Evaluation of Virginia's 21st Century Community Learning

Centers

2019-2020

Cindy Muzzi

Brenda McSparrin Gallagher

Todd Zoblotsky

University of Memphis

July 2021

Table of Contents

Executive Summary	4
The Evaluation Design	4
COVID-19	4
Conclusions	4
Introduction	8
Background and Program Description	8
21st Century Community Learning Centers in Virginia	9
Evaluation Objectives and Questions	9
COVID-19	9
Methods	11
Participants	11
Instrumentation	11
Analyses	12
Center and Participant Characteristics	16
Staff	16
Students	17
Family Members	21
Results	22
Objective 1 & 2 - Improve student achievement in reading/language arts & Improve studen	
achievement in mathematics	22
Objective 3 - Provide opportunities for family engagement.	23
School-day Attendance Analysis	24
Promising Practices and Recommendations	37
Teacher Survey	44
Conclusions	46
References	50

List of Tables

Table 1. Summary of Instruments and Data Sources by Evaluation Question	. 12
Table 2: Paid and Volunteer Staff	. 16
Table 3: Type of Staff	16
Table 4. Summer Student Attendance by Days Served	. 17
Table 5. Summer Student Attendance by Grade Level	. 17
Table 6. Summer Student Demographics	. 18
Table 7. Regular School Year Student Attendance by Days Served	. 19
Table 8. Regular School Year Student Attendance by Grade Level	. 19
Table 9. 21st CCLC and State Regular School Year Student Demographics	. 20
Table 10. Activities Offered by Semester	21
Table 11. Student Grade Outcome Data	. 23
Table 12. Family engagement objective data, 2019-2020	. 23
Table 13. Type of family engagement, 2019-2020	. 23
Table 14. Mean Baseline 2018-2019 School-Day Attendance Rates for 21st CCLC and Control	ol
- · · I	. 24
Table 15. Mean 2019-2020 School-Day Attendance Rates for 21st CCLC and Control Groups	
Table 16. All 21st CCLC Students - Repeated Measures Results for School-Day Attendance	
Table 17. Female 21st CCLC Students - Repeated Measures Results for School-Day Attendan	
Table 18. LEP 21st CCLC Students - Repeated Measures Results for School-Day Attendance.	
Table 19. SPED 21st CCLC Students - Repeated Measures Results for School-Day Attendance	
Table 20. ED 21st CCLC Students - Repeated Measures Results for School-Day Attendance	. 33
Table 21. Minority 21st CCLC Students - Repeated Measures Results for School-Day	
Attendance	
Table 22. Change in CCLC and Commonwealth Division Attendance Rates across Years: 2013	
2019 to 2019-2020	
Table 23. Comparison of CCLC and Commonwealth Level Division Attendance Rates by Yea	
Table 24. Teacher Survey Participation	
Table 25. 21st CCLC Student Outcomes	. 45
List of Figures	
May of Figures	
Figure 1. Interaction Effects for All 21st CCLC Students	. 28
Figure 2. Interaction Effect for Female Students	
Figure 3. Interaction Effect for LEP Students	
Figure 4. Interaction Effect for SPED Students	. 32
Figure 5. Interaction Effect for ED Students	
Figure 6. Interaction Effect for Minority Students	. 35

Executive Summary

The 21st Century Community Learning Centers (21st CCLC) program, funded through the U.S. Department of Education, provides academic enrichment opportunities outside of the regular school day to help students meet state and local performance standards in core academic subjects, such as reading and math. This report summarizes the 2019-2020 evaluation procedures and results for Virginia 21st CCLC programs.

The Evaluation Design

The purpose of the evaluation was to determine whether the 21st CCLC programs were addressing the statewide program objectives: (1) improving student academic achievement in reading; (2) improving student academic achievement in mathematics; and (3) providing opportunities for family engagement. While not one of the statewide objectives, an analysis of school-day attendance was also included.

Data were analyzed from the following sources: (a) 21st CCLC and school-day attendance for all student participants, (b) the online Annual Local Evaluation Survey (ALERT), (c) the Virginia Annual Performance Report (VAPR), and (d) the Teacher Survey.

COVID-19

In early 2020, The World Health Organization declared COVID-19 a global pandemic. In response, the government ordered school building closures across the country, including in Virginia¹, ending all in-person learning. The pandemic created mass disruption of the 21st CCLC programs as they switched to virtual learning from home. Due to school closures, data collection for the 2019-2020 evaluation was affected, and those effects will be noted throughout the report.

Conclusions

The conclusions of the analyses are summarized below by evaluation question.

What is the nature of the Virginia 21st CCLC grant program and level of participation by students?

A wide variety of activities were offered by 21st CCLC centers during the summer, fall, and spring. Homework help, STEM, literacy, and tutoring were the activity types provided most

¹ https://www.doe.virginia.gov/support/health_medical/office/covid-19-faq.shtml#assess

often. Academic support, enrichment, and use of small groups were common practices used to improve student academic achievement. Providing students a choice in the selection of activities and rotating students through various activities were often-mentioned practices that enhanced enrichment opportunities.

Most 21st CCLC staff were paid school day teachers. Grantees expected all staff and volunteers to stress the importance of good character and citizenship and interact positively with students during both activities and lessons. Grantees also stressed that frequent, consistent, and/or continuous communication with their community partners be maintained to keep them engaged in the program.

The majority of the students attended the program less than 30 days and were in grades three through eight. Most student were either White, Black, or Hispanic. Almost two-thirds qualified for free/reduced price lunch. School-day teachers reported that the majority of substantially served 21st CCLC students improved in behavior and homework participation over the school year.

To what degree did centers meet Virginia's objectives for the program?

Without student achievement data from 2019-2020 available, it is difficult to determine if the first two objectives were met (improve student academic achievement in reading and math). Based on the VAPR, about two-thirds of students who were categorized as "needs to improve" in the first quarter improved in both reading and math by the third quarter. Also, those who attended the program longer had a slightly higher chance of improving.

Although centers provided opportunities for family engagement (Objective 3) there was low parent participation in the 21st CCLC programs. For every 12 students who participated in the program, only one parent participated. Only half of the grantees reported meeting the family engagement objective they set in the original grant application, with most providing "Interactive Family Literacy" type-programs. The most heavily emphasized promising practice for family engagement was outreach, communication, and relationship building with families. Grantees repeatedly stressed the importance of using a variety of communication methods with parents, noting "consistent parent communication" was key. Incentives for parent engagement and participation were also seen as important part of family engagement.

What is the impact of 21st CCLC program participation on students' school-day attendance?

Participation in 21st CCLC programs had a statistically significant small, but positive impact on students 2019-2020 school-day attendance rate, compared to control students. On average, students who participated 21st CCLC programs attended close to one day more than control students. There was also a statistically significant positive impact on the 2019-2020 school-day attendance rate for each subgroup (based on Special Education (SPED) status, Limited English Proficient (LEP) status, Economically Disadvantaged (ED) status, gender (female), and minority (i.e., non-white) status). Based on the effect size, 21st CCLC LEP students had the largest positive impact compared to control students. On average, LEP students who participated in 21st CCLC programs attended almost one day more than LEP control students.

Within both years examined (2018-2019 and 2019-20), an increase in number of days of 21st CCLC participation also had statistically significant positive impacts on attendance rates. The lowest 21st CCLC participation group (1-29 days) had statistically significantly lower attendance rates compared to the other three groups (30-59 days, 60-89 days, and 90+ days) in both years for every subgroup with the exception of SPED in 2018-2019, where it was statistically significantly lower than the two highest participation groups. The two highest participation groups (60-89 days, and 90+ days) had statistically significantly higher attendance rates compared to the two lowest participation groups (1-29 days and 30-59 days) overall, and for the female, ED, and minority subgroups. Finally, the highest participation group (90+ days) had statistically significantly higher attendance than the next highest participation group (60-89 days) for the SPED and ED subgroups.

Between years, 21st CCLC participants in the lowest participation group (1-29 days) were the only group to have statistically significant **decreases** in school-day attendance rates, both overall as well as for each subgroup. The 30-59 days participation group for LEP, and the 60-89 days participation group for ED and Minority were the only groups to have statistically significant **increases** between years.

For the **2018-2019** school year, overall, students in the highest 21st CCLC participation group (90+ days) on average, had an attendance rate that was approximately 1.5 percentage points higher compared to students in the lowest 21st CCLC attendance group (1-29 days). Furthermore, this difference increased slightly to almost 2 percentage points in **2019-2020**. The

largest statistically significant differences between 21st CCLC participation groups were between the lowest and highest participation groups in the 2019-2020 school year for the SPED and LEP subgroups. For these two subgroups, students who participated in 21st CCLC programs for 90+ days had on average, an attendance rate that was 2.5 percentage points higher compared to students who participated between 1-29 days.

Readers should note that the 1-29 days participation group (the group with the least number of days attended) was much larger than the other participation groups, making up approximately two-thirds to over 80% of the overall samples in both years. Conversely, the 90+ days participation group (the group with the most days of attendance) made up approximately only 2%-3% of the overall sample. Therefore, comparisons between participation groups should be treated with caution due to the large differences in sample sizes. In addition, due to the fact that schools closed in March 2020 due to the COVID-19 pandemic, it is not possible to know if attendance data for the year would have been different had it been a normal, full school year.

What promising practices regarding the achievement of required objectives were identified by centers?

Among comments submitted by grantees across the six subjects (math and reading/language arts; parent education; character education; enrichment opportunities; and community partnerships), the most heavily emphasized "promising practices" addressed three broad areas. First and most prominently were practices that supported the **students**. These can be broken into three types: Support for academic performance, enrichment activities, and use of small groups. The second broad group of practices encompassed **family engagement** through outreach, communication, and relationship building. Finally, there were practices such as frequent, consistent, and/or continuous **communication** aimed at improving community partnerships.

Grantees were also asked for recommendations to improve the program in the future. Most were for practices already mentioned in the six subjects listed in the previous paragraph. Among ideas not already emphasized were recommended practices under the broad themes of (a) family communication and engagement, (b) program structure due to COVID 19, and (c) staff retention.

Introduction

This report summarizes the 2019-2020 evaluation procedures and results for Virginia 21st Century Community Learning Centers (21st CCLC) programs. The mixed-methods evaluation utilized perceptual as well as program and school-day attendance data from study participants.

The Center for Research in Educational Policy (CREP), Virginia's 21st CCLC evaluator, is a State of Tennessee Center of Excellence and is located at The University of Memphis. CREP's mission is to implement a research agenda associated with educational policies and practices in preK-16 schools, and to provide a knowledge base for use by educational practitioners and policymakers. Since 1989, the Center has served as a mechanism for mobilizing community and university resources to address educational problems and to meet the University's commitment to primary, secondary, and higher education institutions. Functioning as part of the College of Education, the Center seeks to accomplish its mission through a series of investigations conducted by Center faculty, staff, and associates, College and University faculty, and graduate students.

Background and Program Description

The 21st Century Community Learning Centers (CCLC) program was established by Congress as Title X, Part I, of the Elementary and Secondary Education Act (ESEA). It was reauthorized by Congress under the Every Student Succeeds Act of 2015 (ESSA). The purposes of the 21st CCLC program are as follows:

- To provide academic enrichment opportunities outside of the regular school day to help students, particularly students who attend high-poverty and low-performing schools, meet state and local performance standards in core academic subjects.
- To offer students a broad array of services, programs, and activities to complement academics, such as drug and violence prevention; counseling programs; art, music, and recreation programs; technology education; and character education.
- To offer families of students served by community learning centers opportunities for literacy and related educational development.

21st Century Community Learning Centers in Virginia

Every year, applicants apply for competitive 21st CCLC grant funds through the Virginia Department of Education (VDOE). Those awarded the 21st CCLC grant money are part of the three-year grant cycle, and are required by VDOE to participate in data collection, monitoring, and evaluation. Programs provide students with academic and enrichment opportunities before and/or after school, and some offer programs during the summer as well. Collaboration with parents of 21st CCLC students and community partners is also expected within these programs.

Evaluation Objectives and Questions

States, as the recipients of 21st CCLC funds, are responsible for providing comprehensive evaluations of their programs. CREP was contracted by the VDOE to conduct a statewide evaluation and to assess the extent to which local grantees met the following defined programmatic objectives:

Objective 1: Improve student academic achievement in reading.

Objective 2: Improve student academic achievement in mathematics.

Objective 3: Provide opportunities for family engagement.

To address the 21st CCLC objectives, CREP's evaluation is structured around the following questions:

- 1. What is the nature of the Virginia 21st CCLC grant program and level of participation by students?
- 2. To what degree did centers meet Virginia's objectives for the program?
- 3. What is the impact of 21st CCLC program participation on students' school-day attendance?
- 4. What "promising practices" regarding the achievement of required objectives were identified?

COVID-19

In early 2020, The World Health Organization declared COVID-19 a global pandemic. In response, the government ordered school building closures across the country, including in

Virginia², ending all in-person learning. The pandemic created mass disruption of the 21st CCLC programs as they switched to virtual learning from home. Due to school closures, data collection for the 2019-2020 evaluation was affected, and those effects will be noted throughout the report.

² https://www.doe.virginia.gov/support/health_medical/office/covid-19-faq.shtml#assess

Methods

Participants

For the 2019-2020 evaluation, which includes grant recipients within a three-year grant cycle (Cohorts 15R, 16, 17, & 18), 115 programs served 132 schools. Most centers served one school; however, 11 centers served two, three, or four schools. The population consisted of (a) grantees and/or site coordinators, (b) school-day teachers and administrators from participating schools, (c) after-school teachers, (d) volunteers, (e) student participants, and (f) the parents/guardians of student participants. The study population, along with others associated with the program, is discussed in detail in the report section *Center and Participant Characteristics* found on page 17.

Instrumentation

During the 2019-2020 school year, data were collected from three main sources: (a) The online Annual Local Evaluation Survey (ALERT), (b) the Virginia Annual Performance Report (VAPR), and (c) the Teacher Survey. The Student Perceptual Survey was not administered this year due to school closures.

Annual Local Evaluation Report Template (ALERT). The ALERT is an online tool a grantee is required to submit for each center after a full year of program implementation. Grantees with multiple sites serving different students at each site must complete a separate ALERT for each site. The self-reporting tool was opened for approximately two months during the summer of 2020. Its purpose is to gather data regarding measurable objectives, activities, and outcomes. Grantees were also asked to describe the "promising practices" they found most helpful, and to provide recommendations for improvements to the program. It is important to note that grantees reported their individual levels of success in meeting objectives based on their own pre-determined criteria (vs. an objective measure).

Virginia Annual Performance Report (VAPR). The VAPR is data the grantees submit to VDOE through a web-based system. The data collected is required by the United States Department of Education for annual reporting on the progress of the state's 21st CCLC programs and is based on the Government Performance and Results Act (GPRA) measures established by congress. For the 2019-2020 year, and for the years going forward, grantees report VAPR data in Cayen Systems, a Web-based system designed for Virginia's 21st CCLC data collection.

Teacher Survey. The Teacher Survey was designed to collect information from the regular school-day teacher about changes in behavior and homework completion for each 21st CCLC student. These data were also reported online in Cayen Systems.

Student Perceptual Survey. The Student Perceptual Survey was developed to give students the opportunity to anonymously provide their perceptions of the 21st CCLC program and a means to report benefits they attribute to their program attendance. Students in grades 3-12 who participated in the program 30 or more days (i.e., were substantially served) were asked to participate in the survey.

Analyses

Data were analyzed from four main sources: (a) 21st CCLC and school-day attendance data on all student participants, (b) the online Annual Local Evaluation Survey (ALERT), (c) the Virginia Annual Performance Report (VAPR) Survey, and (d) the Teacher Survey. These sources are summarized by evaluation question in Table 1 below, followed by a detailed description of the statistical analyses used to analyze school-day attendance.

Table 1. Summary of Instruments and Data Sources by Evaluation Question

Evaluation Question	Data Sources
What is the nature of the 21st CCLC programs and level of participation by students?	 ALERT Virginia Annual Performance Report (VAPR) Teacher Survey
To what degree did centers meet Virginia's objectives for the program?	 ALERT Virginia Annual Performance Report (VAPR) Teacher Survey
What is the impact of 21st CCLC program participation on students' school-day attendance?	 Teacher Survey 21st CCLC and school-day attendance data
What "promising practices" regarding the achievement of required objectives were identified by centers?	• ALERT

Analysis of School-day Attendance. In the past, analyses of data from the Standards of Learning (SOL) and Virginia Alternative Assessment Program (VAAP) were conducted to determine the extent to which local grantees met programmatic objectives related to improved academic achievement in reading and mathematics. However, for the 2019-2020 school year, SOL and VAAP test data were not available due to the cancellation of Commonwealth

assessments resulting from COVID-19 pandemic-related school closures. In addition, center-level data were not available from the current Cayen Systems. As a result, an analysis of two years of available school-day attendance was conducted instead. The attendance analysis was structured around the following question: What is the impact of 21st CCLC program participation on students' school-day attendance?

The VDOE provided CREP the following data by student for a two-year analysis of school-day attendance:

- School name
- Research ID
- Grade level
- Gender
- Race
- Limited English proficiency status (LEP)
- Disability status (SPED)
- Economically Disadvantaged status (ED)
- Number of days of participation in 21st CCLC
- Number of school days in session (2018-2019 and 2019-2020)
- Number of days present (2018-2019 and 2019-2020)
- Number of days absent (2018-2019 and 2019-2020)

The 2019-2020 population of students for the school-day attendance analysis consisted of students in grades 3-12 enrolled in schools served by a 21st CCLC grantee in cohorts 15R, 16, 17, or 18 (N = 62,554).

Two sets of school-day attendance analyses were conducted. The first set compared the 2019-2020 school-day attendance rate (i.e., percentage of days present) between 21st CCLC participants and matched nonparticipant groups overall, as well as by five subgroups, based on Special Education (SPED) status, Limited English Proficient (LEP) status, Economically Disadvantaged (ED) status, gender (female), and minority (i.e., non-white) status for the 2019-2020 school year, after controlling for prior-year attendance. Only students who were "substantially served" by a center (i.e., attended 30 or more days) were considered 21st CCLC

program participants (n = 6,113). Students who were eligible to attend, but had zero days of attendance, were considered control students (n = 56,441).

To be included in the analysis, students had to have attendance data from both the 2018-2019 and 2019-2020 school years. In addition, the sum of days present and days absent had to equal the total number of school days in session for the year, otherwise the record was deleted (Available sample: CCLC n = 4,961, control n = 49,623). Control students were matched with 21st CCLC students based on their 2018-2019 calculated school-day attendance rate (days present/school days in session). In addition, students were matched on grade level, gender, LEP status, SPED status, ED status, and minority status. The final matched file consisted of 4,961 21st CCLC and 4,961 matched control students.

The second set of school-day attendance analyses compared four CCLC participation groups (1-29 days, 30-59 days, 60-80 days, and 90+ days) for 21st CCLC students only for the 2018-2019 and 2019-2020 school years, as well as the subgroups SPED, LEP, ED, female, and minority. To be included in the analysis, students had to have attendance data from both the 2018-2019 and 2019-2020 school years. Also, the sum of days present and days absent had to equal the total number of school days in session for the year, otherwise the record was deleted. This file consisted of 15,000 21st CCLC students with varying days of participation.

When students are nested within schools (or centers in this case), Hierarchical Linear Models (HLM) is the preferred method of analysis, as it takes the nested structure of the data into account. However, initial results from HLM indicated less than one percent of the total variance in 2019-2020 attendance outcomes was between schools, thereby reducing the need for a hierarchical analysis of the data. Therefore, all outcomes were analyzed using Generalized Linear Models (GLM), as binary logistic regressions (i.e., dichotomous outcome), with the outcome variable being the number of events occurring (number of days present) in a set of trials (number of days in session). This allows all students to be compared using the same scale (i.e., percentage of days present), regardless of any variation in the number of days each school was in session.

In addition to testing outcomes for statistical significance, effect sizes, percentile ranks, and improvement indices associated with the treatment effect were calculated to aid in the interpretation of findings. As an indicator of the impact or "practical significance" of the treatment, the effect size (typically calculated as Hedges' *g*) is a descriptive statistic that

indicates the magnitude of the difference (in standard deviation units) between two measures. The What Works Clearinghouse (WWC) (2020a) has adopted the Cox Index effect size (CIES) for dichotomous outcomes, which provides an effect size similar to Hedges' g. In addition, the WWC translates the Hedges' g and Cox Index effect size into an "improvement index", which can be interpreted as, "the expected change in percentile rank for an average comparison group student if that student had received the intervention."

A further consideration is that the attendance findings can only be used to evaluate the performance of all centers in Virginia as a group, not the performance of any specific center, as results were aggregated across all centers rather than evaluated center-by-center. Also, because of the varied impact of COVID-19 on schools throughout Virginia, methods for recording and collecting attendance data for 2019-2020 could have varied considerably by school.

Center and Participant Characteristics

Center and participant characteristics are reported by grantees in Cayen Systems: 107 centers completed a report for summer 2019, and 124 centers completed a report for the 2019-2020 regular school year. Specific staff, student, family member, and activities are described below.

Staff

As seen in Table 2, more than 80% of the staff were paid, and less than 20% were volunteers. Fall had the highest percentage of volunteers (18%) and spring had the highest percentage of paid staff (87%).

Table 2: Paid and Volunteer Staff

Total # of staff	Number of Paid Staff	% of Paid Staff	Number of Volunteers	% of Volunteers	Total Number of Staff
Summer 2019	1,065	83%	225	17%	1,290
Fall 2019	2,483	82%	539	18%	3,022
Spring 2020	2,292	87%	335	13%	2,627

School-day teachers were the most common staff member working in the 21st CCLC programs during all three semesters (Table 3). Non-teaching staff and college students were the next most common type of staff. Approximately one percent of parents helped in the centers during the regular school year, and 5% helped during the summer.

Table 3: Type of Staff

Term	Admin	College Student	Comm. Member	HS Student	Other	Non- Teaching Staff	Parent	School Day Teacher	Subcon tracted Staff
Summer 2019	7%	9%	6%	5%	5%	14%	5%	48%	3%
Fall 2019	5%	9%	7%	4%	7%	12%	1%	49%	6%
Spring 2020	6%	10%	6%	3%	4%	13%	1%	52%	7%

Students

Summer 2019 Program. A total of 5,749 students in Pre-K through 12th grade attended 21st CCLC summer programs in 2019. The majority (98%) of 21st CCLC student participants attended 1-29 days (See Table 4). Most students were in grades three through eight (77%), with grade six (16%) having the largest number of student participants, followed closely by grade seven (14%). Pre-kindergarten and high school students (9-12) were the least likely to participate because the majority of the grants received and awarded are for upper elementary and middle school grades (See Table 5)

Table 4. Summer Student Attendance by Days Served

Attendance Day Category	Number	Percentage
1-29 days	5655	98%
30-59 days	53	1%
60-89 days	0	0%
90+days	41	1%
TOTAL	5,749	100%

Table 5. Summer Student Attendance by Grade Level

Grade Level	Number	Percentage
Pre-kindergarten	93	2%
Kindergarten	180	3%
1st grade	267	5%
2nd grade	366	6%
3rd grade	666	12%
4th grade	676	12%
5th grade	653	11%
6th grade	907	16%
7th grade	817	14%
8th grade	696	12%
9th grade	165	3%
10th grade	98	2%
11th grade	89	2%
12th grade	76	1%
TOTAL	5,749	100%

Demographics. The summer demographic information collected in the VAPR reflect that nearly half of the student participants were male, and half were female (Table 6). The ethnic groups with the highest percentage of students served were Black (49%), White (34%), and Hispanic (10%). Approximately 6% of students had limited English proficiency, 72% were reported as eligible for free/reduced-price lunch, and 12% had a special need.

Table 6. Summer Student Demographics

Student Demographics	Number	Percentage		
Gender				
Male	2,843	49%		
Female	2,793	49%		
Unknown	113	2%		
TOTAL	5,749	100%		
Ethnicity				
American Indian	29	1%		
Asian	98	2%		
Black	2,801	49%		
Hispanic	547	10%		
Pacific Islander	8	0%		
White	1,945	34%		
Two or more races	283	5%		
Unknown	38	1%		
TOTAL	5,749	100%		
Population Specifics				
Limited English Proficiency	321	6%		
Free/Reduced Lunch	4,132	72%		
Special Needs	713	12%		

Regular School Year Program. Grantees reported that 20,863 students were in attendance at least one or more days during the 2019-2020 regular school year (Table 7). Of that, 38% (n = 7,942) were substantially served (i.e., attended 30 or more days).

Table 7. Regular School Year Student Attendance by Days Served

Attendance Day Category	Number	Percentage
1-29 days	12,921	62%
30-59 days	4,549	22%
60-89 days	2,382	11%
90+days	1,011	5%
TOTAL	20,863	100%

Similar to the summer program, the majority of students served were in grades three through eight (77%) (Table 8). Grade seven had the largest number of student participants (20%), followed closely by grade eight (18%). As noted previously, pre-kindergarten and high school students (9-12) were the least likely to participate because the majority of the grants received and awarded are for upper elementary and middle school grades.

Table 8. Regular School Year Student Attendance by Grade Level

Grade Level	Number	Percentage
Pre-kindergarten	114	1%
Kindergarten	509	2%
1st grade	710	3%
2nd grade	1,111	5%
3rd grade	1,691	8%
4th grade	1,768	8%
5th grade	1,779	9%
6th grade	3,051	15%
7th grade	4,119	20%
8th grade	3,672	18%
9th grade	629	3%
10th grade	729	3%
11th grade	509	2%
12th grade	472	2%
TOTAL	20,863	100%

Demographics. The regular school year demographic information reflect that approximately half of the students served were female, and half were male (Table 9). The ethnic groups with the highest percentage were White (38%), Black (32%), and Hispanic (20%). Approximately 10% of students had limited English proficiency, 62% qualified for free/reduced price lunch, and 12% had a special need. While many of the regular school year percentages are similar to the summer program, the exceptions are that the summer program served a higher percentage of Blacks than Whites, as well as a higher percentage of students that qualify for free and reduced lunch.

Compared to the state. When comparing the 21st CCLC student population to all the students served throughout the Commonwealth of Virginia for the 2019-2020 school year, the 21st CCLC student population was representative of the Commonwealth in some particulars, but not others (See Table 9). The 21st CCLC programs served a higher percentage of Black students and students who qualify for free/reduced price lunch, and a lower percentage of White students than the state overall (Virginia Department of Education, 2019-2020).

Table 9. 21st CCLC and State Regular School Year Student Demographics

Student Demographics	CCLC	CCLC	Commonwealth			
	Gender					
Male	10,175	49%	52%			
Female	10,645	51%	48%			
Unknown	43	<1%	N/A			
TOTAL	20,863	100%				
	Ethnicity		_			
American Indian	58	0%	<1%			
Asian	776	4%	7%			
Black	6,749	32%	22%			
Hispanic	4,222	20%	18%			
Pacific Islander	21	0%	<1%			
White	7,902	38%	46%			
Two or more races	764	4%	6%			
Unknown	371	2%	N/A			
TOTAL	20,863	100%	100%			
Population Specifics						
Limited English Proficiency	2,038	10%	13%			
Free/Reduced Lunch	12,923	62%	41%			
Special Needs	2,423	12%	13%			

Family Members

The 21st CCLC programs also served family members of 21st CCLC students. Grantees reported a total of 734 family members who attended 21st CCLC programs during the summer of 2019, and 1,823 family members in attendance during the regular school year (2019-2020).

Activities

A wide variety of activities were offered to students by 21st CCLC centers, including arts & music, college & career readiness, community/service learning, counseling programs, drug prevention, English language learner support, entrepreneurship, homework help, literacy, mentoring, physical activity, STEM, truancy prevention, tutoring, violence prevention, and youth leadership.

As seen in Table 10, homework help, STEM, literacy, and tutoring were the activity types provided most often during the 2019-2020 school year. Drug prevention, violence prevention, English language learner support, truancy prevention, and entrepreneurship were the activities provided the least.

Table 10. Activities Offered by Semester

Activity	Fall 2019	Spring 2020
Arts & Music	25 sites	26 sites
College & Career Readiness	9 sites	10 sites
Community / Service Learning	12 sites	12 sites
Counseling Programs	5 sites	6 sites
Drug Prevention	0 sites	1 site
English Language Learners Support	3 sites	3 sites
Entrepreneurship	3 sites	4 sites
Homework Help	40 sites	49 sites
Literacy	28 sites	31 sites
Mentoring	14 sites	13 sites
Physical Activity	36 sites	13 sites
STEM	31 sites	35 sites
Truancy Prevention	3 sites	3 sites
Tutoring	29 sites	30 sites
Violence Prevention	1 site	1 site
Youth Leadership	15 sites	17 sites

Results

Grantees are required to address three objectives: 1) Improve student achievement in reading/language arts; 2) Improve student achievement in mathematics; and 3) Provide opportunities for family engagement. The extent to which centers met these objectives is presented below. While not one of the statewide objectives, an analysis of two years of available school-day attendance was conducted, followed by aggregate results of the Promising Practices and the Teacher Survey.

Objective 1 & 2 - Improve student achievement in reading/language arts & Improve student achievement in mathematics

As previously stated, an analysis of data from the Standards of Learning (SOL) and Virginia Alternative Assessment Program (VAAP) were conducted in past years to determine program impacts on student achievement in reading and math. However, for the 2019-2020 school year, SOL and VAAP test data were not available due to the cancellation of Commonwealth assessments resulting from COVID-19 pandemic-related school closures. Therefore, only results from the VAPR were analyzed to address the first and second objective.

VAPR: During the first quarter of the regular school year students are categorized as "needs to improve" in both reading and math if they have a grade of "C" or less. Third quarter grades are then reviewed to see if those "needs to improve" students who attended 30 days or more improved by one letter grade, or for grades that are reported by a percentage, an increase of five percentage point. Grantees from 125 centers entered grade outcome data for their 21st CCLC students. Those outcomes are reported below in Table 11.

Approximately two-thirds of 21st CCLC students who were categorized as "needs to improve" actually improved in both reading and math by the third quarter. Students who attended the program 90 days or more usually had a higher chance of improving their grades than student who attended either 30-59 days or 60-89 days.

Table 11. Student Grade Outcome Data

Grade level	Subject	Needs to improve 30-59 Days	Improved 30-59 Days	% Impro ved	Needs to improve 60-89 Days	Improve d 60-89 Days	% Improv ed	Needs to improve 90+ Days	Improved 90+ Days	% Impr oved
PreK- 5th	Reading	982	667	68%	578	384	66%	210	150	71%
PreK- 5th	Math	871	622	71%	531	351	66%	179	137	77%
6- 12th	Reading	736	478	65%	181	124	69%	78	54	65%
6- 12th	Math	689	461	67%	182	102	56%	85	61	72%

Objective 3 - Provide opportunities for family engagement.

According to the VAPR, a total of 734 family members attended 21st CCLC programs during the summer of 2019, while 1,823 family members attended during the regular school year (2019-2020).

In the ALERT, grantees were asked to report (a) the program's measurable objective for family engagement, (b) the outcomes for that objective, and (c) if they met the objective. About half reported the family engagement objective was met (See Table 12).

Table 12. Family engagement objective data, 2019-2020

Did you meet your objective for	No	Yes	No Response	Responses
Family Engagement	49%	48%	3%	119

When asked about types of family engagement activities the program provided,

Table 13. Type of family engagement, 2019-2020

Identify the types of family engagement activities the program provided: (Check all that apply)	Number	Percentage	Responses
Interactive Family Literacy	103	90%	114
Primary Teacher Training	36	32%	114
Economic Self-sufficiency Training	55	48%	114

[&]quot;Interactive Family Literacy" was the most common type provided (Table 13).

School-day Attendance Analysis

Matched 21st CCLC and Control Groups. 21st CCLC students in the female and ED subgroups had statistically significantly lower attendance rates for the baseline 2018-2019 school year compared to matched control students. There were no other statistically significant differences between the 21st CCLC and matched control groups for the 2018-2019 baseline attendance rates (see Table 14). Although not statistically significant, CCLC mean school-day attendance rates were slightly lower than controls overall and for the subgroup SPED. However, while there were statistically significant differences, baseline equivalence between the CCLC and control groups was established as none of the CIES effect sizes were above the WWC (2020b) established threshold (i.e., |Baseline ES| > 0.25).

Table 14. Mean Baseline 2018-2019 School-Day Attendance Rates for 21st CCLC and Control Groups

Subgroup	N	CCLC Attendance Rate	SD	N	Control Attendance Rate	SD	Coefficient	Odds Ratio	p	CIES	Percentile Rank	Improvement Index
All	4,961	96.1	4.0	4,961	96.2	3.8	-0.01	0.99	0.075	-0.01	50	0
Females	2,577	96.1	3.9	2,521	96.3	3.6	-0.05	0.95	<0.01*	-0.03	49	-1
LEP	626	96.7	3.6	626	96.7	3.4	0.00	1.00	0.964	0.00	50	0
SPED	841	95.3	4.9	841	95.4	4.6	-0.02	0.98	0.209	-0.01	50	0
ED	3,472	95.7	4.3	3,440	95.8	4.1	-0.03	0.98	.007*	-0.01	50	0
Minority	3,393	96.2	4.1	3,393	96.2	4.0	-0.01	0.99	0.553	-0.01	50	0

^{*}Statistically significant at p < 0.05.

When examining the 21st CCLC participant and matched control groups in grades three through twelve overall, after controlling for prior year school-day attendance, participation in 21st CCLC programs ("Yes" or "No") had a statistically significant **positive** effect on participants' 2019-2020 school-day attendance (see Table 15), with the effect size (*CIES* = 0.12) indicating that 55% of 21st CCLC students had higher attendance than the average control group student. 21st CCLC students attended slightly less than one day more on average compared to controls.

In addition, there were statistically significant **positive** differences in the 2019-2020 school-day attendance favoring 21^{st} CCLC participants for all subgroups: (a) female (*CIES* = 0.12), (b) LEP (*CIES* = 0.15), (c) SPED (*CIES* = 0.13), (d) ED (*CIES* = 0.11), and (e) minority (*CIES* = 0.13). Based on the effect size, the LEP subgroup had the largest statistically significant positive difference, with 56% of 21^{st} CCLC LEP students having higher attendance than the

average control LEP student. Overall, 21st CCLC LEP students attended nearly one more day on average compared to LEP control students.

Table 15. Mean 2019-2020 School-Day Attendance Rates for 21st CCLC and Control Groups

Subgroup	N	CCLC Attendance Rate	SD	N	Control Attendance Rate	SD	Coefficient	Odds Ratio	p	CIES	Percentile Rank	Improvement Index
All	4,961	96.2	4.1	4,961	95.5	5.2	0.19	1.21	<0.01*	0.12	55	5
Females	2,577	96.3	4.2	2,521	95.6	5.1	0.20	1.22	<0.01*	0.12	55	5
LEP	626	97.2	3.0	626	96.5	3.8	0.25	1.28	<0.01*	0.15	56	6
SPED	841	95.5	5.1	841	94.5	6.4	0.22	1.24	<0.01*	0.13	55	5
ED	3,472	95.9	4.4	3,440	95.1	5.6	0.18	1.20	<0.01*	0.11	54	4
Minority	3,393	96.4	4.0	3,393	95.6	5.3	0.21	1.24	<0.01*	0.13	55	5

^{*}Statistically significant at p < 0.05.

21st CCLC Only Students. 21st CCLC students' program participation was divided into four groups: (a) 1-29 days, (b) 30-59 days, (c) 60-80 days, and (d) 90+ days. The 2018-2019 baseline and 2019-2020 outcome school-day attendance (number of days present occurring in a set of number of days in session) were treated as a repeated-measures variable (Time). The GLM repeated measures analysis produced three outcome effects: (a) 21st CCLC participation group main effect, (b) **Time** main effect, and (c) **Group and Time** interaction effect. An interaction effect (Group * Time) occurs when the effect of the Group variable depends on the value of the Time variable. When this interaction is statistically significant, independent interpretation of the Group or Time main effect is not possible.

Table 16 through Table 21 display the results of the GLM repeated measures analyses and school-day attendance rate means by participation group and time for all 21st CCLC students, as well as each subgroup.

Figure 1 through Figure 6 are graphic representations of the participation group and time interaction effects. Overall, and for each subgroup, the interaction effect for Group*Time was statistically significant (p < 0.05), indicating that the effects for 21^{st} CCLC participation group were dependent on time.

Overall, 21st CCLC students in the lowest participation group (1-29 days) had a statistically significant decrease in school-day attendance from 95.4% in 2018-19 to 94.9% in 2019-2020 (p < 0.01), while the three highest participation groups had small, non-statistically significant increases in school-day attendance (see Table 16 and

Figure 1). However, the size of the decrease for the lowest participation group (-0.5 percentage points), was small.

During the 2018-2019 and 2019-2020 school years, the three highest participation groups had statistically significantly higher school-day attendance compared to the lowest (1-29 days) participation group, with the differences ranging from 0.5 to 1.9 percentage points. Additionally, the two highest participation groups had statistically significantly higher school-day attendance compared to the 30-59 days participation group in both 2018-2019 and 2019-2020, with the differences ranging from 0.4 to 0.9 percentage points.

Table 16. All 21st CCLC Students - Repeated Measures Results for School-Day Attendance

Effect	Wald Chi-Square	df	p
Intercept	61701.68	1	0.000*
CCLC Participation Group	266.81	3	0.000*
Time	0.01	1	0.930
Group * Time	54.39	3	0.000*

Year	CCLC Participation Group	Mean School-Day Attendance	Std. Dev.	N	% of Sample
A	В	C	D	${f E}$	F
	1-29 days ^a	95.35 ^{bcd}	4.82	10,039	66.9
2018-2019	30-59 days ^b	95.89 ^{acd}	4.06	2,876	19.2
Attendance Rate	60-89 days ^c	96.31 ^{ab}	3.93	1,631	10.9
	90+days ^d	96.78 ^{ab}	2.96	453	3.0
	1-29 days ^a	94.94 ^{bcd}	5.50	10,039	66.9
2019-2020	30-59 days ^b	95.98 ^{acd}	4.38	2,876	19.2
Attendance Rate	60-89 days ^c	96.52ab	3.73	1,631	10.9
	90+days ^d	96.87 ^{ab}	3.03	453	3.0

^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from b, c, and d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicate a statistically significant increase between years.

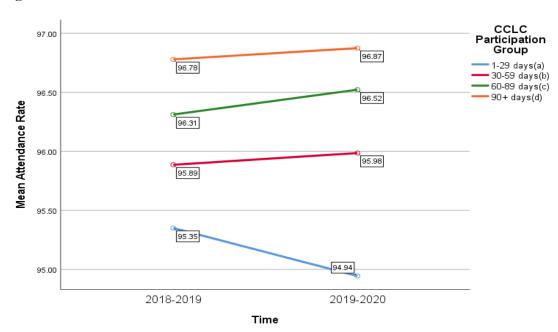


Figure 1. Interaction Effects for All 21st CCLC Students

Female 21st CCLC students in the lowest participation group (1-29 days) had a statistically significant decrease in school-day attendance from 95.4% in 2018-19 to 95.0% in 2019-2020 (p < 0.01), while the three highest participation groups had a small, non-statistically significant **increase** in school-day attendance (see Table 17 and Figure 2). However, the size of the decrease for the lowest participation group (0.4 percentage points), was small.

During the 2018-2019 and 2019-2020 school years, the three highest participation groups had statistically significantly higher school-day attendance compared to the lowest participation group, with the differences ranging from 0.5 to 2.0 percentage points. Additionally, the two highest participation groups had statistically significantly higher school-day attendance compared to the 30-59 days participation group in 2018-2019 and 2019-2020, with the differences ranging from 0.5 to 1.0 percentage points.

Table 17. Female 21st CCLC Students - Repeated Measures Results for School-Day Attendance

Effect	Wald Chi-Square	df	p
Intercept	29169.64	1	0.000*
CCLC Participation Group	135.75	3	0.000*
Time	0.13	1	0.724
Group * Time	33.34	3	0.000*

Year	CCLC Participation Group	Mean School-Day Attendance	Std. Dev.	N	% of Sample
\mathbf{A}	В	C	D	E	${f F}$
	1-29 days ^a	95.40 ^{bcd}	4.98	5,081	66.4
2018-2019	30-59 days ^b	95.89 ^{acd}	4.08	1,491	19.5
Attendance Rate	60-89 days ^c	96.42ab	3.72	837	10.9
	90+days ^d	96.82ab	2.79	248	3.2
	1-29 days ^a	94.96 ^{bcd}	5.51	5,081	66.4
2019-2020	30-59 days ^b	95.95 ^{acd}	4.31	1,491	19.5
Attendance Rate	60-89 days ^c	96.63 ^{ab}	3.82	837	10.9
	90+ days ^d	96.99 ^{ab}	3.00	248	3.2

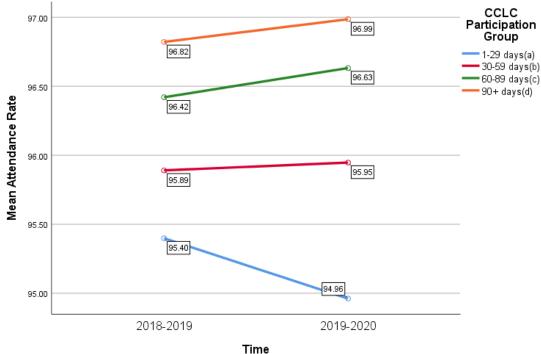
^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from b, c, and d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicate a statistically significant increase between years.

Figure 2. Interaction Effect for Female Students



LEP $21^{\rm st}$ CCLC students in the lowest participation group (1-29 days) had a statistically significant **decrease** in school-day attendance from 95.8% in 2018-2019 to 95.4% in 2019-2020 (p < 0.01), while the 30-59 days participation group had a statistically significant **increase** in school-day attendance from 96.4% in 2018-2019 to 97.1% in 2019-2020 (p < 0.01). The differences between years (-0.4 and 0.7 percentage points respectively), however, were small.

For the **2018-2019** school year, the three highest participation groups had statistically significantly **higher** school-day attendance compared to the lowest participation group, with the differences ranging from 0.6 to 1.5 percentage points. Additionally, the 60-89 days participation group had statistically significantly **higher** (0.5 percentage points) school-day attendance compared to the 30-59 days participation group. For the 2019-2020 school year, the three highest participation groups had statistically significantly higher school-day attendance compared to the lowest participation group, with the differences ranging from 1.7 to 2.5 percentage points (see Table 18 and Figure 3).

Table 18. LEP 21st CCLC Students - Repeated Measures Results for School-Day Attendance

Effect	Wald Chi-Square	df	p
Intercept	11757.11	1	0.000*
CCLC Participation Group	100.52	3	0.000*
Time	2.79	1	0.095
Group * Time	33.120.000	3	0.000*

Year	CCLC Participation Group	Mean School-Day Attendance	Std. Dev.	N	% of Sample
${f A}$	В	C	D	${f E}$	${f F}$
	1-29 days ^a	95.77 ^{bcd}	4.56	2,681	81.1
2018-2019 Attendance Rate	30-59 days ^b	96.44 ^{ac}	3.69	370	11.2
	60-89 days ^c	96.94 ^{ab}	3.59	197	6.0
	90+ days ^d	97.27ª	2.79	59	1.8
	1-29 days ^a	95.39 ^{bcd}	5.48	2,681	81.1
2019-2020 Attendance Rate	30-59 days ^b	97.13ª	3.00	370	11.2
	60-89 days ^c	97.27ª	3.23	197	6.0
	90+ days ^d	97.90ª	2.17	59	1.8

^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from ^{b, c,} and ^d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicate a statistically significant increase between years.

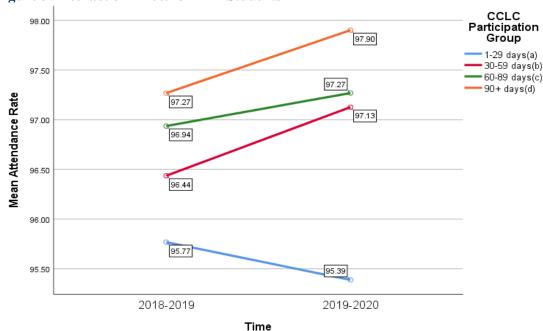


Figure 3. Interaction Effect for LEP Students

SPED 21st CCLC students in the lowest participation group had a statistically significant decrease in school-day attendance from 94.5% in 2018-19 to 93.9% in 2019-2020 (p < 0.01), while the three highest participation groups had a small non-statistically significant increase in school-day attendance (see

Table 19 and Figure 4). The change between years for the lowest participation group was small, at -0.6 percentage points.

For the **2018-2019** school year, the highest participation group (90+ days) had a statistically significantly **higher** school-day attendance compared to the other three participation groups, with the differences ranging from 1.3 to 2.2 percentage points. Additionally, the 60-89 days participation group had had statistically significantly **higher** school-day attendance compared to the 1-29 days participation group (0.9 percentage points). For the **2019-2020** school year, the three highest participation groups had statistically significantly **higher** school-day attendance compared to the lowest participation group, with the differences ranging from 1.2 to 2.8 percentage points. In addition, the highest participation group (90+ days) had statistically significantly **higher** school-day attendance compared to the other three participation groups, ranging from 1.0 to 2.8 percentage points.

Table 19. SPED 21st CCLC Students - Repeated Measures Results for School-Day AttendanceEffectWald Chi-Squaredfp

Intercept	12496.04	1	0.000*
CCLC Participation Group	60.20	3	0.000*
Time	0.22	1	0.636
Group * Time	15.51	3	0.001*

Year	CCLC Participation Group	Mean School-Day Attendance	Std. Dev. N		% of Sample
\mathbf{A}	В	C	D	${f E}$	\mathbf{F}
	1-29 days ^a	94.52 ^{cd}	5.61	1,523	64.4
2018-2019 Attendance Rate	30-59 days ^b	94.96 ^d	5.10	481	20.3
	60-89 days ^c	95.38 ^{ad}	5.07	279	11.8
	90+ days ^d	96.66 ^{abc}	2.69	81	3.4
	1-29 days ^a	93.85 ^{bcd}	6.48	1,523	64.4
2019-2020 Attendance Rate	30-59 days ^b	95.07 ^{ad}	5.66	481	20.3
	60-89 days ^c	95.74 ^{ad}	4.41	279	11.8
	90+ days ^d	96.72 ^{abc}	3.04	81	3.4

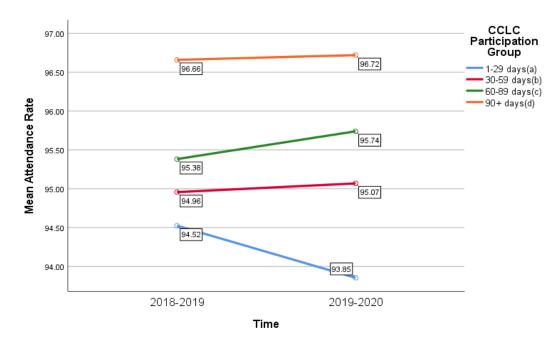
^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from b, c, and d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicated statistically significant increase between years.

Figure 4. Interaction Effect for SPED Students



ED 21st CCLC students in the lowest participation group (1-29 days) had a statistically significant decrease in school-day attendance from 94.9% in 2018-2019 to 94.4% in 2019-2020 (p < 0.01) (-0.5 percentage points), while the 60-89 days participation group had a statistically significant **increase** in school-day attendance from 95.9% in 2018-2019 to 96.2% in 2019-2020 (p = 0.017) (0.3 percentage points).

For the **2018-2019** as well as the **2019-2020** school years, there were statistically significantly differences in school-day attendance between each of the CCLC participation groups, with each higher participation group having better attendance then each subsequently lower participation group (see Table 20 and Figure 5).

Table 20. ED 21st CCLC Students - Repeated Measures Results for School-Day Attendance

Effect	Wald Chi-Square	df	p
Intercept	50007.27	1	0.000*
CCLC Participation Group	223.89	3	0.000*
Time	1.64	1	0.201
Group * Time	53.89	3	0.000*

Year	CCLC Participation Group	Mean School-Day Attendance	• Std Dev		% of Sample	
A	В	C	D	E	\mathbf{F}	
	1-29 days ^a	94.91 ^{bcd}	5.22	6,622	65.6	
2018-2019	30-59 days ^b	95.48 ^{acd}	4.34	2,014	20.0	
Attendance Rate	60-89 days ^c	95.89 ^{abd}	4.29	1,163	11.5	
	90+ days ^d	96.44 ^{abc}	3.28	295	2.9	
2019-2020 Attendance Rate	1-29 days ^a	94.42 ^{bcd}	5.90	6,622	65.6	
	30-59 days ^b	95.57 ^{acd}	4.72	2,014	20.0	
	60-89 days ^c	96.20 ^{abd}	3.99	1,163	11.5	
	90+days ^d	96.75 ^{abc}	3.17	295	2.9	

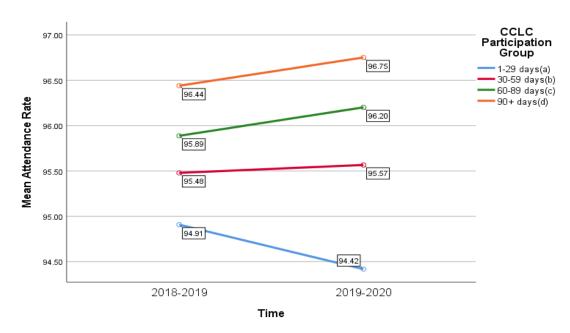
^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from b, c, and d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicate a statistically significant increase between years.





For minority 21st CCLC students, the lowest participation group (1-29 days) had a statistically significant decrease in school-day attendance from 95.4% in 2018-19 to 95.0% in 2019-2020 (p < 0.01) (-0.4 percentage points), while the 60-89 days participation group had a statistically significant increase in school-day attendance from 96.3% in 2019-2019 to 96.7% in 2019-2020 (p = 0.030) (0.4 percentage points) (see Table 21 and Figure 6).

During the 2018-2019 and 2019-2020 school years, the three highest participation groups had statistically significantly higher school-day attendance compared to the lowest participation group, with differences ranging from 0.6 to 2.3 percentage points. Additionally, the two highest participation groups had statistically significantly higher school-day attendance compared to 30-59 days participation group, with differences ranging from 0.3 to 1.1 percentage points.

Table 21. Minority 21st CCLC Students - Repeated Measures Results for School-Day Attendance

			<u> </u>
Effect	Wald Chi-Square	df	p
Intercept	29098.67	1	0.000*
CCLC Participation Group	168.43	3	0.000*
Time	0.77	1	0.381
Group * Time	47.44	3	0.000*

Year	CCLC Participation Group	Mean School-Day Attendance	Std. Dev.	N	% of Sample	
A	В	C	D	${f E}$	\mathbf{F}	
	1-29 days ^a	95.43 ^{bcd}	4.96	6,571	66.0	
2018-2019	30-59 days ^b	95.97 ^{acd}	4.07	1,979	19.9	
Attendance Rate	60-89 days ^c	96.34 ^{ab}	4.15	1,167	11.7	
	90+ days ^d	97.02 ^{ab}	2.74	246	2.5	
	1-29 days ^a	95.01 ^{bcd}	5.65	6,571	66.0	
2019-2020	30-59 days ^b	96.15 ^{acd}	4.17	1,979	19.9	
Attendance Rate	60-89 days ^c	96.65 ^{ab}	3.76	1,167	11.7	
	90+ days ^d	97.25 ^{ab}	2.71	246	2.5	

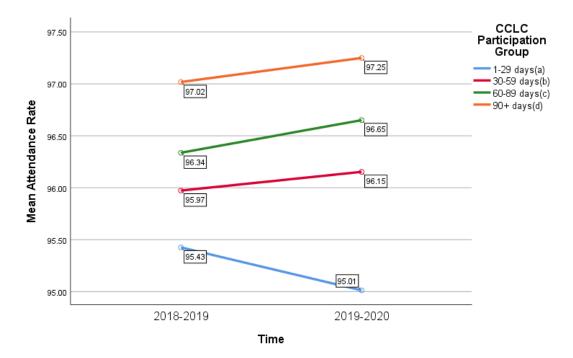
^{*}Statistically significant at p < .05.

Superscripts in Column C indicate statistically significant differences within year (e.g., bcd indicates that a in Column B was statistically significantly different from b, c, and d in Column B).

Means in red indicate a statistically significant decrease between years.

Means in green indicated statistically significant increase between years.

Figure 6. Interaction Effect for Minority Students



Readers should note that the 1-29 days participation group (the group with the least number of days attended) was much larger than the other three participation groups, making up approximately two-thirds to over 80% of the overall samples in both years. Conversely, the 90+ days participation group (the group with the most days of attendance) made up approximately only 2%-3% of the overall sample. Therefore, comparisons between participation groups should be treated with caution due to the large differences in sample sizes. In addition, due to the fact that schools closed in March 2020 due to the COVID-19 pandemic, it is not possible to know if attendance data for the year would have been different had it been a normal, full school year.

For context, in comparison to the Commonwealth (Table 22), where the attendance rate across all 132 school divisions (Commonwealth Total) remained the same across years, with the exception of (a) the 1-29 days participation group (which experienced a decline between years across all subgroups) and (b) the 90+ days participation group for SPED (which remained the same), all other subgroups demonstrated an increase in their attendance rate across years. In addition, compared to the Commonwealth (

Table 23), with the exception of the 1-29 days participation groups, the vast majority of subgroups had attendance rates either (a) at or above the median³ for the Commonwealth or (b) greater than or equal to the Commonwealth level attendance high for the respective year.

Table 22. Change in CCLC and Commonwealth Division Attendance Rates across Years: 2018-2019 to 2019-2020

	Commonwealth						
Group	All	Female	LEP	SPED	ED	Minority	Total
1-29 days	-0.5	-0.4	-0.4	-0.6	-0.5	-0.4	
30-59 days	0.1	0.1	0.7	0.1	0.1	0.2	0.0
60-89 days	0.2	0.2	0.4	0.3	0.3	0.4	0.0
90+days	0.1	0.2	0.6	0.0	0.4	0.3	

Note: There were 132 school divisions in both years. The source of the Commonwealth level data is the Superintendent's Annual Report (https://www.doe.virginia.gov/statistics_reports/supts_annual_report/index.shtml). Values in the cells represent the percentage point change between years.

Note: Values in highlighted in red are statistically significant declines between years, while values highlighted in green are statistically significant increases. Values highlighted in yellow were the same between years.

Table 23. Comparison of CCLC and Commonwealth Level Division Attendance Rates by Year

			C	CLC					Common	wealth	
Year	Group	All	Female	LEP	SPED	ED	Minority	Total	Median	High	Low
	A	В	С	D	Е	F	G	Н	I	J	K
	1-29 days	95.4	95.4	95.8	94.5	94.9	95.4		95	96.0	92.0
2018-	30-59 days	95.9	95.9	96.4	95.0	95.5	96.0	95			
2019	60-89 days	96.3 96.4	96.4	96.9	95.4	95.9	96.3				
	90+days	96.8	96.8	97.3	96.7	96.4	97.0				
	1-29 days	94.9	95.0	95.4	93.9	94.4	95.0			96.0	91.0
2019-	30-59 days	96.0	96.0	97.1	95.1	95.6	96.2	0.5	0.5		
2020	60-89 days	96.5	96.6	97.3	95.7	96.2	96.7	95	95		
	90+days	96.9	97.0	97.9	96.7	96.8	97.3				

³ The median is the point at which half of the sample falls above, and half of the sample falls below.

Note: There were 132 school divisions in both years. The source of the Commonwealth level data is the Superintendent's Annual Report (https://www.doe.virginia.gov/statistics-reports/supts-annual-report/index.shtml). Note: Values highlighted in green in are above the Commonwealth level attendance high for the year across all school divisions (Column J), while values highlighted in yellow are below the median across all school divisions (Column I). Numbers in red are statistically significant decreases between years, while numbers in green are statistically significant increases between years.

Promising Practices and Recommendations

Hundreds of promising practices found to be effective in helping grantees meet their objectives were reported in the ALERT. The most frequently mentioned practices are discussed below, presented in order of the open-ended questions they address, and organized by themes. This is followed by a discussion of the most prominent themes brought out in the recommendations.

1) What activities or promising practices appeared to be most effective in helping to meet your subobjectives for improving student academic achievement in reading/language arts?

The top three promising practices for academic achievement in reading/language arts, in order were (a) academic support, (b) enrichment, and (c) use of small groups. The most commonly mentioned examples of academic support were homework help and remediation/tutoring, with many respondents mentioning using them concurrently. Other common examples included increased reading opportunities, additional time with teachers, and teaching based on grade level or instructional reading level. Suggested ways to increase reading opportunities included: utilizing fun activities, ensuring time for independent reading, having a book club, extending library hours, or providing guided reading practice.

Frequently mentioned examples of enrichment improving reading achievement included use of hands-on projects, online programs such as Newsela and CommonLit, activities or readings that have real-life applications, and a book club or book of the month. Activities with real world applicability included reading recipes and directions for cooking, arts/crafts projects, LEGO and K'nexs projects, and board games.

Approximately a third of respondents explicitly mentioned the use of small groups as effective in meeting reading objectives. This included use of small groups for tutoring, reading in class, program activities, as well as using one-to-one teacher/student interaction.

2) What activities or promising practices appeared to be most effective in helping to meet your subobjectives for improving student academic achievement in math?

Similarly, to Question 1 regarding promising practices for improving achievement in reading/language arts, the top three promising practices for academic achievement in Math were academic support, enrichment, and use of small groups. Again, the most commonly mentioned examples of academic support included homework help, remediation, and tutoring. Examples of support included using personalized software such as myON and IXL, online programs such as Contraption Maker, incorporating real world applications rather than memorization, tailored instruction that fit the needs of students, as well as SOL based lessons and tools.

Frequently identified examples of effective and helpful enrichment included DreamBox, STEM activities, Kahoots, using manipulatives, and IXL Mathematics. Other examples included Math Bingo, Math Seeds, Math Splash, Starfall, Sylvan Learning Center's Ace-It! Program, Family Math Nights, Pullout Program, VPM programs, and evidence-based online programs, such as Imagine Math and Star Math. Respondents also noted the use of various types of apprenticeships or vocational programs such as Emerging Chefs and Outdoor Adventures.

Mention of the efficacy of small groups for achieving Math objectives paralleled the frequency and context of responses about Reading objectives. Approximately a third of respondents mentioned the use of small groups as effective, particularly in the context of tutoring or in class activities.

3) What activities or promising practices appeared to be most effective in helping to meet your subobjectives for family engagement?

The most heavily emphasized promising practice for family engagement was outreach, communication, and relationship building with families. This was followed in emphasis by a variety of family events, and providing workshops, counseling, and other educational sessions for parents.

Grantees repeatedly stressed the importance of using a variety of communication methods with parents, noting "consistent parent communication" was key. These included inperson communication, flyers, phone calls and robo-calls, newsletters, calendars of events and activities, the school marque, e-mail, use of social media, texting, post-card reminders, and digital invitations with RSVPs.

It was further emphasized that eliciting "parental feedback" was a promising practice. Frequently mentioned was the practice of surveying parents to determine their interests, needs, when and how to send information, and what they saw as convenient times for activities. Accounting for parents' actual participation in the programs was also seen as a very important element for success.

Some centers identified the use of interpreter services, refreshments, and childcare at events to eliminate participation barriers families may face. One center noted, "The ability of staff to communicate with families in their home language is also essential. This allows staff to assist families in their connection to the school."

Among the family educational sessions most prominently mentioned were those addressing technology, including computer skills, social networking and social media safety, as well as family literacy activities. Programs on nutrition and healthy cooking were also mentioned numerous times. Grantees reported various forms of training and support to enhance parenting skills as very important as well.

There were various classes and events noted as particularly effective, such as GED preparation classes and college and career information. In addition to events hosting activities that were hands-on, activities that engaged the entire family, or facilitated student and parent interaction, such as field trips involving children and parents, were frequently reported as very engaging and effective. Additionally, events with "fun themes" were noted multiple times as being important for increased participation.

The importance of community partners in providing parent education as well as providing resources to families was frequently reported. These partners included the local Sheriff's or police department, 4-H, YMCA, the Department of Youth and Family Resources, United Way, among others.

Incentives for parent engagement and participation were also seen as a promising practice. Provision of food as either meals or snacks was the most commonly mentioned incentive. Other incentives included the provision of childcare during events, transportation to events, and giveaways of books and other donated items such as door prizes. Additionally, basing the timing of activities to coincide with pick-up/end-of-school, multiple offerings of activities at different times of day, offerings on the same day as school, and other flexible scheduling.

4) What activities or promising practices appeared to be most effective in helping to meet the program's objective for providing enrichment opportunities?

Grantees reported a wide variety of options regarding activities, projects, clubs, and trainings when asked about enrichment opportunities. Providing students a choice in the selection of activities, and rotating students through various activities, were often-mentioned practices that enhanced this variety. Hands-on activities including learning instruments, art, culinary skills, and gardening were commonly mentioned as well.

STEM opportunities were the most prominent activity noted. Field trips were also a frequently mentioned category of activity. For example, "College and other community-based field trips" were mentioned by multiple grantees, along with field trips to local theatres, as well as a Civil War Walking Tour. Field trips were also utilized as part of apprenticeship classes within several professions.

Community partnerships were also commonly referenced as helpful with enrichment activities, either through guest speakers or specialists, by facilitating field trip venues, or as hosting camps. One grantee reported that a partnership "has provided the most effective enrichment opportunities".

5) What activities or promising practices appeared to be most effective in helping to meet the program's objective for providing character education?

Incorporating character education throughout various programs and activities was the primary promising practice reported by grantees in response to this question. Character education was seen to improve behavior, class participation, and attendance. Respondents specifically described various desired personal traits and skills as being enhanced by character education. Most frequently mentioned were teamwork, mentoring, greater emotional regulation and understanding, respect for others, and self-respect.

Enrichment activities and programs were also seen as an important aspect of character education. Respondents noted several programs such as Chicas Poderosas, panther pride, various sports programs, Girls on the Run, Jr LEGO league, among others. Engaging and interactive character education activities was mentioned, with at least one center saying, "no paper-pencil activities unless combined with the interactive piece."

Mentoring was prominently mentioned as a method of delivering character education, followed by integration of character education into programs and direct instruction. In addition to

students' teachers, mentors included individuals from local universities, peer-student mentors, high school students, the Department of Youth and Family Resources, Omega U Fraternity, Future Leaders of America, and Smart Girls programs. Mentoring groups were noted by some grantees as being separated by grade level or gender. Several grantees reported that "gender-based mentoring groups" for students was found to be helpful in developing "character and leadership skills."

Various elements of program structure were reported as promising practices in support of character education. The most favorable was ensuring that character education was incorporated throughout the program. This included ensuring leadership opportunities, increased group work, and having school-wide character expectations. Frequency of character education activities was highlighted by several grantees, with some having a monthly character education program or activity, whereas another stated, "Character education activities were provided weekly and were actively embedded in all facets of the programming".

The grantees described collaborations on character education with many community partners and vendors as promising practices. Community partners included a county sheriff's office, 4-H, Girl Scouts, YMCA, Boys and Girls clubs, the South-Central Counseling Group, as well as others. Services provided by the various partners included mentoring, educational sessions for students, assistance with community projects, and alternate dispute resolution, just to name a few.

Staff and volunteers were mentioned by multiple grantees as being essential to effective character education. All staff and volunteers were expected to stress the importance of good character and citizenship and to interact positively with students during both activities and lessons. Some reported that staff utilized "behavior interventions and supports", ensured students had "consistent relationship-building with staff", and focused "on the students as a whole."

6) What activities or promising practices appeared to be most effective in helping to meet your subobjectives for improving community partnerships?

Responses to this question were predominantly about outreach and communication among program staff and the partners. The running theme throughout was that programs should ensure that frequent, consistent, and/or continuous communication with their community partners is maintained. "Communication with community partners was vital to our program", and

"communication is key" were just some of the phrases used to describe the perceived effectiveness.

Respondents recommended "constant communication about expectations" before and after the grant cycle, as well as consideration of the expectations and needs of grantee and community partners. Meeting frequency was also mentioned by multiple grantees, with several holding regular and frequent meetings with partners. Multiple centers even chose to assign "specific staff members as the liaison with specific community partners."

In addition to meetings and having community partners visit sites and attend events, specific forms of communication mentioned included email, quarterly newsletters, and telephone calls. Communication was often mentioned in conjunction with goals to evaluate progress, review programming, develop more community opportunities, discuss logistical needs of community partners prior to sessions, and invite partners to engage in family programming and/or to visit sites.

Ensuring that community partners were able to provide input and give feedback regarding schedules, programming, and included in broader organizational efforts were also mentioned as a promising practice. Moreover, observing community partners in order to "ensure quality programming" was another effective promising practice described by a grantee.

7) What activities or promising practices appeared to be most effective in helping to meet the program's "other" objective?

When asked about what is helpful to meet "other" objectives, enrichment activities and program structure were the two most common themes grantees noted. Multiple grantees mentioned Girls of the Run, diversity in activities, career-oriented programming such as college and career classes, field trips, and utilizing hands-on activities and projects. Other specifically mentioned enrichment activities identified as helpful in achieving their "other" objectives include piano keyboarding, mini-economy programming, Jr. Lego league, Drama Matters programming, gymnastics, cooking cub, fitness, Science club, STEAM and recreational activities, health and fitness, exercise with learning, garden program, Smart Moves, and Money Matters. Other grantees noted having dedicated STEM days, targeted campus visits, art-related field trips, and morning fitness were beneficial to achieving this objective. One respondent highlighted enrichment importance: "Students seemed to attend school more frequently on days when enrichment instruction was offered."

Some program structure elements noted by grantees were: "An authentic and welcoming environment", grade-based policy for participation, creating weekly lesson plans, having set rotations, incentives for participation such as "Fun Friday" or field trips, frequency of programing (such as having STEM programs biweekly), ensuring attendance is highlighted as important with students, incorporating student feedback, and free programming and transportation. Several respondents commented on continuity between school-day and after-school programming through having teachers teaching their own grade-level during the after-school program or through consistent communication between teachers and staff.

8) Provide recommendations that might improve the program in the future.

Over a hundred responses were submitted, most with multiple recommendations. Many of them mentioned themes of family engagement, program structure, or staffing. Some of the most common family engagement recommendations included "get a group together to do a brainstorm on what family engagement could look like in a different more helpful way to families," ensuring that parent feedback is being incorporated into the program, utilizing a more targeted approach in family outreach in lieu of "a wide-net net" which had lower results; and increase family trainings. Other respondents mentioned plans to "charge each family with attending at least 2 activities" and celebrate participating families. Another respondent wrote "Plan, schedule, and organize all of the family engagement events before the school year starts" in order to avoid rushing to develop programming and to alleviate stress that occurs when planning during the school year. Some recommendations were in response to the ongoing pandemic and social distancing requirements: "Identify more opportunities for families to engage together at home that are specific, with identifiable goals and/or success;" increasing take home resources; and continue to provide resources "related to job opportunities, food assistance, rent assistance, social-emotional assistance, and any other needed resources."

Many of the program structure recommendations have been noted within the "promising practices" above. However, some recommendations not previously discussed included: Implementing "virtual learning student packets (due to COVID 19 pandemic)", creating and distributing learning enrichment packets for those students unable to participate in virtual learning, changing programming locations due to either attendance or to increase community involvement, focus on the data of our students to guide and lead instruction, and providing transportation "to students' home stops after school rather than just to designated town stops."

Participants also recommended reducing programming days for middle schoolers from five to four to increase retention, "shortening hours to prevent teacher and student burn out," and decreasing programming days to allow for school day closure flexibility.

Several staff related recommendations have also been noted in previous sections. However, significant recommendations include promote and increase staff retention, "retain and hire bilingual staff to increase the participation of our Hispanic and English Learner population", encourage homeroom teachers to serve as paid tutors, encourage support staff to help plan, and enact character education activities and programming. Several other recommendations worth mentioning are to incorporate program guidance counselors, as well as increase professional development trainings for all staff.

Teacher Survey

Regular school-day teachers were asked to complete one teacher survey for each 21st CCLC student who was substantially served (i.e., 30 days or more). Ideally 7,942 surveys would have been completed for the 2019-2020 school year, one per 21st CCLC student who attended 30 days or more.

- 7,395 surveys were distributed
- 6,319 surveys were returned
- Therefore, there was a return rate of 85%
- And, 80% of substantially served 21st CCLC students are represented in the results from this survey.

Table 24. Teacher Survey Participation

Student Grade Range	Number of Surveys Distributed	Number of Surveys Returned	% of Return
PreK – 5 th Grade	4,432	4,010	90%
6 th – 12 th Grade	2,963	2,309	78%
Total	7,395	6,319	80%

School-day teachers reported that the majority of substantially served 21st CCLC students improved their behavior and homework participation over the school year. Students in grades 6-12 who participated 90 or more days were slightly more likely to improve in both

homework participation and behavior than 6-12th grade students who participated 30-59 days or 60-89 days. Students in PreK-5th grade were a little less likely to improve in both homework participation and behavior the longer they participated in the program.

Table 25. 21st CCLC Student Outcomes

Grade Category	Days served by program	Number of Students	% HW Part. Improved	% Behavior Improved
Pre-K-5 th Grade	(30-59 Days)	1,962	80%	74%
	(60-89 Days)	1,459	77%	71%
	(90+ Days)	572	78%	68%
6 th -12 th Grade	(30-59 Days)	1,544	79%	77%
	(60-89 Days)	513	78%	77%
	(90+ Days)	227	81%	79%
Overall		6,277	78%	74%

Conclusions

Overall conclusions are presented below by evaluation question.

What is the nature of the Virginia 21st CCLC grant program and level of participation by students?⁴

A wide variety of activities were offered by 21st CCLC centers during the summer, fall, and spring. Homework help, STEM, literacy, and tutoring were the activity types provided most often. Academic support, enrichment, and use of small groups were common practices used to improve student academic achievement. Providing students a choice in the selection of activities and rotating students through various activities were often-mentioned practices that enhanced enrichment opportunities.

Most 21st CCLC staff were paid school day teachers. Grantees expected all staff and volunteers to stress the importance of good character and citizenship and interact positively with students during both activities and lessons. Grantees also stressed that frequent, consistent, and/or continuous communication with their community partners be maintained to keep them engaged in the program.

The majority of the students attended the program less than 30 days and were in grades three through eight. Most student were either White, Black, or Hispanic. Almost two-thirds qualified for free/reduced price lunch. School-day teachers reported that the majority of substantially served 21st CCLC students improved in behavior and homework participation over the school year.

To what degree did centers meet Virginia's objectives for the program?

Without student achievement data from 2019-2020 available, it is difficult to determine if the first two objectives were met (improve student academic achievement in reading and math). However, based on the VAPR, about two-thirds of students who were categorized as "needs to improve" in the first quarter improved in both reading and math by the third quarter. Also, those who attended the program longer had a slightly higher chance of improving.

⁴ Due to school closures the student perceptual survey was not administered at the end of the 2019-2020 school year, and therefore cannot provide student perceptual data and some insight into the nature of the 21st CCLC program.

Although centers provided opportunities for family engagement (Objective 3) there was low parent participation in the 21st CCLC programs. For every 12 students who participated in the program, only one parent participated. Only half of the grantees reported meeting the family engagement objective they set in the original grant application, with most providing "Interactive Family Literacy" type-programs. The most heavily emphasized promising practice for family engagement was outreach, communication, and relationship building with families. Grantees repeatedly stressed the importance of using a variety of communication methods with parents, noting "consistent parent communication" was key. Incentives for parent engagement and participation were also seen as important part of family engagement.

What is the impact of 21st CCLC program participation on students' school-day attendance?

Participation in 21st CCLC programs had a statistically significant small, but positive impact on students 2019-2020 school-day attendance rate, compared to control students. On average, students who participated 21st CCLC programs attended close to one day more than control students. There was also a statistically significant positive impact on the 2019-2020 school-day attendance rate for each subgroup. Based on the effect size, 21st CCLC LEP students had the largest positive impact compared to control students. On average, LEP students who participated in 21st CCLC programs attended almost one day more than LEP control students.

Within both years, an increase in number of days of 21st CCLC participation also had statistically significant positive impacts on attendance rates. The lowest 21st CCLC participation group (1-29 days) had a statistically significantly lower attendance rate compared to the other three groups (30-59 days, 60-89 days, and 90+ days) in both years for every subgroup, with the exception of SPED in 2018-2019, where it was statistically significantly lower than the two highest participation groups. The two highest participation groups (60-89 days, and 90+ days) had statistically significantly higher attendance rates compared to the two lowest participation groups (1-29 days and 30-59 days) overall, and for the subgroups female, ED, and minority. Finally, the highest participation group (90+ days) had statistically significantly higher attendance than the next highest participation group (60-89 days) for the SPED and ED subgroups.

Between years, 21st CCLC participants in the lowest participation group (1-29 days) were the only group to have statistically significant **decreases** in school-day attendance rates, both overall as well as for each subgroup. The 30-59 days participation group for LEP, and the 60-89

days participation group for ED and Minority were the only groups to have statistically significant **increases** between years.

For the **2018-2019** school year, overall, students in the highest 21st CCLC participation group (90+ days) on average, had an attendance rate that was slightly less than 1.5 percentage points higher compared to students in the lowest 21st CCLC attendance group (1-29 days). Furthermore, this difference increased slightly to almost 2 percentage points in **2019-2020**. The largest statistically significant differences between 21st CCLC participation groups were between the lowest and highest participation groups in the 2019-2020 school year for the SPED and LEP subgroups. For these two subgroups, students who participated in 21st CCLC programs for 90+ days had on average, an attendance rate that was 2.5 percentage points higher compared to students who participated between 1-29 days.

Readers should note that the 1-29 days participation group was much larger than the other participation groups, making up approximately two-thirds to over 80% of the overall samples in both years. Conversely, the 90+ days participation group made up approximately only 2%-3% of the overall sample. Therefore, comparisons between participation groups should be treated with caution due to the large differences in sample sizes. In addition, due to the fact that schools closed in March 2020 due to the COVID-19 pandemic, it is not possible to know if attendance data for the year would have been different had it been a normal, full school year.

What promising practices regarding the achievement of required objectives were identified by centers?

Among comments submitted by grantees across the six subjects (math and reading/language arts; parent education; character education; enrichment opportunities; and community partnerships), the most heavily emphasized "promising practices" addressed three broad areas. First and most prominently were practices that supported the students. These can be broken into three types: Support for academic performance; enrichment activities; and use of small groups. The second broad group of practices encompassed family engagement through outreach, communication, and relationship building. Finally, there were practices such as frequent, consistent, and/or continuous communication aimed at improving community partnerships.

Grantees were also asked for recommendations to improve the program in the future.

Most recommendations were for practices already mentioned in responses about the six subjects

listed above. Among ideas not already emphasized were recommended practices under the broad themes of family communication and engagement, program structure due to COVID 19, and staff retention.

References

What Works Clearinghouse (2020a). *Procedures handbook (Version 4.1)*. Washington, DC:

Author. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/referenceresources/WWC-Procedures-Handbook-v4-1-508.pdf

What Works Clearinghouse (2020b). *Standards handbook (Version 4.1)*. Washington, DC:

Author. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/referenceresources/WWC-Standards-Handbook-v4-1-508.pdf