



THE UNIVERSITY OF
MEMPHIS[™]

The Center for Research in
Educational Policy (CREP)

VIRGINIA DEPARTMENT OF EDUCATION
Evaluation of 21st Century Community Learning Centers
2013-2014

Margie King

Kathryn Sharpe

Brenda Gallagher

Todd Zoblotsky

The University of Memphis

July 2015

Table of Contents

Executive Summary.....	1
Results.....	1
Introduction and Overview.....	9
Evaluation Objectives and Measures.....	9
Center Characteristics.....	13
Operations.....	13
Staffing Patterns.....	14
Student Participation and Attendance.....	16
Methods.....	18
Results.....	23
Objective 1: Improve Student Academic Achievement in Reading.....	24
Objective 2: Improve Student Academic Achievement in Mathematics.....	28
Objective 3: Provide Opportunities for Parental Education.....	33
Associations between Center Characteristics and Outcomes.....	40
Extended Learning Time (ELT) Analysis.....	47
Promising Practices and Challenges.....	48
Promising Practices.....	49
Challenges.....	54
Conclusions.....	59
References.....	66
Appendix A: Supplemental Program Objectives.....	67
Objective: Improvement of Student Behavior.....	67
Objective: Provide Enrichment Opportunities.....	68
Objective: Improve Community Partnerships.....	69

List of Tables

Table 1.	Summary of Instruments and Data Sources by Evaluation Question.....	12
Table 2:	Three-Year Achievement and Student-Level Outcomes Demographic Summary in Reading for Grades 4-8.....	26
Table 3:	Three-Year Achievement and Student-Level Interaction Outcomes Summary in Reading for Grades 4-8.....	27
Table 4:	Three-Year Achievement and Student-Level Demographic Outcomes Summary in Mathematics for Grades 4-8	31
Table 5:	Three-Year Achievement and Student-Level Interaction Outcomes Summary in Mathematics for Grades 4-8	32
Table 6.	Percentage of Centers Meeting Parent Education Subobjectives in 2013-2014.....	40
Table 7:	Three-Year Achievement and Center Level Outcomes Summary in Reading for Grades 4-8.....	43
Table 8:	Three-Year Achievement and Center Level Outcomes Summary in Mathematics for Grades 4-8	46
Table 9.	Summary of Promising Practices by Objective: 2013-2014.....	50
Table 10.	Summary of Challenges by Objective: 2013-2014.....	55

List of Figures

Figure 1.	Hours of Operation per Week during the 2011-2012, 2012-2013, and 2013-2014 School Years by Percentage of Centers.....	13
Figure 2.	Paid Staff in 21 st CCLC across Virginia.....	15
Figure 3.	Volunteer Staff in 21 st CCLC across Virginia	15
Figure 4.	Percent of All Student Attendees in 21 st CCLC by Grade Level for 2011-2012, 2012-2013, and 2013-2014	16
Figure 5.	Percent of Regular Attendees (at least 30 days) in 21 st CCLC by Grade Level for 2011-2012, 2012-2013, and 2013-2014.....	17
Figure 6.	Percent of 21 st CCLC Selecting Parent Education Subobjectives for 2013-2014	34
Figure 7.	Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in GED Certificate Program Classes for 2013-2014.....	35
Figure 8.	Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Computer Skills Classes for 2013-2014	36
Figure 9.	Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Parent Training Classes for 2013-2014.....	37
Figure 10.	Percent of 21 st CCLC Reporting Meeting the Objective for Parent/Child Interaction in Academic Activities for 2013-2014.....	38
Figure 11.	Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Career Development Activities for 2013-2014.....	39

Evaluation of 21st Century Community Learning Centers

2013-2014

Executive Summary

The federally-funded 21st Century Community Learning Centers (21st CCLC) grant program provides opportunities outside of the regular school day for academic enrichment to help students meet state and local performance standards in core academic subjects. This report summarizes the results of the Center for Research in Educational Policy's evaluation of 21st CCLC programs in Virginia during 2013-2014. The main purpose of the evaluation was to determine whether these programs were meeting the following statewide program objectives: 1) improving student academic achievement in reading; 2) improving student academic achievement in mathematics; and 3) providing opportunities for parental education. In addition, an overview of the success of centers in achieving supplemental objectives is provided in Appendix A.

Results

Data were analyzed from four main sources: (1) an online annual local evaluation survey (ALERT); (2) the national Profile and Performance Information Collection System (PPICS) for 21st CCLC programs; (3) 21st CCLC attendance data on all student participants with available SOL scores; (4) scores for reading and mathematics from the Standards of Learning (SOL) assessments, Virginia Alternate Assessment Program (VAAP), and Virginia Grade Level Alternative (VGLA) assessment.

The key results of the analyses are summarized below by evaluation question. Preliminary PPICS information was available regarding program staff types and student

attendance. Student achievement data were unavailable for analysis prior to the compilation of this preliminary report. The results of these analyses will be provided in the full report.

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

Similar to prior years, the majority of the 2013-2014 centers were operated in schools and most centers were open 6-15 hours per week. The centers employed 3,444 paid and volunteer staff members to facilitate Virginia 21st CCLC programs. The majority of the paid staff members included school division teachers, youth development workers, or non-teaching school staff, while the majority of the volunteer staff was made up of college and high school students, community members, or youth development workers. There were 23,876 students attending centers and 39.4 percent of students attended regularly, which was defined as Virginia 21st CCLC students who were in attendance for a minimum of 30 days. Students served by Virginia 21st CCLC programs were enrolled in pre-kindergarten through grade 12, with the majority in grades 3-8. The majority (78.2 percent) of students served were reported as African American or White. Overall, the racial/ethnic information of students served by Virginia 21st CCLC programs was reported as follows: African American (42.2 percent), White (36.0 percent), Hispanic (14.3 percent), Asian (2.6 percent), and American Indian (0.5 percent). As of October 9, 2014, racial/ethnic information had not been supplied for 1.7 percent of the students served. Over half of all students served by Virginia 21st CCLC programs were eligible for free or reduced price lunch for the 2013-2014 school year (52.8 percent). Students identified as having limited English proficiency comprised 7.6 percent of the total program enrollment and students identified as having special needs or disabilities represented 8.9 percent of all students served.

In comparison, the total Virginia student membership racial/ethnic information (http://bi.vita.virginia.gov/doi_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership) as of December 9, 2014, was as follows: White (52.2 percent), African American (23.2 percent), Hispanic (13.1 percent), Asian (6.3 percent), Two or More Races (4.7 percent), American Indian/ Alaska Native (.3 percent), and Native Hawaiian/ Pacific Islander (.1 percent). Approximately 40.1 percent of all students across Virginia were eligible for free or reduced price lunch for the 2013-2014 school year. Across Virginia, students with limited English proficiency constituted 9.9 percent of all students enrolled in 2013-2014, and students with special needs or disabilities comprised 12.3 percent of total enrollment during this period.

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

Objective 1: Improve Student Academic Achievement in Reading

For students in grades four through eight, the proficiency and standardized SOL scaled score analyses showed that there was no statistically significant impact of 21st CCLC participation (“Yes” or “No”) on statewide reading assessments. Additionally, the effect size for the proficiency analysis (Cox Index effect size (CIES) = -0.02) and for the standardized SOL scaled score analysis, the effect size ($g = -0.01$) would not be considered substantively important (i.e., educationally meaningful) based on What Works Clearinghouse (WWC) guidelines ($\geq +/- 0.25$). There were also no statistically significant or substantively important differences in either reading proficiency or standardized SOL scaled scores for any subgroup based on 21st CCLC participation. For students in grade three who did not have prior-year test scores available, 21st CCLC participants in 2013-2014 were outperformed by non-participants in reading proficiency

for all students combined and 11 out of 15 available subgroupings and by Virginia in reading proficiency for all students combined and all available subgroupings except Limited English Proficient. In terms of SOL scaled scores, third-grade 21st CCLC participants in 2013-2014 were outperformed by non-participants overall and in 11 out of 15 subgroup comparisons in reading.

Objective 2: Improve Student Academic Achievement in Mathematics

For students in grades four through eight, the proficiency and standardized SOL scaled score analyses showed that there was no statistically significant impact of 21st CCLC participation (“Yes” or “No”) on statewide mathematics assessments. Additionally, the effect size for the proficiency analysis (Cox Index effect size (CIES) = 0.02) and for the standardized SOL scaled score analysis, the effect size ($g = 0.02$) would not be considered substantively important based on What Works Clearinghouse (WWC) guidelines ($\geq \pm 0.25$). There were also no statistically significant or substantively important differences in either mathematics proficiency or standardized SOL scaled scores for any subgroup based on 21st CCLC participation. For students in grade three who did not have prior-year test scores available, 21st CCLC participants in 2013-2014 were outperformed by non-participants on 12 out of 15 subgroupings and Virginia on all but one subgrouping. In terms of SOL scaled scores, third-grade non-participants did better in all but one out of 15 subgroups compared to 21st CCLC participants in 2013-2014.

Objective 3: Provide Opportunities for Parent Education

As required by the 21st CCLC grant, grantees offered General Education Development (GED) certificate programs, computer instruction, parenting skills classes, parent/child activities,

and/or career development activities for parents. Over three-quarters of centers offering opportunities for parent/child interaction in academic activities reported having met their internally established subobjectives. In addition, almost 80 percent of centers offering computer skills instruction and over 70 percent of centers offering parent training reported having met their subobjectives. Finally, more than 60 percent of centers offering career development activities and more than half of centers offering GED certificate programs reported having met their subobjectives.

In what ways do attendance at a 21st CCLC, type and time allocated to activities, and hours of operation predict academic achievement?

This section of the evaluation includes the results of statistical analyses of associations between various categories of center-level data and reading and mathematics outcomes of students in grades four through eight with two years of assessment data available. Only 21st CCLC students who had a minimum of 30 days of attendance were included. These analyses provide information that may be useful to program leaders and are summarized below.

Center-level results from analysis of reading outcomes

The total number of activities at 21st CCLC centers had a positive, but not statistically significant, impact on both reading proficiency level and standardized SOL reading scaled scores in 2013-2014. The total number of hours of activities at centers had a positive, but very small and not statistically significant impact on reading proficiency level, while the number of hours the center was open was associated with slightly higher standardized SOL scaled scores, although the relationship was very small and not statistically significant.

Center-level results for mathematics

The number of paid school-day teachers at 21st CCLC centers had a very small, but statistically significant positive impact on mathematics proficiency level only, with an increase in the number of paid school-day teachers being associated with higher mathematics proficiency levels. The number of paid school-day teachers also had a positive, but very small and not statistically significant impact on standardized SOL mathematics scaled scores. The total number of activities at the center and the number of hours the center was open both had a positive, but very small and not statistically significant impact on mathematics proficiency level and standardized SOL mathematics scores in 2013-2014.

What “promising practices” and challenges were identified by centers regarding the achievement of required objectives?

Grantees were asked to elaborate upon their centers’ objectives that were met and the activities or promising practices that appeared to be the most effective in helping them to meet these objectives. The nature of student activities, including opportunities for individual academic assistance such as tutoring and/or homework assistance, along with non-traditional instruction techniques such as hands-on activities, games, project-based learning, and/or team teaching were frequently mentioned by grantees as effective avenues for meeting the objective of improving student academic achievement. Supporting high-quality after-school staff members that maintained strong connections with the school-day staff and curricula were also considered influential in meeting the improving student academic achievement objective. Regarding the objective of providing parent education, grantees often indicated that aligning programs with parents’ needs and interests was of importance. According to their feedback, programs assisting

with career-development, GRE testing, computer classes, and language instruction were of particular interest to parents. Grantees also noted that offering classes on individual topics at various times throughout the week, rather than in progressive sessions at routine times, helped meet the scheduling needs of parents who worked long days and/or non-traditional hours. When asked about meeting the objective of improving student behavior, incorporating activities that integrated incentives (e.g., prizes and drawings for accumulating positive behavior “points”, field trips, events with food supplied), and consistent expectations between school day and after-school programs were mentioned by grantees as promising practices. Program structure and design, including offering a variety of engaging enrichment activities and non-traditional instructional techniques, were considered effective in meeting the objective of providing enrichment activities. Finally, when asked about promising practices that helped meet the objective of improving community partnerships, grantees frequently mentioned that cultivating and maintaining strong relationships with community members was beneficial. Inviting community partners to take part in the planning process, maintaining on-going communication with partners, and investing in building relationships with partners over the summer were reported as particularly helpful.

Grantees were asked to reflect upon their centers’ objectives that were not met or that showed mixed results, and to identify challenges what might have been associated with the lower results. Winter weather was mentioned frequently by grantees when discussing challenges to meeting objectives, particularly with providing parent education, improving student behavior, providing enrichment opportunities, and improving community partnerships. When asked about improving student academic achievement, grantees often discussed the difficulty of meeting students’ individual challenges (i.e., inconsistent attendance and low student motivation),

changes made to the structure of the Standards of Learning tests, and staffing issues. Challenges concerning the provision of parent education included parents' limited participation, scheduling issues, and home and community characteristics. Grantees shared that a lack of transportation to parent education events and parents' limited availability to attend events due to work schedules made meeting this objective difficult. Limited instructional time, program structure, and students' individual challenges reportedly prevented grantees from meeting the objective of improving student behavior. Feedback from grantees regarding this objective also included the need for more consistency between school-day routines and after-school programs. Grantees mentioned having difficulty providing enrichment opportunities due to program structure, particularly that enrichment activities were more focused on academics than on enrichment. Another challenge reported by grantees was finding qualified enrichment staff for after-school hours. Finally, when asked about challenges related to improving community partnerships, grantees discussed scheduling, communication, and lack of follow-through from community partners.

Evaluation of 21st Century Community Learning Centers 2013-2014

Introduction and Overview

The 21st Century Community Learning Centers (21st CCLC) grant 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 *No Child Left Behind Act of 2001* (NCLB).

The purposes of the 21st CCLC program include:

- To provide opportunities outside of the regular school day for academic enrichment, including tutorial services to help students 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.

In 2013-2014, the Virginia Department of Education (VDOE) provided 21st CCLC grant funds to 90 grantees that operated a total of 110 centers, typically operating within a three-year grant cycle. The grantees provided academic and enrichment programs to students before and/or after-school hours as well as during the summer at some centers. The grant program also supported grantee collaboration with parents and community partners.

Evaluation Objectives and Measures

The VDOE contracted with the Center for Research in Educational Policy (CREP) at the University of Memphis to conduct a statewide evaluation of the 21st CCLC program to meet

federal requirements and to assess the extent to which local grantees met the defined programmatic objectives. The defined objectives were as follows:

Objective 1: Improve student academic achievement in reading;

Objective 2: Improve student academic achievement in mathematics; and

Objective 3: Provide opportunities for parental education.

The evaluation was structured around the following questions:

- What is the nature of the Virginia 21st CCLC grant program and level of participation by students?
- To what degree did centers meet Virginia’s objectives for the program?
- In what ways do attendance at a 21st CCLC, type and time allocated to activities, and hours of operation predict academic achievement?
- What “promising practices” and challenges regarding the achievement of required objectives were identified by centers?

All grantees with centers in operation within the grant cycle in 2013-2014 were asked to participate in the evaluation. A detailed accounting of the number of students and centers originally available and subsequently included, and the rationale for inclusion or exclusion in the analysis are provided in a Supplemental Technical Report which is available by request from the VDOE.

Four main sources of data were used in the evaluation:

1. Two years (2012-2013 and 2013-2014) of Standards of Learning (SOL), Virginia Alternate Assessment Program (VAAP), Virginia Grade Level Alternative (VGLA), and Virginia Modified Achievement Standards Test (VMAST) proficiency and scaled assessment scores in reading and mathematics for students in grades 3-8. In addition to the assessment scores,

data regarding gender; grade; ethnicity; limited English proficient (LEP) status and proficiency level; disability status and primary disability code; economic disadvantage status; and days of participation in the 21st CCLC program also will be included. 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, VGLA, and VMAST alternative assessment data will be included in the analysis of proficiency-level outcomes, but only the SOL assessment will be used in the analysis of scaled score outcomes.

2. The Single Sign-on for Web Systems (SSWS) is a statewide data collection system used to collect 21st CCLC attendance data on all student participants with available SOL scores.
3. The Profile and Performance Information Collection System (PPICS) is a national web-based data collection system that contained (a) descriptive data about grantees and their 21st CCLC program and (b) self-reported progress toward meeting performance indicators. Grantees submitted information to this system at designated time periods each year.
4. Annual Local Evaluation Report Template (ALERT) is an online survey designed to supply supplemental data for this evaluation. The tool gathers additional data regarding center activities and outcomes. Each grantee is required to submit the ALERT for each center after a full year of program implementation.

The preliminary findings in this report reflect the full complement of centers reporting for the 2013-2014 program year (100 percent). The specific data sources and percentage of active centers represented are shown in Table 1 for each evaluation question. The ALERT reports contained both quantitative and qualitative data for analysis. The VDOE requested that grantees submit the ALERT for their centers by July 18, 2014. One center closed during the academic

year, reducing the total number of centers from 111 to 110. More than half of the centers (60.0 percent) submitted the online report by the initial deadline. The remainder of centers completed the report by August 29, 2014. For PPICS data, grantees were able to begin submitting information in April 2014, and all had completed their submissions by October 2014. PPICS reports were available for each of the 110 reporting centers (100 percent). PPICS data within the Annual Progress Report categories of operation, objectives, activities, student behavior, and partnerships were analyzed for all grantees. Student-level SOL, VAAP, and VGLA assessment data from the 2012-2013 and 2013-2014 academic years were provided to CREP by the VDOE.

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

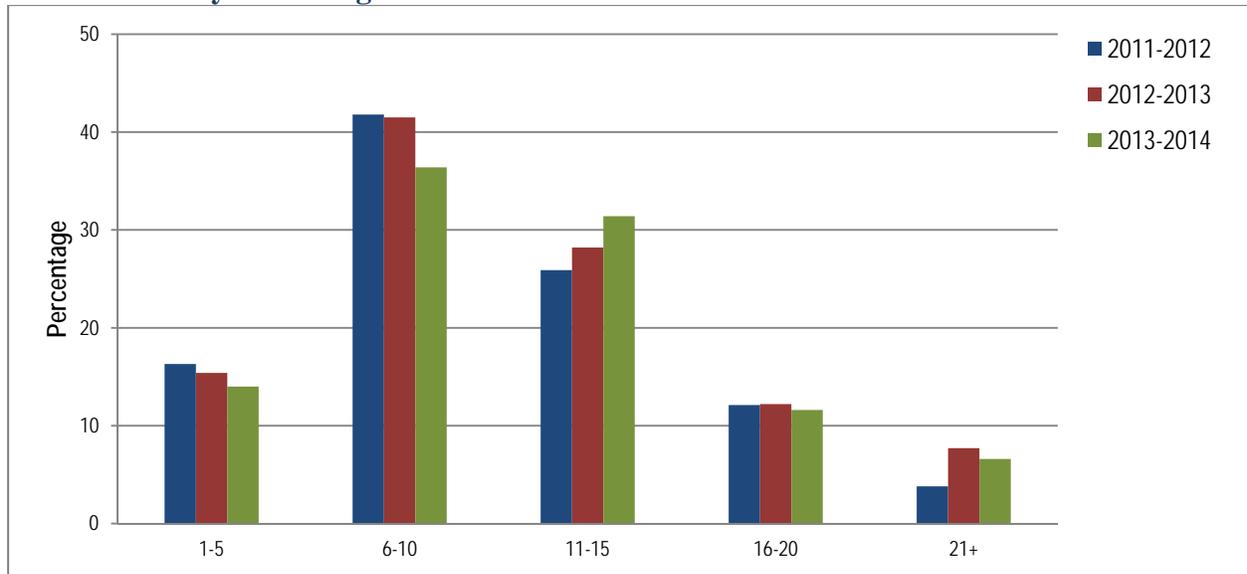
Evaluation Question	Data Sources	Percentage of Active Centers Represented
What is the nature of the 21 st CCLC programs and level of participation by students?	ALERT	100% of reporting centers
	PPICS demographic and attendance data	100% of reporting centers
To what degree did centers meet their objectives?	PPICS APR data	100% of reporting centers
	ALERT	100% of reporting centers
	Virginia SOL test scores in reading and mathematics	91% of reporting centers
In what ways do attendance at a 21 st CCLC, type and time allocated to activities, and hours of operation predict academic achievement?	SSWS data	91% of reporting centers
	Virginia SOL test scores in reading and mathematics	
What “promising practices” and challenges regarding the achievement of required objectives were identified by centers?	ALERT	100% of reporting centers

Center Characteristics

Operations

The majority of centers were operated by school divisions; other centers were operated by clubs, community-based organizations, and faith-based organizations. No centers were operated by charter schools, colleges or universities, or for-profit entities. Centers also varied in the number of hours of operation per week (see Figure 1). These percentages are similar to those reported for the previous year, with the exception of a slight decrease from previous years in centers offering 6-10 hours of service per week and a slight increase from previous years in centers offering 11-15 hours of services per week. Just over two-thirds of reporting centers (67.8 percent) were open 6-15 hours per week during the 2013-2014 year, with the highest proportion (36.4 percent) offering 6-10 hours of services per week.

Figure 1. Hours of Operation per Week during the 2011-2012, 2012-2013, and 2013-2014 School Years by Percentage of Centers



Staffing Patterns

Based on available preliminary¹ PPICS data, there were 3,444 paid and volunteer staff members across the centers during the 2013-2014 school year. Of these staff members, the majority were paid (64.5 percent). Most paid employees were school division teachers (58.8 percent), youth development workers (10.2 percent), or nonteaching school staff (9.5 percent). A fewer percentage of paid employees were parents (0.1 percent), community members (3.2 percent), or college or high school students (6.8 percent). College and high school students were the most prevalent type of unpaid volunteers (52.5 percent), followed by other community members (18.1 percent), and youth development workers (9.8 percent).

The staffing patterns across centers are displayed in Figure 2 and Figure 3. Overall, in 2013-2014, the composition of paid staff generally continued the trends seen in prior years, with school-day teachers making up the greatest percentage. College or high school students continue to make up the greatest proportion of volunteer staff.

¹ As of October 9, 2014, grantees representing 110 centers (100 percent) had submitted their staff information in PPICS, with exceptions.

Figure 2. Paid Staff in 21st CCLC across Virginia

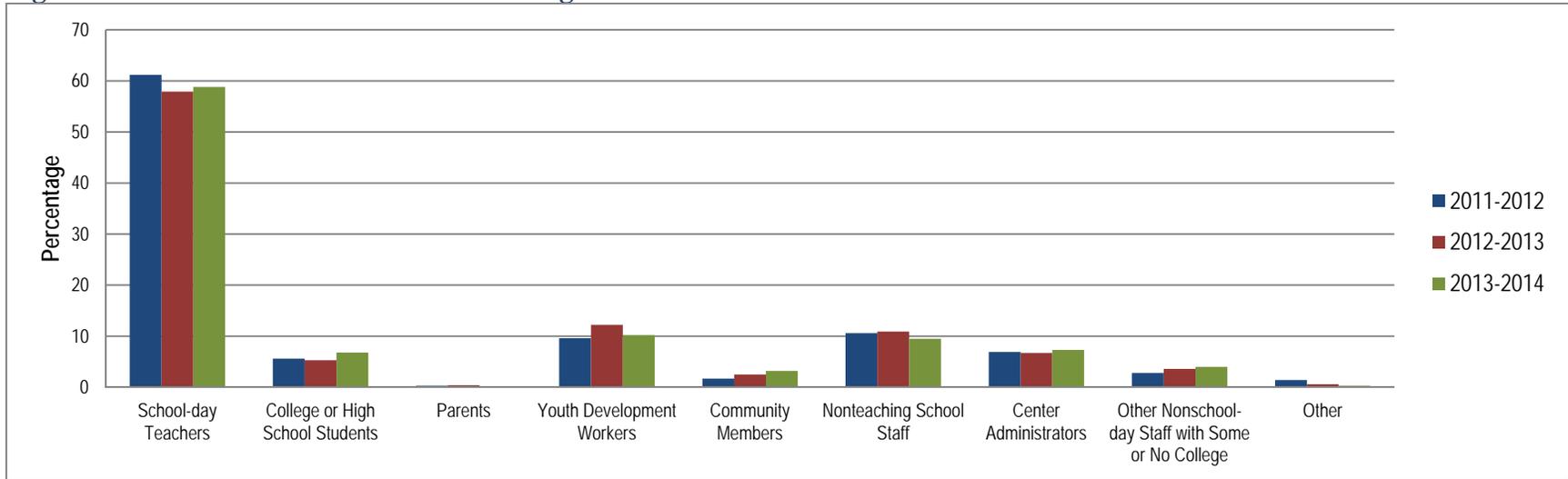
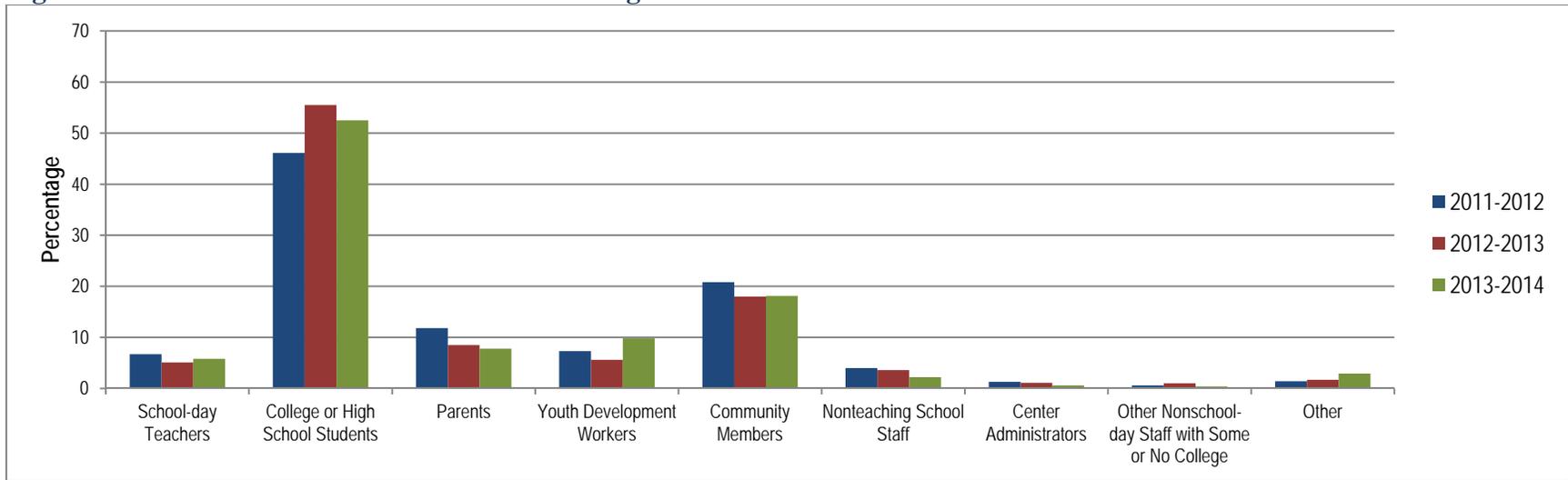


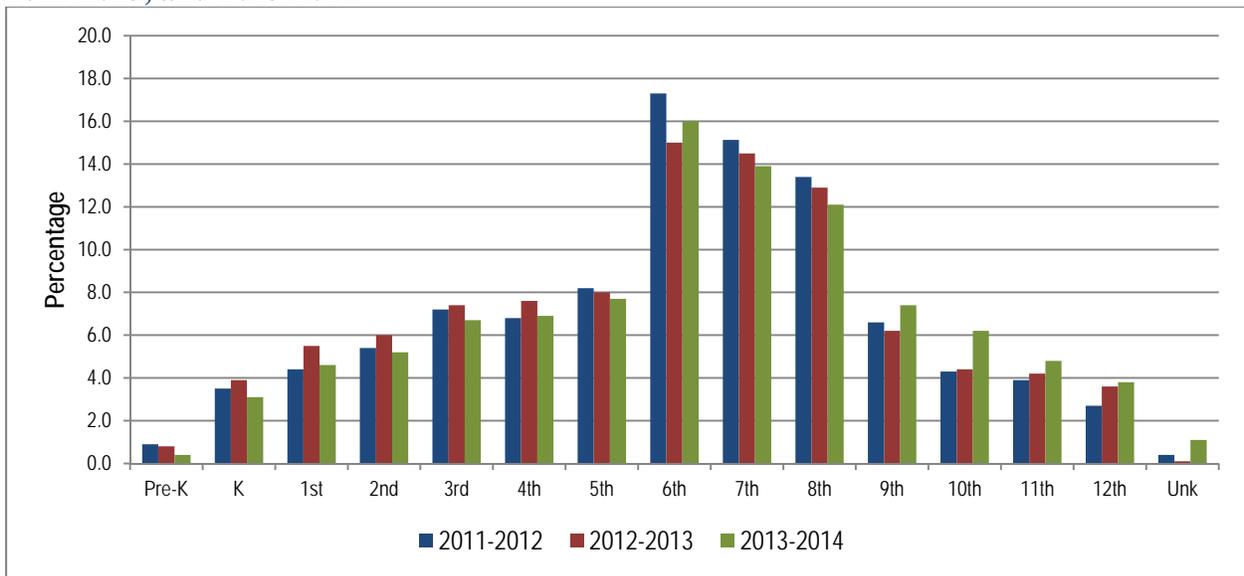
Figure 3. Volunteer Staff in 21st CCLC across Virginia



Student Participation and Attendance

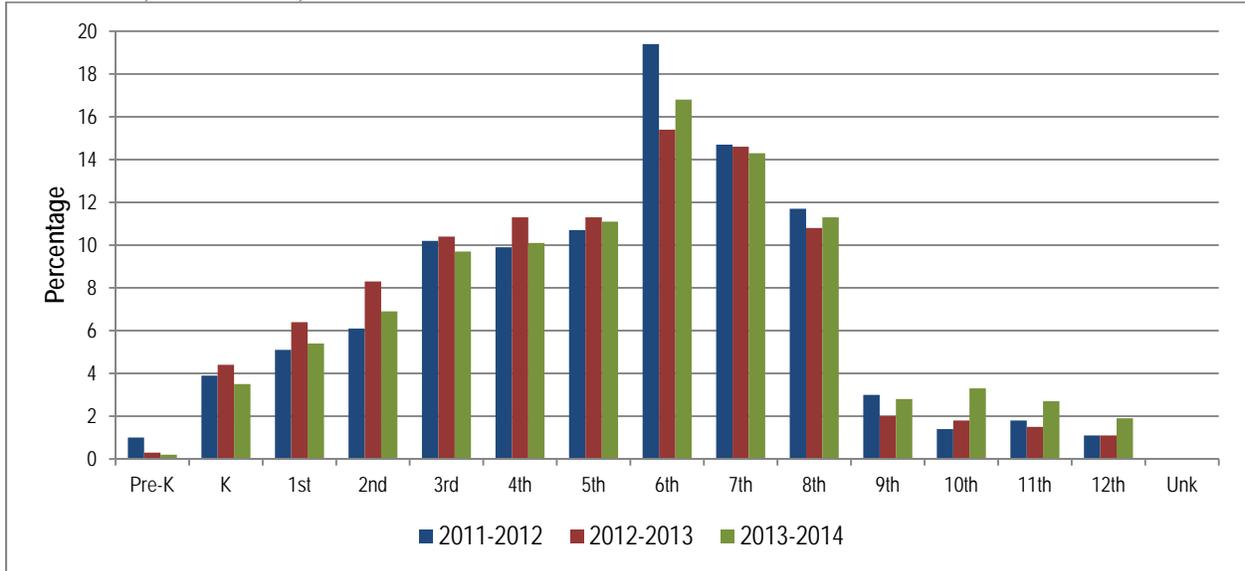
According to available preliminary² PPICS data, a total of 23,876 students were served in 2013-2014, with 9,406 students (39.4 percent) attending center programs regularly (30 days or more). About two-thirds of all students served and about three-quarters of regular attendees were in grades 3-8 (see Figure 4 and Figure 5). In general, percentages of high school students continued to rise, while percentages of elementary and middle school students were lower than the previous years.

Figure 4. Percent of All Student Attendees in 21st CCLC by Grade Level for 2011-2012, 2012-2013, and 2013-2014



² As of October 9, 2014, grantees representing 110 centers (100 percent) had submitted student attendance information by grade level in PPICS, with exceptions.

Figure 5. Percent of Regular Attendees (at least 30 days) in 21st CCLC by Grade Level for 2011-2012, 2012-2013, and 2013-2014



In comparing all student attendees reported in the available preliminary³ PPICS data for 2013-2014 versus those reported in 2012-2013, there was an increase in the proportion of African American student attendees (42.2 percent versus 37.0 percent reported in 2012-2013) and in the proportion of Hispanic student attendees (14.3 percent versus 12.8 percent reported in 2012-2013). The percentage of White student attendees decreased from the previous year (36.0 percent versus 41.5 reported in 2012-2013).

In addition, according to available preliminary⁴ PPICS data, there was a decrease in the percentage of student attendees identified as being at an economic disadvantage comprised 52.9 percent (versus 56.7 percent reported in 2012-2013), and there was a decrease in the percentage of students identified as having limited English proficiency (7.6 percent of the total group; versus 9.7 percent reported in 2012-2013). The percentage of student attendees identified as having special needs or disabilities in 2013-2014 was slightly lower (8.9 percent; versus 9.7 percent

³ As of October 9, 2014, grantees representing 110 centers (100 percent) had submitted student attendance information by ethnicity in PPICS.

⁴ As of October 9, 2014, information on student attendance was available in PPICS by type of special services received for 110 centers (100 percent) and by gender for 110 centers (100 percent).

reported in 2012-2013). Similar to prior-year reports, approximately equal numbers of boys and girls participated in the programs (50 percent boys, 49.9 percent girls; 0.1 missing information) with approximately equal regularity of attendance.

In comparison, the total Virginia student membership (http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership) as of December 9, 2014, was as follows: White (52.2 percent), African American (23.2 percent), Hispanic (13.1 percent), Asian (6.3 percent), Two or More Races (4.7 percent), American Indian/ Alaska Native (.3 percent), and Native Hawaiian/ Pacific Islander (.1 percent). Approximately 40.1 percent of all students across Virginia were eligible for free or reduced price lunch for the 2013-2014 school year. Across Virginia, students with limited English proficiency constituted 9.9 percent of all students enrolled in 2013-2014, and students with special needs or disabilities comprised 12.3 percent of total enrollment during this period.

Methods

The results for Objectives 1 and 2 were examined using Hierarchical Linear Models (HLM) and Hierarchical Generalized Linear Models (HGLM) for students in grades four through eight with two years of test data available. Analyses of the impacts of center-level factors (e.g., the number of hours centers were open) on student achievement only included students who participated in 21st CCLC for 30 or more days (i.e., no control students were included). Additional HLM and HGLM models were examined by comparing matched pairs of students in the treatment group who attended 21st CCLC programs for 30 or more days and students in a control group who were eligible to attend 21st CCLC programs, but had zero days of attendance.

Four sets of analyses (eight analyses total), two for proficiency-level, and two for standardized SOL scaled scores were conducted separately by subject area (reading and mathematics). The first two sets of analyses assessed proficiency-level performance in 2013-2014 based on all available test data (i.e., SOL, VAAP, VGLA, and VMAST) using HGLM. For these analyses, the proficiency level on the SOL, VAAP, VGLA, or VMAST test for the 2012-2013 and 2013-2014 school years was treated as either “pass” or proficient (based on scoring “Proficient” or “Advanced Proficient”), 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, as proficiency level is a common measure across all of the different test types, grade levels, and years. Center-level variables (e.g., total hours open) were included in specified analyses to examine the impacts of these variables on student proficiency. By including all students in the analyses, this method offers the most appropriate tool to analyze outcomes for specific student subgroups.

The first proficiency analyses investigated the relationship of 21st CCLC participation on student achievement. Matched 21st CCLC students who participated for at least 30 days and control students (who were eligible, but did not participate in 21st CCLC) were included ($n = 12,920$ reading, $n = 13,018$ mathematics). Additionally, the effects of 21st CCLC participation by three subgroups, based on special education status, limited English proficiency status, and economically disadvantaged status, were examined. The second proficiency analyses investigated the relationship of center-level characteristics on student achievement for only 21st CCLC students who participated for at least 30 days ($n = 6,460$ reading, $n = 6,509$ mathematics).

While the proficiency analyses were designed to capture broad impacts on student proficiency associated with participation in the 21st CCLC programs, these analyses are not

designed to measure incremental differences in student achievement or differences between treatment and control 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. Therefore, the next two sets of analyses focused on the standardized scaled scores of students who took the SOL assessments in both 2012-2013 and 2013-2014, using HLM. These 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 student-level and center-level variables used in the proficiency level analyses, and in terms of student subgroups, looked at the effects of 21st CCLC participation by economically disadvantaged status only.

The first set of SOL analyses investigated the relationship between 21st CCLC participation and student achievement for matched 21st CCLC and control students ($n = 12,312$ reading, $n = 12,250$ mathematics). Additionally, the effect of 21st CCLC participation by economically disadvantaged status was examined. The second set of SOL analyses investigated the relationship of center-level characteristics on student achievement for 21st CCLC students who participated for at least 30 days ($n = 6,156$ reading, $n = 6,125$ mathematics). It is important to note that while the scaled score analyses are potentially more sensitive to changes attributable to program participation, they also have limitations. In particular, because students who participate in alternative assessments are not included, this type of analysis should not be used to evaluate the impact of participation in the 21st CCLC program on students with disabilities and

students with limited English proficiency, as the SOL assessment outcomes for these two subgroups would not be representative of the total population of students with disabilities and students with limited English proficiency.

Furthermore, as Virginia's tests are not vertically scaled, meaning that scores from different tests, grade levels, and years are not directly comparable in terms of measuring the amount of learning, the test-level⁵ test data were converted to standardized scores (i.e., z-scores) prior to analysis. As a result, the data were placed onto a single, comparable scale 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. While this transformation is the best available approach to measuring achievement using scaled scores from multiple grades in Virginia at this time, the conversion has limitations, as z-scores only provide a measure of achievement relative to Virginia's average, and are not a measure of absolute growth or change from year to year. Thus, the full implications of this conversion applied to Virginia's criterion-referenced tests are not clear.

In addition, the findings can only be used to evaluate the performance of all centers in Virginia as a group, and not the performance of any specific center, as for both the proficiency-level analyses and the analyses of standardized SOL assessment scores, the results were aggregated across all centers rather than evaluated center-by-center. Details regarding the samples included, a complete listing of the variables used in the student matching process, and a description of the treatment-control student matching process, data sources, methodology, and

⁵ 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.

scaled score standardization for the statistical analyses can be found in the Supplemental Technical Report, which is available upon request from the VDOE.

Third-grade Only

As most students in third-grade have no prior-year test data available, it was not feasible to apply inferential statistics to these data because any statistically significant differences between 21st CCLC participants (i.e., those with 30 or more days of attendance) and nonparticipants (i.e., eligible students with zero days of attendance) may not be the result of 21st CCLCs. Rather, differences could be the result of differences in prior ability, as it was not possible to either (1) determine if the participant and nonparticipant groups were similar on prior-year achievement, or (2) adjust 2013-2014 outcomes based on prior-year achievement for the third-grade students.

Consequently, separate descriptive (noninferential) analyses were conducted for 21st CCLC participants and nonparticipants in grade three in 2013-2014 who had no prior-year test data available. The analyses used the proficiency levels on the SOL assessments (based on the percentage scoring Proficient or Advanced) and mean (i.e., average) scaled scores on SOL assessments. For these analyses, it would be more appropriate to use the findings to better understand whether the program is serving students with an identified need (i.e., serving students on average who are the lowest achievers) vs. interpreting the findings as an evaluation of the effectiveness of the 21st Century program. In other words, the outcomes should be used to learn more about the population being served rather than evaluating their outcomes. These analyses examined differences in reading and mathematics achievement between the following:

- (1) 21st CCLC participant and nonparticipant third-grade students;

(2) 21st CCLC participants and all Virginia third-grade students (where similar data were available).

In addition to the comparisons between all students in the 21st CCLC participant and nonparticipant groups, as well between 21st CCLC participants and Virginia, comparisons between these three groups were also conducted by the following subgroups where common data were available: gender, race, economic disadvantage status, disability status, and LEP status. The results for the grade-three-only analyses must be viewed as limited, as they are descriptive only; thus, it is possible that differences in achievement between participants and nonparticipants could be due to differences in areas such as prior ability or motivation, or due to chance, and may not be related to participation in the 21st CCLC program itself. Comparison data for Virginia were based upon the 2012-2013 and 2013-2014 State Report Card data from the Virginia Department of Education's Web site at the following link:

<https://p1pe.doe.virginia.gov/reportcard/>.

Results

The results of the evaluation reflect the extent to which the centers met required programmatic objectives. Grantees were required to address the following three objectives: (1) improve student achievement in reading; (2) improve student achievement in mathematics; and (3) provide opportunities for parental education. Each center could also implement additional objectives as long as they were aligned with the purposes of the federal 21st CCLC program. Although the progress toward meeting the supplemental objectives was not the primary focus of the evaluation, results are provided in Appendix A for informational purposes. It is important to

note that grantees determined and self-reported their individual levels of success in meeting objectives not related to student achievement but based on their own criteria.

Objective 1: Improve Student Academic Achievement in Reading

When looking at all matched 21st CCLC participants and control group students in grades four through eight, after statistically controlling for student demographic variables, participation in 21st CCLC programs (i.e. “Yes” or “No”) had no statistically significant effect on either participants’ reading proficiency levels or standardized SOL reading scaled scores. In addition, the effect sizes for both analyses (Cox Index effect size (CIES) = -0.02 and $g = -0.01$ respectively) were not substantively important (i.e., educationally meaningful) based on What Works Clearinghouse (2014) guidelines (i.e., $\geq \pm 0.25$). The effect size (calculated as either the Cox Index for the proficiency analyses or Hedges’s g for the standardized SOL 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)⁶. There were also no statistically significant or substantively important differences in reading proficiency for any subgroup.

The following trends in statistically significant achievement outcomes emerged in reading over the past three years (2011- 2012 to 2013- 2014) (see Table 2 and Table 3):

For both 21st CCLC students only (Analysis of Center Effects) and for the 21st CCLC vs. control students analyses

- Non-minority students outperformed minority students on the proficiency analyses as well as the standardized SOL scaled score analyses, most with substantively important effects for the 21st CCLC vs. control student analyses, based on WWC guidelines.

⁶ A full discussion of the calculation of the effect sizes can be found in the Supplemental Technical Report.

- Non-special education students outperformed special education students on the proficiency analyses as well as the standardized SOL scaled score analyses, with large, substantively important effects for the 21st CCLC vs. control student analyses.
- Non-economically disadvantaged students outperformed economically disadvantaged students on the proficiency analyses as well as the standardized SOL scaled score analyses, with substantively important effects for the 21st CCLC vs. control student analyses.

For the 21st CCLC vs. control students analyses

- Overall, there were no statistically significant impacts of participation in 21st CCLC on either proficiency or SOL reading achievement.
- Females outperformed males on the proficiency and standardized SOL scaled score analyses, but the magnitude of effects was not substantively important.
- Non-limited English proficient students outperformed limited English proficient students on the standardized SOL scaled score analyses, with substantively important effects for the last two years.

For the 21st CCLC only analyses

- Overall, there were no statistically significant impacts of the number of days of participation in 21st CCLC on either proficiency or SOL reading achievement.

Table 2: Three-Year Achievement and Student-Level Outcomes Demographic Summary in Reading for Grades 4-8

Covariates	Reading						Reading					
	2011-2012		2012-2013		2013-2014		2011-2012 ^a		2012-2013 ^a		2013-2014 ^a	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
<i>Student Demographics</i>												
Number of days of participation in 21 st CCLC							NA	NA	NA	NA	NA	NA
21 st CCLC Participant	NA	NA	NA	NA	NA	NA						
Time	NA	NA	NA	NA	NA	NA	Positive	Positive	Negative	Positive	Positive	
Female						Female higher	Female higher	Female higher	Female higher	Female higher	Female higher	Female higher
							0.10	0.08	0.12	0.10	0.06	0.08
Minority/White (W) (reference group) compared to Hispanic (H), African American (AA), and Other (O) race groups	Non-Minority higher	Non-Minority higher	W higher than H and AA	W higher than H and AA	W higher than H and AA	W higher than AA	Non-Minority higher	Non-Minority higher	W higher than AA	W higher than AA	W higher than H and AA	W higher than H and AA, O higher than W
							-0.40	-0.36	-0.36	-0.34	-0.13, -0.50	-0.10, -0.39, 0.08
Special Education Status (SPED)	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher
							-0.79	-0.83	-0.87	-0.87	-0.92	-0.95
Limited English Proficient (LEP) Status			Non-LEP higher			Non-LEP higher		Non-LEP higher	Non-LEP higher	Non-LEP higher	Non-LEP higher	Non-LEP higher
							-0.10	-0.39	-0.38	-0.51	-0.49	
Educationally Disadvantaged (ED) Status	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher
							-0.47	-0.38	-0.46	-0.35	-0.48	-0.43
Prior Year Z-score	Positive	Positive	Positive	Negative	Positive	Positive	NA	NA	NA	NA	NA	NA

a Note: the values below the group represent the effect size.

Table 3: Three-Year Achievement and Student-Level Interaction Outcomes Summary in Reading for Grades 4-8

Covariates	Reading						Reading					
	2011-2012		2012-2013		2013-2014		2011-2012 ^a		2012-2013 ^a		2013-2014 ^a	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
Interactions												
Special Education	NA	NA	NA	NA	NA	NA		NA		NA		NA
Not Special Education	NA	NA	NA	NA	NA	NA		NA	Control higher	NA		NA
									-0.12			
Limited English Proficient	NA	NA	NA	NA	NA	NA		NA		NA		NA
Not Limited English Proficient	NA	NA	NA	NA	NA	NA		NA	Control higher	NA		NA
									-0.09			
Economically Disadvantaged	NA	NA	NA	NA	NA	NA			Control higher			
									-0.07			
Not Economically Disadvantaged	NA	NA	NA	NA	NA	NA			Control higher			
									-0.12			

a Note: the values below the group represent the effect size.

Results of the descriptive analysis of reading outcomes for students in grade three who did not have prior-year test scores available showed that for proficiency outcomes, 21st CCLC participants in 2013-2014 were outperformed by non-participants in reading proficiency for all students combined and 11 out of 15 available subgroupings and by Virginia in reading proficiency for all students combined and all available subgroupings except Limited English Proficient. In terms of SOL scaled scores, third-grade 21st CCLC participants in 2013-2014 were outperformed by non-participants overall and in 11 out of 15 subgroup comparisons in reading. The “Virginia 21st CCLC 2013-2014 Third-grade Descriptive Analysis” section of the Supplemental Technical Report provides details on the participant, nonparticipant, and overall Virginia samples, and also details differences in reading proficiency and mean SOL assessment scaled scores in both 2012-2013 and 2013-2014 for these two different sets of third-grade students. As noted in that section, it is not appropriate to look at changes (either positive or negative) across years in either proficiency or scaled scores between the two third-grade cohorts, as those changes can be misleading since there is essentially no overlap between these two groups.

Objective 2: Improve Student Academic Achievement in Mathematics

When examining the combination of all matched control group and 21st CCLC participants in grades four through eight, participation in 21st CCLC programs (“Yes” or “No”) did not have a statistically significant effect on participants’ mathematics standardized SOL scaled scores or their mathematics proficiency levels, after controlling for student demographic variables. In addition, the effect sizes for both analyses (Cox Index effect size (CIES) = 0.02 and

$g = 0.02$ respectively) were not substantively important based on What Works Clearinghouse (2014) guidelines (i.e., $\geq \pm 0.25$).

For the proficiency analysis, none of the impacts of participation by subgroup (based on disability (“Yes” or “No”), limited English proficiency (“Yes” or “No”), and economically disadvantaged status (“Yes” or “No”)) were statistically significant, and all had effect sizes that were not substantively important, ranging from CIES = -0.04 to 0.06. For the standardized SOL mathematics scaled score analysis, no statistically significant differences were found between 21st CCLC students who were economically disadvantaged and control students who were economically disadvantaged. The number of days a student participated in 21st CCLC also had no statistically significant impact on either proficiency or SOL outcomes.

The following trends in statistically significant achievement outcomes emerged in mathematics over the past three years (2011- 2012 to 2013- 2014) (see Table 4 and Table 5):

For both 21st CCLC students only (Analysis of Center Effects) and 21st CCLC vs. control students analyses

- Non-minority students outperformed minority students on the proficiency analyses as well as the standardized SOL scaled score analyses, most with substantively important effects for the 21st CCLC vs. control student analyses.
- Non-special education students outperformed special education students on the proficiency analyses as well as the standardized SOL scaled score analyses, with large, substantively important effects for the 21st CCLC vs. control student analyses.
- Non-economically disadvantaged students outperformed economically disadvantaged students on the proficiency analyses as well as the standardized SOL scaled score

analyses, with substantively important effects for the 21st CCLC vs. control student analyses.

For the 21st CCLC only analyses

- Overall, there were no statistically significant impacts of the number of days of participation in 21st CCLC on either proficiency or SOL mathematics achievement.
- The impact of prior-year mathematics achievement was positive for both the proficiency and standardized SOL scaled score outcomes, with higher achievement in the prior year translating into higher performance in the current year.

Table 4: Three-Year Achievement and Student-Level Demographic Outcomes Summary in Mathematics for Grades 4-8

Covariates	Mathematics						Mathematics					
	2011-2012		2012-2013		2013-2014		2011-2012 ^a		2012-2013 ^a		2013-2014 ^a	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
Student Demographics												
Number of days of participation in 21 st CCLC							NA	NA	NA	NA	NA	NA
21 st CCLC Participant	NA	NA	NA	NA	NA	NA	Control higher			CCLC higher		
							-0.17			0.06		
Time	NA	NA	NA	NA	NA	NA	Negative	Positive	Positive	Positive	Positive	
Female	Males higher					Female higher			Males higher			
									-0.12			
Minority/White (reference group) compared to Hispanic (H), African American (AA), and Other (O) race groups	Non-Minority higher	Non-Minority higher	W higher than H and AA	W higher than H and AA	W higher than AA	W higher than AA, O higher than W	Non-Minority higher	Non-Minority higher	W higher than AA	W > than AA, O > than W	W > than AA and H, O > than W	W > than AA and H, O > than W
							-0.35	-0.30	-0.35	-0.28, 0.13	-0.46, -0.17, 0.23	-0.43, -0.10, 0.19
Special Education Status (SPED)	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher	Non-SPED higher
							-0.75	-0.75	-0.72	-0.73	-0.89	-0.97
Limited English Proficient (LEP) Status						Non-LEP higher	LEP higher		Non-LEP higher	Non-LEP higher	Non-LEP higher	Non-LEP higher
							0.12		-0.15	-0.18	-0.27	-0.31
Educationally Disadvantaged (ED) Status	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher	Non-ED higher
							-0.34	-0.34	-0.40	-0.34	-0.42	-0.44
Prior Year Z-score	Positive	Positive	Positive	Positive	Positive	Positive	NA	NA	NA	NA	NA	NA

a Note: the values below the group represent the effect size.

Table 5: Three-Year Achievement and Student-Level Interaction Outcomes Summary in Mathematics for Grades 4-8

Covariates	Mathematics						Mathematics					
	2011-2012		2012-2013		2013-2014		2011-2012 ^a		2012-2013 ^a		2013-2014 ^a	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
Interactions												
Special Education	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.15	NA		NA		NA
Not Special Education	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.63	NA		NA		NA
Limited English Proficient	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.66	NA		NA		NA
Not Limited English Proficient	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.54	NA		NA		NA
Economically Disadvantaged	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.48			CCLC higher 0.08		
Not Economically Disadvantaged	NA	NA	NA	NA	NA	NA	21 st CCLC higher 0.92	Control higher -0.1				

a Note: the values below the group represent the effect size.

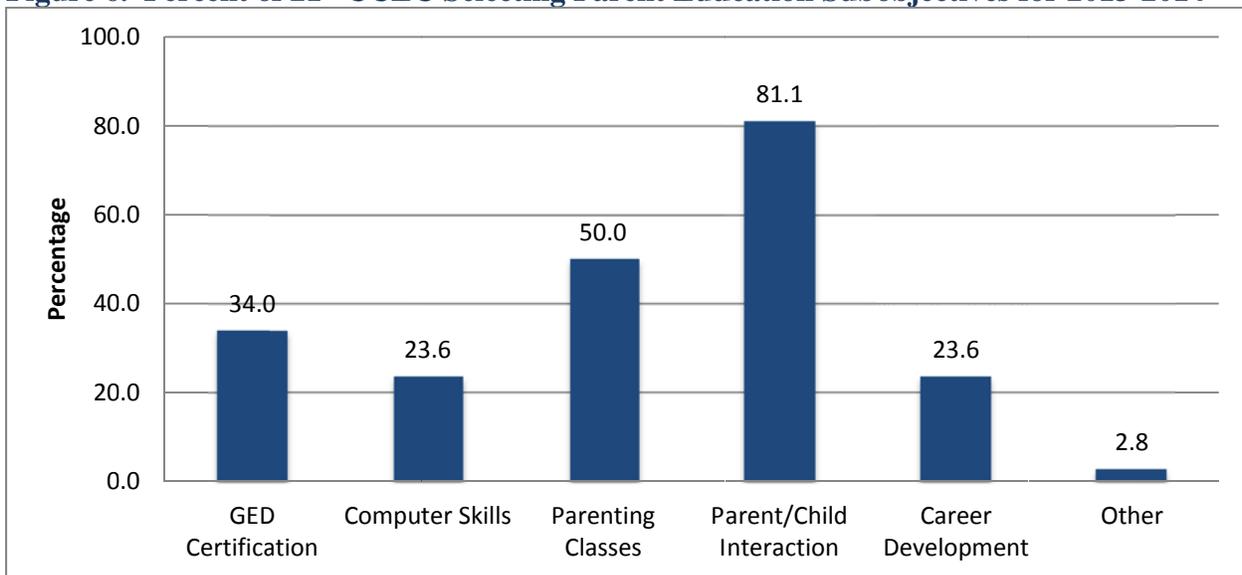
The results of the grade-three-only analyses of proficiency level data showed that third-grade 21st CCLC participants in 2013-2014 were outperformed by non-participants on 12 out of 15 subgroupings and Virginia on all but one subgrouping. In terms of SOL scaled scores, third-grade non-participants did better in all but one out of 15 subgroups compared to 21st CCLC participants in 2013-2014.

For the details on the participant, nonparticipant, and overall Virginia samples and for the details of differences in mathematics proficiency and mean SOL scaled scores in both 2012-2013 and 2013-2014 for these two different sets of third-grade students, readers are referred to the “Virginia 21st CCLC Third-grade Descriptive Analysis” section of the Supplemental Technical Report available upon request from the VDOE. As noted in that section, it is not appropriate to look at changes (either positive or negative) across years in either proficiency or scaled scores between the two third-grade cohorts, as those changes can be misleading since there is essentially no overlap between these two groups.

Objective 3: Provide Opportunities for Parental Education

Center administrators (93.8 percent) stated that they provided a variety of activities to meet this objective. In 2013-2014, these centers reported implementing activities that invited parent/child interaction (81.1 percent), which are higher than levels reported in 2012-2013 (80.7 percent). These and other selected parent activities are shown in Figure 6; the most common activities cited by the centers during 2013-2014 are displayed. It is important to note that grantees determined their own criteria for success in meeting parental education objectives and reported their outcomes accordingly.

Figure 6. Percent of 21st CCLC Selecting Parent Education Subobjectives for 2013-2014



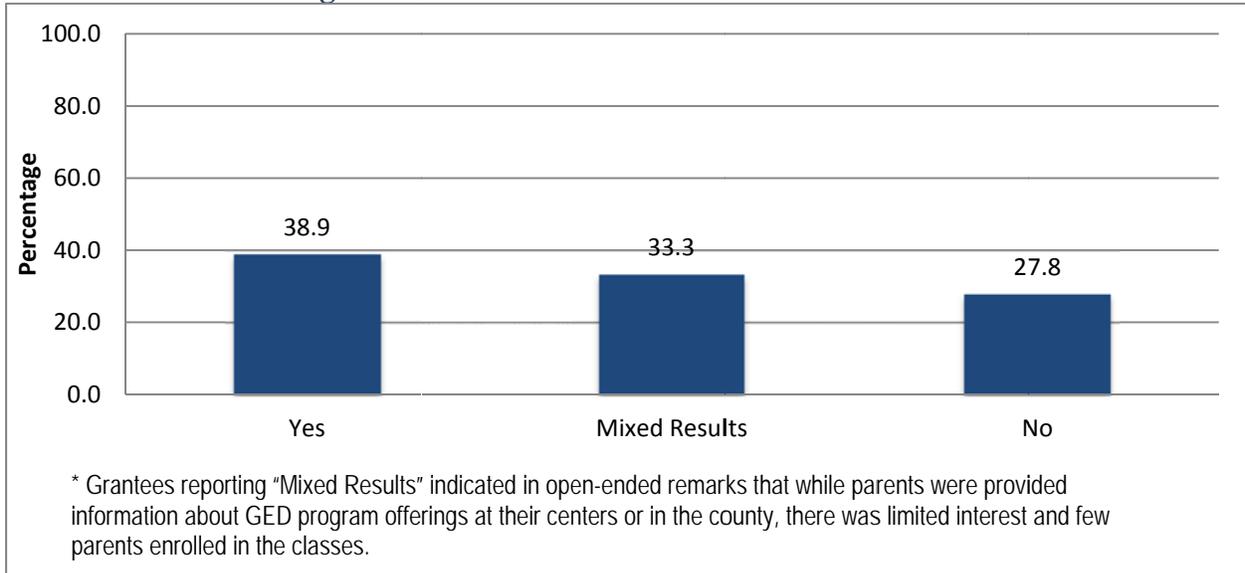
General Education Development

Of those centers providing a General Education Development (GED) certificate program, 50.0 percent reported scheduling the GED certificate program classes at the center and 72.2 percent reported referring parents to GED certification programs in the community. To determine whether centers had met the GED subobjective by providing a GED certificate program (whether in-house or outside the center), 72.2 percent of centers used an attendance report and 52.8 of centers used the number of certificate recipients. Figure 7 shows the percentage of centers that reported meeting the GED subobjective. The percentages are based on the number of centers that chose to include the subobjective of “providing a GED certificate program.”

More than a third (38.9 percent) of the centers providing a GED certificate program reported meeting this subobjective. While many grantees indicated that many of the GED participants increased by at least 0.5 grade level, some grantees indicated that there was low

interest in the program, and one noted that every participant had to start over in January due to the GED revisions for 2014.

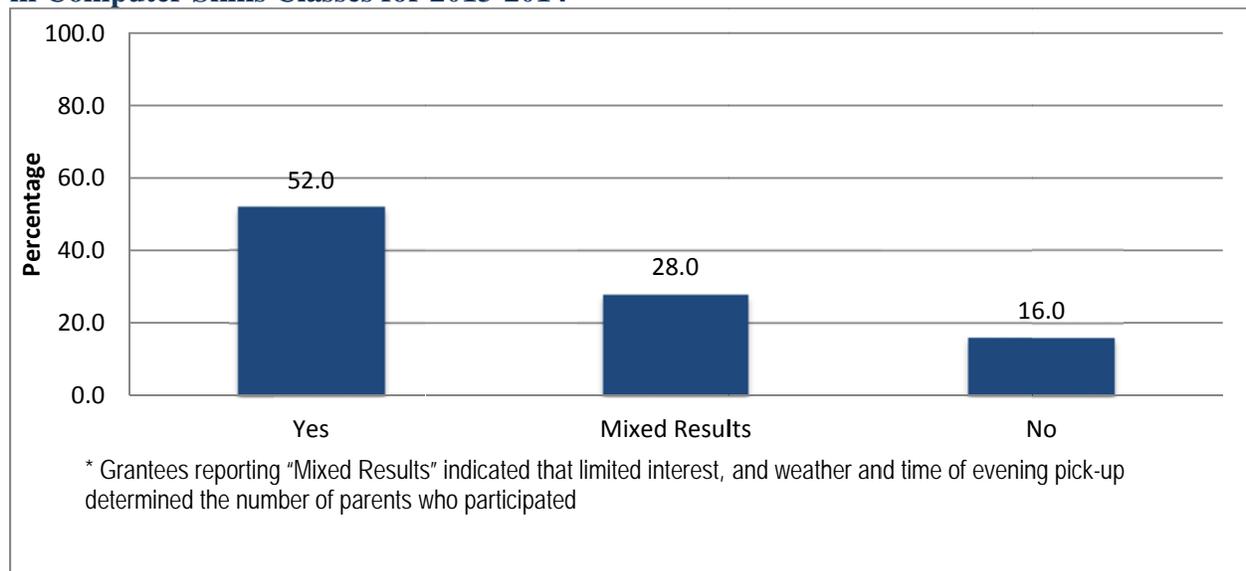
Figure 7. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in GED Certificate Program Classes for 2013-2014



Computer Instruction for Parents

Computer skills classes were reported to be offered by 72.0 percent of centers that provided computer usage activities. Half of centers reported developing projects integrating computer use for parents and children to complete together (52.0 percent). Other centers (8.0 percent) offered parents opportunities to learn about and engage with computer-based learning programs in order to support their children with homework, school projects, and study habits. Centers that provided computer usage activities reported using a variety of measures to determine whether they had met this subobjective, including records of the numbers of sessions offered (76.0 percent), attendance reports (68.0 percent), and pre/post skills assessments (12.0 percent). Figure 8 shows the percentage of centers that reported meeting the computer skills subobjective based on the number of centers that chose parent participation in computer skills classes as an objective.

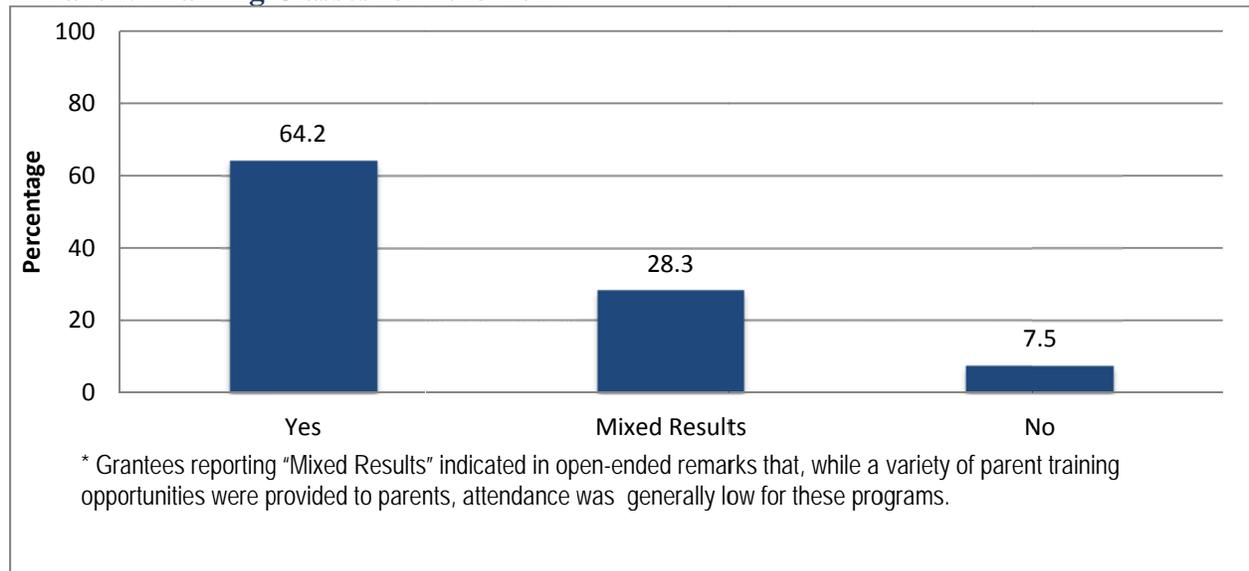
Figure 8. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Computer Skills Classes for 2013-2014



Parenting Skills

Parenting skills classes were provided by 86.8 percent of centers that completed the ALERT. The use of community speakers was reported by 60.4 percent of the centers. Topics included how to increase SOL scores, health and nutrition, bullying prevention, and ESL classes for parents. Other centers (11.3 percent) offered college tours, cultural arts activities attended by the entire family, and information regarding what students were working on in school. Centers that offered parenting skills classes reported using a variety of data sources to determine whether they had met this subobjective, including attendance reports (86.8 percent), records of the number of sessions offered (86.8 percent), evaluation forms completed by parents (50.9 percent), and other (1.9 percent). Figure 9 shows the percentage of centers that reported meeting the parenting skills subobjective based on the number of centers that chose parent participation in parent training classes as an objective.

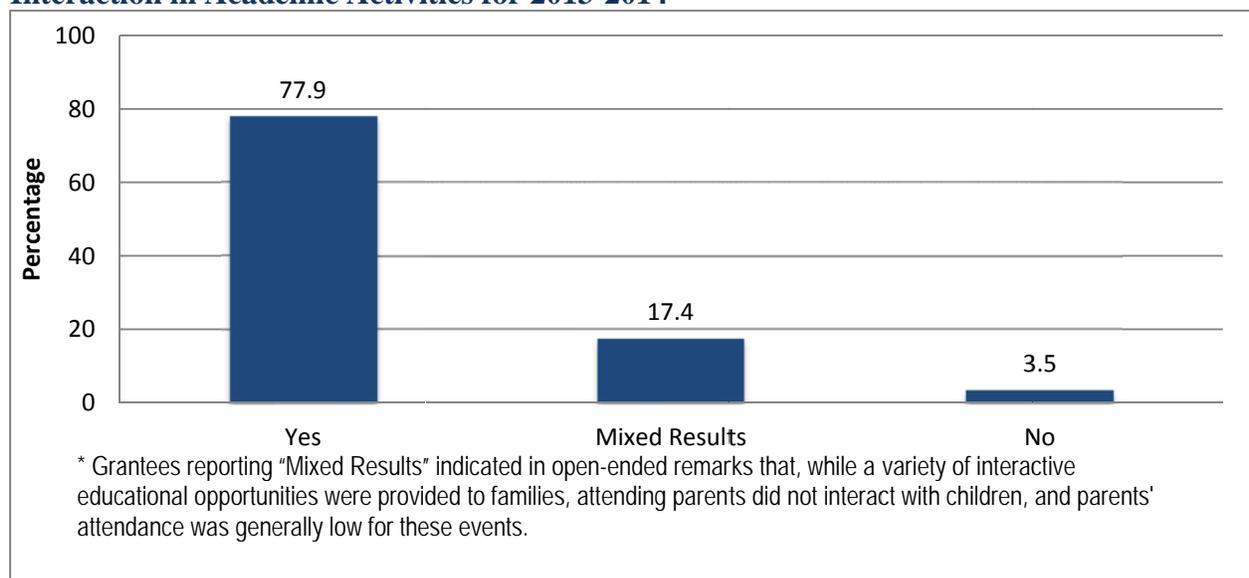
Figure 9. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Parent Training Classes for 2013-2014



Parent/Child Activities

Opportunities for parent/child interaction in academic activities were offered by 81.1 percent of the reporting centers. Most of these centers offered family nights with parent/child activities (82.6 percent), and many held open houses for parents to learn about their children's work (72.1 percent). Some offered parent training in homework help (41.9 percent) or take-home projects for parent/child completion (29.1 percent). Other activities reported included goal setting for academic success; a mobile literacy vehicle; budget, taxes, and resume writing sessions; SOL preparation; and reading and test-taking strategies. Centers that offered opportunities for parent/child interaction in academic activities reported using a variety of data sources to determine whether they had met this subobjective, including attendance reports (83.7 percent), the number of sessions offered (82.6 percent of centers), and evaluation forms completed by parents (44.2 percent). Figure 10 shows the percentage of centers that reported meeting the parent/child interaction in academic activities subobjective based on the number of centers that chose parent/child interaction in academic activities as an objective.

Figure 10. Percent of 21st CCLC Reporting Meeting the Objective for Parent/Child Interaction in Academic Activities for 2013-2014



Career Development for Parents

Parent career development was selected as a subobjective by 23.68 percent of the reporting centers. The centers that addressed this area most frequently offered career exploration classes (68.0 percent), job application assistance sessions (52.0 percent), and vocational classes (32.0 percent). Other activities reported (24.0 percent of centers) included parent lending libraries, GED completion, pursuit of higher education in community colleges, English language acquisition, how to start your own business, how to write a resume, and effective communication and use of technology in the work place. Centers that reported career development as a subobjective used a variety of data sources to determine whether they had met this subobjective, including records of the number of sessions offered (80.0 percent), attendance reports (76.0 percent), evaluation forms completed by parents (60.0 percent), and other sources (8.0 percent), including sign-out sheets and monthly progress reports. Figure 11 shows the percentage of centers that reported meeting the career development subobjective based on the number of centers that chose parent participation in career development activities as a subobjective.

Figure 11. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Career Development Activities for 2013-2014

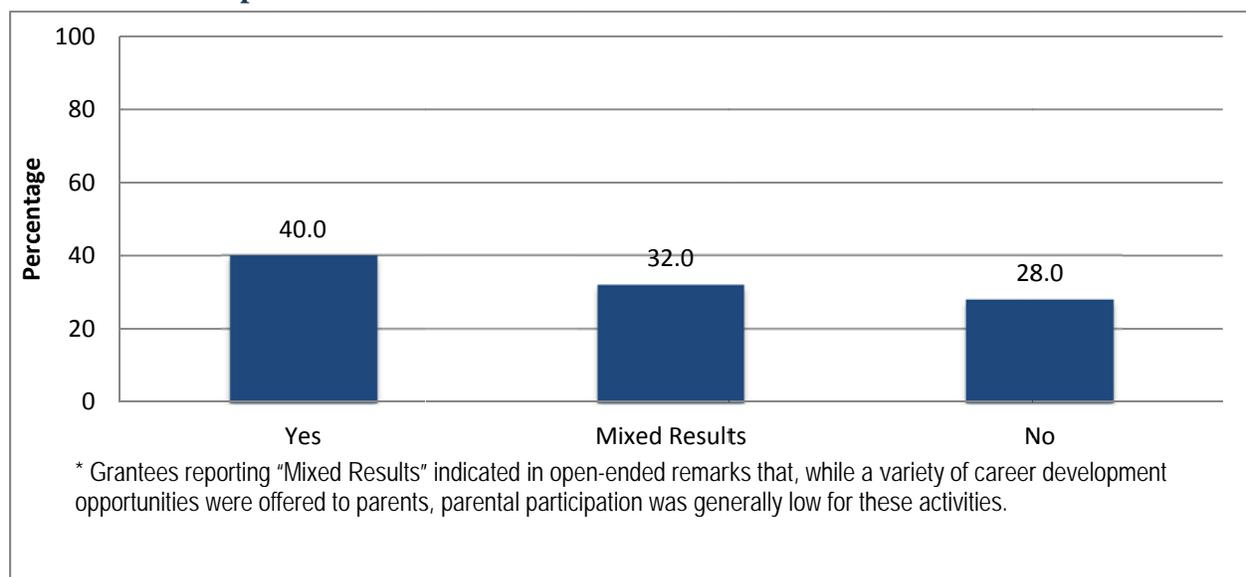


Table 6 shows the comparative success that centers reported having in meeting parent education subobjectives. It is important to note that grantees determined their own criteria for success in meeting parental education objectives and reported their outcomes accordingly.

Table 6. Percentage of Centers Meeting Parent Education Subobjectives in 2013-2014

Subobjective	Selected (percent)*	Met (percent)	Mixed Results (percent)	Did Not Meet (percent)
General Education Development	34.0	38.9	33.3	27.8
Computer Skills Instruction	23.6	52.0	28.0	16.0
Parent Training	50.0	64.2	28.3	7.5
Parent/Child Interaction Activities	81.1	77.9	17.4	3.5
Career Development	23.6	40.0	32.0	28.0

*Percentages total more than 100 percent because grantees selected more than one subobjective for parent education.

Associations between Center Characteristics and Outcomes

This section of the evaluation includes the results of statistical analyses of associations between various categories of center-level data and reading and mathematics outcomes of students in Grades 4-8 participating in 21st CCLC with two years of assessment data available. These analyses provide information that may be useful to program leaders and are summarized below.

From 2007-2008 to 2011-2012, there had been a decrease each year in the total number of individual activities that the centers have offered. In 2012-2013 and 2013-2014, the number of individual activities increased with 2013-14 having the fourth highest level since 2007-2008, but the mean number of activities in 2013-2014 decreased to the lowest level since 2008-2009. There has been a continual downward trend in the mean (i.e., average) number of activities since 2009-2010, and until the 2012-13 year, a downward trend in the total number of providers, with 2013-14 having the third highest number of providers. The 2007-2008 year had the highest total number of activities, the highest mean number of activities, and the second largest number of

providers. The 2008-2009 year had the largest number of providers and the second highest total number of activities, but the smallest mean number of activities. The 2011-2012 year had the lowest total number of activities, and the lowest number of providers. The “Results for Grades 4–8” section of the separate Supplemental Technical Report provides more detailed, statistically oriented findings on the center-level outcomes.

The association between center characteristics and reading achievement

The number of days of participation in 21st CCLC was not shown to be a statistically significant predictor of either reading proficiency level or standardized reading SOL scaled score outcomes. In the full model, no center-level variables were statistically significant predictors of either reading proficiency level or standardized reading SOL scaled scores.

In a separate set of analyses for students with one to 29 days of attendance in 21st CCLC, students with 30 to 59 days of attendance in 21st CCLC, and for the combined group of all students with one or more days of attendance in 21st CCLC, there were statistically significant negative correlations between days attended and 2013-2014 reading z-scores, with more days of attendance being associated with a decrease in the standardized reading SOL scaled score, but the magnitude of the relationships ($r = -0.36$, $r = -0.44$, and $r = -0.41$) were considered low.

The following trends in statistically significant achievement outcomes emerged in reading over the past three years (2011- 2012 to 2013- 2014) for the 21st CCLC students only analyses (Analysis of Center Effects) (see Table 7):

- The impact of prior-year achievement was positive for the proficiency level outcomes, with higher achievement in the prior year translating into higher performance in the current year.

- There were no statistically significant impacts of the number of days of participation in 21st CCLC on either proficiency or SOL achievement.

Table 7: Three-Year Achievement and Center Level Outcomes Summary in Reading for Grades 4-8

Covariates	Reading						Reading					
	2011-2012 ^a		2012-2013 ^a		2013-2014 ^a		2011-2012		2012-2013		2013-2014	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
<i>Center Information</i>												
Number of hours center was open							NA	NA	NA	NA	NA	NA
Number of unique activities at the center							NA	NA	NA	NA	NA	NA
Total number of hours of activities at the center							NA	NA	NA	NA	NA	NA
Percent of center activities that were academic				Negative			NA	NA	NA	NA	NA	NA
				-0.002								
Number (percent) of paid school-day teachers at the center	Positive	Positive					NA	NA	NA	NA	NA	NA
	0.01	0.005										

a Note: the values below the group represent the coefficient for the analysis.

The association between center characteristics and mathematics achievement

The number of days attended was not shown to be a statistically significant predictor of mathematics proficiency level or standardized mathematics SOL scaled score outcomes. Only one center-level variable, number of paid school-day teachers was a statistically significant predictor of mathematics proficiency level outcomes, but not standardized mathematics SOL scaled score outcomes in 2013-2014. However, the impact was small (0.02). For each additional paid school-day teacher, there was a 2 percent increase in the odds of scoring proficient.

In addition, for students with 30 to 59 days of attendance in 21st CCLC, along with all students with at least one day of attendance in 21st CCLC, there was a statistically significant negative correlation between days attended and 2013-2014 mathematics z-scores, with more days of attendance being associated with a decrease in the standardized mathematics SOL scaled score, with the magnitude of the relationship ($r = -0.58$ and $r = -0.23$) being moderate to low. There was no statistically significant relationship between days of attendance and 2013-2014 z-scores in mathematics for students with one to 29 days of attendance ($r = -0.20$) or for students with 60 or more days of attendance ($r = 0.002$). The “Results for Grades 4–8” section of the separate Supplemental Technical Report provides more detailed, statistically oriented findings on the center-level outcomes.

The following trends in statistically significant achievement outcomes emerged in mathematics over the past three years (2011- 2012 to 2013- 2014) for the 21st CCLC students only analyses (Analysis of Center Effects) (see Table 8).

- The impact of prior-year achievement was positive for both the proficiency and standardized SOL scaled score outcomes, with higher achievement in the prior year translating into higher performance in the current year.
- There were no statistically significant impacts of the number of days of participation in 21st CCLC on either proficiency or SOL achievement.

Table 8: Three-Year Achievement and Center Level Outcomes Summary in Mathematics for Grades 4-8

Covariates	Mathematics						Mathematics					
	2011-2012 ^a		2012-2013 ^a		2013-2014 ^a		2011-2012		2012-2013		2013-2014	
	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL	Proficiency	SOL
	21 st CCLC Only		21 st CCLC Only		21 st CCLC Only		21 st CCLC vs. Control		21 st CCLC vs. Control		21 st CCLC vs. Control	
<i>Center Information</i>												
Number of hours center was open	Positive	Positive					NA	NA	NA	NA	NA	NA
	0.01	0.005										
Number of unique activities at the center				Negative			NA	NA	NA	NA	NA	NA
				-0.006								
Total number of hours of activities at the center							NA	NA	NA	NA	NA	NA
Percent of center activities that were academic	Negative	Negative					NA	NA	NA	NA	NA	NA
	-0.01	-0.003										
Number (percent) of paid school-day teachers at the center	Positive				Positive		NA	NA	NA	NA	NA	NA
	0.01				0.02							

^a Note: the values below the group represent the coefficient for the analysis.

Extended Learning Time (ELT) Analysis

CREP conducted a descriptive analysis of the one pilot school, Jefferson-Houston Elementary in the Alexandria City Public Schools, which implemented the optional 21st CCLC flexibility waiver for Extended Learning Time (ELT) in 2013-2014. For the analysis, Jefferson-Houston Elementary was compared to all other subgrantees not implementing the flexibility waiver to examine performance differences (if any) between the two groups. Two analyses were conducted, one based on proficiency levels, and the other on SOL achievement. In the first analysis, the proficiency level on the SOL, VAAP, VGLA, or VMAST tests in reading and mathematics for the 2013-2014 school year was coded as “pass” (or proficient) when the proficiency level was “Proficient” or “Advanced Proficient,” and as “fail” otherwise (i.e., where the proficiency level was either “Basic” or “Below Basic”). The prior year (2012-2013 school year) proficiency levels on the same tests for the same students (where available) were grouped into “pass” and “fail” in a similar manner. In the second analysis, the outcome variable was the mean (i.e., average) standardized scaled score (z-score) on the SOL test in reading and mathematics for the 2012-2013 and 2013-2014 school years for the same group of students. The comparison between the 2012-2013 and 2013-2014 years gives a non-statistical way of comparing ELT student achievement before and after the students attended the ELT program.

In terms of proficiency outcomes, the non-ELT centers had a higher percentage of students score Proficient or Advanced in both reading and mathematics in both years. The difference in proficiency was larger in mathematics in 2013-2014 (23.8 percentage points), and was larger in reading in 2012-2013 (24.5 percentage points).

A similar pattern appeared when looking at mean standardized scaled scores (z-score) on the SOL test in reading, where non-ELT centers outperformed Jefferson-Houston Elementary in

both years, with a larger difference in 2012-2013 vs. 2013-2014. Both groups, however, were below Virginia's average (i.e., both groups had negative z-score means). The same was true in mathematics, where non-ELT centers outperformed Jefferson-Houston Elementary on both the 2012-2013 and 2013-2014 mean. As with reading, both groups were below Virginia's average both years.

In interpreting these outcomes, it is important to note several caveats. First, the analyses are descriptive. As a result, any differences between the ELT and non-ELT centers could be due to chance vs. any effects, or lack of effects, of the ELT program. Second, there were extremely large differences in the sample sizes between the two groups. For the proficiency analyses, there were 52 ELT students in both years compared to 11,322 non-ELT students. For SOL, there were 42 ELT students in both years compared to 10,745 non-ELT students. Such huge discrepancies make it difficult to realistically weigh differences in performance between the two groups. Finally, the demographic composition of the two groups may also not be comparable, with the percentages of economically disadvantaged, special education, and African-American students in particular, being much larger in the ELT group.

Promising Practices and Challenges

As part of the self-reporting information provided in the ALERT, grantees were asked to provide comments regarding activities they felt were most effective in helping them to meet program objectives, factors that could have been associated with the lower results for objectives not met or showing mixed results, and recommendations they might have for improving the program in their centers in the future. Qualitative analysis of the grantees' open-ended comments involved a structured, multi-step process. First, the grantees' original comments were

grouped into categories representing their basic content. Next, the categories were grouped into overarching themes that were present across the objectives. Final analysis produced frequency percentages for each overarching theme that was observed in the dataset. Because it was possible for some comments to contain multiple content categories, the percentages reported reflect the total number of categories—within each overarching theme—derived from the dataset and not necessarily the total number of comments received from grantees. The promising practices and challenges faced by the reporting centers are summarized and details are reported below.

Promising Practices

Grantees were asked to elaborate upon the centers' objectives that were met and the activities or promising practices that appeared to be most effective in helping them to meet these objectives. The grantees' responses frequently included the following: the nature of student activities that were most effective in supporting grant objective attainment; cultivating and maintaining strong relationships and partnerships with families; incorporating incentives, and communicating consistent expectations between school activities and afterschool activities to promote desired student behavior; cultivating and maintaining strong relationships and partnerships with community members; and supporting high quality after-school staff that maintains strong linkages with the school-day staff and curricula. In Table 9, the promising practices that were frequently experienced by grantees in 2013-2014 are summarized by objective and are described in further detail below.

Table 9. Summary of Promising Practices by Objective: 2013-2014

Promising Practice	Improve Student Academic Achievement	Provide Parent Education	Improve Student Behavior	Provide Enrichment Opportunities	Improve Community Partnerships
The nature of student activities that were most effective in supporting grant objective attainment.	X	+	X	X	+
Cultivating and maintaining strong relationships with community members.	*	+	*	+	X
Incorporating incentives, and communicating consistent expectations between school activities and afterschool activities to promote desired student behavior.	*	+	X	*	
Cultivating and maintaining strong relationships and partnerships with families.	*	X	*		
Supporting high quality after-school staff that maintains strong linkages with the school-day staff and curricula.	X		*	*	

^X Promising practice was included in the majority of responses across the entire dataset for the objective.

⁺ Promising practice was included in a small proportion of responses across the entire dataset for the objective.

^{*} Promising practice was minimally included in responses across the entire dataset for the objective.

The nature of student activities that were most effective in supporting grant objective attainment

According to grantees operating centers in 2013-2014, the nature of student activities that were most effective in supporting grant objective attainment involved tutoring opportunities, homework assistance, and/or non-traditional instruction techniques (e.g., hands on activities, games, project-based learning, small groups, and team teaching). These types of activities were most effective in supporting subobjectives related to providing enrichment opportunities, improving student behavior, and improving student academic achievement. Additional aspects of student activities that supported grantees’ subobjectives related to providing enrichment opportunities and improving student behavior included the alignment of academics and enrichment experiences as well as offering activities of high interest to students. Further

structural components that were particularly supportive in improving student academic achievement and improving student behavior afforded greater individualized attention and tailored instruction to students.

Some grantees felt that the nature of student activities also influenced the achievement of subobjectives related to parent education as well as the improvement of community partnerships. Grantees indicated that the greater the variety of learning experiences offered to students, the more opportunities were available for parent and community involvement.

Cultivating and maintaining strong relationships and partnerships with community members

According to grantees operating centers in 2013-2014, subobjectives for improving community partnerships were supported by activities such as including community partners in the planning process of the programs offered to students and families, engaging in clear communication and face to face meetings with partners, developing relationships with community partners through the facilitation of site visits, and acknowledging partners' participation. Grantees indicated that additional partnerships often created additional enrichment opportunities for students which, in turn, enhanced enrichment opportunities, improved student behavior, and created the potential to increase student achievement.

Incorporating incentives and communicating consistent expectations to promote desired student behavior

According to grantees operating centers in 2013-2014, incorporating incentives and communicating consistent expectations promoted grant objective attainment. Enrichment

opportunities and field trips were most commonly cited as activities that were helpful in improving subobjectives related to both student behavior and student achievement. For improving student behavior, a number of grantees indicated success with positive reinforcement using tangible rewards over various periods of time through the accumulation of stickers, points, or tickets which are then accrued toward a larger award (e.g., a school event or class party). In addition, grantees indicated the effectiveness of implementing a participation policy that required homework completion or school attendance in order to engage in enrichment activities. Similarly, grantees indicated that upholding high and consistent expectations and emphasizing student accountability were effective practices for improving academic achievement. Clearly communicating these expectations to all staff members and parents was considered a promising practice that improved student behavior, as well as academic achievement, and was helpful in improving parent education.

Cultivating and maintaining strong relationships and partnerships with families

According to grantees operating centers in 2013-2014, cultivating and maintaining strong relationships and partnerships with families was important in supporting grant objective attainment, particularly with respect to providing parent education, improving student academic achievement, and improving student behavior. Grantees indicated that aligning parent education programs to parent needs and interest was influential in increasing parent attendance and engagement. Activities that provided career-oriented services were of particular interest to parents. Grantees also shared that using resources in the community to provide parent education was a promising practice. Additionally, grantees provided engaging activities that offered opportunities for parent and student participation such as field trips and Family Fun Nights.

Grantees indicated that parents appreciated opportunities to develop language and other skills needed to succeed in the workplace along with ways to access community programs and resources. Grantees also attempted to respond to families' needs and challenges by including more convenient and flexible scheduling of activities, food, direct services through mobile community outreach, and child care.

Other aspects of building relationships with families that supported grantee's subobjectives related to improving student behavior and academic performance by communicating the same strategies used in the classroom and in the after-school program to students' caregivers. Grantees also shared that students' behavior improved when relationships were strong between teachers and students as well as between teachers and families.

Supporting high quality after-school staff that maintains strong linkages with the school-day staff and curricula

According to grantees' operating centers in 2013-2014, supporting high-quality after-school staff that maintains strong linkages with the school-day staff and curricula promoted grant objective attainment. This was distinctly evident in the areas of improving student academic achievement, improving student behavior, and providing enrichment opportunities. For improving subobjectives related to student academic achievement, grantees indicated the importance of employing highly-qualified instructors. The importance of retaining instructors from year to year, as well as recruiting school-day teachers to work in the after-school program were commonly shared practices that grantees felt positively impacted student achievement. When asked about promising practices related to the subobjectives for improving student behavior, grantees indicated the importance of incorporating the presence of a counselor in after-

school programs. Grantees also discussed using the same behavior model during both the school day and after-school programs, collaborating with the feeder school regarding student behavior, and providing after-school staff with the training and resources for engaging with students who may have challenging personal or social conditions. The importance of having a staff that is committed and encouraging was reiterated. Concerning enrichment programs, a small number of grantees shared the importance of maintaining staff members that can guide enrichment appropriately, who are highly motivated, and who can be a part of designing the enrichment programs.

Challenges

Grantees were asked to reflect upon their centers' objectives that were not met, or showed mixed results, and to identify challenges that might have been associated with the lower results. Overarching themes—themes present across objectives—were present in the grantees' responses. These overarching themes, referred to below as challenges, include: limited instructional time; program design and structure; home and community characteristics and challenges; students' individual challenges; supporting quality after-school staff; and cultivating strong community connections. In Table 10, the challenges that were frequently experienced by grantees in 2013-2014 are summarized by objective and described in further detail below.

Table 10. Summary of Challenges by Objective: 2013-2014

Challenge	Improve Student Academic Achievement	Provide Parent Education	Improve Student Behavior	Provide Enrichment Opportunities	Improve Community Partnerships
Limited instructional time	*	+	+	X	
Program design and structure	*	*	+	X	
Cultivating strong community connections	*	+	*		X
Supporting quality after-school staff	X		*	*	
Students' individual challenges	X	*	+		
Home characteristics and challenges	*	+	*		

^X Challenge was included in the majority of responses across the entire dataset for the objective.

⁺ Challenge was included in a small proportion of responses across the entire dataset for the objective.

^{*} Challenge was minimally included in responses across the entire dataset for the objective.

Limited instructional time

Grantees operating centers in 2013-2014 indicated that limited instructional time was a challenge that impacted four of the five objectives. Grantees reported that providing enrichment opportunities was a significant challenge for their program due to difficulty scheduling enrichment activities after school (33.5 percent of comments), transportation to after school events (33.5 percent of comments), and winter weather related closings (33.0 percent of comments). According to grantees, limited instructional time due to inconsistent student attendance (66.7 percent of comments), limited student participation (16.7 percent of comments), and winter weather related closings (16.7 percent of comments) made improving student behavior a challenge. Furthermore, grantees indicated that providing parent education was a challenge due to difficulty scheduling events around parents' work schedules (66.7 percent of comments), numerous winter weather related closings (27.8 percent of comments), and the lack of onsite childcare (5.6 percent of comments). Lastly, grantees reported time constraints (66.6 percent of comments) and winter weather related closings (33.4 percent of comments) challenged their ability to uphold community partnership visits.

Program design and structure

For grantees operating centers in 2013-2014, challenges related to program design and structure touched efforts in four of the five major grant objective areas. Grantees indicated (50.1 percent of comments) that a contributing factor to their difficulties may have been related to the design of enrichment opportunities that were focused heavily on academics rather than enrichment activities. According to grantees (17.2 percent of comments), the inadequate alignment of the after-school program to families' needs and interests (particularly with regard to language barriers), shortage of incentives for parents, and the style of classes offered (offering series of classes rather than individual classes) may have contributed to difficulties in meeting subobjectives related to providing parent education. Grantees suggested (15 percent of comments) that a contributing factor to their difficulties in meeting subobjectives related to improving student behavior may have been that the after-school program's structure is significantly different from that of the typical school-day, and that there is a need for more consistency with the record keeping of students' behavior. A smaller number of grantees (8.7 percent of comments) indicated that factors contributing to their difficulties in meeting subobjectives related to student achievement include that the established goals were too difficult to meet, the tutor is not a classroom teacher, late notification of grant awards makes effectiveness more challenging, and program partners struggle to accommodate students. While students were showing growth, the growth may not have been enough to meet the set subobjectives.

Cultivating strong community connections

A few grantees operating centers in 2013-2014 indicated that complications with scheduling partner services or resources due to time constraints as well as winter weather

closings hindered progress toward community partnership goals. Some grantees also mentioned that inadequate communication between the school and partner along with lack of follow-through on commitments by the partner hindered progress toward their community partnership goals.

Supporting high quality after-school staff that maintains strong linkages with the school-day staff and curricula

Grantees operating centers in 2013-2014 indicated addressing challenges related to improving students' academic performance were related to supporting a high quality staff (15 percent of comments) in three of the five major grant objective areas. Grantees mentioned insufficient communication between school day staff and after-school teachers, high turn-over among teachers in the after-school program, and a lack of training for after-school staff and volunteers may have contributed to difficulties in meeting the subobjectives related to improving students' academic performance. According to grantees, (12.5 percent of comments) they experienced difficulty finding and hiring qualified staff which contributed to the challenge of providing enrichment opportunities. Finally, grantees indicated (10 percent of comments) that after-school teachers were frequently tired at the end of the day, and difficulty maintaining sufficient instructional and support staffing may have contributed to the challenge of improving student behavior.

Students' individual challenges

Grantees operating centers in 2013-2014 indicated that growth in student achievement was difficult because of the nature of the academic and personal challenges faced by students in

their programs. According to grantees, regular program attendance was a challenge for students. Grantees also revealed that a large number of students in their program lacked academic motivation and struggled with the higher-order thinking skills necessary for academic success, particularly with regard to testing. Many grantees indicated that they serve a large population of at-risk students, ESL students, and students who need or are using an Individual Education Plan (IEP). A small number of grantees indicated that the students they serve rely heavily on medication, function best when their classroom teacher is present, and/or are in need of additional attention, all of which greatly influence student behavior. According to a few grantees, students' low engagement with academics was also a challenge that impacted parent education.

Home and community characteristics and challenges

Grantees operating centers in 2013-2014 indicated that certain challenges students and families experienced in their homes and community inhibited progress in the areas of parent education, student academic achievement, and student behavior. The greatest challenges for providing parent education were related to the cultural, demographic, or socio-economic characteristics of the families served and community infrastructural characteristics such as traveling distance and lack of public transportation. There were significant scheduling issues related to work and transportation that inhibited parents from being able to attend events at the school. The greatest challenge for improving students' academic achievement was related to the parents' low level of perceived value in the educational programs being offered. A small number of grantees indicated that students' home environment along with external factors in the community contributed to challenges related to improving student behavior.

Conclusions

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

Similar to prior years, the majority of the 2013-2014 centers were operated in schools and most centers were open 6-15 hours per week. The centers employed 3,444 paid and volunteer staff members to facilitate Virginia 21st CCLC programs. The majority of the paid staff members included school division teachers, youth development workers, or non-teaching school staff, while the majority of the volunteer staff was made up of college and high school students, community members, or youth development workers. There were 23,876 students attending centers and 39.4 percent of students attended regularly, which was defined as Virginia 21st CCLC students who were in attendance for a minimum of 30 days. Students served by Virginia 21st CCLC programs were enrolled in pre-kindergarten through grade 12, with the majority in grades 3-8. The majority (78.2 percent) of students served were reported as African American or White. Overall, the racial/ethnic information of students served by Virginia 21st CCLC programs was reported as follows: African American (42.2 percent), White (36.0 percent), Hispanic (14.3 percent), Asian (2.6 percent), and American Indian (0.5 percent). As of October 9, 2014, racial/ethnic information had not been supplied for 1.7 percent of the students served. Over half of all students served by Virginia 21st CCLC programs were eligible for free or reduced price lunch for the 2013-2014 school year (52.8 percent). Students identified as having limited English proficiency comprised 7.6 percent of the total program enrollment and students identified as having special needs or disabilities represented 8.9 percent of all students served.

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

Objective 1: Improve Student Academic Achievement in Reading.

Based on the statistical analyses for grades four through eight that included two years of test data, participation in the 21st CCLC program was not a statistically significant predictor of reading achievement outcomes based on either proficiency levels or standardized SOL scaled scores. The number of days participated was also not a statistically significant predictor of reading outcomes. In addition, there were no statistically significant effects of participation in 21st CCLC on reading achievement outcomes for any of the three subgroups analyzed (based on disability, limited English proficiency, or economically disadvantaged status).

It should be noted that in the Spring of 2013, all schools in Virginia took new rigorous English assessments that were based on the revised English Standards of Learning (SOL) approved by the Board of Education in 2010, which included new content and the increased rigor of the 2010 standards, and which could have affected the reading achievement outcomes.

It should be noted that the predictor variables included in the statistical analyses could not explain all of the variance (i.e., variability) in reading achievement. In other words, additional variables not included in these models (e.g., student motivation, school-day attendance, parental involvement) could be accounting for some of the variability in reading achievement.

Results of the descriptive analyses of outcomes for students in grade three who did not have prior-year test scores available showed that overall, third-grade 21st CCLC participants in 2013-2014 were outperformed by non-participants in reading proficiency for all students combined and 11 out of 15 available subgroupings and by Virginia in reading proficiency for all students combined and all available subgroupings except Limited English Proficiency. In terms

of SOL scaled scores, third-grade 21st CCLC participants in 2013-2014 were outperformed by non-participants overall and in 11 out of 15 subgroup comparisons in reading.

Objective 2: Improve Student Academic Achievement in Mathematics.

Based on the statistical analyses for grades four through eight that included two years of test data, participation in the 21st CCLC program was not a statistically significant predictor of mathematics achievement outcomes based on either proficiency levels or standardized SOL scaled scores. The number of days of participation was not a statistically significant predictor of mathematics outcomes. In addition, there were no statistically significant effects of participation in 21st CCLC on mathematics achievement outcomes for any of the three subgroups analyzed (based on disability, limited English proficiency, or economically disadvantaged status).

However, it should be noted that the predictor variables included in the statistical analyses did not explain all of the variance in mathematics achievement. Additional variables not included in these models could be accounting for some of the variability in mathematics achievement.

Results of the descriptive analyses of outcomes for students in grade three who did not have prior-year test scores available showed that in terms of mathematics proficiency, third-grade 21st CCLC participants were outperformed by non-participants on 12 out of 15 subgroupings and Virginia on all but one subgrouping. In terms of SOL scaled scores, third-grade non-participants did better in all but one out of 15 subgroups compared to 21st CCLC participants in 2013-2014.

Objective 3: Provide Opportunities for Parent Education

As required by the 21st CCLC grant, grantees offered General Education Development (GED) certificate programs, computer instruction, parenting skills classes, parent/child activities, and/or career development activities for parents. Over 80 percent of centers offering opportunities for parent/child interaction in academic activities reported having met their internally established subobjectives. In addition, 52 percent of centers offering computer skills instruction and over 64.2 percent of centers offering parent training reported having met their subobjectives. Finally, more than 40.0 percent of centers offering career development activities and 38.9 percent of centers offering GED certificate programs reported having met their subobjectives.

In what ways do attendance at a 21st CCLC, type and time allocated to activities, and hours of operation predict academic achievement?

The results suggest that more paid school-day teachers had a small, positive, yet statistically significant impact on mathematics proficiency levels. No other center-level variables had a statistically significant impact on students' academic achievement.

It should be noted that the predictor variables included in the statistical analyses did not explain all of the variance in reading or mathematics achievement. Additional variables not included in these models could be accounting for some of the variability in achievement.

What “promising practices” and challenges regarding the achievement of required objectives were identified by centers?

Grantees were asked to elaborate upon their centers’ objectives that were met and the activities or promising practices that appeared to be the most effective in helping them to meet these objectives. The nature of student activities, including opportunities for individual academic assistance such as tutoring and/or homework assistance, along with non-traditional instruction techniques such as hands-on activities, games, project-based learning, and/or team teaching were frequently mentioned by grantees as effective avenues for meeting the objective of improving student academic achievement. Supporting high-quality after-school staff members that maintained strong connections with the school-day staff and curricula were also considered influential in meeting the objective of improving student academic achievement. Regarding the objective of providing parent education, grantees often indicated that aligning programs with parents’ needs and interests was of importance. According to their feedback, programs assisting with career-development, GRE testing, computer classes, and language instruction were of particular interest to parents. Grantees also noted that offering classes on individual topics at various times throughout the week—rather than in progressive sessions at routine times—helped meet the scheduling needs of parents who worked long days and/or non-traditional hours. When asked about meeting the objective of improving student behavior, incorporating activities that integrated incentives (e.g., prizes and drawings for accumulating positive behavior “point”, field trips, events with food supplied), and consistent expectations between school day and after-school programs were mentioned by grantees as promising practices. Program structure and design—including offering a variety of engaging enrichment activities and non-traditional instructional techniques—were considered effective in meeting the objective of providing

enrichment activities. Finally, when asked about promising practices that helped meet the objective of improving community partnerships, grantees frequently mentioned that cultivating and maintaining strong relationships with community members was beneficial. Inviting community partners to take part in the planning process, maintaining on-going communication with partners, and investing in building relationships with partners over the summer were reported as particularly helpful.

Grantees were asked to reflect upon their centers' objectives that were not met or that showed mixed results, and to identify challenges what might have been associated with the lower results. Winter weather was mentioned frequently by grantees when discussing challenges to meeting objectives, particularly with providing parent education, improving student behavior, providing enrichment opportunities, and improving community partnerships. When asked about improving student academic achievement, grantees often discussed the difficulty of meeting students' individual challenges (i.e., inconsistent attendance and low student motivation), changes made to the structure of the Standards of Learning tests, and staffing issues. Challenges concerning the provision of parent education included parents' limited participation, scheduling issues, and home and community characteristics. Grantees shared that a lack of transportation to parent education events and parents' limited availability to attend events due to work schedules made meeting this objective difficult. Limited instructional time, program structure, and students' individual challenges reportedly prevented grantees from meeting the objective of improving student behavior. Feedback from grantees regarding this objective also included the need for more consistency between school-day routines and after-school programs. Grantees mentioned having difficulty providing enrichment opportunities due to program structure, particularly that enrichment activities were more focused on academics than on enrichment.

Another challenge reported by grantees was finding qualified enrichment staff for after-school hours. Finally, when asked about challenges related to improving community partnerships, grantees discussed scheduling, communication, and lack of follow-through from community partners.

References

What Works Clearinghouse (2014). Procedures and standards handbook (Version 3.0).
Washington, DC: Author. Retrieved from [ies.ed.gov/ncee/wwc/pdf/reference_resources/
wwc_procedures_v3_0_standards_handbook.pdf](http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_standards_handbook.pdf)

Appendix A: Supplemental Program Objectives

In addition to the state mandated 21st CCLC program objectives, some grantees chose supplemental objectives as part of their center activities. This appendix provides information on the percentage of centers choosing each supplemental objective and the success centers reported in meeting these objectives.

Objective: Improvement of Student Behavior

The objective for improving student behavior was selected by 60.2 percent of centers that completed the ALERT. The percentage of centers selecting various subobjectives for this objective is shown in Table A-1. Success of the reporting centers in meeting these subobjectives is shown in Table A-2. Please note that grantees determined and self-reported their individual levels of success in meeting student behavior objectives based on their own criteria.

Table A-1. Percentage of Centers Selecting Subobjectives for Improving Student Behavior in 2013-2014

Subobjective	Percentage of Centers Selecting
Improve classroom behavior	83.8
Complete homework satisfactorily	83.8
Improve classroom participation	75.0
Improve class attendance	67.6
Improve motivation to learn	72.1
Improve ability to get along with other students	67.6
Other	4.4

Table A-2. Percentages of Success by Reporting Centers in Meeting Subobjectives for Improving Student Behavior in 2013-2014

Subobjective	Met (percent)	Mixed Results (percent)	Did Not Meet (percent)
Improve classroom behavior	68.4	29.8	1.8
Complete homework satisfactorily	71.9	26.3	1.8
Improve classroom participation	74.5	25.5	0.0
Improve class attendance	65.2	32.6	2.2
Improve motivation to learn	75.5	22.4	2.0
Improve ability to get along with other students	76.1	21.7	2.2

Objective: Provide Enrichment Opportunities

The objective for providing enrichment opportunities was selected by 95.6 percent of centers that completed the ALERT. The percentage of centers selecting various subobjectives for this objective is shown in Table A-3. Success of the reporting centers in meeting these subobjectives is shown in Table A-4. Please note that grantees determined and self-reported their individual levels of success in meeting enrichment opportunity objectives, based on their own criteria.

Table A-3. Percentage of Centers Selecting Subobjectives for Providing Enrichment Opportunities in 2013-2014

Subobjective	Percentage of Centers Selecting
Increase children's exposure to the fine arts and cultural events	65.7
Increase children's depth of understanding of academic subjects through non-traditional instruction	80.6
Increase children's health awareness and physical education	82.4
Provide programs in preventing drug/alcohol use and/or violence	44.4
Other	0.9

Table A-4. Percentages of Success by Reporting Centers in Meeting Subobjectives for Providing Enrichment Opportunities in 2013-2014

Subobjective	Met (percent)	Mixed Results (percent)	Did Not Meet (percent)
Increase children's exposure to the fine arts and cultural events	97.2	1.4	0.0
Increase children's depth of understanding of academic subjects through nontraditional instruction	94.3	4.6	0.0
Increase children's health awareness and physical education	85.4	12.4	1.1
Provide programs in preventing drug/alcohol use and/or violence	93.8	4.2	2.1

Objective: Improve Community Partnerships

The objective for improving community partnerships was selected by 46.9 percent of centers that completed the ALERT. The percentage of centers selecting various subobjectives for this objective is shown in Table A-5. Success of the reporting centers in meeting these subobjectives is shown in Table A-6. Please note that grantees determined and self-reported their individual levels of success in meeting community partnership objectives, based on their own criteria.

Table A-5. Percentage of Centers Selecting Subobjectives for Improving Community Partnerships in 2013-2014

Subobjective	Percentage of Centers Selecting
Increase the number of partners	50.9
Increase the activities of partners	62.3
Improve communication with partners	67.9
Improve the sustainability of the program through partner commitments beyond the grant period	50.9
Other	0.0

Table A-6. Percentages of Success by Reporting Centers in Meeting Subobjectives for Improving Community Partnerships in 2013-2014

Subobjective	Met (percent)	Mixed Results (percent)	Did Not Meet (percent)
Increase the number of partners	66.7	14.8	18.5
Increase the activities of partners	66.7	24.2	9.1
Improve communication with partners	83.3	16.7	0.0
Improve the sustainability of the program through partner commitments beyond the grant period	63.0	29.6	7.4