



THE UNIVERSITY OF
MEMPHIS™

The Center for Research in
Educational Policy (CREP)

Evaluation of Virginia's 21st Century Community Learning

Centers

2021-2022

Cindy Muzzi

Robert McKinney

Jean Black

Todd Zoblotsky

The University of Memphis

September 2023

Table of Contents

List of Figures	3
Executive Summary	4
The Evaluation Design	4
Conclusions	4
Introduction.....	7
Background and Program Description	7
21 st Century Community Learning Centers in Virginia	8
Evaluation Objectives and Questions	8
Methods	10
Participants	10
Instrumentation.....	10
School-Related Outcomes	11
Center and Participant Characteristics	16
Staff	16
Students	17
Family Members.....	20
Activities.....	21
Results.....	22
Objective 1 - Show gains on reading/language arts SOL assessments.....	22
Objective 2 - Show gains on mathematics SOL assessments.....	24
Objective 3 - Increase family engagement	25
Objective 4 - Show an increase in school day attendance.....	26
Objective 5 - Show a decrease in in-school suspensions	27
Objective 6 - Show an increase in student engagement	27
Objective 7 - Show an increase in grade point average (GPA).....	28
21 st CCLC Promising Practices	28
Student Engagement Survey (Teacher APR Survey).....	35
Conclusions.....	38
References.....	43

List of Tables

Table 1. Summary of Instruments and Data Sources by Evaluation Question	11
Table 2: Paid and Volunteer Staff.....	16
Table 3. Summer 2021 Student Attendance by Days Served	17
Table 4. Summer 2021 Student Attendance by Grade Level.....	17
Table 5. Summer 2021 Student Demographics.....	18
Table 6. Regular School Year Student Attendance by Days Served	18
Table 7. Regular School Year Student Attendance by Grade Level.....	19
Table 8. 21st CCLC and State Regular School Year Student Demographics.....	20
Table 9. Activities Offered by Term.....	21
Table 10. Academic Achievement VAPR Outcome Data – Reading and Language Arts.....	22
Table 11. Academic Achievement VAPR Outcome Data - Math.....	24
Table 12. Type of Family Engagement.....	25
Table 13. Parent Participation.....	26
Table 14. School Day Attendance VAPR Outcome Data.....	26
Table 15. In-School Suspension VAPR Outcome Data.....	27
Table 16. Student Engagement VAPR Outcome Data.....	28
Table 17. Grade Point Average VAPR Outcome Data	28
Table 18. 21 st CCLC Student Outcomes – Citizenship.....	36
Table 19. 21 st CCLC Student Outcomes - Collaboration.....	36
Table 20. 21 st CCLC Student Outcomes - Communication.....	37
Table 21. 21 st CCLC Student Outcomes – Creative Thinking.....	37
Table 22. 21 st CCLC Student Outcomes – Critical Thinking	37
Table 23. Student Survey Outcomes – I go to the after-school program because... ..	38
Table 24. Student Survey Outcomes – Agreement with the Following Statements	39
Table 25. Student Survey Outcomes – Staff.....	39
Table 26. Student Survey Outcomes – Going to the after-school program has helped me.....	39
Table 27. Student Survey Outcomes – ONLY High School Students.....	40

List of Figures

Figure 1: Type of Staff during Summer and Regular School Year.....	16
--	----

Executive Summary

The 21st Century Community Learning Centers (21st CCLC) program, funded through the U.S. Department of Education (DOE), 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 2021-2022 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 following program objectives: 1) show gains on reading/language arts SOL assessments, 2) show gains on mathematics SOL assessments, 3) increase family engagement, 4) show an increase in school day attendance, 5) show a decrease in in-school suspensions, 6) show an increase in student engagement, and 7) show an increase in grade point average (GPA).

Data were analyzed from the following sources: (a) the online Annual Local Evaluation Survey (ALERT), (b) the Virginia Annual Performance Report (VAPR) Survey, (c) the Student Engagement Survey (formerly known as the Teacher Survey), (d) Student Perceptual Survey, (e) 21st CCLC and school-day attendance for all student participants, and (f) two years of **Standards of Learning (SOL)** and **Virginia Alternate Assessment Program (VAAP)** proficiency and scaled assessment scores.

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?

Approximately 24,255 students qualified for 21st CCLC services. Of those, 16,177 (67%) attended at least one day of the 21st CCLC program during the 2021-2022 regular school year, and 46% were substantially served (i.e., attended 30 or more days). Nearly 54% of 21st CCLC students were considered economically disadvantaged (ED) and 51% were from underrepresented minorities (URM). Other things worth noting about the 21st CCLC grant programs include:

- 84 centers reported serving 2,032 family members during the regular school year.
- 138 centers provided nearly 100,000 hours of activities to students during the regular school year.
- According to the regular school day teachers, between 18% and 39% of students in grades one through five improved in citizenship, collaboration, communication, creative thinking, and critical thinking during the regular school year.
- Perceptual student data collected at the end of the 2021-2022 school year from nearly 6,000 students in grades three through twelve showed positive results.

To what degree did centers meet Virginia’s objectives for the program? What is the impact of 21st CCLC program participation on students’ school-day attendance?

The Virginia 21st CCLC program had a positive effect on the students they served, and as a whole were able to meet objectives four through seven and partially meet objectives one through three. For objectives one and two, when looking at the statistical analyses results, the comparison group usually outperformed the 21st CCLC students, but the differences were small and not educationally meaningful.

- **Objective 1:** 76% of students showed **gains in reading and language arts** from 2020-2021 to 2021-2022; however, the statistical analysis showed that the 21st CCLC students were outscored by the comparison group except for the third grade SPED and ED subgroups, and not to a meaningful degree.
- **Objective 2:** 76% of students showed **gains in mathematics** from 2020-2021 to 2021-2022; however, the statistical analysis showed that the 21st CCLC students were outscored by the comparison group except for the overall SPED subgroup, which showed a small positive effect size (0.12), and the third grade EL and SPED subgroups. Again, the differences were not large enough to be meaningful.
- **Objective 3:** Centers **increased the number of parent/guardian participants** from summer 2020 to summer 2021 by 618%; however, the number of participants slightly decreased (2.5%) from the 2020-2021 to the 2021-2022 regular school year.
- **Objective 4:** 70% of students showed an **increase in school day attendance** from 2020-2021 to 2021-2022, and the statistical analysis showed that the 21st CCLC

program had a statistically significant positive effect on student attendance as a whole (0.27), as well as the ED (0.27), SPED (0.35), and female (0.33) subgroups. The magnitude of these attendance differences were much larger than the differences on SOL outcomes.

- **Objective 5:** Two of the six students who had two years of **ISS data** (2020-2021 to 2021-2022) showed improvement (33%); however, the sample size was very small, and results should be used with caution.
- **Objective 6:** 96% of students showed an **increase in student engagement** on at least one behavior indicator as determined by the Student Engagement Survey.
- **Objective 7:** 57% of students showed an **increase in GPA** from 2020-2021 to 2021-2022.

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

Among comments about promising practices submitted by grantees across the six areas (math and reading/language arts; family engagement; enrichment opportunities; character education; and community partnerships), those most heavily emphasized addressed three broad areas. First, and most prominently, were **practices that supported the students**. These can be broken into three types: Academic support; enrichment activities; and assessment of students' needs. The second broad group of practices encompassed **family engagement** through events (virtual or in-person), provision of resources, and partnering with communities to provide resources to the families. Finally, there were practices such as strong communication, collaboration, and continued support aimed at improving and maintaining **community partnerships**.

Introduction

This report summarizes the 2021-2022 evaluation procedures and results for Virginia 21st Century Community Learning Centers (21st CCLC) programs. The mixed-methods evaluation utilized perceptual survey data, as well as program and school-day attendance data from study participants, and proficiency level and scaled scores from reading and math statewide assessments.

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 by addressing educational problems and meeting 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 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 the competitive 21st CCLC grant funds through the Virginia Department of Education (VDOE). Those awarded the 21st CCLC funds are typically 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:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show gains on **reading/language arts** SOL assessments.
- **Objective 2:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show gains on **mathematics** SOL assessments.
- **Objective 3: Family members** of students who participate in local 21st CCLC programs will show increased engagement in opportunities for literacy and related educational development.
- **Objective 4:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show an increase in **school day attendance**.
- **Objective 5:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show a decrease in **in-school suspensions**.

- **Objective 6:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show an increase in **student engagement** as reported by school day teachers.
- **Objective 7:** Virginia students attending schools that primarily serve a high percentage of students from low-income families and regularly attending a 21st CCLC program will show an increase **in grade point average (GPA)**.

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?

Methods

Participants

The 2021-2022 evaluation included 138 after-school programs within a three-year grant cycle (Cohorts 15, 17, 18, 19, & 20). The 21st CCLC 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*.

Instrumentation

During the 2021-2022 school year, data were collected by CREP using the following instruments: (a) the online Annual Local Evaluation Survey (ALERT) and (b) the Student Perceptual Survey. Data for the Virginia Annual Performance Report (VAPR) and Student Engagement Survey (also known as the Teacher APR Survey) are submitted by center grantees and site coordinators through a web-based system called TransAct and then shared with CREP to be analyzed and included in this report. A description of each instrument is provided below.

Annual Local Evaluation Report Template (ALERT). A grantee is required to submit an ALERT annually 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 2022. 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 challenges they faced while implementing 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).

Student Perceptual Survey. The Student Perceptual Survey gives 21st CCLC students the opportunity to anonymously provide their perceptions of the program, and a means to report benefits they attribute to their program attendance. Students in grades three through twelve who participated in the program 30 or more days (i.e., were substantially served) are asked to complete the survey.

Virginia Annual Performance Report (VAPR). VAPR is based on the Government Performance and Results Act (GPRA) established by congress and is required by the United States Department of Education (DOE) in order to track the annual progress of the state’s 21st CCLC programs. In 2020, The United States Department of Education (USED) approved a set of five new GPRA measures for the 21st CCLC program to be implemented by programs starting in summer 2021. Grantees are responsible for entering the data and certifying it by the date set annually by the VDOE.

Student Engagement Survey. The Student Engagement Survey, also known as the Teacher APR Survey, was designed to collect information from the regular school-day teacher about changes in citizenship, communication, collaboration, critical thinking, and creative thinking for each student, in grades one through five, who attended the 21st CCLC program 15 hours or more.

School-Related Outcomes

Other data shared by VDOE include **student attendance**, and two years of **Standards of Learning (SOL)** and **Virginia Alternate Assessment Program (VAAP)** proficiency and scaled assessment scores. These test data cover reading and mathematics for students in grades three through twelve. In addition to the assessment scores, VDOE shared student gender, grade, ethnicity, English Language Proficiency (ELP) status, disability status and primary disability code (if applicable), economically disadvantaged status, and days of participation in the 21st CCLC program. It should be noted that students with limited English proficiency, at the lowest levels of English proficiency, and students with disabilities are permitted to participate in approved alternative assessments. The VAAP alternate assessment data were included in the analysis of proficiency-level outcomes, but only the SOL assessment data were used in the analysis of scaled score outcomes.

These data 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?	<ul style="list-style-type: none"> • ALERT • Virginia Annual Performance Report (VAPR) • Student Engagement Survey

Evaluation Question	Data Sources
	<ul style="list-style-type: none"> • Student Perceptual Survey
To what degree did centers meet Virginia’s objectives for the program?	<ul style="list-style-type: none"> • Standards of Learning (SOL) • Virginia Alternate Assessment Program (VAAP) • ALERT • Virginia Annual Performance Report (VAPR) • Student Engagement Survey
What is the impact of 21st CCLC program participation on students’ school-day attendance?	<ul style="list-style-type: none"> • School day attendance provided by the state
What “promising practices” regarding the achievement of required objectives were identified by centers?	<ul style="list-style-type: none"> • ALERT

Statistical Analysis of Student Achievement and School-day Attendance

Sample

Pretest data (2020-2021 school year) were missing for the vast majority of students, particularly those with zero days of participation in 21st CCLC programs. Of the 347,001 records of posttest data (both English Reading and Mathematics) in grades four through twelve, only 9,882 (3%) had accompanying pretest data. After records with scores of zero on the pretest or posttest were removed, only 534 records (0.2%) (158 English Reading, 376 Mathematics) were available from students who had zero days of 21st CCLC participation (i.e., the comparison group). Because this group was so small, students who had from 1-29 days of 21st CCLC participation also had to be used as part of the comparison group, making the final comparison sample size 5,488 (2,564 English Reading, 2,924 Mathematics), which included all students with 0-29 days of attendance. As a result, the comparison group students also had an average of 10 days of 21st CCLC participation. Meanwhile, the treatment group had 4,160 students (2,040 English Reading and 2,120 Mathematics). The results of statistical analyses should be interpreted cautiously, as they may not reflect the full effect of 30 days of participation. Additionally, the generalizability of the results is unclear, as it is not certain that pretest data were missing completely at random. In other words, unmeasured background factors (e.g., student motivation) could influence the availability of data, and therefore affect the results of the analysis.

This procedure resulted in reasonably equal participant and comparison group sizes. As a result, it was not possible to match participant and comparison students on demographic variables, as that procedure requires a pool of comparison students that is substantially larger than the treatment group. However, both the English Reading and Mathematics groups met What Works Clearinghouse (2022) standards for baseline equivalence on all covariates (gender, racial minority, EL, SPED, ED) and outcomes (scaled scores and proficiency). The risk of pre-existing demographic differences biasing the analyses is therefore small.

Additionally, students were not uniquely identified in the data. Therefore, in the attendance analysis, students who took End-of-Course assessments in both English Reading and Mathematics will be represented twice.

Third Grade

In previous years of this evaluation, the descriptive comparison of third grade students typically compared students in the 21st CCLC program and comparison groups to students in the same group for the previous year. For example, participant students in Year 2 (e.g., 2021-2022) would be compared to participant students in Year 1 (e.g., 2020-2021).

However, the most recent school year with reasonably complete test data at the student level was 2018-2019. As those data were no longer available to CREP, the current evaluation compared treatment students to comparison students on the most recent year only. Since that descriptive analysis did not rely on a pre-test, all students with 2021-2022 data were available for analysis. Third grade students with zero days of participation were matched to 21st CCLC participants to create an equivalent comparison group. As with the 4th–12th grade sample, students were not uniquely identified, so the attendance analysis may include some students twice.

Analyses

To estimate the effect of the 21st CCLC program on student academic achievement, CREP compared 21st CCLC-attending students (defined as students with 30 days or more of 21st CCLC attendance) with non-attenders (defined as students with less than 30 days of 21st CCLC attendance). This process was restricted to students who (a) had two years of data available (2020-21 pretest and 2021-22 posttest), and (b) did not have a score of zero in either year. CREP then used Hierarchical Linear Models (HLM) and Hierarchical Generalized Linear Models (HGLM) to analyze state reading and mathematics assessment data for the matched students. A

similar analysis was performed using HGLM to determine the impact of 21st CCLC attendance on school-day attendance.

Proficiency Analyses

The first set of analyses assessed **proficiency-level performance** in 2021-2022 based on all available test data (i.e., SOL and VAAP) using HGLM. For these analyses, the proficiency level on the **SOL and VAAP** tests for the 2020-2021 and 2021-2022 school years was treated as either “pass” (based on scoring “Proficient,” “Advanced Proficient,” or “Advanced/College Path”), or “fail” (based on scoring “Basic” or “Below Basic”). This method permitted the inclusion of all students, regardless of the type of assessment taken to participate in Virginia’s statewide testing program (i.e., traditional or alternate), as proficiency level is a common measure across each of the different test types, grade levels, and years. By including all students in the analyses, this method offers the most appropriate tool to analyze outcomes for specific student subgroups for the data available. Additionally, the effects of 21st CCLC participation on five subgroups, based on (a) gender, (b) racial minority status, (c) special education status (SPED), (d) English Language Proficiency (ELP) status, and (e) economically disadvantaged (ED) status were examined.

Scaled Score Analyses

While these analyses were designed to capture broad impacts on student proficiency associated with participation in the 21st CCLC programs, these analyses were not designed to measure *incremental* differences in student achievement or differences between treatment and comparison students that may occur *within* proficiency levels. For example, students who initially scored at the low end of proficiency, but moved to the high end of proficiency, would have demonstrated no measurable change in the proficiency analyses because their overall proficiency level (i.e., Proficient or Not Proficient) had not changed, even though their academic achievement may have increased from one year to the next. In other words, their scores on standardized assessments would have increased, but they stayed within the same proficiency level category (i.e., Proficient).

Therefore, the next two sets of analyses focused on the **standardized scaled scores** of students who took the **SOL assessments** in both 2020-2021 and 2021-2022, using HLM. These SOL analyses were intended to be more sensitive to these types of changes that occur across the scaled score range, regardless of students’ proficiency levels. The standardized SOL scaled score analyses included the same covariates used in the proficiency level analyses, and looked at the effects of 21st

CCLC participation in the same subgroups. While this analysis **excluded VAAP students**, only 6 records of VAAP data were available, so the effect of their exclusion should be minimal. As a result, almost all results from both sets of analyses are based only on SOL test outcomes.

Furthermore, since a) test scores between grade levels were not equal (between-grade differences were as high as $g = 0.4$), and b) CCLC participation was correlated with grade level, the test¹ outcome data were converted to standardized scores (i.e., z-scores) prior to analysis. This procedure placed the data onto a single, comparable scale across grade levels while retaining the shape of the distribution of the original scores. The conversion also allowed different grade levels to be combined so that the effectiveness of centers could be evaluated based on all students served.

Attendance Analyses

The **attendance analyses** used HGLM to investigate the impact of 21st CCLC participation on students' school-day attendance. For each student, the number of days present and the number of days absent had to total the number of days in session, otherwise the record was deleted. The number of days absent during the 2021-2022 school year was analyzed, while taking the number of days in session and the number of absences during the 2020-2021 school year into account. This allows all students to be compared using the same scale, regardless of any variation in the number of days each school was in session. Additionally, the effects of 21st CCLC participation on five subgroups, based on (a) gender, (b) racial minority status, (c) ELP status, (d) SPED status, and (e) ED status, were examined.

A further consideration is that the achievement and 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 the results were aggregated across all centers rather than evaluated center-by-center.

¹ The test level is the achievement test level independent from grade level. Therefore, students' scores were standardized based on the test level of the test they took, not the grade level in which they were enrolled.

Center and Participant Characteristics

Each year, 21st CCLC grantees are required to enter information about their staff, students, family members, and activities in the online TransAct system. One hundred and thirteen (113) centers completed a report for summer 2021, and 138 centers completed a report for the 2021-2022 regular school year. The 21st CCLC population is described in more detail below.

Staff

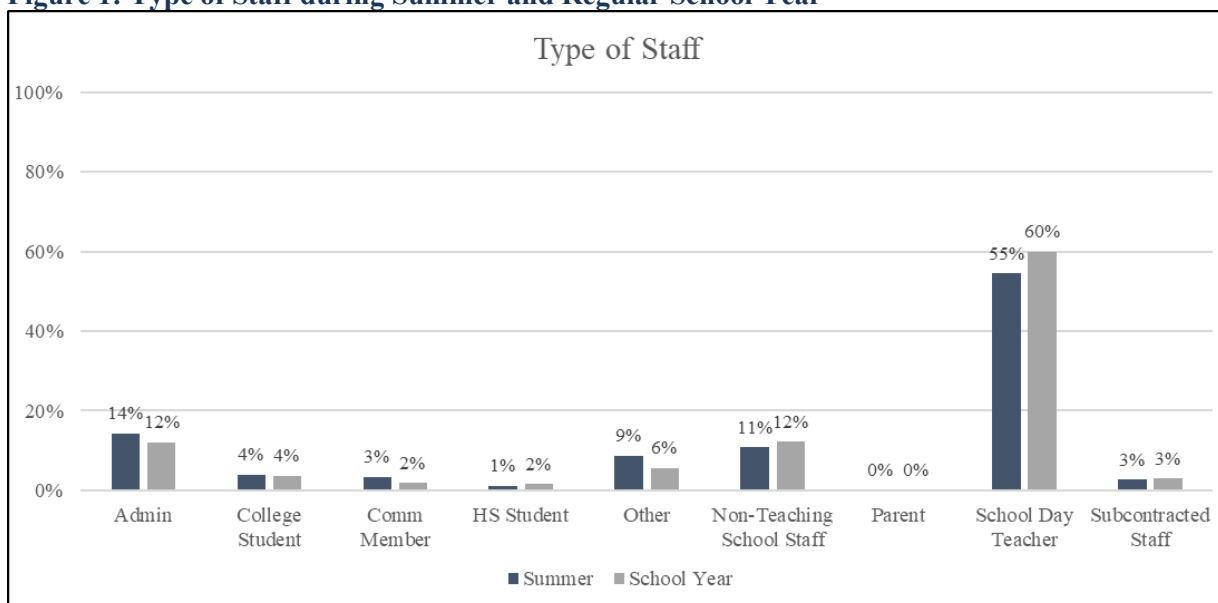
As seen in **Table 2**, 98% of the staff were paid and 2% were volunteers for both Summer 2021 and the regular school year (2021-2022).

Table 2: Paid and Volunteer Staff

Term	Paid		Volunteer		Total # of staff
	Number	Percentage	Number	Percentage	
Summer 2021	1,129	98%	19	2%	1,148
Regular School Year	1,826	98%	39	2%	1,867

School-day teachers were the most common type of staff member during both summer 2021 and the regular school year (**Figure 1**). Administrators and non-teaching school staff were the next most common type of staff to work in the centers. Parents made up less than 1% of the center staffing for each term.

Figure 1: Type of Staff during Summer and Regular School Year



Students

Summer 2021 Program. During the summer of 2021, a total of 4,523 students in PreK through 12th grade attended 21st CCLC, which is more than twice as many students served during the summer of 2020 ($N = 2,154$). The majority (98%) of 21st CCLC student participants attended less than 30 days (i.e., 1-29 days) (**Table 3**). Most students were in grades one through eight (82%), with grades three, four, and five having the largest number of student participants. Pre-kindergarten and high school students (9-12) had the lowest number of participants (**Table 4**). According to VDOE, most of the grant applications received and awarded each year are for upper elementary (3-5) and middle school grades (6-8).

Table 3. Summer 2021 Student Attendance by Days Served

Attendance Day Category	Number	Percentage
Less than 30 days	4,425	98%
30-59 days	94	2%
60-89 days	4	<1%
90+ days	0	0%
TOTAL	4,523	100%

Table 4. Summer 2021 Student Attendance by Grade Level

Grade Level	Number	Percentage
Pre-kindergarten	46	1%
Kindergarten	163	4%
1st grade	348	8%
2nd grade	466	10%
3rd grade	530	12%
4th grade	570	13%
5th grade	513	11%
6th grade	362	8%
7th grade	494	11%
8th grade	426	9%
9th grade	282	6%
10th grade	111	2%
11th grade	99	2%
12th grade	113	2%
TOTAL	4,523	100%

Demographics. The summer demographic information collected in the VAPR reflected slightly more male than female participants (**Table 5**). The ethnic groups with the highest

percentage of students were White (47%), Black (32%), and Hispanic (13%). Approximately 16% of students were English Learners (EL) and 12% were classified as “students with disabilities.”

Table 5. Summer 2021 Student Demographics

Student Demographics	Number	Percentage
Gender		
Male	2,309	51%
Female	2,198	49%
Gender Not Reported	2	<1%
Unknown	7	<1%
TOTAL	4,523	100%
Ethnicity		
American Indian/Alaskan Native	7	<1%
Asian	77	2%
Black	1,462	32%
Hispanic	569	13%
Pacific Islander	2	<1%
White	2,120	47%
Two or more	22	<1%
Unknown	264	6%
TOTAL	4,523	100%
Population Specifics		
English Learners (EL)	532	16%
Students with Disabilities	737	12%

Regular School Year Program. Grantees reported that 16,177 students were in attendance at least one or more days during the 2021-2022 regular school year (**Table 6**). Of that, 46% were substantially served (i.e., attended 30 or more days). By comparison, after-school attendance increased 47% from the 2020-2021 to the 2021-2022 school year (11,027 to 16,177).

Table 6. Regular School Year Student Attendance by Days Served

Attendance Day Category	Number	Percentage
1-29 days	8,703	54%
30-59 days	3,232	20%
60-89 days	1,752	11%
90+ days	2,490	15%
TOTAL	16,177	100%

Most 21st CCLC students were in grades two through eight (76%) (**Table 7**). Grades six, seven, and eight had the largest number of student participants. Similar to the summer program, pre-kindergarten and high school students (10-12) had the lowest number of participants.

Table 7. Regular School Year Student Attendance by Grade Level

Grade Level	Number	Percentage
Pre-kindergarten	164	1%
Kindergarten	620	4%
1st grade	819	5%
2nd grade	1,316	8%
3rd grade	1,637	10%
4th grade	1,592	10%
5th grade	1,576	10%
6th grade	1,870	12%
7th grade	2,300	14%
8th grade	2,046	13%
9th grade	759	5%
10th grade	572	4%
11th grade	494	3%
12th grade	412	3%
TOTAL	16,177	100%

Demographics. The 2021-2022 regular school year demographic information reflected slightly more female participants than male. The ethnic groups with the highest percentages were White (42%), Black (31%), and Hispanic (17%). Approximately 16% of students were English Learners (EL) and 14% were classified as “students with disabilities.” Many of the regular school year demographics are similar to the summer program. The largest differences are that (a) the regular school year programs served a slightly *lower* percentage of White students (42% during the regular school year versus 47% during the summer) and (b) a slightly *higher* percentage of Hispanic students (17% during the regular school year versus 13% during the summer).

Compared to the state. When comparing the 21st CCLC student population to all students served throughout the Commonwealth of Virginia for the 2021-2022 school year, the

21st CCLC student population was representative of the Commonwealth in some ways (i.e., gender, Hispanic percentage, EL, and students with disabilities), but not others. The 21st CCLC programs served a *higher* percentage of Black students and a slightly *lower* percentage of Asian and White students. Refer to **Table 8** for more details.

Table 8. 21st CCLC and State Regular School Year Student Demographics

Student Demographics	CCLC Number Number	CCLC Percentage	Commonwealth Percentage ²
Gender			
Male	7,700	48%	51%
Female	8,046	50%	49%
Gender Not Reported	7	<1%	NA
Unknown	424	3%	NA
TOTAL	16,177	100%	100%
Ethnicity			
American Indian/Alaskan Native	34	<1%	<1%
Asian	380	2%	7%
Black	5,017	31%	22%
Hispanic	2,676	17%	18%
Pacific Islander	10	<1%	<1%
White	6,805	42%	46%
Two or more	58	<1%	6%
Unknown	1,197	7%	NA
TOTAL	16,177	100%	100%
Population Specifics			
English Learners (EL)	2,587	16%	13%
Students with Disabilities	2,262	14%	14%

Family Members

The 21st CCLC programs also served family members of 21st CCLC students, which complies with the third GPRA measure “increase family engagement.” Grantees reported a total of 237 family members who attended 21st CCLC programs during the summer of 2021, and 2,032 family members in attendance during the regular school year (2021-2022).

² <https://schoolquality.virginia.gov/virginia-state-quality-profile#desktopTabs-3>

Activities

A wide variety of activities were offered to students by 21st CCLC centers, as shown in **Table 9**. A total of 105 provided more than 22,000 hours of activities to students in the summer, and 138 centers provided nearly 100,000 hours of activities to students during the regular school year. *STEM*, *Well-rounded Education Activities*, *Healthy and Active Lifestyle*, *Academic Enrichment*, and *Literacy Education* were the activity categories with the most participants during both the summer and regular school year, with *Academic Enrichment* activities being utilized more during the regular school year and *STEM* activities utilized more during the summer.

Table 9. Activities Offered to Students by Term

Activity Category	Summer 2021		Regular School Year (2021-2022)	
	Participants	Hours	Participants	Hours
Academic Enrichment	2,025	4,598	10,987	34,004
Activities for English Learners	35	131	276	486
Assistance to Students who have been Truant, Suspended, or Expelled	223	398	186	353
Career Competencies and Career Readiness	625	527	1,902	2,603
Cultural Programs	56	61	648	738
Drug and Violence Prevention and Counseling	450	578	1,664	1,183
Expanded Library Service Hours	0	0	128	110
Healthy and Active Lifestyle	2,348	2,714	8,663	14,056
Literacy Education	1,952	3,203	5,707	11,818
Parenting Skills and Family Literacy	212	32	2,190	895
Science, Technology, Engineering, and Mathematics (STEM)	2,997	5,615	7,605	13,436
Services for Individuals with Disabilities	0	0	7	26
Telecommunications and Technology Education	0	0	98	138
Well-rounded Education Activities, including credit recovery or attainment	2,383	4,768	7,924	18,498
TOTAL	NA	22,625	NA	98,344

Results

Grantees are required to address seven objectives while implementing their 21st CCLC program: 1) show gains on reading/language arts SOL assessments; 2) show gains on mathematics SOL assessments, 3) increase family engagement, 4) show an increase in school day attendance, 5) show a decrease in in-school suspensions, 6) show an increase in student engagement, and 7) show an increase in grade point average (GPA). The extent to which the centers met these objectives is presented below. While not one of the statewide objectives, an analysis of the Student Engagement Survey and a descriptive write-up of common themes found in the Promising Practices section of the ALERT are also provided.

Two things to note in terms of data: State achievement data were missing, mostly from the 2020-2021 school year, and inputting data into TransAct was not fully completed by every grantee. Missing data can occur for various reasons, such as errors in data collection, data entry mistakes, or continued disruptions from the pandemic. Had all data been included, the results in this annual report may have been different.

Objective 1 - Show gains on reading/language arts SOL assessments

VAPR: Grantees are asked to enter student academic achievement data in TransAct. Grantees reported that over three-quarters (76%) of 21st CCLC students in grades four through eight who had two years of data on the state assessment in Reading and Language Arts demonstrated growth from 2020-2021 to 2021-2022. Students who attended 15 to 269 hours were slightly more likely to show growth in Reading and Language Arts than students who attended less than 15 hours or more than 270 hours (**Table 10**).

Table 10. Academic Achievement VAPR Outcome Data – Reading and Language Arts

State Assessment - Reading and Language Arts (Grades 4-8)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	2,221	1,617	73%
15 to 44 Hours	1,978	1,546	78%
45 to 89 Hours	1,737	1,347	78%
90 to 179 Hours	1,519	1,163	77%
180 to 269 Hours	611	469	77%
More than 270 Hours	370	269	73%
TOTAL	8,436	6,411	76%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

Scaled Scores: When looking at 21st CCLC participant and comparison group students in grades four through twelve, after statistically controlling for student demographic variables and prior year achievement, the effect of 21st CCLC participation was statistically significant and negative for standardized SOL test scaled scores in English Reading, though with an effect size that is typically considered too small to be meaningful ($g = -0.04$).

The effect size (calculated as either the Cox Index for the proficiency analyses or Hedges' g for the standardized SOL test scaled score analyses) is a descriptive statistic that provides a measure of the *magnitude* of the difference between scores (i.e., whether the difference is large enough to be meaningful, separate from whether the difference is statistically significant). An effect size of $g = -0.04$ indicates that, on the SOL English Reading test, 21st CCLC participants scored 0.04 standard deviations lower than comparison students, with the average treatment student scoring at the 48th percentile of the control group. In the subgroup analyses, the effect of 21st CCLC participation was not statistically significant in racial minority, EL, disabled, or economically disadvantaged students; however, for female students, it was statistically significant and negative ($g = -0.074$), but small, with the average female student in the treatment group scoring at the 47th percentile of the control group.

It should be stressed that due to a low number of students with zero days of participation, the comparison group largely consisted of students with at least some 21st CCLC participation (1-29 days). Additionally, because the treatment and comparison groups had similar numbers of students, matched samples could not be created. Statistical results should therefore be interpreted cautiously.

Proficiency: 21st CCLC participation had no statistically significant effect on student proficiency (CIES = -0.03). It similarly had no statistically significant results on student proficiency in any subgroup. As with the scaled score analysis, most students in the comparison group had some participation in 21st CCLC. Consequently, statistical results should be interpreted cautiously.

Third Grade: Results of the descriptive analysis of reading outcomes for students in grade three showed that for **proficiency outcomes**, 21st CCLC participants were *outperformed* by comparison students for all students combined and in the female, racial minority, and EL subgroups. However, 21st CCLC participants *outscored* comparison students in the SPED and ED subgroups. For **scaled scores outcomes**, 21st CCLC participants were *outperformed* by

comparison students for all students combined and in the female, racial minority, EL, and ED subgroups. However, 21st CCLC participants *outscored* comparison students in the SPED subgroup.

Objective 2 - Show gains on mathematics SOL assessments

VAPR: Similar to the VAPR results for Reading and Language Arts, grantees reported over three-quarters (76%) of 21st CCLC students in grades four through eight demonstrated growth on the state assessment in math. Students who attended more than 15 hours were slightly more likely to show growth on the state assessment in Math than students who attended less than 15 hours (**Table 11**).

Table 11. Academic Achievement VAPR Outcome Data - Math

State Assessment - Math (Grades 4-8)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	2,232	1,624	73%
15 to 44 Hours	1,985	1,494	75%
45 to 89 Hours	1,734	1,349	78%
90 to 179 Hours	1,526	1,186	78%
180 to 269 Hours	614	467	76%
More than 270 Hours	371	281	76%
TOTAL	8,462	6,401	76%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

Scaled Scores: When looking at 21st CCLC participants and comparison group students in grades four through twelve, after statistically controlling for student demographic variables and prior year achievement, the effect of 21st CCLC participation was not statistically significant in mathematics. In the subgroup analyses, the effect of 21st CCLC participation was not statistically significant for female, racial minority, EL, or economically disadvantaged students. However, in students with a disability, the difference was statistically significant and positive, with a small effect size ($g = 0.12$). That effect size indicates that, on the SOL mathematics test, students with a disability who participated in 21st CCLC programs for at least 30 days scored 0.12 standard deviations higher than similar students with lower levels of participation, with the average treatment student scoring at the 55th percentile of the comparison group. When interpreting these results, it should be stressed that due to a low number of students with zero days of participation, the comparison group largely consisted of students with at least some 21st CCLC participation (1-29 days). Additionally, because the treatment and comparison groups had

similar numbers of students, matched samples could not be created. Statistical results should therefore be interpreted cautiously.

Proficiency: 30 days of 21st CCLC participation had no statistically significant effect on student proficiency in math when compared to fewer days of participation (CIES = 0.01). Similarly, there was no statistically significant effect on student proficiency in any subgroup. As with the scaled score analysis, most students in the comparison group had some participation in 21st CCLC, so statistical results should be interpreted cautiously.

Third Grade: In terms of mathematics **SOL test scaled scores**, third grade comparison students outscored 21st CCLC participants for all students combined and in the female, racial minority, and ED subgroups. However, participants outscored the comparison group in the EL and SPED subgroups. In terms of mathematics **proficiency**, third grade comparison students outscored 21st CCLC participants for all students combined and in the female, racial minority, SPED, and ED subgroups. However, participants outscored the comparison group in the EL subgroup.

Objective 3 - Increase family engagement

VAPR: Grantees are asked to enter **family engagement** data in TransAct. For the 2021-2022 school year, grantees reported a total of 237 family members who attended 21st CCLC programs during the summer of 2021, which is a 618% increase from the previous summer ($N = 33$). For the regular school year, grantees reported that 2,032 family members were in attendance, which is similar to the number served the previous school year ($N = 2,084$).

ALERT: Grantees were asked questions about the program outcomes for the **family engagement objective** in the ALERT to provide VDOE specific feedback on this objective. Nearly half (45%) of centers were progressing toward their objective, 44% met or exceeded the objective, and 11% felt they made no progress towards meeting the objective (**Table 12**).

Table 12. Type of Family Engagement

Select the comment that describes the program’s outcome for family engagement.	Number	Percentage
Met or exceeded objective	59	44%
No progress made on objective	14	11%
Progressing toward objective	60	45%
TOTAL	133	100%

Grantees were also asked to rate how challenging **parent participation** was at their center. Half (50%) reported that parent participation was “somewhat of a challenge,” 35% reported it as a “major challenge,” and a little less than a fifth (15%) reported parent participation as “not a challenge” (**Table 13**).

Table 13. Parent Participation

	Not a challenge	Somewhat of a challenge	Major challenge	Responses
Parent participation	15%	50%	35%	133

Objective 4 - Show an increase in school day attendance

VAPR: Grantees are asked to enter school-day attendance data in TransAct. Grantees reported that 70% of 21st CCLC students in grades one through twelve demonstrated an improvement in their school day attendance. Students who attended more than 15 hours were more likely to show improvement in school day attendance than those who attended less than 15 hours. Students served 180-269 hours were the most likely to show an improvement (85%). See **Table 14** for more details.

Table 14. School Day Attendance VAPR Outcome Data

School Day Attendance (Grades 1-12)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	689	422	61%
15 to 44 Hours	474	327	69%
45 to 89 Hours	408	300	74%
90 to 179 Hours	392	287	73%
180 to 269 Hours	169	144	85%
More than 270 Hours	166	119	72%
TOTAL	2,298	1,599	70%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

Absences: When examining the 21st CCLC participant and matched comparison group in grades four through twelve, after controlling for (a) student demographic variables, (b) grade, (c) prior year school-day attendance, and the (d) number of days in the academic year of each school, participation in 21st CCLC programs had a statistically significant positive effect on participants’ 2021-2022 school-day attendance, with the effect size (CIES = 0.27) indicating that 61% of 21st CCLC students had attendance equal to or greater than the average comparison group student. Overall, 21st CCLC students attended almost three full days on average compared

to controls. In addition, there were statistically significant positive differences in school-day attendance favoring 21st CCLC participants for the SPED (CIES = 0.35), female (CIES = 0.33), and economically disadvantaged (CIES = 0.27) subgroups. The SPED subgroup had the largest statistically significant positive difference, with 64% of 21st CCLC SPED students having higher attendance than the average comparison SPED student. Overall, 21st CCLC SPED students had 4.5 days of extra attendance compared to SPED controls, after accounting for covariates.

Third Grade: For attendance in third grade, there was no meaningful difference between participants and comparison students. Both groups had the same average number of absences, and the same percentage of days absent.

Objective 5 - Show a decrease in in-school suspensions

VAPR: Centers that work with schools that give in-school suspensions (ISS) to students were asked to report student-level ISS data in TransAct. For the 2021-2022 school year, grantees reported six students who had two years of ISS data. Results showed that students who attended 15 hours or more of were more likely to show improvement in ISS than those who attended less than 15 hours (**Table 15**). However, because the number of students with two years of ISS data is small and likely not complete, the outcomes may not be representative of the larger population. Interpret and use these findings with caution.

Table 15. In-School Suspension VAPR Outcome Data

In-School Suspensions (Grades 1-12)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	3	0	0%
15 to 44 Hours	1	1	100%
45 to 89 Hours	1	1	100%
90 to 179 Hours	0	0	0%
180 to 269 Hours	1	0	0%
More than 270 Hours	0	0	0%
TOTAL	6	2	33%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

Objective 6 - Show an increase in student engagement

VAPR: Grantees were asked to survey regular school-day teachers in grades one through five about the 21st CCLC student level of engagement in learning and enter the data in TransAct. For the 2021-2022 school year, teachers reported that almost all (96%) of 21st CCLC students in grades one through five demonstrated an improvement in their engagement in learning. Students

who attended more than 15 hours were a little more likely to show growth in engagement than those who attended less than 15 hours (**Table 16**).

Table 16. Student Engagement VAPR Outcome Data

Engagement in learning (Grades 1-5)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	742	687	93%
15 to 44 Hours	837	801	96%
45 to 89 Hours	903	862	95%
90 to 179 Hours	1,116	1,086	97%
180 to 269 Hours	542	533	98%
More than 270 Hours	347	335	97%
TOTAL	4,487	4,304	96%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

Objective 7 - Show an increase in grade point average (GPA)

VAPR: Grantees were asked to report student-level GPA data in TransAct for grades seven, eight, ten, eleven, and twelve. For the 2021-2022 school year, grantees reported that over half (57%) of 21st CCLC students demonstrated improvement in their GPA. Students who attended 45 to 89 hours were slightly more likely to show an improvement in their GPA than students with 44 hours or less of attendance or students with 90 to 269 hours of attendance. Students who attended more than 270 hours were a lot more likely show an improvement in their GPA than any other group (**Table 17**).

Table 17. Grade Point Average VAPR Outcome Data

GPA (Grades 7, 8, 10, 11, & 12)	Sum of Number with Data*	Sum of Number Reporting Growth	Percentage Reporting Growth
Less than 15 Hours	228	128	56%
15 to 44 Hours	150	84	56%
45 to 89 Hours	128	81	63%
90 to 179 Hours	64	32	50%
180 to 269 Hours	15	6	40%
More than 270 Hours	16	13	81%
TOTAL	601	344	57%

*Students with two years of data for comparison (2020-2021 and 2021-2022)

21st CCLC Promising Practices

Hundreds of promising practices that were 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 question they address, and organized by theme.

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

The top three promising practices for academic achievement in reading and language arts were: Academic support, academic enrichment, and assessment of student needs.

Regarding **academic support**, most grantees discussed the importance of tutoring and remediation, along with homework help. They also emphasized peer-to-peer learning and small group interactions to improve students' reading level. Other examples of academic support for reading included increasing frequency of support and allowing for extended time, as well as preparing students for the state achievement test (SOL). It was also noted that many programs scaffolded literacy and reading activities into all their other projects and enrichment opportunities to reinforce foundational skills.

Academic enrichment was most frequently characterized by creative reading and writing activities. Some of the activities included were (a) games, (b) field trips, (c) reading exercises, (d) reading SOL skills, (f) reading theater, and (g) use of Fountas & Pinnell Leveled Literacy intervention. Additional academic enrichment included the use of technology through online reading programs such as IXL Reading/Writing, KidzLit, and Write Brain. The online reading programs were often described as essential supplemental literacy tools. When students could meet in-person, enrichment typically included opportunities like spelling bees, writing/book clubs, and mentor-reader partnerships.

Assessment of student needs also aided in reading growth throughout the year. Giving students an environment where their voices could be heard, their questions could be answered, and where they received unique attention boosted reading morale. Similarly, the reading objective was bolstered by grantees/program facilitators strengthening staffs' literacy instructional practices. For example, by conducting read-alouds, practicing writing skills, and developing reading comprehension abilities, staff could better assess reading achievement. Other specific examples that work well for centers were implementing biweekly assessments to track

student progress throughout the year. Some also utilized student and teacher feedback to assess and target problem areas in students' learning.

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

Two of the top three promising practices or activities for improving achievement in math were the same as those of the reading objective: Academic support, academic enrichment, and real-world application.

Academic support for mathematics was heavily represented by tutoring, remediation, and homework help. Homework assistance occurred through one-on-one tutoring, small group learning, and peer-to-peer support. Resources like Homework Help Hotlines were made available to students along with the use of flash cards and BelXcel curriculum. Individualized support was also a common academic support theme. Some of the afterschool programs included individualized lesson plans and activities that were tailored to the developmental level of the student. Through this individualized support, students were not only able to receive additional assistance in areas of math where they were struggling, but also the ability to build confidence in navigating mathematics.

Academic enrichment included a diverse spread of programs, materials, and resources used to strengthen students' abilities. For example, virtual programs like IXL Math, STEM-based math projects, and math game websites were beneficial. Meanwhile, for in-person programs, math manipulatives, math clubs, and incorporating math into other activities (such as cooking or physical education) strengthened students' capabilities in mathematics. Enrichment clubs, motivational activities, STEM activities and games, Project Learn curriculum, and social emotional learning were also used to reinforce learning of math materials.

Real-world application involved activities that required hands-on practice and application of math skills/curriculum in the student's day-to-day life. Some of the activities included field trips, STEM projects, outdoor learning, and small group activities. Small group instruction was once again mentioned by many programs as essential in helping foster a deeper learning for their students. Having staff assistants and conducting math group projects in smaller teams supported students in a more personal and less stressful environment.

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

The most frequently reported promising practices for family engagement included events, provision of resources, and partnering with the community.

Grantees mentioned that **family engagement events** were able to occur more often than the prior year due to less COVID restrictions, and these events kept families more engaged and involved. Family events included family nights and activities, fun and creative programs for improving educational knowledge, and parental workshops. When centers could invite their families to attend events in-person, the afterschool programs hosted kick-off and tailgating events, family meals, program-family relationship building meetings, financial classes, paint nights, dance demonstrations, talent shows, and science activities. Additionally, parents were provided with training and support so they could enhance their child's education and learning. When in-person meetings were not advisable, programs held virtual family nights, virtual game nights, and conducted virtual family literacy/numeracy nights to keep families engaged.

Resources were provided by centers to keep families engaged in the after-school programs, including transportation services in local neighborhoods, as well as door prizes and meals at different events. Also, using technology like virtual platforms to host an event, and apps to send parents reminders, increased family involvement. With the help of these resources, parents/guardians were able to attend program-provided events revolving around essential life skills topics like financial independence, GED enrollment, and parent resource management.

Finally, **partnering with the communities** was a promising practice for increasing family engagement. Communities provided additional resources outside of what the centers could provide that educated families on wellness, nutrition, and literacy. For example, local bank partnerships engaged students and families in financial literacy (e.g., saving, budgeting, and investments). Partnerships with the community library assisted families with the Adult Book Club and Write Brain book collaboration. Furthermore, grantees engaged in a partnership with community colleges to assist with career navigation and college planning.

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

The top three promising practices that helped programs in meeting their enrichment objectives included (a) using real-world application, (b) STEM activities, and (c) community-based organizations.

Some of the most frequently observed enrichment activities used to improve students' understanding of subject materials involved **real-world application**: Educational field trips, problem-based learning, and hands on activities. These activities included STEAM, movement, art, photography, and social emotional learning. Leadership training and environment-based education were also used to improve the effectiveness of student involvement in enrichment activities.

Similarly, **STEM activities** were highly requested by students and utilized by most centers, including peer-to-peer learning and activities that incorporated subjects and skills for STEM. For example, Flying Classroom, which incorporates STEM education while exploring unique global interactions, was highlighted by many programs as being beneficial in exposing students to real-world STEM applications while maintaining student interest. Other STEM programs involved robotics or coding clubs which further developed students' interest in pursuing STEM enrichment. Additionally, STEM activities incorporated diverse learning approaches such as problem-based learning, experiential learning, and inquiry-based learning.

Creative methods of involving **community-based organizations** included afterschool programs incorporating community-based organizations to deliver activities in STEM, art, and sports. Opportunities like running clubs, health and wellness seminars, and sports clubs provided opportunities to enhance both academic and physical enrichment. The Virginia's Children's Theatre and Robot Theatre were useful in providing opportunities for crafting, teambuilding, and enhancing students' self-esteem.

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

Character development was heavily supported and evidenced by many promising practices. Specifically, character development occurred most frequently through social emotional learning, academic support, and building rapport with staff.

Socio-emotional learning has been a topic of focus both in and out of schools for ensuring students' mental health and wellbeing are acknowledged, while simultaneously

providing strategies to reinforce good practices in emotional stability. Activities incorporated throughout many of the programs were: (a) Self-care, (b) team building, (c) gratitude journaling, (d) mindfulness, and (e) involvement in activities that foster respect, fairness, and ethics. By practicing introspection, many grantees were able to provide counseling support to students and families to help develop positive self-esteem and prevent behavioral issues. Some of the centers incorporated morning meditation daily. Furthermore, topics like instilling a growth mindset and practicing mindfulness helped develop character strengths students maintained throughout the year. Tangible materials, such as using the Calm phone app, journaling, or reading *Chicken Soup for the Soul*, were reported as providing outlets that were engaging and interesting to students.

Diverse **academic supports** were another beneficial source of character development. Programs integrated these supports into STEM and STEAM activities, with many providing support according to grade level and developmental level of the students in the program. Meanwhile, some grantees mixed different grade levels together. Some centers engaged students in team building activities that provided some connection to school day activities. For example, some coupled character development with academic activities to reinforce learning from the school day program while developing appropriate social skills.

Another promising practice of character development was **staff building rapport** with teachers, mentors, family members, or students. These positive relationships staff built were effective in improving character development and the engagement of everyone involved. Students learned to cooperate with others and see opposing perspectives through the social-skills modeling of staff.

6) What activities or promising practices appeared to be most effective in helping to meet the program's goal for improving community partnerships?

The most frequently reported promising practices for meeting the community partnership goals were (a) consistent and continual communication, (b) collaboration, and (c) continued support.

When the pandemic was prevalent, and face-to-face meetings were difficult to maintain, grantees formulated new methods of **consistent and continual communication** to continue their relationships with partners and community members. This type of communication was essential in securing community support for programming. For example, virtual communication (Zoom

meetings, emails, and phone calls) was used more often to build and maintain rapport, which helped community partners feel involved, even from a distance. Similarly, many community partners were able to transition their programming into a virtual format, which allowed for instantaneous feedback and more accessibility for many student attendees. Monthly newsletters also allowed grantees to keep partners involved.

Collaboration was helpful in strengthening the relationships with community partners. Working collaboratively with community partners to identify and plan events for students and family members supported continual involvement and investment with afterschool programming. Community partners were sometimes involved in identifying goals and creating content for students and families. Additionally, community partners were able to weigh in on event planning, evaluation of outcomes, and recruiting volunteers. Grantees indicated that the act of collaboration fostered a “win-win” relationship leading to increased involvement from students and their families.

Grantees felt it can be difficult to start new partnerships and was sometimes easier to receive **continued support** from seasoned community partners who may have a personal connection to the program. Partners were often asked for specific necessities for students (e.g., food, school materials, clothing, etc.) and they provided more than expected. Grantees also highlighted how flexible many of the current community partners were to alter their usual programming to meet the needs of students, as well as making virtual materials, sending prepared supplies home with students, and offering in-kind programming.

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

Grantees used a variety of methods to meet what they reported as an additional “other” objective of their site, including (a) keeping students engaged, (b) offering an array of enrichment activities, and (c) providing social emotional learning. The “Other” promising practices align strongly with the previous objectives, but emphasize how crucial these programming facets were to the overall implementation of their mission.

Keeping students engaged was an additional powerful promising practice. Grantees focused on assessing students’ needs and interests and incorporating the feedback into the planning of afterschool activities. Additionally, grantees provided some flexibility with program

scheduling, assisting students with both virtual and in-person supports, and addressed gaps in learning which can be a powerful tool for keeping students engaged in their education.

Offering an array of enrichment activities once again stood out as one of the most frequently utilized forms of student support. These opportunities ranged from (a) physical activities, such as dance, yoga, and running clubs, to (b) STEM based programs, like robotics clubs, nature clubs, and science groups. Students were also able to participate in fine arts enrichment, such as theater, music, and art programs. Other programs aided in character development, including the Gator Club Leadership Group, which provided students a space to learn leadership skills. Many grantees provided activities to develop life skills, such as money management, drug and alcohol avoidance information, and even how to recognize the signs of human trafficking. Academic-based programming was also common, including debate clubs, summer academies, book clubs, and writing classes.

Finally, **socio-emotional development** was paramount in meeting the “Other” goal. Most grantees had integrated socio-emotional lessons into their programming, which allowed for students to build self-esteem, appropriate emotional expression, and empathy. Many programs had students meet in small groups to discuss personal feelings and struggles, as well as demonstrate how to navigate problems. Also, the ability to discuss “real-world” problems outside of the academic setting was reported as beneficial in helping students with behavioral and emotion management issues.

Student Engagement Survey (Teacher APR Survey)

Regular school-day teachers were asked to complete a survey about each 21st CCLC student in grades one through five who attended 15 hours or more of the after-school program. A total of 73 centers administered surveys to teachers during the 2021-2022 school year. The survey asked teachers to rate the improvement of a student in five areas: (a) Citizenship, (b) collaboration, (c) communication, (d) creative thinking, and (e) critical thinking. A teacher can select more than one response to rate student improvement in a particular area; therefore, the percentages in **Tables 18 - 22** are calculated using the total number of 1st through 5th grade students with 15 or more hours ($N = 6,186$), not the total number of responses.

When asked about *Citizenship*, teachers reported that nearly a third (30%) of 21st CCLC students improved their attitude about school, 28% improved in completing classroom

assignments, 20% improved in completion of homework assignments, and 18% improved their attitude towards helping members of the school community. Another 21% did not need to improve in citizenship, and 7% demonstrated no improvement (**Table 18**).

Table 18. 21st CCLC Student Outcomes – Citizenship

Citizenship	Number	Percentage
Demonstrated improvement in their attitude about school	1,855	30%
Improved completion of classroom assignments	1,721	28%
No improvement was needed; they're doing great!	1,296	21%
Improved completion of homework assignments	1,259	20%
Improved attitude toward helping members of the school community	1,084	18%
Has NOT demonstrated any improvement in meeting this expectation	461	7%
TOTAL # of 1-5 grade students served 15 hours or more	6,186	

In regard to *Collaboration*, teachers reported that over a third (37%) of students showed improvement in participating in classroom discussions, 30% improved in participating in group assignments, and 18% value the opinions of others more often. Another 18% did not need to improve in collaboration, and 8% demonstrated no improvement (**Table 19**).

Table 19. 21st CCLC Student Outcomes - Collaboration

Collaboration	Number	Percentage
Improved participation in classroom discussions	2,304	37%
Improved participation in group assignments	1,843	30%
No improvement was needed; they're doing great!	1,094	18%
Values the opinions of others more often	1,100	18%
Has NOT demonstrated any improvement to meet this expectation	499	8%
TOTAL # of 1-5 grade students served 15 hours or more	6,186	

When asked about *Communication*, teachers reported that over a third (36%) of students showed improvement in interactions with peers, 29% improved in interactions with adults, and 25% showed improvement in active listening. Meanwhile, 18% did not need to improve in communication, and 8% demonstrated no improvement (**Table 20**).

Table 20. 21st CCLC Student Outcomes - Communication

Communication	Number	Percentage
Improved interactions with peers	2,226	36%
Improved interactions with adults	1,773	29%
Improved active listening	1,557	25%
No improvement was needed; they're doing great!	1,136	18%
Has NOT demonstrated any improvement to meet this expectation	469	8%
TOTAL # of 1-5 grade students served 15 hours or more	6,186	

For *Creative Thinking*, teachers reported over a third (39%) of students improved in their willingness to try new things, 30% improved in perseverance when faced with a challenging task, and 24% improved resourcefulness. Sixteen percent did not need to improve in creative thinking, and 8% demonstrated no improvement (**Table 21**).

Table 21. 21st CCLC Student Outcomes – Creative Thinking

Creative Thinking	Number	Percentage
Improved willingness to try new things	2,398	39%
Improved perseverance when faced with a challenging task	1,842	30%
Improved resourcefulness	1,465	24%
No improvement was needed; they're doing great!	978	16%
Has NOT demonstrated any improvement to meet this expectation	492	8%
TOTAL # of 1-5 grade students served 15 hours or more	6,186	

When asked about *Critical Thinking*, teachers reported that over a third (38%) of students improved actions and strategies to accomplish tasks, and 32% improved use of knowledge and curiosity to explore and analyze. Sixteen percent did not need to improve in critical thinking and 10% demonstrated no improvement (**Table 21**).

Table 22. 21st CCLC Student Outcomes – Critical Thinking

Critical Thinking	Number	Percentage
Improved actions and strategies to accomplish tasks	2,322	38%
Improved use of knowledge and curiosity to explore and analyze	1,973	32%
No improvement was needed; they're doing great!	987	16%
Has NOT demonstrated any improvement to meet this expectation	633	10%
TOTAL# of 1-5 grade students served 15 hours or more	6,186	

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?

Approximately 24,255 students qualified for 21st CCLC services. Of those, 16,177 (67%) attended at least one day of the 21st CCLC program during the 2021-2022 regular school year, and 46% were substantially served (i.e., attended 30 or more days). Nearly 54% of 21st CCLC students were considered economically disadvantaged (ED) and 51% were from underrepresented minorities (URM). Other things worth noting about the 21st CCLC grant programs include:

- 84 centers reported serving 2,032 family members during the regular school year.
- 138 centers provided nearly 100,000 hours of activities to students during the regular school year.
- According to the regular school day teachers, between 18% and 39% of students in grades one through five improved in citizenship, collaboration, communication, creative thinking, and critical thinking during the regular school year.

Perceptual student data collected at the end of the 2021-2022 school year from nearly 6,000 students in grades three through twelve lends additional insight into the nature of the 21st CCLC programs. The top three reasons students attended the after-school program were (a) the activities are fun (66%), (b) their friends go (55%), and (c) they like going to the afterschool program (55%). Refer to **Table 23** for more details.

Table 23. Student Survey Outcomes – I go to the after-school program because...

Survey item	Number	Percentage
The activities are fun.	3,842	66%
My friends go.	3,249	55%
I like going to the afterschool program.	3,214	55%
The afterschool program helps me do better in school.	2,641	45%
My parents want me to go.	2,149	37%
There is nothing else to do after school.	1,362	23%
My teacher wants me to go.	691	12%
TOTAL	5,863	100%

Most students felt safe (80%), found there were a lot of different activities (76%), and had time to finish their homework (66%). Still, less than half (40%) chose “yes” when asked if they get to choose the activities they want to do (**Table 24**).

Table 24. Student Survey Outcomes – Agreement with the Following Statements

Survey item	Yes	Sometimes	No	Total
I feel safe.	80%	17%	3%	5,832
There are a lot of different activities.	76%	19%	5%	5,733
I have time to finish my homework.	66%	24%	10%	5,744
I get along well with other students.	62%	33%	5%	5,736
I get help with my homework.	61%	23%	16%	5,710
I learn skills that help me when I am not at school.	58%	28%	14%	5,741
I learn how to study.	52%	27%	21%	5,724
I get to choose activities I want to do.	40%	38%	21%	5,751

When it comes to staff, most students felt the staff (a) treated them with respect (81%), (b) encouraged them to do their best (80%), (c) were trustworthy (77%), and (d) listened to them when they said something (73%). See **Table 25** for more information.

Table 25. Student Survey Outcomes – Staff

Survey item	Yes	Sometimes	No	Total
The staff treat me with respect.	81%	16%	3%	5,726
The staff encourage me to do my best.	80%	16%	4%	5,750
I trust the staff.	77%	18%	4%	5,750
The staff listens to me when I have something to say.	73%	23%	4%	5,728

When students were asked how the after-school program has helped them, the items with the highest percentage of agreement were: Make new friends (73%), get better grades in school (72%), and get along well with other students (70%). See **Table 26** for more details.

Table 26. Student Survey Outcomes – Going to the after-school program has helped me...

Survey item	Agree	Not Sure	Disagree	Total
Make new friends.	73%	17%	10%	5,641
Get better grades in school.	72%	19%	9%	5,617
Get along well with other students.	70%	22%	8%	5,605
Behave well in class.	69%	22%	9%	5,593
Be better at math.	66%	21%	13%	5,643
Enjoy school more.	64%	21%	15%	5,613
Attend class regularly.	64%	24%	12%	5,585
Turn in my homework on time.	63%	24%	13%	5,598
Be a better reader.	60%	26%	13%	5,631

The majority of high school students felt their afterschool program (a) helped prepare them for a job or career (71%), (b) prepare them for trade school or college (69%), and (c) taught them about professional behavior (68%). While not one of the top three items with the highest agreement, most also agreed they received information that would (a) help them choose trade schools or colleges (65%), (b) careers (64%), or (c) assist with the admissions process (64%). See **Table 27** for additional information.

Table 27. Student Survey Outcomes – ONLY High School Students

Survey item	Yes	Sometimes	No	Total
The afterschool program helps me learn the knowledge and skills that I will need to be ready for a job or career.	71%	21%	8%	628
The afterschool program helps me learn the knowledge and skills that I will need to be ready for trade school or college.	69%	21%	10%	627
The afterschool program teaches me about professional behavior.	68%	24%	8%	630
I receive information that will help me choose a trade school or college.	65%	23%	12%	628
I receive information that will help me find a job or choose a career.	64%	23%	12%	633
I receive information or assistance with the trade school or college admissions process.	64%	21%	14%	626

To what degree did centers meet Virginia’s objectives for the program? What is the impact of 21st CCLC program participation on students’ school-day attendance (Objective 4)?

The 21st CCLC programs had a positive effect on the students they served, and as a whole were able to meet objectives four through seven and partially meet objectives one through three. For objectives one and two, when looking at the statistical analyses results, the comparison group usually outperformed the 21st CCLC students, but the differences were small and not educationally meaningful.

- **Objective 1:** 76% of students showed **gains in reading and language arts** from 2020-2021 to 2021-2022; however, the statistical analysis showed that the 21st CCLC students were outscored by the comparison group except for the third grade SPED and ED subgroups, and not to a meaningful degree.
- **Objective 2:** 76% of students showed **gains in mathematics** from 2020-2021 to 2021-2022; however, the statistical analysis showed that the 21st CCLC students were

outscored by the comparison group except for the overall SPED subgroup, which showed a small positive effect size (0.12), and the third grade EL and SPED subgroups. Again, the differences were not large enough to be meaningful.

- **Objective 3:** Centers **increased** the number of **parent/guardian participants** from summer 2020 to summer 2021 by 618%; however, the number of participants slightly **decreased** (2.5%) from the 2020-2021 to the 2021-2022 regular school year.
- **Objective 4:** 70% of students showed an **increase in school day attendance** from 2020-2021 to 2021-2022, and the statistical analysis showed that the 21st CCLC program had a statistically significant positive effect on student attendance as a whole (0.27), as well as the ED (0.27), SPED (0.35), and female (0.33) subgroups. The magnitude of these attendance differences were much larger than the differences on SOL outcomes.
- **Objective 5:** Two of the six students who had two years of **ISS data** (2020-2021 to 2021-2022) showed improvement (33%); however, the sample size was very small, and results should be used with caution.
- **Objective 6:** 96% of students showed an **increase in student engagement** on at least one behavior indicator as determined by the Student Engagement Survey.
- **Objective 7:** 57% of students showed an **increase in GPA** from 2020-2021 to 2021-2022.

Readers should keep in mind that the treatment group for objectives one and two (i.e., those with 30 or more days of attendance, or were substantially served) were compared almost entirely to a group of students who also attended 21st CCLC programming (1-29 days as opposed to zero days). Only 6% of students in the English Reading comparison group and 13% in the Mathematics comparison group had zero days of 21st CCLC attendance. As a result, what is essentially being compared is dosage, or the amount of programming that impacts outcomes, vs. participation alone.

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

Among comments about promising practices submitted by grantees across the six areas (math and reading/language arts; family engagement; enrichment opportunities; character education; and community partnerships), those most heavily emphasized addressed three broad

areas. First, and most prominently, were **practices that supported the students**. These can be broken into three types: Academic support; enrichment activities; and assessment of students' needs. The second broad group of practices encompassed **family engagement** through events (virtual or in-person), provision of resources, and partnering with communities to provide resources to the families. Finally, there were practices such as strong communication, collaboration, and continued support aimed at improving and maintaining **community partnerships**.

References

What Works Clearinghouse. (2022). *What Works Clearinghouse procedures and standards handbook, version 5.0*. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance (NCEE).

<https://ies.ed.gov/ncee/wwc/Handbooks>

Virginia School Quality Profile. (2021-2022). Virginia Department of Education.

<https://schoolquality.virginia.gov/virginia-state-quality-profile#desktopTabs-3>.