



VIRGINIA DEPARTMENT OF EDUCATION

Evaluation of 21st Century Community Learning Centers

Center for Research in Educational Policy

The University of Memphis

325 Browning Hall

Memphis, Tennessee 38152

Toll Free: 1-866-670-6147

2008-2009





Center for Research in Educational Policy

The University of Memphis

325 Browning Hall

Memphis, Tennessee 38152

Toll Free: 1-866-670-6147

VIRGINIA DEPARTMENT OF EDUCATION

Evaluation of 21st Century Community Learning Centers

2008-2009

August 2010

Heidi Park

Erika Layton

Todd Zoblotsky

Ying Huang

Center for Research in Educational Policy

Table of Contents

| | |
|--|----------|
| Evaluation of 21 st Century Community Learning Centers 2008-2009 Executive Summary | iii |
| Evaluation of 21 st Century Community Learning Centers 2008-2009 | 1 |
| Introduction and Overview | 1 |
| Evaluation Design and Measures..... | 1 |
| Center Characteristics..... | 4 |
| Operations..... | 4 |
| Staffing Patterns | 5 |
| Level of Participation by Students..... | 6 |
| Results | 8 |
| Relations Between Center Characteristics and Outcomes | 18 |
| Promising Practices and Challenges | 19 |
| Promising Practices | 19 |
| Challenges | 22 |
| Conclusions | 23 |
| Appendix A: Supplemental Program Objectives..... | 25 |
| Table A-1. Percentage of Centers Selecting Subobjectives for Improving Student Behavior..... | 25 |
| Table A-2. Percentages of Success by Reporting Centers in Meeting Subobjectives for Improving Student Behavior..... | 26 |
| Table A-3. Percentage of Centers Selecting Subobjectives for Providing Enrichment Opportunities | 26 |
| Table A-4. Percentages of Success by Reporting Centers in Meeting Subobjectives for Providing Enrichment Opportunities..... | 27 |
| Table A-5. Percentage of Centers Selecting Subobjectives for Improving Community Partnerships | 27 |
| Table A-6. Percentages of Success by Reporting Centers in Meeting Subobjectives for Improving Community Partnerships..... | 28 |

List of Tables

| | |
|---|----|
| Table 1. Summary of Instruments and Data Sources by Evaluation Question | 3 |
| Table 2. Percentage of Centers Meeting Parent Education Subobjectives..... | 17 |

List of Figures

| | |
|---|----|
| Figure 1. Hours of Operation per Week during the 2006-2007, 2007-2008, and 2008-2009 School Years by Percent of Centers | 4 |
| Figure 2. Paid Staff in 21 st CCLC across Virginia | 5 |
| Figure 3. Volunteer Staff in 21 st CCLC across Virginia | 6 |
| Figure 4. Percent of All Student Attendees in 21 st CCLC by Grade Level for 2006-2007, 2007-2008, and 2008-2009 | 7 |
| Figure 5. Percent of Regular Attendees (at least 30 days) in 21 st CCLC by Grade Level for 2006-2007, 2007-2008, and 2008-2009 | 7 |
| Figure 6. Percent of 21 st CCLC Selecting Parent Education Subobjectives for 2008-2009 | 12 |
| Figure 7. Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in GED Certificate Program Classes for 2008-2009 | 13 |
| Figure 8. Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Computer Skills Classes for 2008-2009 | 14 |
| Figure 9. Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Parent Training Classes for 2008-2009 | 15 |
| Figure 10. Percent of 21 st CCLC Reporting Meeting the Objective for Parent and Children Interaction in Academic Activities for 2008-2009 | 16 |
| Figure 11. Percent of 21 st CCLC Reporting Meeting the Objective for Parent Participation in Career Development Activities for 2008-2009 | 17 |

Evaluation of 21st Century Community Learning Centers 2008-2009

Executive Summary

The 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 the 2008-2009 Virginia 21st CCLC grantee programs. The purpose was to determine whether the federally-funded 21st CCLC programs were meeting Virginia's program objectives by: (1) improving student academic achievement in reading; (2) improving student academic achievement in mathematics; and (3) providing opportunities for parental education. An overview of the success of centers in achieving supplemental objectives is provided in Appendix A.

Results

Data were analyzed from three main sources: (1) an online annual local evaluation survey (ALERT); (2) the Profile and Performance Information Collection System (PPICS); and (3) scores for reading and mathematics from the Standards of Learning (SOL) assessments, Virginia Alternate Assessment Program (VAAP), and Virginia Grade Level Alternative (VGLA) assessment.

For Objectives 1 and 2, the assessment data were analyzed separately by subject (reading or mathematics) using two different inferential (i.e., statistical) methods for students in grades three through eight who had two years of assessment data available (2007-2008 and 2008-2009). In both cases, students who participated in 21st CCLC for 30 or more days were matched based on several demographic variables to similar students in the control group who were eligible for, but did not participate in the program.

In an effort to evaluate the more subtle or incremental improvements in student outcomes not captured by the categorical analyses, which only looked at broad changes in student proficiency, a second set of analyses was carried out for students' standardized scaled scores (z-scores) on the traditional statewide assessment (i.e., SOL). The results are described below by objectives.

Separate descriptive (noninferential) analyses were conducted for 21st Century participants (i.e., those with 30 or more days of attendance) and nonparticipants (i.e., eligible students with zero days of attendance) in grade three in 2008-2009 who had no prior year test data available using proficiency levels on the SOL, VAAP, and VGLA assessments (based on the percentage scoring Proficient or Advanced) and mean (i.e., average) scale scores on SOL assessments only. These analyses also examined differences in reading and mathematics achievement between 21st Century participants, all

Commonwealth third-grade students in the 2007-2008 and 2008-2009 school years. Comparisons between 21st Century participants and nonparticipants were also conducted by the following subgroups where common data were available: gender, race, economically disadvantaged status, students with disabilities status, and LEP status. Results from the grade three only analyses must be treated with caution because they do not incorporate data necessary to control for students' prior-year achievement, which is known to be a significant predictor of future year achievement.

The key results of the analyses are summarized below by evaluation question.

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

Schools operated the majority of centers, and most were open between 6 and 20 hours per week. There were 1,229 paid and volunteer staff members across 133 centers. Most paid employees were school division teachers or nonteaching staff, while most volunteers were college and high school students, community members, and parents. Students attending centers during 2008-2009 numbered 19,217 and 53.8 percent attended regularly (30 days or more). Students served were in PreKindergarten through grade 12, with the majority in PreKindergarten through grade five. Racial/ethnic groups were represented in centers as follows: White (47 percent), African-American (33.1 percent), and Hispanic (9.7 percent). In comparison, across the Commonwealth of Virginia, the total student membership as of September 30, 2008, was as follows: White (56.5 percent), African-American (25.7 percent), Hispanic (9 percent), Asian/Pacific Islander (5.7 percent), American Indian (0.3 percent), and Unspecified (2.8 percent). Slightly under half of students served were economically disadvantaged. Groups comprising students with limited English proficiency and students with special needs or disabilities each represented less than 8 percent of total students served.

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

Objective 1: Improve Student Academic Achievement in Reading.

For students in grades three through eight who attended a 21st CCLC program for at least 30 days, both the categorical and scaled score analyses showed no statistically significant impact of 21st CCLC participation alone on statewide reading assessments when students were treated either as a single group or when subgroups were considered. However, the number of days attended was shown to be statistically significant in the analysis of standardized SOL scale scores. However, while statistically significant, the impact of the number of days attended was very small. Specifically, a student would have to attend approximately 14 days in the 21st CCLC program to increase his or her reading SOL score by one scale score point.

Objective 2: Improve Student Academic Achievement in Mathematics.

For students in grades three through eight who attended a 21st CCLC program for at least 30 days, the pattern of results for mathematics was similar to that found for reading. Both the scaled score and categorical analyses showed no statistically significant impact of 21st CCLC participation in and of itself on statewide mathematics assessments when students were considered as either a single group or by subgroups. As in reading, the impact of the number of days attended was statistically significant, but very small, with a student having to attend approximately 14 days to increase his or her SOL score by one scale score point.

Objective 3: Provide Opportunities for Parent Education.

As required by the 21st CCLC grant, centers offered General Education Development (GED) certificate programs, computer instruction, parenting skills classes, parent/child activities, and/or career development activities for parents. The majority offering computer skills instruction, parent training and parent/child interaction activities reported meeting their internally established subobjectives. Centers offering career development or GED certification classes reported mixed results.

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

Results of analyses of the effects of center-level variables on reading and mathematics outcomes of students in grades three through eight with two years of assessment data available 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 hours centers were open had a very small, but positive impact on students' reading outcomes, with a higher number of hours associated with statistically significantly higher standardized SOL reading scores in 2008-2009. The number of paid school-year teachers had a very small, but positive impact on students' reading outcomes, with a higher number of teachers being associated with both a higher number of students achieving proficiency and a higher standardized SOL scaled score in 2008-2009. The total hours of activities at centers was not a statistically significant predictor of either reading proficiency or standardized scale scores. Finally, the total number of activities had a very small, but negative impact on students' reading outcomes, with a higher number of activities associated with a statistically significantly lower number of students achieving proficiency in 2008-2009.

Center-level results for mathematics

As in reading, the total hours centers were open was associated with statistically significantly higher standardized SOL mathematics scores in 2008-2009, in addition to a significantly higher number of students achieving proficiency in mathematics. Like in reading, an increase in the total number of paid school-year teachers was associated with a very slight, yet statistically significant increase in standardized SOL mathematics scores and higher odds of achieving proficiency in 2008-2009. However, unlike the outcomes in reading, an increase in the total number of activity hours was associated with a very small, but statistically significant decline in standardized SOL mathematics scores in 2008-2009. The total number of activities was not statistically significant in predicting mathematics outcomes.

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

Many centers perceived a positive relationship between improvements in student academic achievement and the homework help and tutoring provided before or after school through 21st CCLC. Many centers employed or consulted regular and Title I teachers after school to align tutoring and enrichment activities with the school day curriculum. Technology-based programs and hands-on activities were also reported to enhance student learning. Cultural, recreational, and arts programs were reported to be most popular and effective in engaging students. The substantial contribution of partners was often highlighted, as was the importance of maintaining solid channels of internal and external communication.

The predominant challenge faced by centers concerned parental participation in the centers’ programs, including student activities, parent classes and workshops, and involvement in their children’s education at home. Maintaining high levels of student participation was also challenging for many centers, particularly with students who were struggling academically. Sports and afterschool activities also inhibited student involvement in afterschool programs due to scheduling overlaps.

Conclusions

Based on the statistical analyses for grades three through eight that included two years of test data, while participation in the 21st CCLC program in and of itself was not statistically significant in predicting achievement outcomes in either subject, the number of days of participation in 21st CCLC program did have a statistically significant and positive influence on both reading and mathematics standardized scale score achievement and mathematics proficiency in 2008-2009. Therefore, it appears that attending more days in the program did lead to a small increase in achievement as measured by statewide assessments.

The results also suggest that the more hours centers were open had a small, yet statistically significant positive impact on standardized SOL reading and mathematics scale scores and a positive impact on number of students earning proficient scores in mathematics. In addition, the outcomes imply that a larger number of paid school-day teachers had a relatively small, but statistically significant and positive impact on both standardized SOL and proficiency level achievement in both reading and mathematics. There were two small, but statistically significant negative outcomes for center-level variables as well. The total hours of activities was associated with lower standardized SOL mathematics scores, while the total number of activities was associated with a lower number of students scoring proficient in reading.

Results of the descriptive analyses of outcomes for students in grade three who did not have prior year test scores available showed that for proficiency outcomes, the percentage of 21st CCLC participants scoring Proficient or Advanced in mathematics was higher than nonparticipants overall in 2008-2009, but was lower than nonparticipants overall in reading. The same was true in terms of SOL scale score outcomes in 2008-2009, where 21st CCLC participants overall had a higher mean than nonparticipants in mathematics, but a lower mean in reading.

Evaluation of 21st Century Community Learning Centers 2008-2009

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*. The purposes of the 21st CCLC program are:

- 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 2008-2009, the Virginia Department of Education provided 21st CCLC grant funds to 88 grantees that operated a total of 123 centers. 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 Design and Measures

The Center for Research in Educational Policy (CREP) at The University of Memphis was contracted by the Virginia Department of Education 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 were identified by centers regarding the achievement of required objectives?

All grantees and their respective centers in operation in 2008-2009 were asked to participate in the evaluation. A detailed accounting of the number of students and centers originally available and subsequently included, along with the rationale for inclusion or exclusion in the analysis, is provided in a supplemental report.

Three main sources of data were used in the evaluation:

1. Two years (2007-2008 and 2008-2009) of Standards of Learning (SOL), Virginia Alternate Assessment Program (VAAP), and Virginia Grade Level Alternative (VGLA) proficiency and scaled assessment scores in reading and mathematics for students in grades three through grade eight. In addition to the assessment scores, data regarding gender, grade, ethnicity, English language learner status and proficiency level, disability status and primary disability code, economically disadvantaged status, and days of participation in the 21st CCLC program were also included. It should be noted that English language learners at the lowest levels of English proficiency and students with disabilities may participate in approved alternative assessments. The VAAP and VGLA alternative assessment data were included in the analysis of proficiency level outcomes, but only the SOL assessment was used in the analysis of scale score outcomes.
2. The Profile and Performance Information Collection System (PPICS) is a national Web-based data collection system that contains (a) descriptive data about grantees and their 21st CCLC program and (b) self-reported progress toward meeting performance indicators. Grantees submit information to this system at designated time periods each year.
3. Annual Local Evaluation Report Template (ALERT) is an online survey designed to supplement PPICS 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 Virginia Department of Education requested that grantees submit the ALERT for their centers by August 31, 2009. Four centers were dropped from the initial pool of 123 because; two of the four centers were combined; one center did not meet the full-year implementation requirement; and one center became inactive in the 2008-2009 program year. Approximately 69.7 percent (83/119) of the centers submitted the online report by the initial deadline. The remainder of centers completed the report between September and October 2009. The findings in this report reflect the full complement of centers reporting for the 2008-2009 program year. The ALERT reports contained both quantitative and qualitative data for analysis. For PPICS data, grantees were able to begin submitting information in April 2008 and all had completed their submissions by December 2009. PPICS reports were available for 204 organizations, including 133 total centers, 119 of which met the requirements for also completing the ALERT. PPICS data within the Annual Progress Report categories of operation, objectives, activities, student behavior, and partnerships were analyzed for all grantees. Student-level SOL assessment data from the 2006-2007, 2007-2008 and 2008-2009 academic years were provided to CREP by the Virginia Department of Education. The specific data sources are shown in Table 1 for each evaluation question.

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

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

Center Characteristics

Operations

Among centers, 83.3 percent were operated by schools. Others were operated by community centers (5.4 percent), faith-based organizations (2.9 percent), nationally affiliated nonprofit agencies (2.9 percent), and other agencies (units of city or county government, regional/intermediate education agencies, health-based organizations, libraries, park/recreation districts, bureaus of Indian affairs, or private schools) (3.4 percent). These percentages are similar to those reported in PPICS by the grantees for the 2006-2007 and 2007-2008 school years. Centers varied in their structure, most notably in the number of hours of operation per week (see Figure 1). These percentages are also similar to those reported for the previous year.

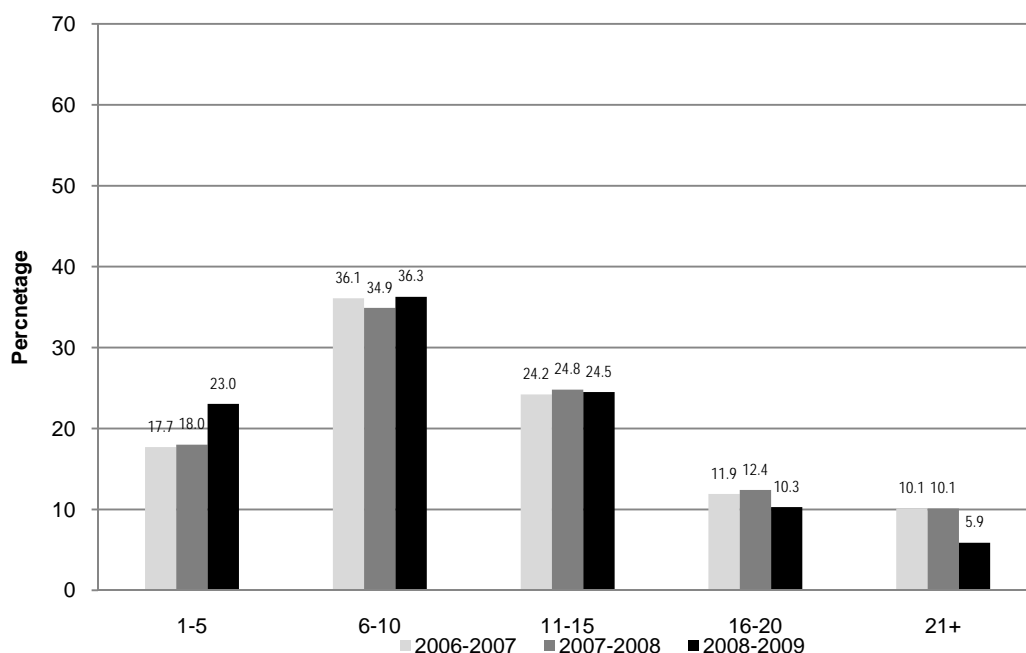


Figure 1. Hours of Operation per Week during the 2006-2007, 2007-2008, and 2008-2009 School Years by Percent of Centers

The majority of centers (71.1 percent) were open between six and 20 hours per week during the 2008-2009 year, with the highest percentage offering between six and ten hours of services per week (36.3 percent).

Staffing Patterns

The staffing patterns across centers are displayed in Figures 2 and 3. Based on available PPICS data, there were 1,229 paid and volunteer staff members across the centers in 2008-2009. Of these staff members, the majority were paid (78.8 percent). Most paid employees were school division teachers (47.6 percent) or nonteaching staff (13.4 percent). Few paid employees were parents (.8 percent) college or high school students (10.5 percent) or community members (.3 percent). College and high school students were the most prevalent type of unpaid volunteers (25.8 percent), followed by community members (26.5 percent) and then parents (16.2 percent).

Overall, in 2008-2009, the paid staff type composition generally continued the trends seen from 2006-2007 to 2007-2008. School division teachers comprised less than half of all paid staff in 2008-2009; during the two previous years, they had comprised more than half of all paid staff. In contrast, increases of almost 50 percent from the prior year were seen in the proportions of paid college or high school students, youth development workers, center administrators, and nondivision personnel. The volunteer staff proportions also increased overall, with the greatest increase from prior years seen in volunteer school division teachers (12.3 percent, versus 5.2 percent in 2007-2008) and the greatest decrease observed in volunteer college or high school students (25.8 percent, versus 43.1 percent in 2007-2008).

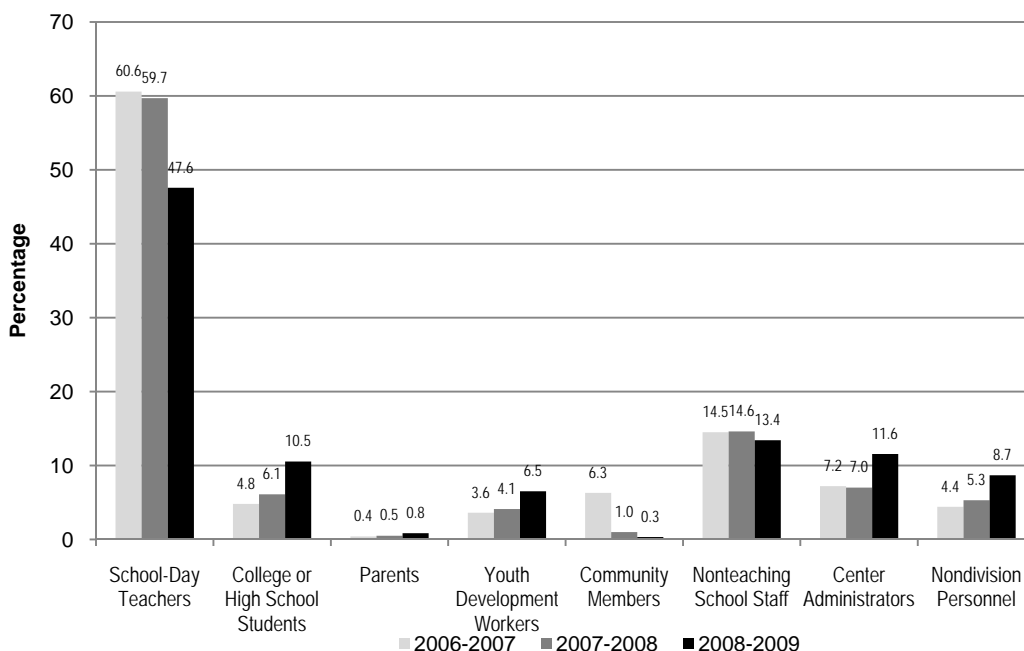


Figure 2. Paid Staff in 21st CCLC across Virginia

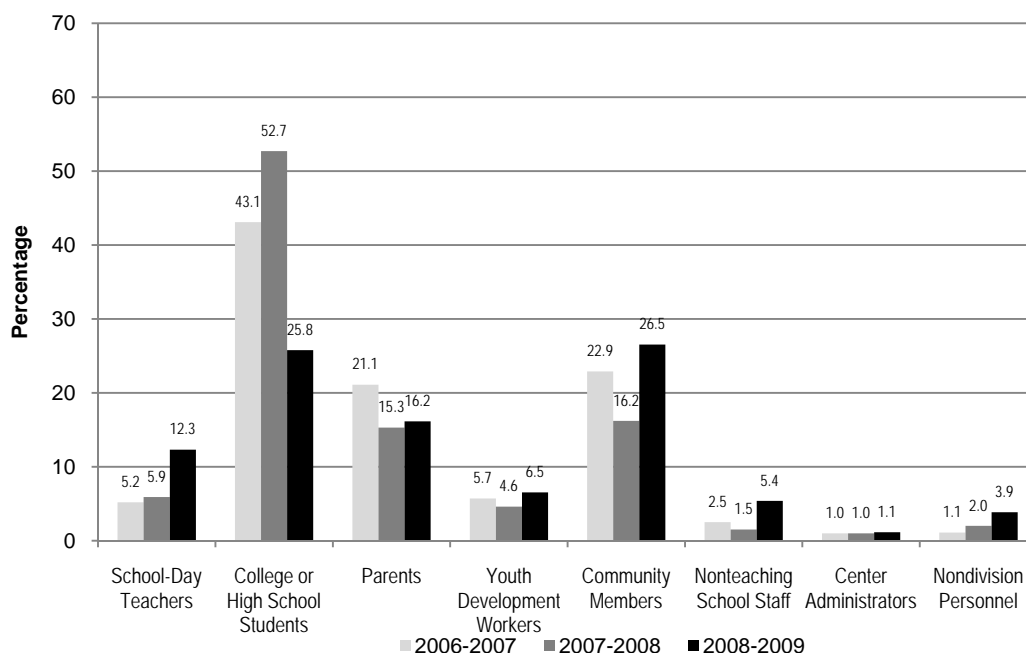


Figure 3. Volunteer Staff in 21st CCLC across Virginia

Level of Participation by Students

According to available PPICS data, a total of 19,217 students were served by 204 centers, with 10,332 students (53.8 percent) attending regularly (30 days or more) in 2008-2009. More than 65 percent of participating students were in PreKindergarten through grade five (see Figures 4 and 5). The percentages of all student attendees and regular student attendees by grade were comparable to those in 2006-2007 and in 2007-2008.

PPICS data indicate that of all student attendees in 2008-2009, 47 percent were White, and 9.7 percent were Hispanic. These percentages are slightly higher than those reported for 2006-2007 and 2007-2008. There were slightly fewer African-American attendees in 2008-2009 when compared to 2006-2007 and 2007-2008 (33.1 percent; versus 36.7 percent, and 43.9 respectively). By comparison, as of September 30, 2008, a total of 56.5 percent of students across the Commonwealth of Virginia were White, while 25.7 percent were African-American, and 9 percent were Hispanic (http://www.doe.virginia.gov/statistics_reports/enrollment/fall_membership/index.shtml). There were also slightly fewer economically disadvantaged students in 2008-2009 when compared to the previous two years (48.5 percent; versus 51.3 percent and 56.4 percent of the total group). Students with limited English proficiency comprised 7.9 percent of the total group, and students with disabilities comprised 7.6 percent, percentages similar to those reported in the previous two years. Also similar to 2006-2007 and 2007-2008 reports, approximately equal numbers of boys and girls participated in the programs (48.1 percent boys; 49.2 percent girls), with approximately equal regularity of attendance.

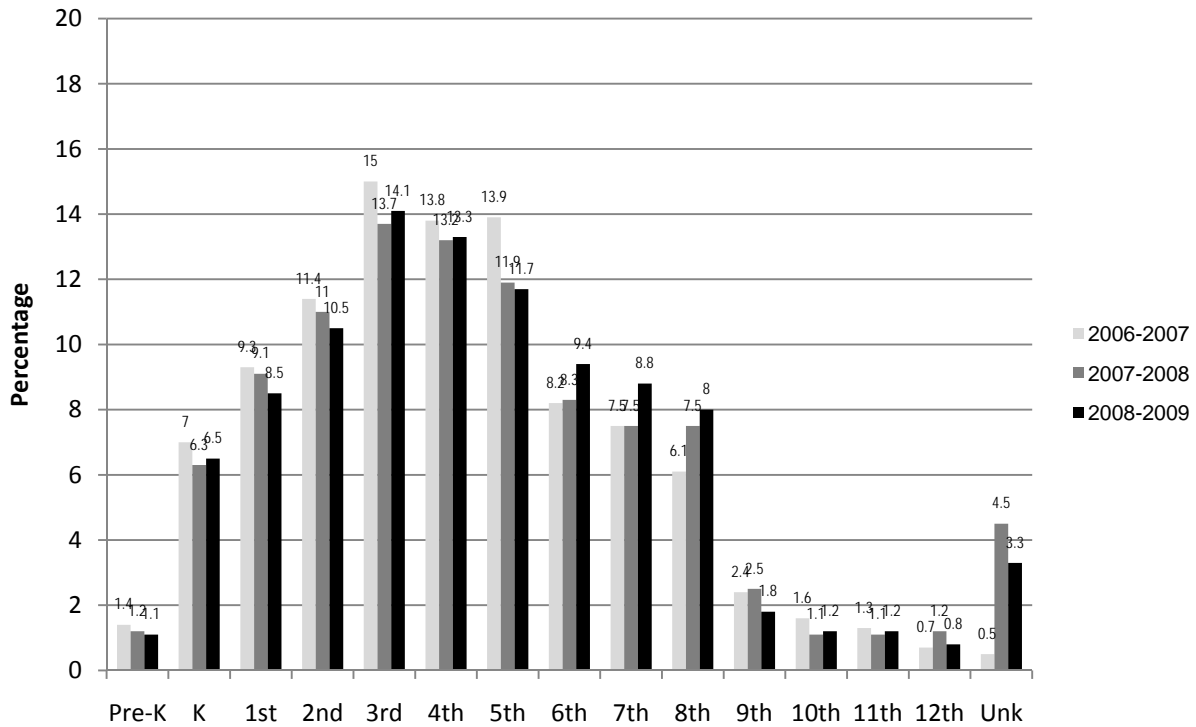


Figure 4. Percent of All Student Attendees in 21st CCLC by Grade Level for 2006-2007, 2007-2008, and 2008-2009

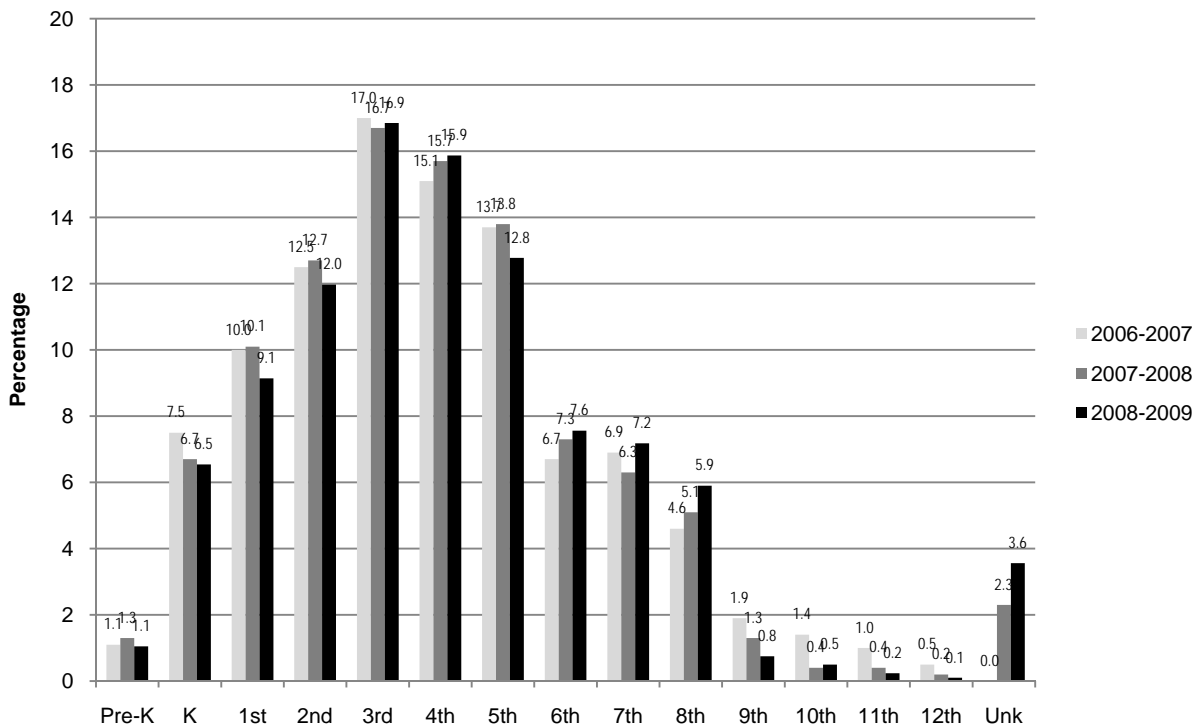


Figure 5. Percent of Regular Attendees (at least 30 days) in 21st CCLC by Grade Level for 2006-2007, 2007-2008, and 2008-2009

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 based on their own criteria.

The results from Objectives 1 and 2 were examined using various statistical regression models for students in grades three through eight with two years of test data available by comparing matched pairs of treatment students who attended 21st CCLC programs for 30 or more days and students in the control group who were eligible to attend 21st CCLC programs but had zero days of attendance.

Two analyses were conducted by subject (reading and mathematics). The first analysis looked at proficiency level performance in 2007-2008 and 2008-2009 based on all available test data (i.e., SOL, VAAP, or VGLA), and the second looked only at the standardized scale scores of students who took the SOL in both 2007-2008 and 2008-2009. The proficiency level on the SOL, VAAP, or VGLA test for the 2007-2008 and 2008-2009 school years was treated as either (1) “pass” or proficient (based on scoring “Proficient” or “Advanced Proficient”) or (2) “fail” (based on scoring “Basic” or “Below Basic”). This method permitted the inclusion of all students, regardless of the type of assessment they used to participate in Virginia’s statewide testing program, as the proficiency level outcomes are comparable across all of the different test types, grade levels, and years. By including all students in the analyses, this first method offers the most appropriate tool to analyze outcomes for specific student subgroups (e.g., Limited English Proficient students). The effects of 21st CCLC participation by three subgroups—students with disabilities, LEP, and economically disadvantaged—were included in the analyses of proficiency outcomes. Center-level variables (e.g., total hours open) were also included to examine the impacts of these variables on student proficiency.

While the categorical analyses were designed to capture broad changes in student proficiency associated with participation in the 21st CCLC programs, these analyses cannot capture incremental improvements in student achievement that may occur within proficiency levels. For example, students who score at the low end of proficiency but move to the high end of proficiency would have demonstrated

no measurable change in the categorical 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 second set of analyses based on the standardized SOL scaled score were intended to be more sensitive to these types of changes that occur across the scale score range, regardless of students' proficiency levels. The standardized scaled score analyses also included the same center-level variables used in the categorical analysis, and looked at the effects of 21st CCLC participation by economically disadvantaged status. 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 English language learners, as the SOL outcomes for these two subgroups would not be representative of the total population of students with disabilities and English language learners.

Furthermore, because Virginia's tests are not vertically scaled, meaning scores from different tests, grade levels, and years are not comparable, the grade-level test data were converted to z-scores prior to analysis, which converts the data to a single, comparable scale while retaining the shape of the distribution of the original scores, and allowed different grade levels to be combined in order to evaluate the effectiveness of centers based on all students served. This transformation is the best available approach to measuring achievement using scaled scores from multiple grades in Virginia at this time; however, it is known to be imperfect as z-scores only provide a measure of achievement relative to the Commonwealth average, and are not a measure of absolute growth or change from year to year. Therefore, the full implications of this conversion applied to Virginia's criterion referenced tests are not clear. In addition, as with the proficiency level analyses, the analyses of standardized SOL scores aggregated results across all centers, rather than conducting a center-by-center analysis. As a result, the findings can be used to evaluate the performance of all centers in the Commonwealth of Virginia, and not the performance of any specific center. The details regarding the samples used, a complete listing of the variables used in the matching process and a description of the treatment-control student matching process itself, data sources, methodology, and scale score standardization for the statistical analyses can be found in the separate Supplemental Technical Report document.

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 it was not possible to either (1) determine if the participant and nonparticipant groups were similar on prior-year achievement or (2) adjust 2008-2009 outcomes based on prior-year achievement. Therefore, any statistically significant findings would not be reliable as they could be the result of differences in prior ability as opposed to participation in the 21st Century program.

Consequently, separate descriptive (noninferential) analyses were conducted for 21st Century participants (i.e., those with 30 or more days of attendance) and nonparticipants (i.e., eligible students with zero days of attendance) in grade three in 2008-2009 who had no prior-year test data available. The analyses used the proficiency levels on the SOL, VAAP and VGLA assessments (based on the percentage scoring Proficient or Advanced) and mean (i.e., average) scale scores on SOL tests. These analyses examined differences in reading and mathematics achievement between (1) 21st Century participant and nonparticipant third-grade students, (2) 21st Century participants and all Commonwealth third-grade students (where similar data were available), and (3) the 2007-2008 and 2008-2009 school years. In addition to the comparison between all students in the 21st Century participant and nonparticipant groups, comparisons between 21st Century participants and nonparticipants were also conducted by the following subgroups where common data were available: Gender, Race, Economically Disadvantaged status, Students with Disabilities status, and Limited English Proficient (LEP) status. The results for grade three only must be viewed with caution as they are descriptive only, and any differences in achievement between participants and nonparticipants could be due to differences in areas such as prior ability or motivation, and not related to participation in the 21st Century program itself. Comparison data for the Commonwealth were based upon the 2007-2008 and 2008-2009 State Report Card data from the Virginia Department of Education's Web site at (<https://p1pe.doe.virginia.gov/reportcard/>).

Objective 1: Improve Student Academic Achievement in Reading.

Both the categorical and scaled score analyses showed no statistically significant impact of 21st CCLC participation in and of itself on statewide reading assessments when students were either treated as a single group or when subgroups were considered. However, the number of days attended was shown to be statistically significant in the analysis of standardized SOL scale scores. Although statistically significant, the impact of the number of days attended was very small. Specifically, a student would have to attend approximately 14 days in the 21st CCLC program to increase his or her SOL score by one scale score point. Interested readers can see the "Results for Grades 3–8" section of the Supplemental Technical Report document for a detailed discussion of the outcomes related to participation in the 21st CCLC program and disability (i.e., special education), LEP, and economically disadvantaged status, and for other general outcomes not directly related to program participation (e.g., prior achievement and ethnicity).

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, the percentage of 21st CCLC participants scoring Proficient or Advanced in reading was lower than nonparticipants overall, but was

higher than nonparticipants for the following subgroups: Males, American Indian or Alaskan Native, African-American students, Hispanic students, Economically Disadvantaged students, and Students with Disabilities. In addition, the percentage of 21st CCLC participants scoring Proficient or Advanced in reading was lower than all Commonwealth third-grade students overall, but was higher for three subgroups: American Indian/Alaska Native, Hispanic students, and Students with Disabilities. In terms of SOL scaled score outcomes, the mean reading SOL scaled score for 21st CCLC participants was lower than that of nonparticipants overall and for all subgroups with the exception of Students with Disabilities. Interested readers can see the “Virginia 21st CCLC Third-grade Descriptive Analysis” section of the Supplemental Technical Report document for the details on the participant, non-participant, and Commonwealth samples, and for the details of changes in reading proficiency and mean SOL scores between 2007-2008 and 2008-2009 for these two different sets of third-grade students.

Objective 2: Improve Student Academic Achievement in Mathematics.

For students in grades three through eight who attended a 21st CCLC program for at least 30 days, the pattern of results for mathematics was similar to that found for reading. Both the scaled score and categorical analyses showed no statistically significant impact of 21st CCLC participation in and of itself on statewide mathematics assessments when students were considered as either a single group or by subgroups. As in reading, the impact of the number of days attended was statistically significant, but very small, with a student having to attend approximately 14 days to increase his or her SOL scale score by one scale score point.

The results from the grade three analyses of categorical data showed that the percentage of 21st CCLC participants scoring Proficient or Advanced in mathematics was higher than nonparticipants overall, and was also higher than nonparticipants for the following subgroups: Males, Asian students, African-American students, Hispanic students, Economically Disadvantaged, Students without Disabilities, LEP and Non-LEP students. The percentage of 21st CCLC participants scoring Proficient or Advanced in mathematics was lower than all Commonwealth third-grade students overall, but was higher for four subgroups: American Indian/Alaska Native, Asian, Hispanic students, and LEP students. For SOL scaled score outcomes, the mean mathematics SOL scaled score for 21st CCLC participants was higher than that of nonparticipants overall and for the following subgroups: Females, Males, African-Americans, Hispanics, Economically Disadvantaged, Students with and without disabilities, and students not designated as LEP. For the details on the participant, nonparticipant, and Commonwealth samples, and for the details of changes in mathematics proficiency and mean SOL scores between 2007-2008 and

2008-2009 for these two different sets of third-grade students, interested readers can see the “Virginia 21st CCLC Third-grade Descriptive Analysis” section of the Supplemental Technical Report document.

Objective 3: Provide Opportunities for Parental Education.

Centers stated that they provided a variety of activities to meet this objective. Most centers reported implementing activities that invited parent/child interaction (83.5 percent). Parenting classes were reported as being conducted in 47.7 percent of the centers. These and other selected parent activities are shown in Figure 6. The most common activities cited by the centers during 2008-2009 are discussed below.

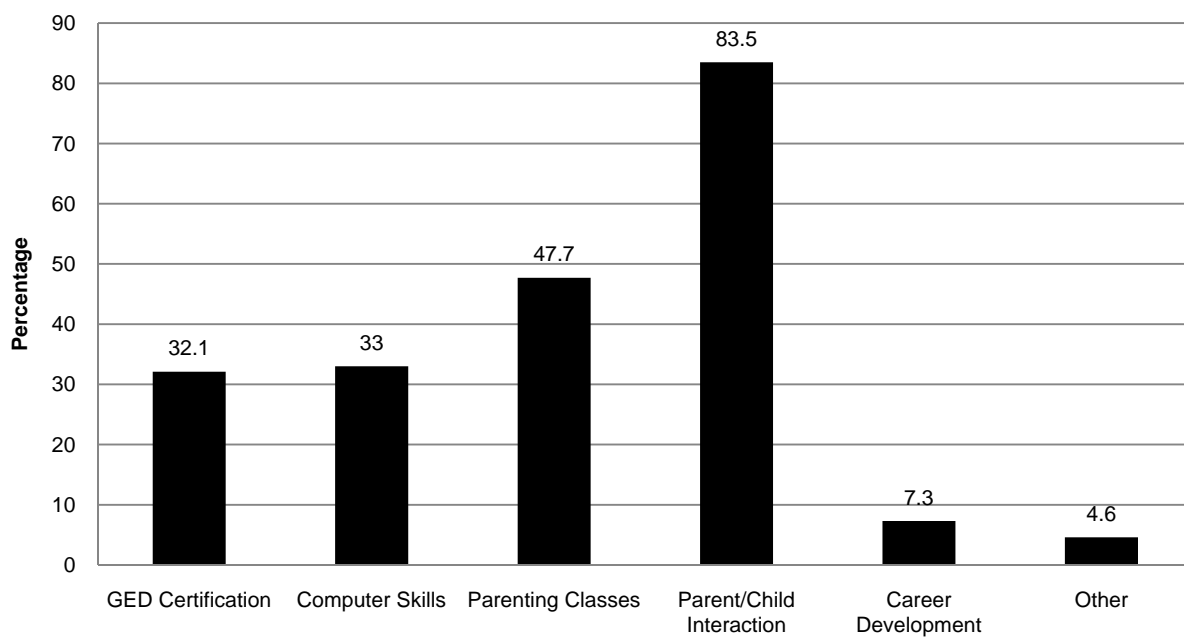


Figure 6. Percent of 21st CCLC Selecting Parent Education Subobjectives for 2008-2009

General Education Development. Of those providing a General Education Development (GED) certificate program, 42.9 percent reported scheduling the GED certificate program classes at the center, while others referred parents to GED certification programs in the community. To determine whether the GED subobjective was met for centers indicating that they had provided a GED certificate program (whether in-house or outside the center), many centers used an attendance report (71.4 percent) or the number of certificate recipients (48.6 percent). Figure 7 shows the percentage of centers that reported meeting the GED subobjective (the percentages are based on the number of centers that chose GED attainment as an objective).

A little over one-third (37.1 percent) of the centers providing a GED certificate program reported meeting this subobjective. A number of grantees indicated that GED program attendance records were often unavailable due to reasons of confidentiality or because of inconsistent communication from community partners providing the service. Of those centers that had attendance records available, several centers indicated that GED programming was less successful when they were not able to offer it at the school. The majority of centers with available attendance data reported that parent participation was consistent, though low. Several of these centers reported that parents who did participate demonstrated progress and a few earned their GED or made other career advancements.

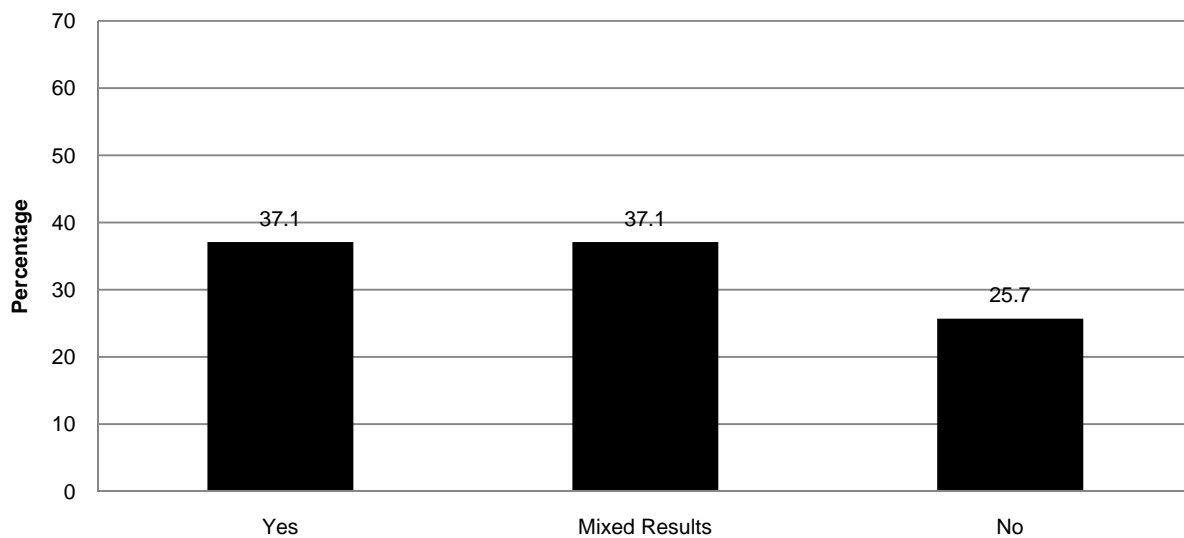


Figure 7. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in GED Certificate Program Classes for 2008-2009

Computer Instruction. Computer skills classes were reported to be offered by 88.9 percent of centers that provided computer usage activities. Some centers developed projects integrating computer use for parents and children to complete together. Others incorporated computer skills training into broader adult education classes. To measure the degree to which this subobjective was met, for centers that reported providing computer usage activities, 91.7 percent of centers used attendance reports, 75 percent used records of the numbers of sessions offered, and 16.7 percent used pre-/post skills assessments. Some centers indicated that computer skills classes were well attended and participants demonstrated progress in their knowledge of the subject. Many centers indicated that they offered classes and workshops on computer usage and safety but exact attendance rates at these programs were not reported. A few centers

reported that parents did not take advantage of the classes offered. Transportation was a reason that was often cited for this lack of participation. The percentages in Figure 8 are for those centers that reported addressing this subobjective.

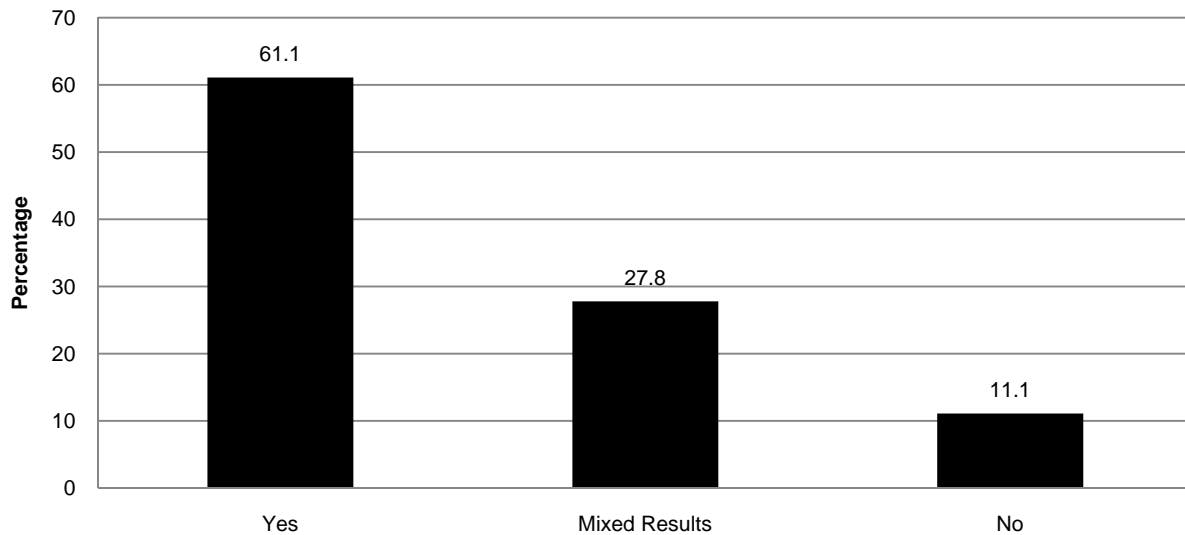


Figure 8. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Computer Skills Classes for 2008-2009

Parenting Skills. Parenting skills classes were provided by 82.7 percent of centers that completed ALERT. The use of community speakers was reported by 48.1 percent of the centers. Topics offered included strategies for parents to help their children with homework and prepare for the SOL tests. Topics on general parenting skills included communication, protection and child safety, conflict resolution and discipline, and middle school and adolescent issues. Health, nutrition, and financial planning classes were also offered at some centers. To measure the degree to which this subobjective was met, for centers reporting that they offered parenting skills classes, 90.4 percent of centers used attendance reports, 88.5 percent used number of sessions offered, and 50 percent used evaluation forms completed by parents. Although centers reported varying attendance rates for these programs, most stated that they were favorably perceived by those who did attend. Some centers indicated that the provision of incentives such as meals, door prizes, and child care affected attendance positively. Issues such as transportation, child care, and scheduling conflicts were cited as reasons why parents did not attend. The percentages in Figure 9 are for the number of centers that reported on this subobjective.

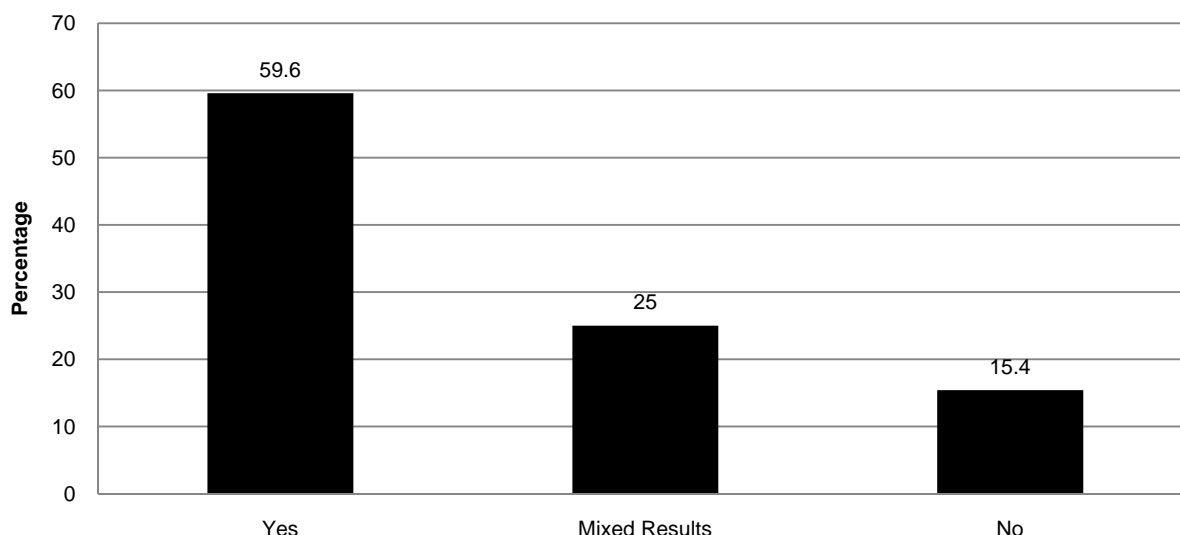


Figure 9. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Parent Training Classes for 2008-2009

Parent/Child Activities. Opportunities for parent/child interaction in academic activities were offered in 72.5 percent of reporting centers. Most of these centers offered family nights with parent/child activities (92.3 percent) and many held open houses for parents to learn about their children's work (67 percent). Some offered parent training in homework help (31.9 percent) or take-home projects for parent/child completion (26.4 percent). Other activities reported included programs showcasing academic participation and enrichment, book clubs and literacy programs, field trips, and fitness activities. Data sources that were used by centers to determine if this subobjective was met for centers reporting that they offered opportunities for parent/child interaction in academic activities, were the number of sessions offered (78 percent of centers), attendance reports (76.9 percent) and evaluation forms completed by parents (25.3 percent). The percentages in Figure 10 are for the number of centers that reported on this subobjective.

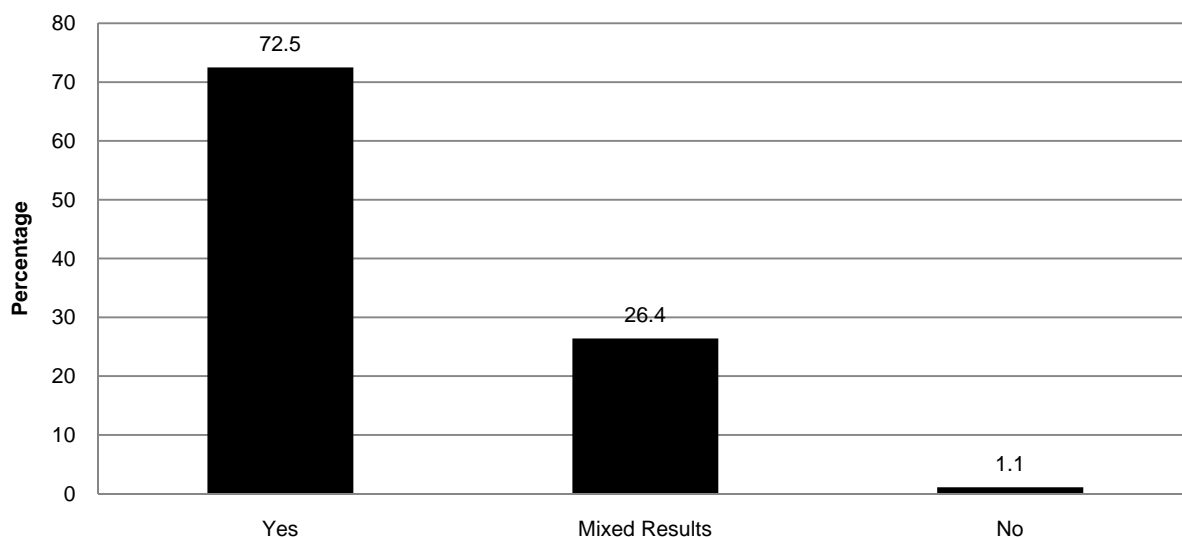


Figure 10. Percent of 21st CCLC Reporting Meeting the Objective for Parent and Children Interaction in Academic Activities for 2008-2009

Career Development. Career development was selected as a subobjective by 7.3 percent of the reporting centers. The centers that did address this area most frequently offered career exploration classes (50 percent), job application assistance sessions (37.5 percent), job fairs (25 percent), English language classes for specific employment sectors (25 percent), and vocational classes (12.5 percent). To determine if the subobjective was met for centers reporting that they provided career development, 62.5 percent of centers used attendance reports, 50 percent used the number of sessions offered, 25 percent used evaluation forms completed by parents, and 12.5 percent used other sources, such as pre- and posttest scores. The percentages in Figure 11 are for the number of centers that reported on this subobjective.

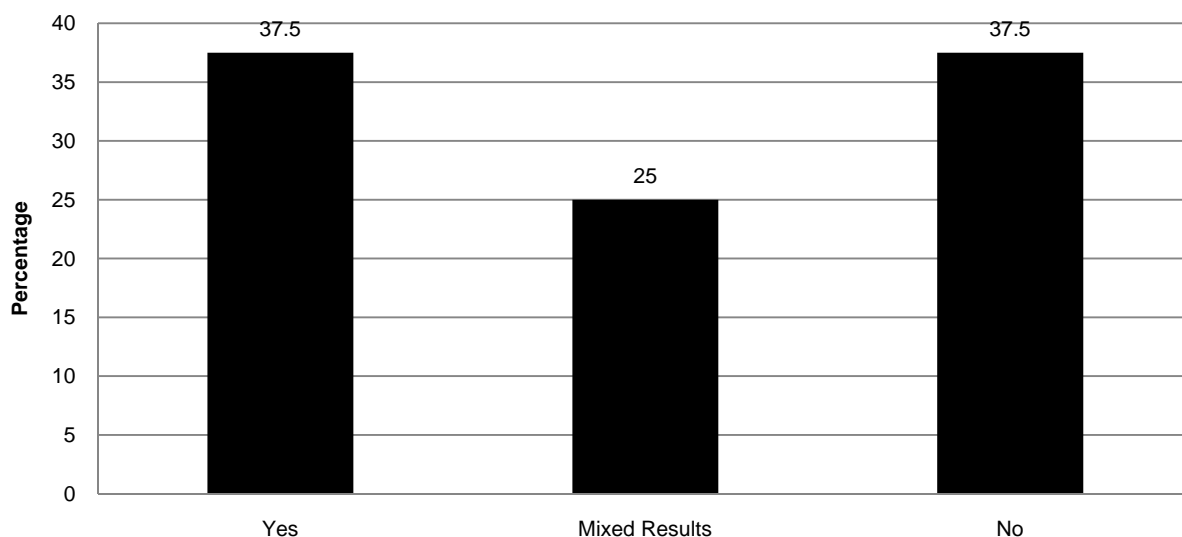


Figure 11. Percent of 21st CCLC Reporting Meeting the Objective for Parent Participation in Career Development Activities for 2008-2009

Table 2 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 2. Percentage of Centers Meeting Parent Education Subobjectives

| Subobjective | Met (percent)* | Mixed Results (percent)* | Did Not Meet (percent)* |
|-------------------------------------|----------------|--------------------------|-------------------------|
| General Education Development | 37.1 | 37.1 | 25.7 |
| Computer Skills Instruction | 61.1 | 27.8 | 11.1 |
| Parent Training | 59.6 | 25.0 | 15.4 |
| Parent/Child Interaction Activities | 72.5 | 26.4 | 1.1 |
| Career Development | 37.5 | 25.0 | 37.5 |

*Percentages may not add up to 100 percent because some centers did not respond to this item.

Relations 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 three through eight with two years of assessment data available. These analyses provide information that may be useful to program leaders, and are summarized below.

The association between center characteristics and reading achievement

The total number of hours centers were open had a small, but positive impact on students' reading outcomes, with a higher number of hours associated with statistically significantly higher standardized SOL reading scores in 2008-2009. The number of paid school-year teachers had a small, but positive impact on students' reading outcomes, with a higher number of teachers being associated with both a higher number of students achieving proficiency and a higher standardized SOL scale score in 2008-2009. The total hours of activities at centers was not a statistically significant predictor of either reading proficiency or standardized scale scores. Finally, the total number of activities had a very small, but negative impact on students' reading outcomes, with a higher number of activities associated with statistically significantly lower number of students achieving proficiency in 2008-2009. Interested readers can see the "Results for Grades 3–8" section of the Supplemental Technical Report document for more detailed, statistically oriented findings on the center-level outcomes.

The association between center characteristics and mathematics achievement

As in reading, the total hours centers were open was associated with statistically significantly higher standardized SOL mathematics scores in 2008-2009, in addition to significantly higher number of students achieving proficiency in mathematics. Like in reading, an increase in the total number of paid school-year teachers was associated with a very slight, yet statistically significant increase in standardized SOL mathematics scores and higher odds of achieving proficiency in 2008-2009. However, unlike the outcomes in reading, an increase in the total number of activity hours was associated with a small, but statistically significant decline in standardized SOL mathematics scores in 2008-2009. The total number of activities was not statistically significant in predicting mathematics outcomes. Interested readers can see the "Results for Grades 3–8" section of the Supplemental Technical Report document for more detailed, statistically oriented findings on the center-level outcomes.

Promising Practices and Challenges

As part of the self-reporting information provided in ALERT, grantees were requested to provide comments regarding activities they felt most effective in helping them to meet program objectives, factors that could have been associated with 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. From these comments, several themes emerged indicating promising practices and challenges faced by the centers. These themes are summarized below by category.

Promising Practices

Tutoring and homework help. Many centers perceived a relationship between improvements in student academic achievement and the homework help and tutoring provided after school and, at some centers, before school. As one grantee stated, “As studies have shown, when kids do complete their homework they are more likely to show up for school and participate in class. We have found the same to be true.” Several grantees indicated that the children are excited about attending “tutoring that takes them beyond the ordinary classroom review of subject matter,” and that the strongest asset of their program was having dedicated school day teachers and other certified educators to assist students. Some centers reported that their high school students were also effective in helping students with homework and with prerequisite skill mastery.

Enrichment activities. Centers used enrichment activities to supplement and enhance student learning. Many centers reported providing a variety of offerings to maximize student interest and participation. Art in History, Auto Mechanics, Career Opportunity Explorations, Claymation, “Creative Science Investigations” (CSI), Culinary Arts, Digital Photography, Drama, Food Glorious Food, Global Positioning System (GPS) Device Usage/Scavenger, Horticulture, Jewelry Making, K’NEX® engineering, Robotics, Swimming, TooBeez, Wii Sports, and Yoga were some of the enrichment activities cited at some centers. According to several centers, cultural, recreational, and arts programs were reported to be most effective, overall, in engaging students. Technology was also widely incorporated in after school activities and curriculum, with several centers attributing the popularity and effectiveness of the SmartBoard and of computer-based enrichment programs such as Read 180, Accelerated Reader, Orchard Educational Software, and Rosetta Stone to their high student academic achievement and attendance.

“No lecture” didactic approach. Many center respondents emphasized that their “no lecture” didactic approach of nontraditional, hands-on learning that “takes [students] beyond the ordinary classroom review of subject matter” was both popular and effective with students. Specifically, project-based activities, such as the Money Makers Club, which gave students the opportunity to learn business skills

while reinforcing reading and mathematics, were often cited by grantees as contributing the most to student participation, attendance, enthusiasm, and respect for the program. Several centers emphasized the contribution of partners in making these enrichment opportunities possible, which in turn increased program attendance. One grantee stated, “There was a respect for the program by the students and their parents. All wanted to be a part so they could improve in their subjects and do the fun things the program did.”

Cooperative learning. An additional promising practice in increasing student participation was instituting cooperative learning through physical education activities or small group assignments. One grantee described this practice as follows: “In this practice, students learned from each other, engaged in dialogue, instructional inquiry, and problem solving. Students developed their socialization skills through cooperative learning. Additionally, cooperative learning activities enhanced students’ creative abilities and verbal communication skills.”

Targeting students at risk. To ensure that students in greatest need of assistance were served, several centers actively recruited students at risk to their programs. Staff in these centers worked with teachers and other school personnel to identify students who could benefit from the programs. Some centers targeted students who were English language learners and tailored activities to help them and their families with their language skills. Other centers targeted students with the lowest reading abilities in each grade and worked with Title I teachers to develop the most effective reading curriculum and activities for these students. A few of these centers reported meeting their objectives for special needs students as well as reduced retention rates of regular attendees to the afterschool program.

Alignment of activities with school day lessons. Efforts to align center tutoring and enrichment activities to students’ current lessons in the regular school day most frequently involved employing school day teachers or holding regular planning meetings with regular and Title I teachers. Some centers partnered with other service providers in developing grade-level curriculums and literacy plan strategies for afterschool that were complementary with the teaching accomplished in school. Other centers reported that their host school administrators worked closely with program staff to monitor program and participant needs, and that this collaboration was “a tremendous support which allows participants and parents to integrate the value of day-school and afterschool activities.”

Improved communication and rapport. Centers repeatedly emphasized the considerable role of efforts to improve and maintain solid channels of communication, overall, within the center and between the center and its host school and partners. Not only did working with school personnel improve program alignment with the school day, it also provided program staff with a direct route to information about

students who might have needed additional help with particular topics or have other needs. The importance of communicating well with partners was also noted by several centers, citing a strong linkage between solid partner relationships and program sustainability. Efforts to improve positive communication with parents were reported by a few grantees as well, who reported increases in both student and parent attendance and participation.

Community involvement and active participation by the public. As the program coordinator at one center stated, “Excellent community involvement and active participation by the public provided the motivation and inspiration the students needed to achieve the goals they had set for themselves.” Expos, fairs, visual and performing arts shows, talent shows, and service learning projects were highlighted by several centers as opportunities for students to learn to be vocal and proactive in their community. Such events garnered high student, parent, and public participation and contributed to overall student enthusiasm for the afterschool program.

Parent incentives. Many centers found the use of incentives effective not only in motivating students, but also in increasing parental participation in center activities. Snacks or special activities or privileges were used at some centers as incentives for completing homework or displaying other forms of achievement. For example, work done in the Accelerated Reader program was rewarded with play time on the Nintendo Wii. Other centers introduced competitive games and prize incentives to their remediation programs and found that these promoted both attendance and interest in the afterschool program. Several grantees used participation in the program’s enrichment, club, or sports activities as incentives for school day attendance. Increases in school day attendance were duly observed when made requisite to participation in these special activities afterschool. Students also showed an increased interest in banking, the arts, music, and recreation through these opportunities, which were often made possible through partners.

Student incentives. Many centers found the use of incentives effective not only in motivating students, but also in increasing parental participation in center activities. For students, competition was often cited as a method to increase student engagement in enrichment activities. Academically focused games in which students competed against each other were frequently mentioned. Special activities or privileges awarded to students who completed assignments or displayed some other form of achievement (for example, work done in the Accelerated Reader program) were common. Several grantees mentioned students being offered time to play with Nintendo Wii gaming systems when work was accomplished, test scores improved, or other academic goals were reached.

Offering parents incentives was also cited as effective in order to increase their participation in center activities. Free meals were frequently provided to encourage parents to attend family nights, student performances, and other center events. Child care or extended student activities were often offered to relieve families of these concerns when considering parent workshops. Involving the children in on-site enrichment programs while the parents were attending classes was reported to increase parent attendance and program success. Inviting parents on center field trips with their students was also well received and allowed for more family interaction time. Overall, the practice of arranging more activities for structured parent-child interaction was reported to be highly effective, not only in increasing parent and student attendance but in meeting academic and behavioral objectives as well. One center reported that Rosetta Stone language learning software had been made available to families and that its usage had increased over the year. In addition, one center reported that their evening technology classes on Microsoft Office reached enrollment capacity, suggesting that courses in this area were deemed highly relevant and important to parents at this center.

Targeting at-risk students. To ensure that students in greatest need of assistance were served, several centers actively recruited at-risk students to their programs. Staff in these centers worked with teachers and other school personnel to identify students who could benefit from the programs. Some centers targeted students who were English language learners and tailored activities to help these students with their language skills.

Challenges

Parental involvement. The predominant challenge reported by centers concerned parents. While several centers noted that parent attendance was high for student events, participation was reported to be continually low for parent education activities, such as GED and other adult education classes, ESL, computers and technology, and parenting skills. Parents' work schedules and transportation issues, as well as sporting events and other family obligations were frequently cited as reasons why parents did not participate. Many parents in these areas were reported to work second shifts or worked 30 or more miles from their homes and their children's schools, making them unavailable during center activity time or events. Several centers indicated that parental involvement was also low at home, with few parents demonstrating knowledge or care regarding the education or development of their children.

Student participation and attitude. Several grantees indicated that regular attendance of students in their programs was a challenge. Moreover, students with inconsistent center attendance also tended to have poorer classroom behavior and lower homework completion. In particular, it was noted that students struggling academically were not all attending. A few centers indicated that some students did not seem

motivated to learn or succeed in school, and that this might be due in part to the lack of support at home for their education. Centers working with middle school and high school students indicated that gaining their participation was considerably difficult; however, it was acknowledged that the unique aspects of this developmental period often lead to challenging behavioral and social outcomes. Centers reported mixed results on their fitness objectives, with programs incorporating the YMCA, other community partners or service providers, or team sport free play garnering more student interest than other daily fitness programs offering less variety in activity.

Economic stressors. A few grantees commented that the economic circumstances of the area and work situations of parents contributed not only to lower student and family participation but also to the availability of funds for the center. High unemployment rates affected the levels of support that centers were able to acquire from community partners. Material and financial assets and time were all commodities that needed to be spread thinly across the community. As a result, centers lacking community and other sources of funding were limited in the programs and services that they were able to provide. Economic stressors also presented challenges for centers at the individual level, with transportation to center events and time costs leading to lower parent attendance and participation in programs perceived less immediately relevant to them.

Conclusions

Based on the statistical analyses for grades three through eight that included two years of test data, while participation in the 21st CCLC program in and of itself was not statistically significant in predicting achievement outcomes in either subject, the number of days of participation in 21st CCLC program did have a statistically significant and positive influence on both reading and mathematics standardized scale score achievement and mathematics proficiency in 2008-2009. Therefore, it appears that attending more days in the program did lead to increased achievement. Future studies may then want to investigate whether there is a cutoff for the minimum number of days of attendance that results in improved achievement. This may help the Commonwealth and providers determine if there is a minimum number of hours of service that should be provided to students in order to expect improvements in achievement outcomes.

Furthermore, the results suggest that the more hours centers were open had a very small, yet statistically significant positive impact on standardized SOL reading and mathematics scale scores and a positive impact on the number of students scoring proficient in mathematics. In addition, the outcomes imply that a larger number of paid school day teachers had a relatively small, but statistically significant and positive impact on both proficiency level and standardized SOL achievement in both reading and

mathematics. As with the findings related to days of attendance, future studies may want to look at the cost/benefit balance between increasing the number of hours open and number of teachers and the improvement in achievement.

There were two small, but statistically significant negative outcomes for center level variables as well. The total hours of activities was associated with lower standardized SOL mathematics scores, while the total number of activities was associated with lower number of students scoring proficient in reading. These findings could be explored further in future studies to help determine, as with hours open and number of teachers, if there is a cutoff point where the number of hours of activities or number of activities begins to hamper achievement because staff may be stretched too thin or trying to include too many different types of activities to be effective.

However, the reader should note that the predictor variables included in the statistical analyses only explained around 40 percent of the variance (i.e., variability) in 2008-2009 SOL standardized scale score achievement in both subjects. In other words, additional variables not able to be included in the SOL analyses (e.g., student motivation, parental involvement) are accounting for nearly 60 percent of the variability in SOL achievement in 2008-2009. It is the case that for analyses of achievement outcomes such as those conducted; it is not possible or practical to include all potential sources of influence in the statistical model, which is limited to the data that states are reasonably able to collect. In addition, as the analyses examined the effects of all centers combined, it could be that individual centers may have experienced gains in student achievement that were not evidenced in the aggregated analyses. Furthermore, the fact that some differences between treatment and control groups as a whole were not statistically significant does not mean that individual students did not make gains in achievement, or that they did not have other positive experiences in 21st CCLC not measured by achievement test scores.

Results of the descriptive analyses of outcomes for students in grade three who did not have prior-year test scores available showed that for proficiency outcomes, 21st Century participants appeared to do better in mathematics as opposed to reading. The percentage of 21st CCLC participants scoring Proficient or Advanced in mathematics was higher than nonparticipants overall in 2008-2009, but was lower than nonparticipants overall in reading. The same was true in terms of SOL scale score outcomes in 2008-2009, where 21st CCLC participants overall had a higher mean than nonparticipants in mathematics, but a lower mean in reading. For differences based on demographic subgroups (e.g., gender, ethnicity), outcomes also favored mathematics over reading, with participants in more demographic subgroups outperforming nonparticipants in mathematics.

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 58.5 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

| Subobjective | Percentage of Centers Selecting |
|--|---------------------------------|
| Improve classroom behavior | 86.1 |
| Complete homework satisfactorily | 90.3 |
| Improve classroom participation | 77.8 |
| Improve class attendance | 68.1 |
| Improve motivation to learn | 79.2 |
| Improve ability to get along with other students | 81.9 |
| Other | 0.0 |

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

| Subobjective | Met (percent) | Mixed Results (percent) | Did Not Meet (percent) |
|--|---------------|-------------------------|------------------------|
| Improve classroom behavior | 59.7 | 40.3 | 0.0 |
| Complete homework satisfactorily | 70.8 | 29.2 | 0.0 |
| Improve classroom participation | 67.9 | 32.1 | 0.0 |
| Improve class attendance | 59.2 | 28.6 | 12.2 |
| Improve motivation to learn | 71.9 | 26.3 | 0.0 |
| Improve ability to get along with other students | 54.2 | 45.8 | 0.0 |

Objective: Provide Enrichment Opportunities

The objective for providing enrichment opportunities was selected by 90.2 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

| Subobjective | Percentage of Centers Selecting |
|--|---------------------------------|
| Increase children's exposure to the fine arts and cultural events | 78.4 |
| Increase children's depth of understanding of academic subjects through nontraditional instruction | 74.8 |
| Increase children's health awareness and physical education | 65.8 |
| Provide programs in preventing drug/alcohol use and/or violence | 33.3 |
| Other | 0.0 |

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

| Subobjective | Met (percent) | Mixed Results (percent) | Did Not Meet (percent) |
|---|---------------|-------------------------|------------------------|
| Increase children's exposure to the fine arts and cultural events | 96.6 | 2.3 | 1.1 |
| Increase children's depth of understanding of academic subjects through non-traditional instruction | 90.4 | 8.4 | 1.2 |
| Increase children's health awareness and physical education | 83.6 | 15.1 | 0.0 |
| Provide programs in preventing drug/alcohol use and/or violence | 100.0 | 0.0 | 0.0 |

Objective: Improve Community Partnerships

The objective for improving community partnerships was selected by 46.3 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

| Subobjective | Percentage of Centers Selecting |
|---|---------------------------------|
| Increase the number of partners | 52.6 |
| Increase the activities of partners | 59.6 |
| Improve communication with partners | 54.4 |
| Improve the sustainability of the program through partner commitments beyond the grant period | 45.6 |
| Other | 0.0 |

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

| Subobjective | Met (percent) | Mixed Results (percent) | Did Not Meet (percent) |
|---|------------------|----------------------------|---------------------------|
| Increase the number of partners | 70.0 | 26.7 | 3.3 |
| Increase the activities of partners | 73.5 | 23.5 | 2.9 |
| Improve communication with partners | 83.9 | 12.9 | 3.2 |
| Improve the sustainability of the program through partner commitments beyond the grant period | 84.6 | 7.7 | 7.7 |