

Indiana 21st Century Community Learning Centers Statewide Evaluation Report: 2021-2022

July 2023

DIEHL CONSULTING GROUP

evaluation | analytics | solutions

Executive Summary

Indiana's 21st CCLC Programs

The 21st Century Community Learning Centers (21st CCLC) program provides students with access to quality out-of-school time programming. During 2021-2022, the Indiana Department of Education (IDOE) administered 21st CCLC grants within two cohorts (Cohort 10, Cohort 11) to 71 grantees. A total of 198 sites participated in the Indiana 21st CCLC program.



15,839

Students served in 2021-2022



77%

Of students were K-6th grade



80

Average students per site



52%

of program participants attended 45 or more days

Benefits for 21st CCLC Students

Descriptive analyses suggested a positive relationship between high levels of 21st CCLC participation and 1) student academic performance and 2) school behaviors.

Figure I: Academic Performance: ILEARN 3-8 (2021-2022)

A higher percentage of $21^{\rm st}$ CCLC participants attending 90+ days earned a passing score on the ILEARN assessment compared to students attending less frequently.

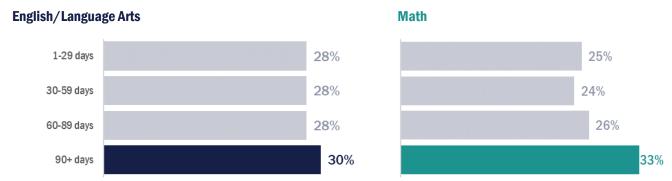


Figure II: Academic Performance: Grades K-12 (2021-2022)

A higher percentage of 21st CCLC participants attending 90+ days earned a B or better on their spring semester grade or showed improvement compared to students attending less frequently.

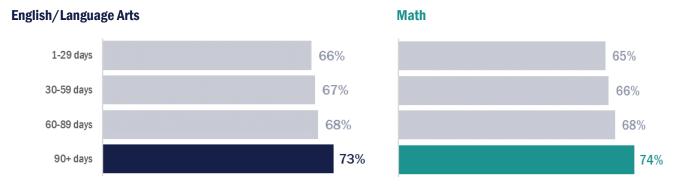


Figure III: In-School Suspensions: Grades K-12 (2021-2022)

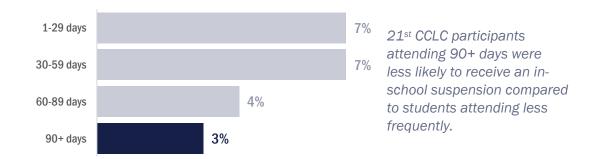


Figure IV. High School Graduation: Grade 12 (2021-2022)



92% of 12th grade 21st CCLC participants graduated on schedule.

Beginning in 2019, Indiana's Performance Measurement Framework was revised to include a focus on Academic, Social/Behavioral, and Family Engagement outcomes. All 21st CCLC sites are required to track and report on performance measures in each of these areas.

Figure V: Percentage of Performance Measures Met – All Sites (2021-2022)



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Detailed Summary & Conclusions

Overview of 21st CCLC

The 21st Century Community Learning Centers (21st CCLC) program provides students with access to quality out-of-school time programming. The grant initiative began in 1994 under the Elementary and Secondary School Act and was later expanded in 2001 through the No Child Left Behind Act and again in 2015 through the Every Child Succeeds Act. The program is currently administered by state education agencies.

Through 21st CCLC, youth and families are provided with a diversity of opportunities focusing on academic enrichment and youth development. Programs are designed to provide students with a safe environment during non-school hours, while supporting students' social-emotional development and overall academic success. During 2021-2022, the Indiana Department of Education (IDOE) administered 21st CCLC grants within two cohorts (Cohort 10, Cohort 11) to 71 grantees. A total of 198 sites participated in the Indiana 21st CCLC program.

2021-2022 Evaluation

This evaluation report describes the status of Indiana 21st CCLC programs operating in the 2021-2022 program year. It builds on methods from prior evaluations. Key findings and considerations are first summarized in this section. Results are further described in the sections that follow, including an overall description of program context, the levels of 21st CCLC participation, descriptive and impact analyses describing relationships between participation and student outcomes, a summary of performance measures reported by grantees, and results of a quality survey completed by program sites. Detailed analyses are included in the Appendices, along with methods and detailed program context information.

The evaluation is organized around the following key approaches:

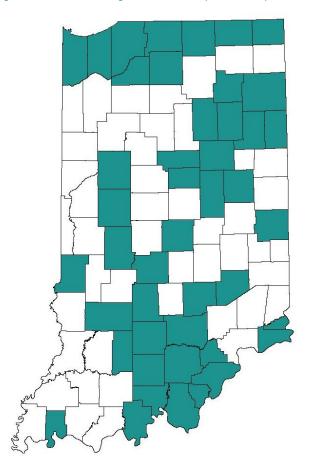
- Program Context
- Descriptive Analysis
- Case Studies

- Matched-Groups Analysis
- Performance Measures Summary

Program Context

In 2021-2022, a total of 198 sites across 45 Indiana counties (through 71 grantees) participated in the Indiana Department of Education's (IDOE) 21^{st} CCLC program. A total of 15,839 participants were served in 21^{st} CCLC programming.

Figure i: 21st CCLC Program Locations (2021-2022)



APPROACH

Background

Program context summarizes the characteristics of 21st CCLC programming offered by grantees during the 2021-2022 grant year, including grantee characteristics, participant demographics, attendance levels, activity data, and staff/volunteer demographics.

Data Sources

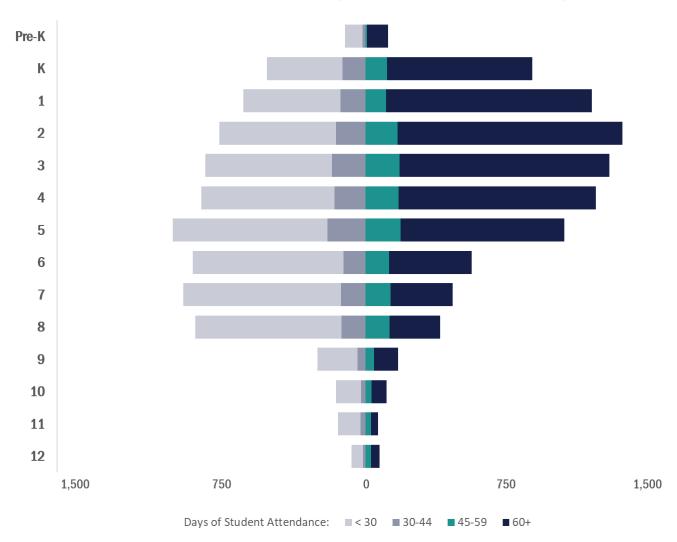
Data were entered into the Cayen Afterschool Software by grantees, subcontractors (e.g., local evaluators), and IDOE during the 2021-2022 grant year and exported by the evaluation team during fall 2022 and winter 2022. Where appropriate, historical attendance data (2015, 2016, 2017, 2018, 2019, 2020, 2021) were utilized to provide additional context. Additionally, grantees' local evaluation reports and executive summaries were also utilized.

The majority of program participants were elementary school students (grades K-5), and most of these students attended 60 or more days.

Figure ii: 21st CCLC Program Locations (2021-2022)

More than half of all participants in pre-Kindergarten through 5th grade attended for at least 45 days.

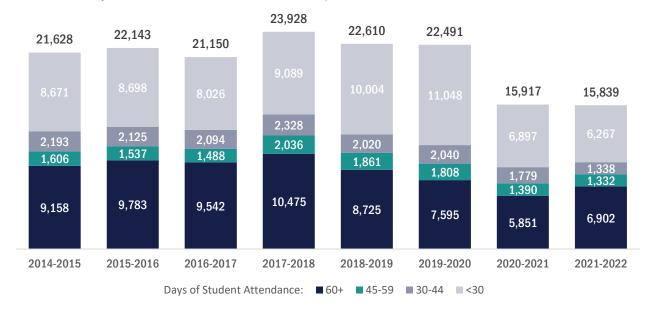




The number of participants decreased by 6,652 (30% decrease) from 2019-2020 to 2021-2022. This decrease can largely be attributed to the COVID-19 pandemic.

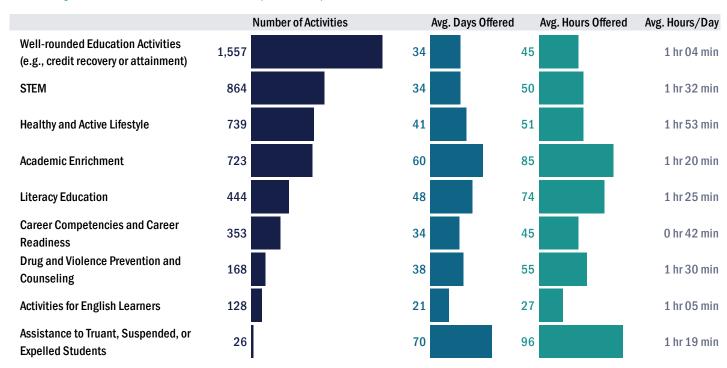
Figure iii: Annual 21st CCLC Participation (2015-2022)

The number of 21st CCLC participants served decreased in 2020-2021 and 2021-2022, likey due to the effects of the COVID-19 pandemic.



Programming included a variety of activities such as educational activities, STEM, health and fitness, academic enrichment, and literacy – among many others.

Figure iv: 21st CCLC Activities Offered (2021-2022)



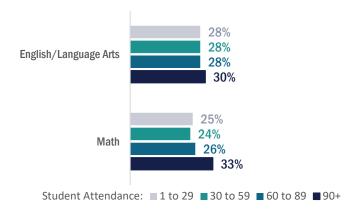
Descriptive Analysis

Relationship Between Academic Performance and 21st CCLC Participation

A series of descriptive and impact analyses with 21st CCLC participants highlight a relationship between high levels of 21st CCLC participation and measures of academic performance. Findings appear to be strongest among students who participate in 90 or more program days.

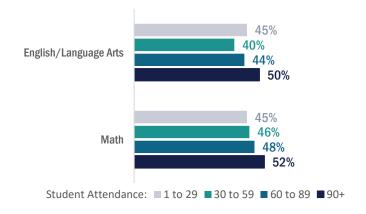
INDIANA STATE ASSESSMENT PROFICIENCY (ILEARN): During 2021-2022, a higher percentage of 21st CCLC participants in grades 3 to 8 attending 90+days passed the ELA and math portions of ILEARN compared to those attending less frequently (Figure v).

Figure v: Percent Passing ILEARN Grades 3-8 (ELA/Math)



ILEARN GROWTH: During 2022, a higher percentage of 21^{st} CCLC participants in grades 4 to 8 attending 90+ days demonstrated growth (i.e., Student Growth Percentiles (SGP) \geq 50) on the ELA and math portions of ILEARN compared to those attending less frequently (Figure vi).

Figure vi: Percent Showing Growth on ILEARN Grades 3-8 (ELA/Math)



APPROACH

Background

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and academic and behavioral outcomes. Subgroup analyses were completed using multi-year attendees and low performing students (receiving a D+, D, D-, or F in the fall). For matched-groups analyses, groups of regular attendees (30+, 60+, 90+) were matched with a demographically similar comparison group using propensity score matching. It should be noted that while propensity score matching was used to create comparison groups that were similar to the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study.

Definitions

Academic performance indicators were examined across various levels of program participation: (a) *High Academic Performance Indicator*defined as the percentage of 21st CCLC participants maintaining a C or better on the spring semester grade or increasing their grade from fall to spring; and (b) *Satisfactory Academic Performance Indicator* defined as the percentage of 21st CCLC participants maintaining a C or better on the spring semester grade or increasing their grade from fall to spring.

Outcome Measures

ILEARN: Indiana Learning Evaluation Assessment Readiness Network (ILEARN) data were utilized to examine academic achievement in English/language arts and math for grades 3-8. ILEARN was administered in the spring of 2022. All data were provided by IDOE. ILEARN scale scores, growth, and proficiency levels were reported.

→ *Matched-Groups.* Small, statistically significant effects (described below) were found for the *ILEARN* growth (as defined by SGP) in 2022. These findings generally supported findings noted in the descriptive analyses.

30 or More Days (ILEARN Math Growth): Students who attended for 30 or more days were statistically significantly more likely to earn an SGP greater than or equal to 50 on ILEARN Math compared to the matched control group. Additionally, students who attended 30 or more days were more likely to meet their ILEARN Growth Target compared to the matched control group.

60 or More Days (ILEARN Math Growth): Students who attended for 60 or more days were statistically significantly more likely to earn an SGP greater than or equal to 50 on ILEARN Math compared to the matched control group. Additionally, students who attended 60 or more days were more likely to meet their ILEARN Growth Target compared to the matched control group.

90 or More Days (ILEARN ELA Proficiency): Students who attended for 90 or more days were statistically significantly more likely to pass the ILEARN ELA assessment compared to the matched control group.

90 or More Days (ILEARN Math Proficiency): Students who attended for 90 or more days were statistically significantly more likely to pass the ILEARN Math assessment compared to the matched control group.

90 or More Days (ILEARN Math Growth): Students who attended for 90 or more days were statistically significantly more likely to earn an SGP greater than or equal to 50 on ILEARN Math compared to the matched control group. Additionally, students who attended 90 or more days were more likely to meet their ILEARN Growth Target compared to the matched control group.

Average Final Grades: Final average grades were calculated by recoding traditional report card grades to a 0-4 scale (A=4, B=3, C=2, D=1, F=0). In some cases, sites also included +/-. To allow for consistent comparisons, these grades were converted to the traditional scale.

Department of Education (DOE)
Teacher Survey: Teacher-perceived school-related behaviors were assessed utilizing the DOE Teacher Survey, which is a required data element for Indiana 21st CCLC. The survey measures teacher perceptions of student improvement in 11 areas of behavior. Two versions of the survey were administered based on grade level.

School Day Attendance: School day attendance was calculated by the number of days attended out of days enrolled based on a minimum enrollment of 162 days.

ACCESS for ELLs: ACCESS for ELLs measures students' English language proficiency across four domains: listening, speaking, reading, and writing. Schools use results to guide instructional decisions for ELL students.

Course Completion: Data from the IDOE Course Completion Report (DOE-CC) were available for the evaluation. The evaluation focused on dual credits and high school credits.

Graduation: Data from the IDOE Graduate Report (DOE-GR) were available for the evaluation. Annually, graduation data are collected by IDOE from public schools (traditional and charter), accredited nonpublic schools, and non-accredited nonpublic schools participating in the Choice Scholarship program.

In-School Suspension: IDOE's discipline data layout (DOE-ES) defines

REPORT CARD GRADES: For 2022, a higher percentage of 21st CCLC participants attending 90 or more days were more likely to improve their grades or maintain satisfactory grades in English/language arts and math compared to those attending less frequently (Figures vii and viii).

Figure vii: Improving or Maintaining a B or Higher: K-12 (2021-2022)

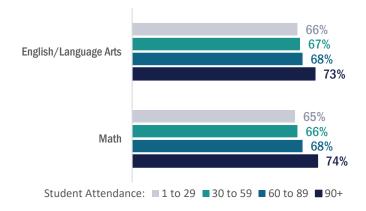
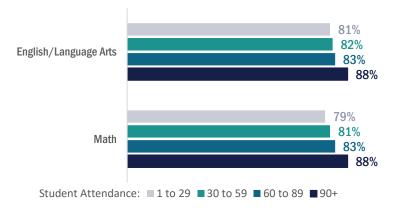


Figure viii: Improving or Maintaining a C or Higher: K-12 (2021-2022)



in-school suspensions as incidents in which a "student is removed from an assigned class or activity to another setting in order to maintain an orderly and effective educational system" (n.p.).

Out-of-School Suspension: If no "instructional time" (i.e., approved course, curriculum, or educationally related activity under the direction of a teacher) is provided to the student, the suspension is classified as an out-of-school suspension.

Data Sources

Data were entered into Cayen by grantees, subcontractors, and IDOE staff during the 2021-2022 grant years and exported by the evaluation team during fall 2022. Additional outcome data were provided by IDOE in spring 2022.

AVERAGE FINAL GRADES: There was a statistically significant relationship between afterschool attendance frequency and final average English/language arts grade for grades K-12, when controlling for participant age. Students attending at higher levels (60 to 89 days and 90+ days) had significantly higher final grades compared to those attending less frequently (Figure ix). Grades could range from 0 (F) to 4 (A) with most scores falling between 2 (C) and 4 (A).

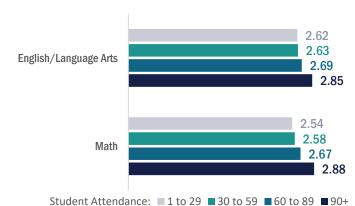


Figure ix: Average English/Language Arts & Math Spring Grades: K-12 (2021-2022)

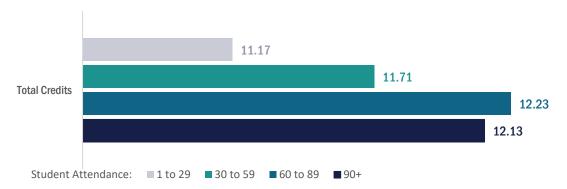
HIGH SCHOOL GRADUATION: Nearly all (92%, 114/124) 12th grade 21st CCLC participants graduated on schedule. Of graduates, the majority of students 61% (69/114) earned a Core 40 diploma with no additional honors. When graduation was examined based on attendance gradations, a higher percentage of 21st CCLC participants attending 30-59 days graduated compared to those attending at other levels.





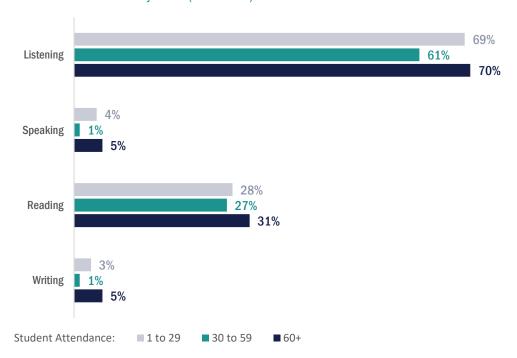
ANNUAL HIGH SCHOOL CREDITS OBTAINED: High school students attending 21st CCLC at higher levels obtained a larger number of credits during the 2021-2022 school year compared to students who attended less frequently.

Figure xi: Total Credits Obtained: 9-12 (2021-2022)



WIDA ACCESS FOR ELLs Proficiency: Across WIDA domains, results were mixed, which suggested that additional support is needed for ELL students attending 21st CCLC. However, there was some evidence to suggest greater proficiency for students attending at the highest levels.

Figure xii: ACCESS for ELLs Proficiency: K-12 (2021-2022)



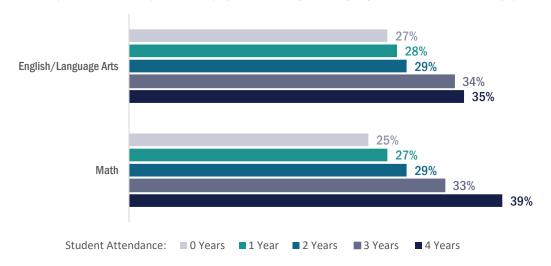
Relationship Between Academic Performance and 21st CCLC Participant Subgroups

A series of exploratory descriptive analyses with unique subgroups further highlight a relationship between high levels of 21st CCLC participation and measures of academic performance. These analyses explored relationships between participation and academic performance in respect to participants who participated at high levels in multiple years.

MULTI-YEAR ATTENDANCE: The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' academic performance data from spring 2022 and disaggregated by the number of years (0 years, 1 year, 2 years, 3 years, or 4 years).

- → *ILEARN ELA Proficiency.* There was a statistically significant association between years of 60 or more days attendance and ILEARN English/Language Arts proficiency. This association was driven by students attending 60 or more days in 3 years or 4 years. These students were more likely to pass the assessment compared to students who attended regularly (i.e., 60 or more days) in fewer years.
- → *ILEARN Math Proficiency.* There was a statistically significant association between years of 60 or more days attendance and ILEARN Math proficiency. This association was driven by students attending 60 or more days for 3 or 4 years. These students were more likely to pass the assessment compared to students who attended regularly for fewer years.





→ Average Grades. For students in grades 3-8, there was a statistically significant relationship between years of regular attendance (i.e., 60+ days) and final average English/language arts and math grades. For both subjects, students who never attended regularly in three or four years had the highest final spring grades. For grades 9-12, no statistically significant relationships between years of regular attendance and final average English/language arts or math grades were observed. However, when viewed descriptively, results suggested that high school students who attended at higher levels in multiple years have higher grades.

Figure xiv. Multi-year Attendance (Grades 3-8) by English/Language Arts & Math Final Grades (2021-2022)

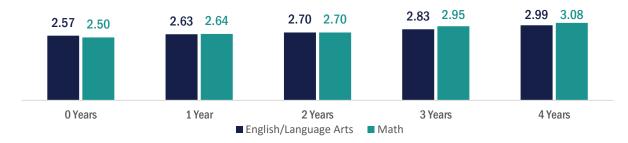


Figure xv. Multi-year Attendance (Grades 9-12) by English/Language Arts & Math Final Grades (2021-2022)



→ *Course Completion.* For students in grades 9-12, significant relationships were observed between years of regular attendance and total credits. Students attending regularly in zero years obtained significantly fewer credits than their peers who attended regularly in two to four years.

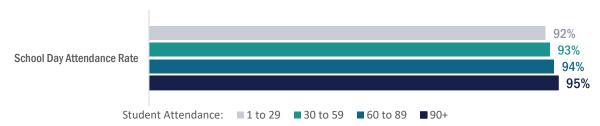
Figure xvi. Multi-year Attendance (Grades 9-12) by Credits Obtained (2021-2022)



Relationship Between School Attendance and 21st CCLC Participation

A subset of participants who had school day enrollment and attendance data entered within Indiana's data collection system was examined. A statistically significant relationship between participation in out-of-school-time programming and school attendance was found. Participants attending more days of out-of-school-time programming had higher school day attendance rates compared to participants attending out-of-school-time programming less frequently.

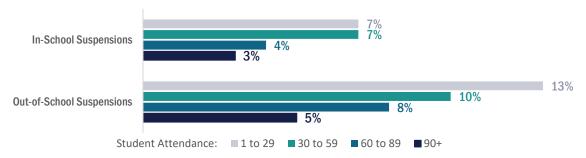
Figure xvii: Attendance Rates: K-12 (2021-2022)



Relationship Between School Discipline and 21st CCLC Participation

A series of descriptive analyses with 21^{st} CCLC participants highlight a relationship between high levels of 21^{st} CCLC participation and lower suspension rates. Findings appear to be strongest among students who participate in 90 or more program days.

Figure xviii: Suspension Rates: K-12 (2021-2022)



Relationship Between Behavior and 21st CCLC Participant Subgroups

A series of exploratory descriptive analyses with unique subgroups further highlight a relationship between high levels of 21^{st} CCLC participation and measures of student behavior. These analyses explored relationships between participation and behavior in respect to participants who participated at high levels in multiple years.

MULTI-YEAR ATTENDANCE: The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2018 to 2022. Multi-year attendance was linked with participants' behavioral data from spring 2022 and disaggregated by the number of years (0 years, 1 year, 2 years, 3 years, or 4 years). Due to smaller sample sizes in the higher participation levels among high school students, the

maximum number of years was collapsed into two or more years. Because K-2 participants were not able to attend a full 4 years, these grade levels were excluded from the analyses.

- → *In-School Suspension.* For grades 3-8, there was a significant association between the number of years of regular attendance and in-school suspension rates. Students who attended 60+ days during three or four years were significantly less likely to be suspended than those who attended less frequently.
- → *Out-of-School Suspension.* For grades 3-8, there was a significant association between the number of years of regular attendance (i.e., 60+ days) and out-of-school suspension. Students who never attended 60+ days were significantly more likely to be suspended compared to peers who attended more frequently.

Figure xix: Suspension Rates: 3-8 (2021-2022)

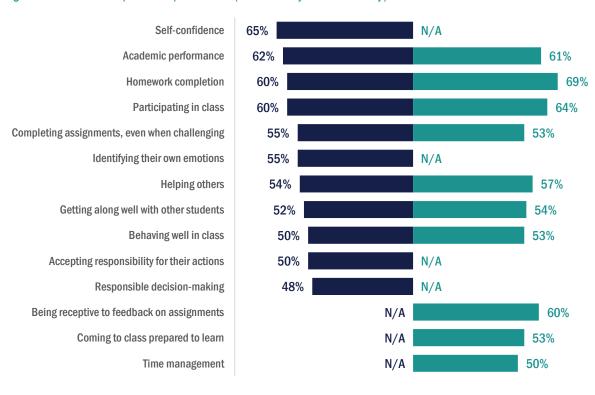


Relationship Between School-Related Behaviors and 21st CCLC Participation

At the end of the school year, school day teachers were asked to report on the extent to which certain behaviors exhibited by a site's attendees improved or did not improve during the reporting period. Two survey instruments were available to grantees: a K-12 survey and a 6-12 grade survey (which included several items specifically designed for middle and high school students). In most cases, the majority of participants who attended 30 or more days and those attending 60 or more days were reported by teachers as improving on specific items.

SCHOOL-RELATED BEHAVIORS: At least 6 out of 10 participants attending 60+ days in the 21st CCLC program and identified as needing to improve their school-related behaviors were reported by their teacher as improving in self-confidence, academic performance, homework completion, and class participation for K-12 students and improving in homework completion, academic performance, class participation, and receptiveness to feedback for 6-12 students.

Figure xx: Teacher-Reported Improvement (K-12 Survey & 6-12 Survey)



Summary of Indiana 21st CCLC Performance Measures

Summary of Progress toward Performance Measure Targets: Grades K-12

Results from local 21st CCLC Executive Summaries were reviewed, and a state summary was compiled. Across all sites, the majority of performance measures were met. Sites were most likely to meet Family Engagement measures, followed by Social/Behavioral and Academic measures (see **Background** in sidebar).

Figure xxi: Percentage of Performance Measures Met – All Sites (Grades K-12)



ACADEMIC PERFORMANCE MEASURES (GRADES K-12): Across all sites, 75% of Academic performance measures were met (534/714). Within the Academic performance measures, all sites were required to include English/language arts and math grade measures. Across all sites, 75% of English/language arts grade measures (146/194) and 78% of math grade measures (151/193) were met.

SOCIAL/BEHAVIORAL PERFORMANCE MEASURES (GRADES K-12): Of the 427 Social/Behavioral performance measures set by sites, 77% (330/427) were met.

FAMILY ENGAGEMENT (GRADES K-12): Across all sites, 93% of all Family Engagement performance measures (280/302) were met.

REGULARLY ATTENDING PARTICIPANTS (RAP) TARGETS (GRADES K-12):

Over half (57%) of sites met their targets for regularly attending participants (RAP). To be a regularly attending participant for state reporting in 2021-2022, students must attend at least 30 days of school year programming.

Figure xxii: Percentage of Sites Meeting RAP Targets



APPROACH

Background

Beginning in 2019, Indiana's
Performance Measurement
Framework was revised to include a
focus on Academic,
Social/Behavioral, and Family
Engagement outcomes. All 21st
CCLC sites are required to track and
report on performance measures in
each of these areas. With the support
of their local evaluator, grantees
identify local assessment tools and
create site-level performance
measures and targets. All
performance measures are approved
by IDOE.

Academic: Example measures included the percentage of students earning a B or higher or increasing their English/language arts grade from fall to spring and the percentage of students improving academic performance as reported by classroom teachers.

Social/Behavioral: Example measures included the percentage of students reporting increased optimism about their school day and the percentage of students improving classroom behavior as reported by classroom teachers.

Family Engagement: Example measures included the percentage of parents attending school-sponsored family sessions and the percentage of parents reporting an increase in time spent reading with their child.

Data Source

Data sources utilized by sites included, but were not limited to, report card grades, standardized test scores/proficiency, stakeholder surveys, and the IDOE Teacher Survey. Site-level results were reported in the Executive Summary of the yearly local evaluation reports required for each 21st CCLC grantee.

Conclusions

The 2021-2022 evaluation of Indiana's 21st CCLC programs provides ongoing evidence of the relationship between high levels of participation in afterschool programming and improved outcomes for Indiana's youth. When examined in the context of prior evaluations, current results are consistent with trends that have emerged across over five years of evaluation. Moreover, these results suggest that while the COVID-19 pandemic may have restricted access to the program (as demonstrated in lower levels of statewide participation), benefits remained for students who were able to take advantage of 21st CCLC services. A summary of key conclusions and implications follows.

Descriptive analyses suggested a positive relationship between high levels of 21st CCLC participation and academic performance (e.g., ILEARN, reading and math grades), school day attendance, and school behavior. Findings appear to be strongest among students who attend 90 or more days. Moreover, participants who attend 21st CCLC programs for multiple years and attend at higher levels during those years (60 or more days each year) appear to have better academic and behavioral outcomes compared to those who attend less frequently. Relationships between high levels of attendance and academic performance were confirmed by matched-groups analyses, which showed that students attending at higher levels were more likely to pass and demonstrate growth on the ILEARN assessment. Moreover, the matched-groups analyses suggested evidence of a relationship between attendance in the program and fewer school disciplinary issues. Course completion results suggest that high school students may benefit from participation in the program, especially at higher levels and over multiple years.

Considerations

The 2021-2022 evaluation of the Indiana 21st CCLC program highlights a number of promising findings associated with implementation of 21st CCLC programming. The current evaluation builds on prior findings. Many previous methods were continued, and enhancements were added to address new evaluation questions or increase rigor. While promising findings have been noted, several considerations should be taken into account when interpreting and utilizing results from this evaluation.

- ▶ LIMITATIONS OF MATCHED-GROUPS AND DESCRIPTIVE ANALYSES: As noted elsewhere in this report, while propensity score matching was used to create comparison groups that were similar to the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study. The analyses may be limited by the existence of variables that predict student attendance or academic performance but were not available to the evaluation team. These analyses should be interpreted as only preliminary evidence of program impacts (Naftzger et al., 2016; Somers et al., 2013). In addition, multiple descriptive analyses were conducted. This approach represents all 21st CCLC participants with available data and is useful for understanding overall program trends. However, when describing relationships between program participation and relevant outcomes, it is understood that these data do not imply causation.
- LIMITATIONS OF AVAILABLE DATA: Indiana requires grantees to enter program context, participation, and outcome information into a statewide web-based attendance system. For the 2021-2022 evaluation, this software tool was the TransAct/Cayen AfterSchool Software. The statewide evaluation was dependent on the veracity of data entered by grantees into the system. In some cases, data were not entered for participants (Table B1 in Appendix B), which limited

analyses. In other cases, the nature of the available information did not allow for meaningful study. For example, to ensure consistency in the type of data being used within analyses specific to English/language arts and math grades, only participants with traditional report card grades (i.e., A+ or A to F) were included; however, a portion of participants reported non-traditional report card information. Given variance in scales used and uncertainty in what the scales represented, these data were not included in analyses.

- CONTEXTUALIZING EFFECT SIZES: Throughout the report, effect size estimates are provided to demonstrate the magnitude of differences between participant groups. To aid in the communication of these effects, multi-disciplinary guidelines for effect size interpretation were utilized where appropriate (see Appendix B: Methodology and Analysis). While these guidelines are utilized consistently across a variety of settings, it is also important to contextualize effect sizes contained in this report within the field of education. Kraft (2018) notes that in education settings, effects generally labeled "small" have been described as "of policy interest" (Hedges & Hedberg, 2007), "substantively important" (What Works Clearinghouse, 2014, p. 23), and "having educational significance" (Bloom et al., 2008).
- PROGRAM QUALITY: Results from the analyses suggested some statistically significant, positive differences between 21st CCLC participants attending with higher frequency compared to those attending less frequently; however, as noted, differences between these groups consisted of mostly small effect sizes. While these effects are similar to results from other studies, several studies that link program quality to youth outcomes should be considered (e.g., Durlak, Weissberg, & Pachan, 2010; Leos-Urbel, 2013; Naftzger et al., 2013; Shernoff, 2010). While the literature may suggest that program quality has some influence on student outcomes, the current evaluation does not differentiate between programs operating at higher quality compared to those operating at lower levels or control for program quality or a robust set of site-level characteristics in its analyses. Methods are proposed for subsequent evaluations that will better examine the relationships between quality and program outcomes.



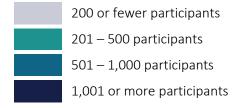
Program Context

Program Context: 2021-2022

21st CCLC Locations

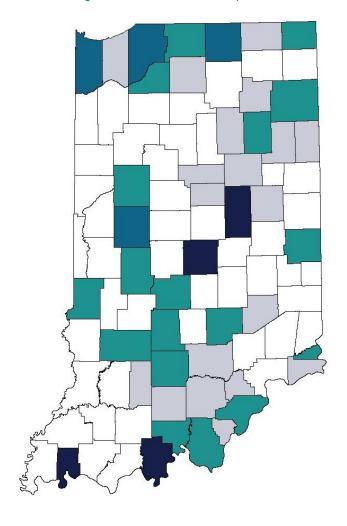
In 2021-2022, 71 grantees with a total of 198 sites (with attendees)¹ participated in the Indiana Department of Education's (IDOE) 21st Century Community Learning Centers (CCLC) program. 21st CCLC programs were offered in 45 Indiana counties.

These counties are highlighted in the map (Figure 1) based on the number of 21st CCLC participants in summer and school year programming:²



The counties with the highest volume of 21st CCLC participants included Marion (2,652), Perry (1,214), Madison (1,166), and Vanderburgh (1,044). Grant County and Whitley County were new to providing 21st CCLC programs in 2021-2022. For a complete listing of counties with student attendance, see Table C1 in Appendix C.

Figure 1: 21st CCLC Indiana Map 2021-2022



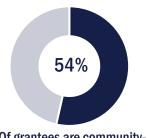
 $^{^{\}rm 1}\, {\rm Includes}$ school year and summer-only sites.

 $^{^2}$ All data included within this section of the report were pulled from Indiana's 21st CCLC afterschool data management system (Cayen), with student duplicates removed.

Grantees

Of Indiana's 71 grantees in 2021-2022, over half (54%) were a community-based organization and two of every five (38%) were a school district. Other types of organizations included charter schools and colleges/universities. Data are displayed in Figure 2. See Table C2 in Appendix C for additional details.

Figure 2: 21st CCLC Grantees 2021-2022





Of grantees are community-based organizations.

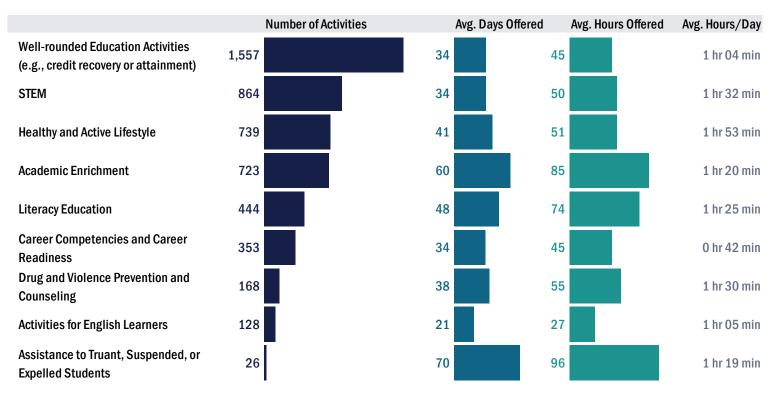
Of grantees are school districts.

Activities

21st CCLC sites provide a variety of activity topics, including academic enrichment, career readiness, drug and violence prevention, educational activities, healthy and active lifestyles, literacy, and STEM – among many others. The activity topics with the greatest number of activities (which represents activity variety) across the 21st CCLC sites were well-rounded education activities and STEM activities. Sites reported the greatest number of average hours spent assisting students who were truant, suspended, or expelled and providing academic enrichment; this represents where participants spent most of their time.

Topics with more than 10 activities and their corresponding average number of days offered, average number of hours offered, and average hours per day are presented in Figure 3 below. Data include both school year and summer programming. Additional data are available in Table C3 of Appendix C.³

Figure 3: Activity Implementation 2021-2022



³ There were 270 activities that were missing data for their activity category (5%). Missing data are not included in the figure.

Attendance

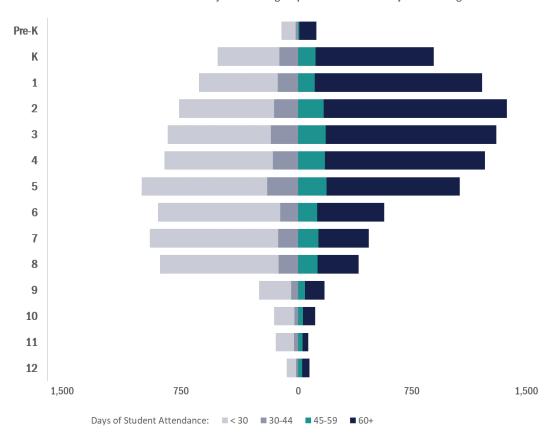
21st CCLC programs were available for participants enrolled in pre-kindergarten (pre-K) through 12th grade, with a total of 15,839 participating in 2021-2022. Likely influenced by the COVID-19 pandemic, there were over 6,600 fewer students in 2021-2022 than before the pandemic in 2019-2020. The number of students participating in each grade level ranged from the smallest group of 136 12th grade students to the largest group of 1,967 3rd grade students. The majority of 21st CCLC participants (77%) were in 1st through 7th grade.⁴

15,839 Students were served by 21st CCLC programming in Indiana in during 2021-2022

Indiana's 2021-2022 data show that more than half of all participants in pre-K through 5th grade attended at least 45 days. In addition, more than half of students in kindergarten through 3rd grade attended for 60 or more days. For additional data, see Table C4 in Appendix C.

Figure 4: Student Attendance 2021-2022

More than half of all participants in pre-Kindergarten through 5th grade attended for at least 45 days.



Students below 45 day attendance goal | Students above 45 day attendance goal

⁴ Data entry for the 2021-2022 school year allowed student grade-level to be labeled as "unknown." As a result, grade level was unknown for 66 students (0.4%). Unknown students are not included in the figure.

HOURLY ATTENDANCE (GPRA THRESHOLDS)

Another way to examine attendance trends is by looking at the breakdown of hourly student attendance by federally identified Government Performance and Results Modernization Act (GPRA) thresholds used for federal reporting. This includes grouping attendance by pre-defined hours ranges (e.g., 1-15 hours). The chart below highlights trends for Indiana's 21st CCLC students by GPRA ranges. These data mirror trends noted in Figure 4 on the previous page, including students in kindergarten through 5th grade comprising a large group of students (10,672; 68%) that also had higher rates of attendance in 21st CCLC programming (50% attended for 136 hours or more). The largest group of students (2,506) had an hourly attendance range of 46-90 hours, with students attending for 16-45 hours (2,440 students) being the second largest group. For additional data, see Table C5 in Appendix C.⁵

Figure 5: Student Attendance by GPRA Thresholds 2021-2022

Students in **kindergarten through 5**th **grade** comprised over 68% of all 21st CCLC students.

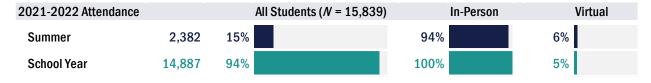


Results below 100 students are not labeled due to space constraints.

ATTENDANCE BY TERM

Programming for 21^{st} CCLC was provided throughout the 2021-2022 school year and during summer 2021. Of participating students (N = 15,839), the majority attended during the school year (14,887; 94%). Similarly, most students attended in-person programming, though virtual and hybrid (both in-person and virtual) formats were also offered. Data are displayed in the figure below with additional details in Tables C6-7 in Appendix C.

Figure 6: Attendance by Term 2021-2022



Some programming was offered in a hybrid format where students participated both in-person and virtually.

⁵ Data for GRPA thresholds were missing for 159 students (1%). Missing data are not included in the figure.

ATTENDANCE BY STUDENT DEMOGRAPHICS

21st CCLC student attendance varied slightly depending on student demographic characteristics, such as race/ethnicity, eligibility for free/reduced lunch, or special education status. The figures that follow show student attendance trends by demographics, with further details in Tables C8-13 in Appendix C.⁶

Figure 7: Student Attendance by Race and Ethnicity 2021-2022

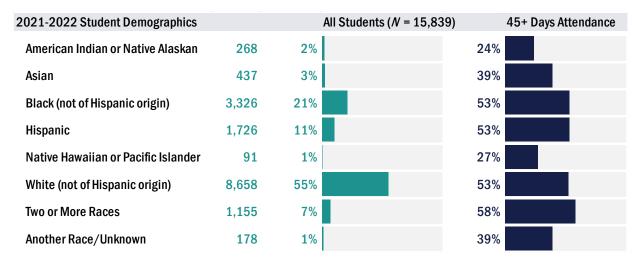


Figure 8: Student Attendance by Demographics 2021-2022

2021-2022 Student Demographics		All Students	45+ Days Attendance
Free & Reduced Lunch	10,992	71%	52%
Paid Lunch	4,445	29%	52%
Limited English Proficiency	1,016	6%	49%
Non-LEP	14,668	94%	53%
Special Education	1,730	11%	41%
Special Education	1,730	11/0	41/0
Non-SE	13,580	89%	53%
Famala	0.000	51%	F39/
Female	8,000	51%	52%
Male	7,783	49%	53%

⁶ Details for missing data in student demographics are available in Appendix C. Missing data are not included in Figure 8.

Attendance Trends

The COVID-19 pandemic likely impacted the number of students served in 2021-2022. Prior to the pandemic, the number of participants served annually by 21st CCLC programming had increased by over 980 participants from 2014-2015 to 2018-2019. The COVID-19 pandemic beginning in spring 2020 likely affected attendance totals in the 2019-2020, 2020-2021, and 2021-2022 school years. In 2020-2021, the number of 21st CCLC students decreased by over 6,570 students from the prior year (2019-2020). Again in 2021-2022, the number of 21st CCLC students remained lower than usual (6,652 students fewer than in 2019-2020).

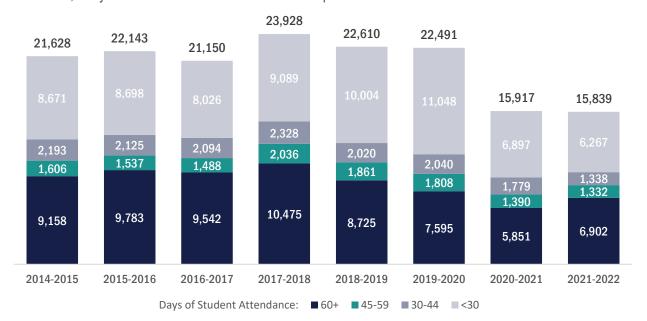
Further, changes in the number of participants served may be attributed in part to differences in the number of sites funded by 21st CCLC in Cohort 6 (2014-2017), Cohort 7 (2015-2018), Cohort 8 (2018-2022), Cohort 9 (2019-2022), Cohort 10 (2021-2025), and Cohort 11 (2022-2026). The number of grantees funded under each of these cohorts varied, thereby influencing the availability of 21st CCLC programming across Indiana.

ATTENDANCE BY YEAR

Over the past eight years (2014-2015 through 2021-2022), 41% of students attended 60 or more days, and 59% attended at least 30 days. For additional data, see Table C14 in Appendix C.

Figure 9: Student Attendance by Year

The number of 21st CCLC participants served decreased in 2020-2021 and 2021-2022, likey due to the effects of the COVID-19 pandemic.

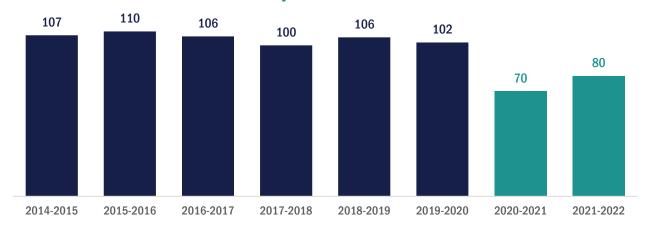


AVERAGE PARTICIPANTS PER SITE BY YEAR

Over the previous six school years (2014-2015 through 2019-2020), the average number of participants per site has remained steady, with an average of 100 to 110 students being served per site each year. However, in the 2020-2021 and 2021-2022 school years, averages of 70 and 80 students were served per site, likely due to the effects of COVID-19. Further data are available in Table C15 in Appendix C.

Figure 10: Average Participants Per Site by Year

The average number of 21st CCLC participants by site remained at or above 100 until the 2020-2021 and 2021-2022 school years.



ANNUAL PARTICIPANTS AND SITES BY YEAR

Since the 2014-2015 school year, the number of 21st CCLC sites has remained relatively consistent, averaging 215 sites per school year with a minimum of 192 sites and maximum of 250 sites. Similarly, since 2014-2015, the number of 21st CCLC participants has remained relatively close to the average number of students (20,713 students). However, in 2020-2021 and 2021-2022, there were fewer students than in the previous years. This is a noticeable difference from the annual trends of the previous six school years, likely due to the impact of COVID-19. Additional student data are available in Table C16 in Appendix C.

Figure 11: Annual Participants and Sites by Year

The number of 21st CCLC sites and 21st CCLC participants have stayed close to the average for every school year except 2020-2021 and 2021-2022 for 21st CCLC participants.



Staff & Volunteers

1,489 Individuals provided 21st CCLC programming to students in Indiana in 2021-2022

Over 1,480 individuals worked with 21st CCLC participants in 2021-2022. The largest number of staff/volunteers were not certified teaching staff (697; 47%) and were not school district employees (641; 43%). For staff with data, the majority had 1-5 years of out-of-school-time experience (380; 26%). For additional staff data, see Tables C17-19 in Appendix C.

Figure 12: 21st CCLC Staff & Volunteers 2012-2022

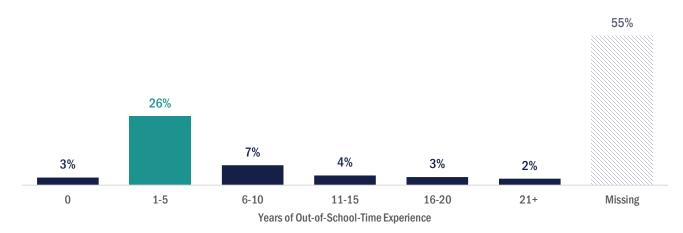
The majority of staff with data available were **not certified teachers** and **not school district employees**. Data were missing for about 2 of every 5 staff members.



Shaded areas in the graph represent missing data.

Figure 13: 21st CCLC Staff & Volunteers Experience 2021-2022

The majority of staff had **1-5 years of out-of-school-time experience**. (This is over half of staff members with data available.)

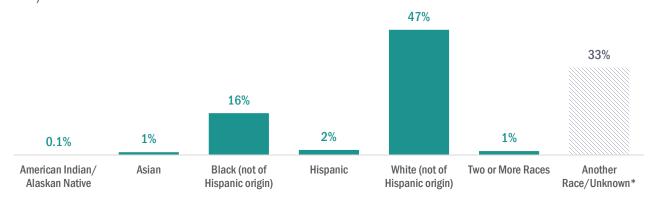


STAFFING DEMOGRAPHICS

Around two of every three staff and volunteers (n = 998; missing = 33%) had data related to race and ethnicity, and 80% (n = 1,196; missing = 20%) had data related to sex. For those with data, approximately one of every two staff were White and not of Hispanic origin (47%), and two of every three staff were female (67%).

Figure 14: 21st CCLC Staff & Volunteer Demographics 2021-2022

Staff represented varying races, with the majority being White or Black (for staff with data).

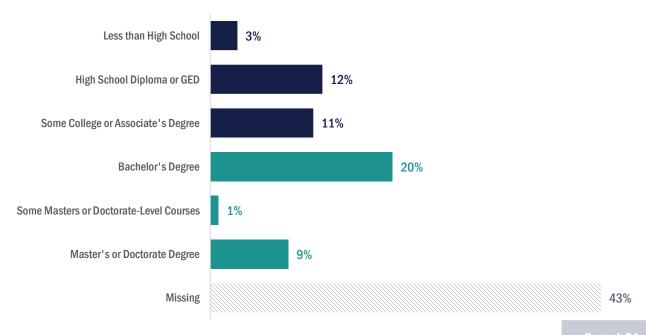


^{*}Another Race/Unknown includes staff/volunteers with missing race/ethnicity fields.

Around 57% of staff and volunteers (n = 844; missing = 43%) had information about their highest level of educational attainment. Of those with data, about one of every two had a bachelor's degree or higher (53%). For additional staff and volunteer demographic data, see Tables C20-22 in Appendix C.

Figure 15: 21st CCLC Staff & Volunteer Educational Attainment 2021-2022

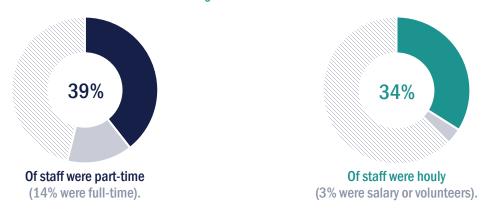
For staff with data, about half had a bachelor's degree or higher.



STAFF WAGES

Around 54% of staff and volunteers (n=802; missing=46%) had data for full-time or part-time status and around 38% (n=558; missing=62%) had wage data. Of those with data, the majority were part-time and received hourly wages. For additional staff and volunteer wage data, see Tables C23-24 in Appendix C.

Figure 16: 21st CCLC Staff & Volunteer Status and Wages 2021-2022



Shaded areas in the graph represent missing data.

ANNUAL STAFFING TRENDS

Since the 2016-2017 school year, the number of staff and volunteers has averaged 1,732 individuals per year. The 2019-2020 school year had the greatest number of staff and volunteers with 2,194 individuals. The 2021-2022 school year saw a decrease of over 800 staff and volunteers from the year prior. Staffing numbers slightly increased in 2021-2022 (98 more staff). Data are available in Table C25 in Appendix C.

Figure 17: 21st CCLC Staff & Volunteers by Year

The number of **21**st **CCLC** staff and volunteers and **21**st **CCLC** participants have stayed close to the average for every school year except 2020-2021 and 2021-2022.





Descriptive Analysis

Descriptive Analysis: State Assessment and 21st CCLC Participation

State Assessment

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and academic outcomes as measured by Indiana's state assessment, the Indiana Learning Evaluation Assessment Readiness Network (ILEARN). Beginning in 2019, ILEARN is completed annually to measure student mastery of basic skills. Including both a written and multiple-choice assessment, ILEARN is completed each spring by students in grades 3-8. As described below, the main descriptive analyses examined proficiency levels. Average scale scores for each grade level are reported in Appendix B and in the matched-groups analyses.

Indiana Learning Evaluation Assessment Readiness Network (ILEARN) ILEARN: Indiana Learning Evaluation Assessment Readiness Network (ILEARN) data were utilized to examine academic achievement in English/language arts and math for grades 3-8. ILEARN was administered in the spring of 2022. All data were provided by IDOE. ILEARN scale scores, growth (based on student growth percentile (SGP)), and proficiency levels were reported. Given the nature of the ILEARN scaling, comparisons of mean scores were presented independently by grade level (see Appendix B). Proficiency levels were provided by IDOE.

English/Language Arts ILEARN Proficiency by 21st CCLC Participation

The percentage of 21st CCLC participants who scored at or above proficiency on the ILEARN English/Language Arts was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 18: Student Attendance Gradations by English/Language Arts ILEARN Proficiency – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** passed ILEARN English/Language Arts compared to those attending fewer days for 3-8 grade levels.

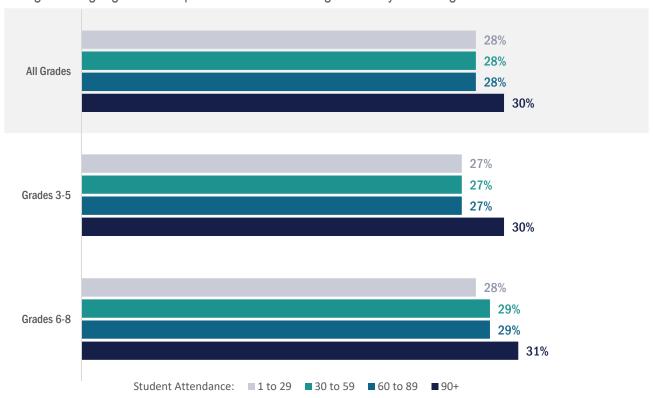


Table 1: Student Attendance Gradations by English/Language Arts ILEARN Proficiency – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants passing ILEARN

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
	n/N	%	n/N	%	n/N	%	n/N	%
All Grades (3-8)	641/2312	28%	289/1037	28%	174/630	28%	433/1425	30%
3-5	257/939	27%	153/562	27%	104/388	27%	335/1104	30%
6-8	384/1373	28%	136/475	29%	70/242	29%	98/321	31%

Math ILEARN Proficiency by 21st CCLC Participation

The percentage of 21st CCLC participants who scored at or above proficiency on the ILEARN Math was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 19: Student Attendance Gradations by Math ILEARN Proficiency – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** passed ILEARN Math compared to those attending fewer days for 3-8 grade levels.

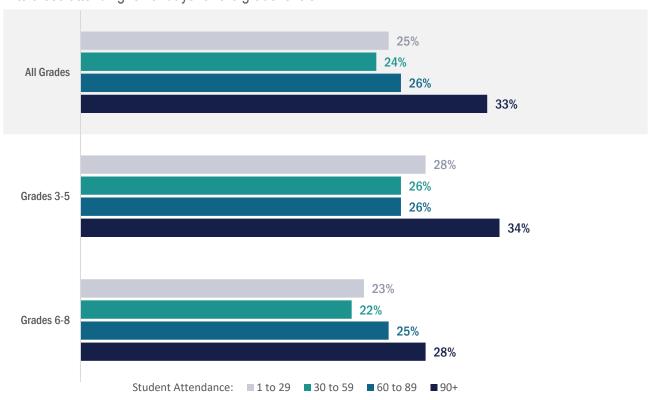


Table 2: Student Attendance Gradations by ILEARN Math Proficiency – 2021-2022

Math: Percentage of 21st CCLC participants passing ILEARN

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
	n/N	%	n/N	%	n/N	%	n/N	%
All Grades (3-8) ^a	585/2301	25%	247/1032	24%	161/625	26%	462/1420	33%
3-5ª	264/931	28%	144/558	26%	101/385	26%	374/1100	34%
6-8	321/1370	23%	103/474	22%	60/240	25%	88/320	28%

^a Statistically significant association.

English/Language Arts ILEARN Growth by 21st CCLC Participation

The percentage of 21st CCLC participants (grades 4 to 8) with a student growth percentile (SGP) greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) on the ILEARN English/Language Arts was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 20: Student Attendance Gradations by English/Language Arts ILEARN Growth – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** demonstrated growth on the ILEARN English/Language Arts compared to those attending fewer days for 4-8 grade levels.

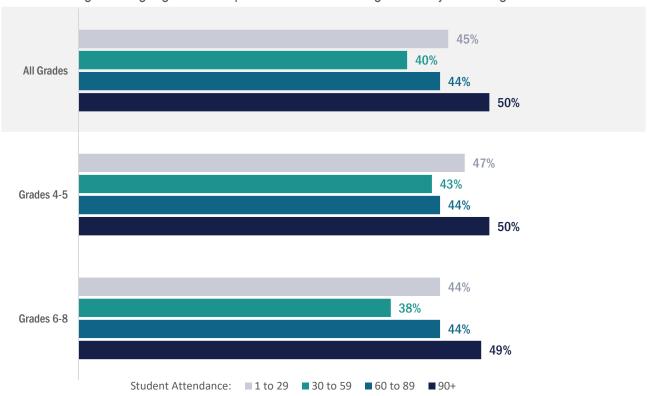


Table 3: Student Attendance Gradations by English/Language Arts ILEARN Growth – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants demonstrating growth (SGP ≥ 50) on ILEARN

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades (4-8) ^a	1210/2705	45%	483/1196	40%	339/776	44%	781/1578	50%
4-5ª	477/1023	47%	247/580	43%	182/415	44%	556/115	50%
6-8ª	733/1682	44%	236/616	38%	157/361	44%	225/463	49%

^a Statistically significant association.

Math ILEARN Growth by 21st CCLC Participation

The percentage of 21st CCLC participants (grades 4 to 8) with an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) on the ILEARN Math was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 21: Student Attendance Gradations by Math ILEARN Growth – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** demonstrated growth on the ILEARN Math compared to those attending fewer days for 4-8 grade levels.

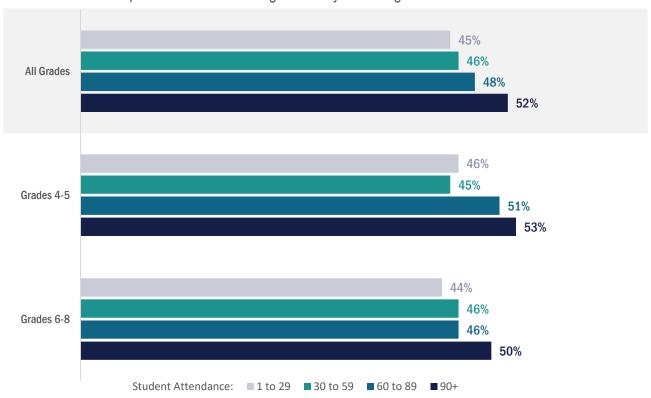


Table 4: Student Attendance Gradations by ILEARN Math Growth - 2021-2022

Math: Percentage of 21st CCLC participants demonstrating growth (SGP ≥ 50) on ILEARN

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades (4-8) ^a	1202/2701	45%	545/1191	46%	373/774	48%	814/1573	52%
4-5ª	466/1019	46%	261/579	45%	209/414	51%	586/1113	53%
6-8	736/1682	44%	284/612	46%	164/360	46%	228/460	50%

^a Statistically significant association.

Descriptive Analysis: Report Card Grade Performance and 21st CCLC Participation

Indiana Academic Progress Indicators

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and academic outcomes. Beginning in 2018-2019, Indiana adopted an outcome measurement framework whereby grantees are required to submit an academic performance measure based on improvement and attainment of math and English/language arts grades from fall to spring. Consistent with this approach, the following academic progress indicators for grantees with traditional report card grades (e.g., A through F, A+ through F) were examined across various levels of program participation:

High Academic/Growth Progress Indicator

Percentage of 21st CCLC participants earning a <u>B or better</u> or increasing their grade from fall to spring

→ Participants who improved their grade by at least one letter grade from the fall to spring semester or received a B or higher in the final grading period

Satisfactory Academic/Growth Progress Indicator

Percentage of 21st CCLC participants earning a <u>C or better</u> or increasing their grade from fall to spring

→ Participants who improved their grade by at least one letter grade from the fall to spring semester or received a C or higher in the final grading period

English/Language Arts: High Academic/Growth Progress Indicator by 21st CCLC Participation

The percentage of 21st CCLC participants who earned a B or better as their final spring grade or improved their English/language arts grade from the fall to the spring semester (*High Academic/Growth Progress Indicator*) was calculated for participants and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 22: Student Attendance Gradations by English/Language Arts B or Better or Improving Grade – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** earned a B or better or improved their English/language arts grade compared to those attending fewer days for K-12 grade levels.

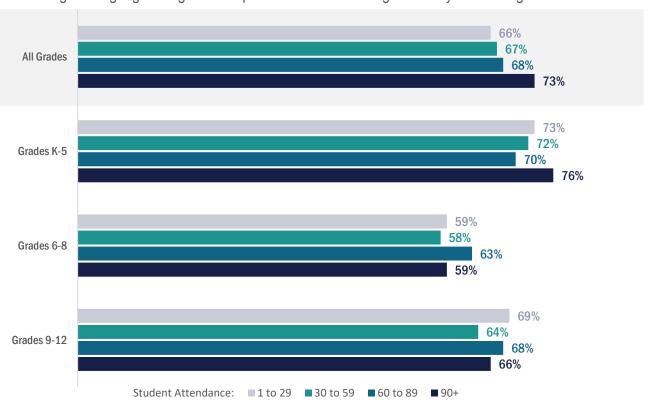


Table 5: Student Attendance Gradations by English/Language Arts B or Better or Increasing Grade – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants earning a <u>B or better</u> or improving their grade from fall to spring

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	1608/2420	66%	949/1427	67%	777/1137	68%	1853/2531	73%
K-5 ^a	835/1146	73%	595/831	72%	502/713	70%	1592/2096	76%
6-8	629/1065	59%	260/448	58%	171/272	63%	218/370	59%
9-12	114/209	69%	94/148	64%	104/152	68%	43/65	66%

^a Statistically significant association.

Math: <u>High Academic/Growth</u> <u>Progress Indicator</u> by 21st CCLC Participation

The percentage of 21st CCLC participants who received a B or higher as their final spring grade or improved their math grade from the fall to the spring semester (*High Academic/Growth Progress Indicator*) was calculated for participants and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 23: Student Attendance Gradations by Math B or Better or Improving Grade – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** received a B or higher or improved their grade compared to those attending fewer days for K-12 grade levels.

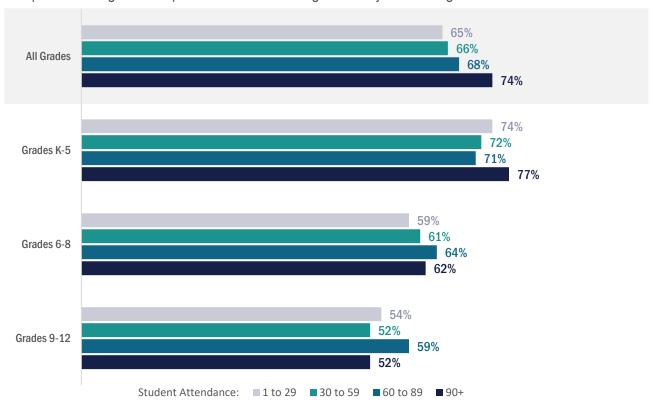


Table 6: Student Attendance Gradations by Math B or Better – 2021-2022

Math: Percentage of 21st CCLC participants earning a <u>B or better</u> or improving their grade from fall to spring

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	1414/2167	65%	922/1393	66%	768/1133	68%	1845/2480	74%
K-5 ^a	740/1001	74%	588/822	72%	510/718	71%	1592/2059	77%
6-8	565/963	59%	261/430	61%	169/264	64%	221/359	62%
9-12	109/203	54%	73/141	52%	89/151	59%	32/62	52%

^a Statistically significant association.

English/Language Arts: <u>Satisfactory Academic/Growth</u> **Progress Indicator** by 21st CCLC Participation

The percentage of 21st CCLC participants who earned a C or better as their final grade or improved their English/language arts grade from the fall to the spring semester (*Satisfactory Academic/Growth Progress Indicator*) was calculated for participants and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 24: Student Attendance Gradations by English/Language Arts C or Better or Improving Grade – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** earned a C or higher or improved their English/language arts grade compared to those attending fewer days for K-12 grade levels.

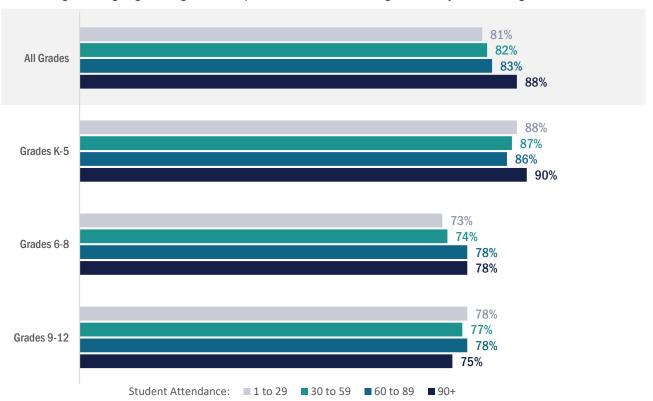


Table 7: Student Attendance Gradations by English/Language Arts C or Better – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants earning a <u>C or better</u> or improving their grade from fall to spring

2021-2022	1-29 days		30-59 d	30-59 days		days	90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	1950/2420	81%	1171/1427	82%	945/1137	83%	2228/2531	88%
K-5 ^a	1011/1146	88%	726/831	87%	614/713	86%	1890/2096	90%
6-8	777/1065	73%	331/448	74%	212/272	78%	289/370	78%
9-12	162/209	78%	114/148	77%	119/152	78%	49/65	75%

^a Statistically significant association.

Math: Satisfactory Academic/Growth Progress Indicator by 21st CCLC Participation

The percentage of 21st CCLC participants who earned a C or better as their final grade or improved their math grade from the fall to the spring semester (*Satisfactory Academic/Growth Progress Indicator*) was calculated for participants and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 25: Student Attendance Gradations by Math C or Better or Improving Grade – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** received a C or higher or improved their grade compared to those attending fewer days for K-12 grade levels.

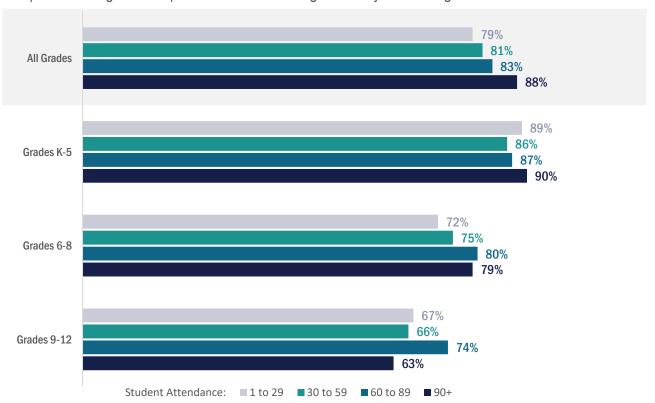


Table 8: Student Attendance Gradations by Math C or Better or Improving Grade – 2021-2022

Math: Percentage of 21st CCLC participants earning a C or better or improving their grade from fall to spring

2021-2022	1-29 days 30		30-59 d	ays	60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	1720/2167	79%	1124/1393	81%	944/1133	83%	2185/2480	88%
K-5 ^a	887/1001	89%	709/822	86%	621/718	87%	1861/2059	90%
6-8ª	697/963	72%	322/430	75%	211/264	80%	285/359	79%
9-12	136/203	67%	93/141	66%	112/151	74%	39/62	63%

^a Statistically significant association.

Descriptive Analysis: Average Final Grades and 21st CCLC Participation

Average Final Grades

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and academic outcomes as measured by average English/language arts and math grades. Based on participants' English/language arts and math final grades from spring 2022, average grades were calculated as follows:

Average final report card grade

An average grade was calculated for all students who had grades entered on an A to F scale. Grades were recoded to a 0-4 scale (A=4, B=3, C=2, D=1, F=0). In some cases, centers also included +/-. To allow for consistent comparisons, these grades were converted to the traditional scale.

English/Language Arts: Average Spring Final Gradeby 21st CCLC Participation

Participants' average English/language arts grades were calculated based on the final spring grade and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days). Grades could range from 0 (F) to 4 (A) with most scores falling between 2 (C) and 4 (A).

There was a significant relationship between afterschool attendance frequency and final average English/language arts grade for grades K-12 (p < .001). The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades K-12. Post-hoc comparisons revealed that students attending 90+ days had significantly higher final grades on average compared to students attending 1-29 days (p < .001), 30-59 days (p < .001), and 60-89 days (p = .001).

When examined by grade level band, there was a significant relationship between afterschool attendance frequency and final average English/language arts grade for grades K-5 (p = .001). The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades K-5. Post-hoc comparisons revealed that students attending 90+ days had significantly higher final grades on average compared to students attending 30-59 days (p < .05) and 60-89 days (p < .05).

Figure 26: Student Attendance Gradations by Average English/Language Arts Final Spring Grade – 2021-2022

For K-12, 21st CCLC participants attending **90+ days** had higher average English/language arts grades in spring 2022 compared to 1-29 days, 30-59 days, and 60-89 days.

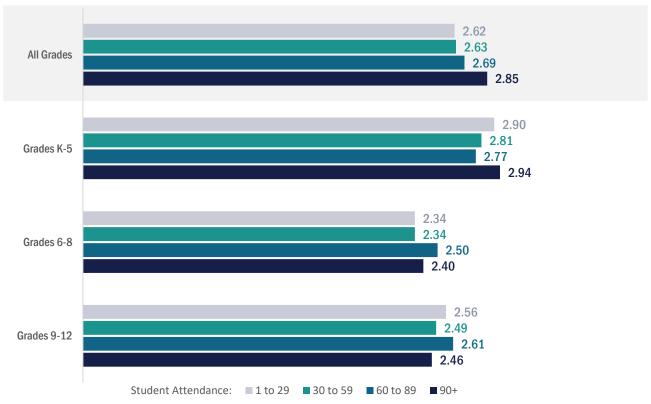


Table 9: Student Attendance Gradations by English/Language Arts Average Final Spring Grade – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants by average final grades

2021-2022	1-29	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n	mean	n	mean	n	mean	n	mean	
All Grades ^a	2420	2.62	1427	2.63	1137	2.69	2531	2.85	7515
K-5ª	1146	2.90	831	2.81	713	2.77	2096	2.94	4786
6-8	1065	2.34	448	2.34	272	2.50	370	2.40	2155
9-12	209	2.56	148	2.49	152	2.61	65	2.46	574

^a Statistically significant.

Math: <u>Average Spring Final Grade</u> by 21st CCLC Participation

Participants' average math grades were calculated based on the final spring grade and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days). Grades could range from 0 (F) to 4 (A) with most scores falling between 2 (C) and 4 (A).

There was a significant relationship between afterschool attendance frequency and final average math grade for grades K-12 (p < .001). The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades K-12. Post-hoc comparisons revealed that students attending 90+ days had significantly higher final grades on average compared to students attending 1-29 days (p < .001), 30-59 days (p < .001), and 60-89 days (p < .001). Students attending 60-89 days had significantly higher final grades on average compared to students attending 1-29 days (p = .03). Effect sizes were small.

When examined by grade level band, there was a significant relationship between afterschool attendance frequency and final average math grade for grades K-5 (p < .001). The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades K-5. Post-hoc comparisons revealed that students attending 90+ days had significantly higher final grades on average compared to students attending 1-29 days (p = .03), 30-59 days (p < .001), and 60-89 days (p = .002). Effect sizes were small.

Moreover, there was a significant relationship between afterschool attendance frequency and final average math grade for grades 6-8 (p = .04). The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades 6-8.

Figure 27: Student Attendance Gradations by Math Average Final Spring Grade – 2021-2022

21st CCLC participants attending **90+ days** had higher average math grades in spring 2022 compared to students attending 1-29 days, 30-59 days, and 60-89 days for all grades K-12.

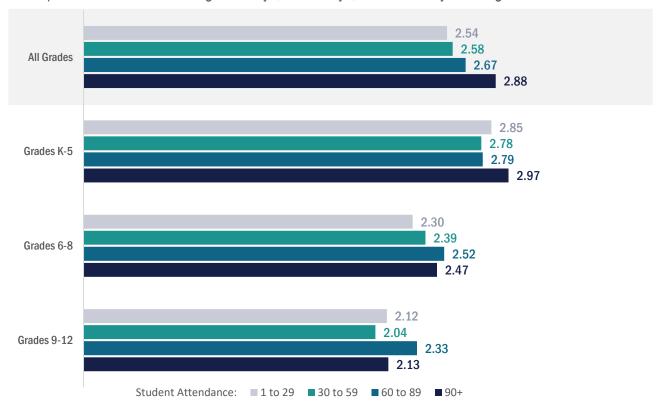


Table 10: Student Attendance Gradations by Math Average Final Spring Grade – 2021-2022

Math: Percentage of 21st CCLC participants by average final grades

2021-2022	1-29 days		30-59 days		60-89 days		90+ days		N
2021-2022	n	mean	n	mean	n	mean	n	mean	
All Grades ^a	2167	2.54	1393	2.58	1133	2.67	2480	2.88	7173
K-5ª	1001	2.85	822	2.78	718	2.79	2059	2.97	4600
6-8ª	963	2.30	430	2.39	264	2.52	359	2.47	2016
9-12	203	2.12	141	2.04	151	2.33	62	2.13	557

^a Statistically significant.

Descriptive Analysis: High School Graduation and 21st CCLC Participation

High School Graduation

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and graduation outcomes. Graduation data were provided and matched with 21^{st} CCLC participation data to support these analyses. Analyses were completed only for 12^{th} grade participants for whom a successful Student Test Number (STN) match was available. This included 91% (124/136) of 12^{th} grade 21^{st} CCLC participants.

Graduation: Data from the IDOE Graduate Report (DOE-GR) were available for the evaluation. Annually, graduation data are collected by IDOE from public schools (traditional and charter), accredited nonpublic schools, and non-accredited nonpublic schools participating in the Choice Scholarship program. Based on IDOE (2020) guidelines, a successful graduate is defined as meeting any of the following:

- 1. Students earning a diploma before October 1 following an academic year.
- 2. Students attending an adult secondary credit (ASC) program to obtain credit toward their diploma during the evening or after school hours AND enrolled at the high school.
- 3. Students completing their graduation requirements EARLY; whether a year early OR semester early.
- 4. Students who graduated in a previous year and were omitted from the DOE-GR submission.
- 5. Students completing their graduation requirements while attending an alternative education program or adult secondary credit program not located in the issuing diploma high school.
- 6. Students completing their graduation requirements while attending their last year of school in a foreign country as an exchange student.
- 7. Students completing their graduation requirements while attending somewhere other than the issuing diploma high school for other reasons.

High School Graduation

High School Graduation Rate

Across all attendance levels, 92% (114/124) of 12^{th} grade 21^{st} CCLC participants (i.e., attending one or more days of school year programming) graduated from high school. Across various subgroups, the majority of 21^{st} CCLC students graduated.

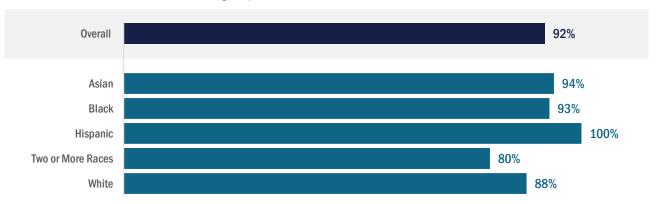
Figure 28: Graduation Rate by Participant Demographics – 2021-2022

Nearly all 21st CCLC participants in 12th grade graduated from high school. This trend was consistent across sex, education program, and lunch status.



Figure 29: Graduation Rate by Race/Ethnicity⁷ – 2021-2022

The majority of 21st CCLC participants in 12th grade graduated from high school. This trend was consistent across all racial/ethnic groups.



⁷ Note: In the Cayen system, race and ethnicity are entered into the same variable. As a result, both race and ethnicity are reported together throughout the evaluation report (see Appendix B for more detailed discussion).

HIGH SCHOOL GRADUATION BY 21st CCLC PARTICIPATION

The percentage of 21st CCLC participants who graduated was calculated and disaggregated by the four attendance gradations (1-29 days, 30-59 days, 60-89, and 90+ days).

A higher percentage of 21^{st} CCLC 12^{th} grade participants attending 1-29 days graduated compared to those attending 30-59 days, 60-89 days, and 90+ days.

Figure 30: Student Attendance Gradations by Graduation Rate – 2021-2022

A higher percentage of 21st CCLC 12th grade participants attending **30-59 days** graduated compared to those attending 1-29 days, 60-89 days, and 90+ days.



Table 11: Student Attendance Gradations by Graduation – 2021-2022

Graduation: Percentage of 21st CCLC participants graduating on schedule

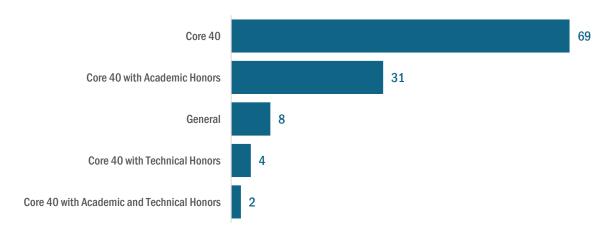
2021 2022	1-29	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	
Grade 12	45/49	92%	34/36	94%	30/33	91%	5/6	83%	

GRADUATION TYPE

As noted above, 92% (114/124) of 12^{th} grade students graduated. Of these, 61% of students (69/114) earned a Core 40 diploma with no additional honors. The second largest group of graduates earned a Core 40 with Academic Honors diploma (27%; 31/114), followed by the General diploma (7%; 8/114).

Figure 31: Graduation Type – 2021-2022

Over half of graduating 12th grade participants earned a Core 40 diploma without additional honors.



Descriptive Analysis: High School Course Completion and 21st CCLC Participation

High School Course Completion

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and high school course completion. Course completion data were provided and matched with 21st CCLC participation data to support these analyses. Analyses were completed only for 9-12 grade participants for whom a successful STN match was available. This included 1,711 (94%) of the 1,821 high school students participating in 21st CCLC programs during the school year. As described below, the descriptive analyses examined high school credits obtained, ELA credits obtained, math credits obtained, science credits obtained, participation in dual credit courses, and dual credits obtained by attendance gradation.

High School Course Completion

Course Completion: Data from the IDOE Course Completion Report (DOE-CC) were available for the evaluation. Annually, course completion data are collected by IDOE from public schools (traditional and charter), accredited nonpublic schools, and non-accredited nonpublic schools participating in the Choice Scholarship program. The evaluation focused on *dual credits* and *high school credits*. IDOE defines dual credit courses as those that provide both high school credit and transcripted college credit from a post-secondary institution. Only credits from state-approved courses may provide dual credits.

Annual High School Credits Obtained

The number of credits obtained by high school students during the 2021-2022 school year was provided by IDOE and linked with 21st CCLC participation data. Total credits obtained across all school subjects was examined by attendance gradation, along with specific analyses for ELA, math, and science credits obtained during the 2021-2022 school year.

Annual Total Credits Obtained by 21st CCLC Participation

There was a significant relationship between afterschool attendance frequency and the total number of credits obtained for grades 9-12 (p = .02). The effect was small, with afterschool attendance frequency explaining approximately 1% of the variance in total credits obtained. Students attending 1-29 days obtained significantly fewer credits compared to students attending 60-89 days (p = .01). Effect sizes were small.

Figure 32: Participant Attendance Gradations by Total Credits Obtained – 2021-2022

Students attending 1-29 days earned significantly fewer credits compared to students attending 60-89 days.



Table 12: Participant Attendance Gradations by Total Credits Obtained – 2021-2022

Total credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-29	1-29 days		30-59 days		60-89 days		- days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	305	11.17	194	11.71	158	12.23	56	12.13

Annual ELA Credits Obtained by 21st CCLC Participation

There were no significant relationships between afterschool attendance frequency and the total number of ELA credits obtained for grades 9-12.

Figure 33: Participant Attendance Gradations by ELA Credits Obtained – 2021-2022

No significant relationships were observed between ELA credits and afterschool attendance. When examined descriptively, there is some evidence to suggest that students attending at higher levels may have obtained more credits.



Table 13: Participant Attendance Gradations by ELA Credits Obtained – 2021-2022

ELA credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-29	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n	mean	n	mean	n	mean	n	mean	
9-12	298	2.13	192	2.17	155	2.37	55	2.11	

Annual Math Credits Obtained by 21st CCLC Participation

There was a significant relationship between afterschool attendance frequency and the total number of math credits obtained for grades 9-12 (p = .001). The effect was small, with afterschool attendance frequency explaining approximately 2% of the variance in math credits obtained. Students attending 60-89 days obtained significantly more math credits compared to students attending 1-29 days (p = .001) or 30-59 days (p = .04). Effect sizes were small. Note: Small sample sizes for the 90+ day group likely affected the lack of significant pairwise comparisons.

Figure 34: Participant Attendance Gradations by Math Credits Obtained – 2021-2022

21st CCLC participants in grades 9-12 attending **60-89 days** earned significantly more credits compared to students who attended less frequently.



Table 14: Participant Attendance Gradations by Math Credits Obtained – 2021-2022

Math credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-29	days	30-5	30-59 days		60-89 days		90+ days	
2021-2022	n	mean	n	mean	n	mean	n	mean	
9-12	284	1.61	186	1.67	153	1.93	52	2.00	

Annual Science Credits Obtained by 21st CCLC Participation

There were no significant relationships between afterschool attendance frequency and the total number of science credits obtained for grades 9-12.

Figure 35: Participant Attendance Gradations by Science Credits Obtained – 2021-2022

No significant relationships were observed between Science credits and afterschool attendance. When examined descriptively, there is some evidence to suggest that students attending at higher levels may have obtained more credits.

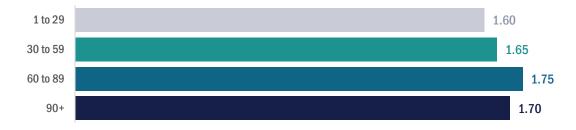


Table 15: Participant Attendance Gradations by Science Credits Obtained – 2021-2022

Science credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-29	1-29 days		30-59 days		60-89 days		· days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	266	1.60	169	1.65	139	1.75	50	1.70

Descriptive Analysis: WIDA ACCESS for ELLs and 21st CCLC Participation

WIDA ACCESS for ELLs

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and performance on the WIDA ACCESS for English Language Learners (ELL) assessment. Assessment data were provided by IDOE and matched with 21st CCLC participation data to support these analyses. As described below, the descriptive analyses examined differences in proficiency levels across each assessment domain: listening, speaking, reading, and writing by attendance gradation. Note: due to small sample sizes, only three gradations were reported: 1-29 days, 30-59 days, and 60+ days.

WIDA ACCESS for ELLs: ACCESS for ELLs is a suite of English language proficiency tests for K–12 students. Yearly, the assessment measures students' English language proficiency across four domains: listening, speaking, reading, and writing. Local Education Agencies (LEAs) and schools use results to guide instructional decisions related to ELL students (e.g., programming, course selection).

WIDA ACCESS for ELLs

Based on performance on discrete English language development standards defined by WIDA, students are scored for each domain and are assigned into one of six proficiency levels: Level 1 Entering, Level 2 Emerging, Level 3 Developing, Level 4 Expanding, Level 5 Bridging, and Level 6 Reaching. Based on guidance from IDOE, the current evaluation focused on these proficiency levels.

For alignment with IDOE, benchmark values were defined as scoring at or above Level 5 for the purpose of the evaluation. In Indiana, students scoring at or above a Level 5 are no longer considered ELLs (J. Woo, personal communication, March 22, 2022). As recommended by IDOE, proficiency for each domain was reported separately to support ongoing planning and interventions.

WIDA ACCESS for ELLs Proficiency

2021-2022 WIDA ACCESS for ELLs assessment data were provided by IDOE and linked with 21st CCLC participation data. Benchmark thresholds were identified based on consultation with IDOE and using Indiana's threshold for English language proficiency. For alignment with IDOE, benchmark values were defined as proficiency levels greater than or equal to Level 5 for the purpose of the evaluation. In Indiana, students scoring at or above a Level 5 are no longer considered ELLs (J. Woo, personal communication, March 22, 2022).

WIDA LISTENING DOMAIN

The percentage of 21st CCLC participants meeting the benchmark was calculated and disaggregated by three attendance gradations (1-29 days, 30-59 days, and 60+ days).

Figure 36: Student Attendance Gradations by WIDA Listening Proficiency – 2021-2022

The majority of students across all levels of attendance passed the WIDA Listening assessment. No significant differences were observed.

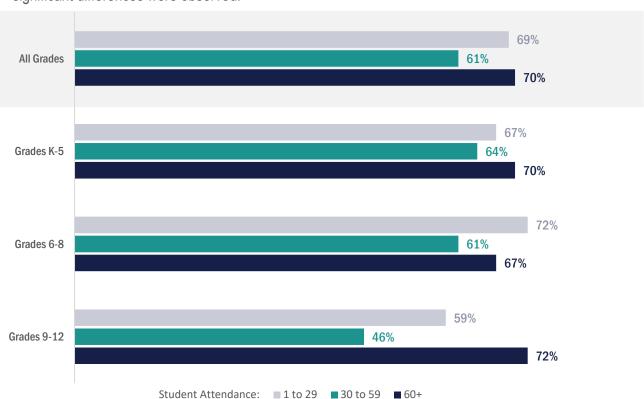


Table 16: Student Attendance Gradations by WIDA Listening Proficiency – 2021-2022

Listening: Percentage of 21st CCLC participants earning Level 5 or better

2021 2022	1-29 (days	30-59	days	60+ days		
2021-2022	n/N	%	n/N	%	n/N	%	
All Grades	239/349	69%	100/163	61%	392/561	70%	
K-5	138/206	67%	79/123	64%	325/462	70%	
6-8	90/125	72%	11/18	61%	54/81	67%	
9-12	10/17	59%	10/22	46%	13/18	72%	

WIDA SPEAKING DOMAIN

The percentage of 21st CCLC participants meeting the benchmark was calculated and disaggregated by three attendance gradations (1-29 days, 30-59 days, and 60+ days).

Figure 37: Student Attendance Gradations by WIDA Speaking Proficiency – 2021-2022

The percentage of 21st CCLC participants meeting the benchmark on the WIDA assessment was consistent across attendance gradations for K-12 grade levels.

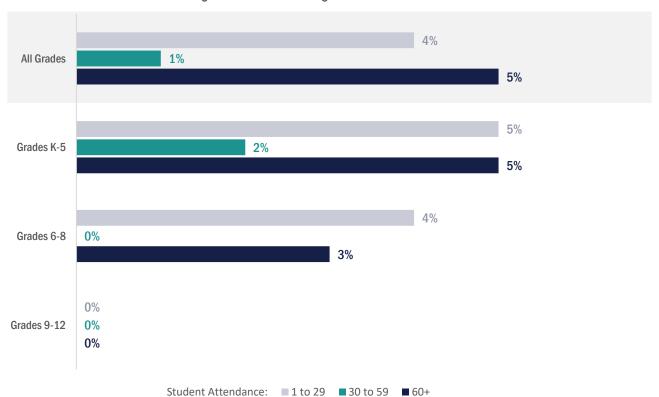


Table 17: Student Attendance Gradations by WIDA Speaking Proficiency – 2021-2022

Speaking: Percentage of 21st CCLC participants earning Level 5 or better

2024 2022	1-29 (days	30-59	days	60+ days		
2021-2022	n/N	%	n/N	%	n/N	%	
All Grades	15/349	4%	2/163	1%	25/560	5%	
K-5	10/206	5%	2/123	2%	23/461	5%	
6-8	5/125	4%	0/18	0%	2/81	3%	
9-12	0/17	0%	0/22	0%	0/18	0%	

WIDA READING DOMAIN

The percentage of 21st CCLC participants meeting the benchmark was calculated and disaggregated by three attendance gradations (1-29 days, 30-59 days, and 60+ days). No significant associations were observed.

Figure 38: Student Attendance Gradations by WIDA Reading Proficiency – 2021-2022

The percentage of 21st CCLC participants meeting the benchmark on the WIDA assessment was consistent across attendance gradations for K-12 grade levels.

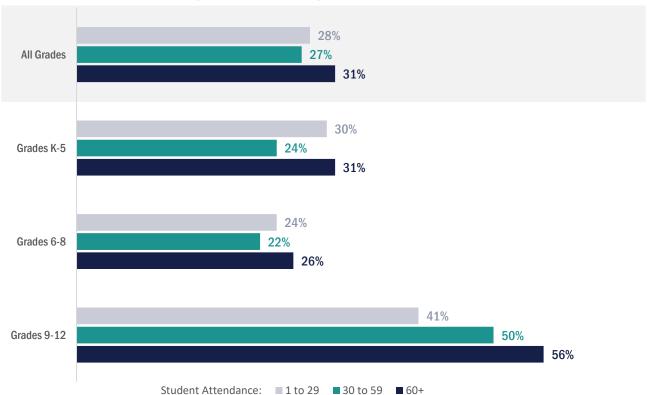


Table 18: Student Attendance Gradations by WIDA Reading Proficiency – 2021-2022

Reading: Percentage of 21st CCLC participants earning Level 5 or better

2021-2022	1-29	days	30-59	days	60+ days		
	n/N	%	n/N	%	n/N	%	
All Grades	98/349	28%	44/163	27%	172/561	31%	
K-5	61/206	30%	29/123	24%	141/462	31%	
6-8	30/125	24%	4/18	22%	21/81	26%	
9-12	7/17	41%	11/22	50%	10/18	56%	

WIDA WRITING DOMAIN

The percentage of 21st CCLC participants meeting the benchmark was calculated and disaggregated by three attendance gradations (1-29 days, 30-59 days, and 60+ days). There was a significant association between afterschool attendance and WIDA Writing proficiency.

Figure 39: Student Attendance Gradations by WIDA Writing Proficiency – 2021-2022

There was a significant association between afterschool attendance and WIDA Writing proficiency for grades K-12. Students attending **60+ days** were more likely to pass the assessment.

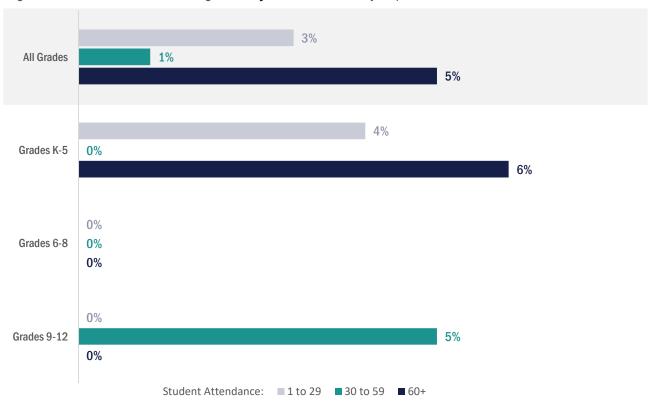


Table 19: Student Attendance Gradations by WIDA Writing Proficiency – 2021-2022

Writing: Percentage of 21st CCLC participants earning Level 5 or better

2021-2022	1-29	days	30-59	days	60+ days		
	n/N	%	n/N	%	n/N	%	
All Grades	9/349	3%	1/163	1%	25/556	5%	
K-5	9/206	4%	0/123	0%	25/458	6%	
6-8	0/125	0%	0/18	0%	0/81	0%	
9-12	0/17	0%	1/22	5%	0/17	0%	

Descriptive Analysis: Academic Performance and 21st CCLC Participant Subgroups

English/Language Arts Lower Performing Participants by 21st **CCLC Participation**

To examine improvement, participants who received an F or D grade in English/language arts at the end of the fall semester were identified. Next, the percentage of participants who increased their grade from fall to spring was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 40: Attendance Gradations for Lower Performing Students by English/Language Arts Improvement – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** and **60-89 days** who received an F or D grade at the end of the fall semester increased their grade from fall to spring compared to 1-29 days and 30-59 days for all grade levels.

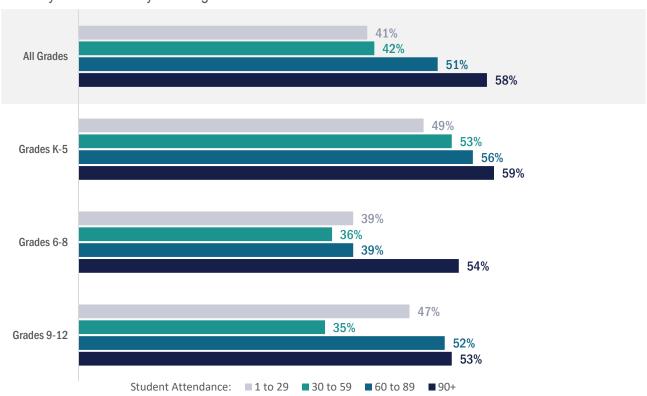


Table 20: Attendance Gradations for Lower Performing Students by English/Language Arts Increases – 2021-2022

English/Language Arts: Percentage of low performing participants who received an F or D grade at the end of the fall semester and increased their grade from fall to spring

2021-2022	1-29 days		30-59	30-59 days		days	90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	185/450	41%	104/245	42%	102/201	51%	214/372	58%
K-5	64/132	49%	51/96	53%	64/114	56%	157/266	59%
6-8ª	91/254	39%	41/115	36%	21/54	39%	48/89	54%
9-12	30/64	47%	12/34	35%	17/33	52%	9/17	53%

^a Statistically significant association.

Math Lower Performing Participants by 21st CCLC Participation

To examine improvement, participants who received an F or D grade in math at the end of the fall semester were identified. Next, the percentage of participants who increased their grade from fall to spring was calculated and disaggregated by four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Figure 41: Attendance Gradations for Lower Performing Students by Math Improvement – 2021-2022

A higher percentage of 21st CCLC participants attending **90+ days** who received an F or D grade at the end of the fall semester increased their grade from fall to spring compared to 1-29 days, 30-59 days, and 60-89 days for all grade levels.

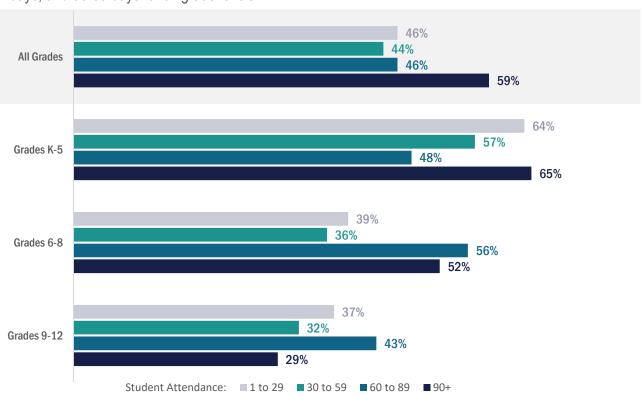


Table 21: Attendance Gradations for Lower Performing Students by Math Increases – 2021-2022

Math: Percentage of low performing participants who received an F or D grade at the end of the fall semester and increased their grade from fall to spring

2021-2022	1-29 days		30-59	30-59 days		days	90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	207/451	46%	127/288	44%	100/216	46%	212/360	59%
K-5 ^a	87/136	64%	69/121	57%	55/115	48%	157/243	65%
6-8	94/244	39%	43/120	36%	28/61	56%	48/93	52%
9-12	26/71	37%	15/47	32%	17/40	43%	7/24	29%

^a Statistically significant association.

State Assessment Proficiency by Multi-Year 21st CCLC Participation

Multi-year attendance was linked with participants' English/language arts and math proficiency from spring 2022 and disaggregated by the number of years of attendance (0 years, 1 year, 2 years, 3 years, or 4 years).

ENGLISH/LANGUAGE ARTS MULTI-YEAR ANALYSIS: GRADES 3-8

There was a significant association between years of 60 or more days attendance and ILEARN English/Language Arts proficiency (p = .02) for grades 3-8. This association was driven by students attending 60 or more days for 3 or for 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years. When examined by grade level band, there was also a significant association between years of 60 or more days attendance and ILEARN English/Language Arts proficiency for students in grades 3-5 (p = .03). For students in grades 3-5, this association was driven by students attending 60 or more days for 3 years or 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years.

Figure 42: Multi-year Attendance (Grades 3-8) by English/Language Arts ILEARN Proficiency – 2021-2022

For grades 3-8, students attending 60 or more days for **3 years** or **4 years** were more likely to pass the assessment compared to students who attended regularly in fewer years.

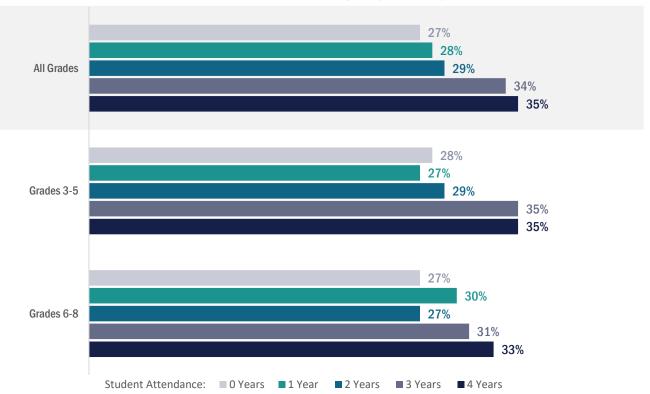


Table 22: Multi-year 60+ Days Participation (Grades 3-8) by English/Language Arts ILEARN Proficiency – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants attending 60+ days across multiple years passing IIFARN

2021-2022	0 Yea	rs	1 Yea	r	2 Year	'S	3 Year	s	4 Yea	ars
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	871/3208	27%	411/1468	28%	169/592	29%	121/357	34%	80/231	35%
3-5ª	384/1373	28%	252/945	27%	121/413	29%	95/274	35%	68/195	35%
6-8	487/1835	27%	159/523	30%	48/179	27%	26/83	31%	12/36	33%

^a Statistically significant association.

MATH MULTI-YEAR ANALYSIS: GRADES 3-8

There was a significant association between years of 60 or more days attendance and ILEARN Math proficiency (p < .001). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for 3 or 4 years. These students were more likely to pass the assessment compared to students who attended regularly for fewer years. When examined by grade level band, there was a significant association between years of 60 or more days attendance and ILEARN Math proficiency for students in grades 3-5 (p = .001) For students in grades 3-5, this association was driven by students attending 60 or more days for 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years.

Figure 43: Multi-year Attendance (Grades 3-8) by Math ILEARN Proficiency – 2021-2022 Students attending 60 or more days for **3 years** or **4 years** were more likely to pass the assessment compared to students who attended regularly for fewer years.

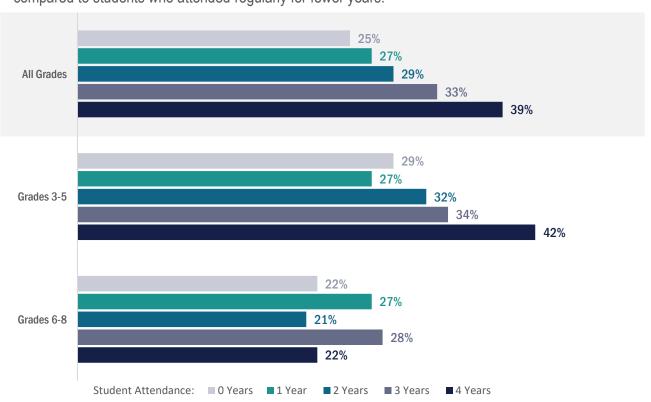


Table 23: Multi-year 60+ Days Participation (Grades 3-8) by Math ILEARN Proficiency – 2021-2022

Math: Percentage of 21st CCLC participants attending 60+ days across multiple years passing ILEARN

2021 2022	0 Yea	rs	1 Yea	r	2 Yea	rs	3 Year	rs	4 Yea	ars
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	803/3186	25%	399/1462	27%	171/590	29%	117/357	33%	89/231	39%
3-5ª	395/1360	29%	257/940	27%	133/412	32%	94/274	34%	81/195	42%
6-8	408/1826	22%	142/522	27%	38/178	21%	23/83	28%	8/36	22%

^a Statistically significant association.

English/Language Arts & Math 2022 Final Average Grades by Multi-Year 21st CCLC Participation

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' final average English/language arts and math grade from spring 2022 and disaggregated by the number of years (zero years, one year, two years, three years, or four years). Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis. Note: students who did not attend 60 days during any year = zero years.

Final average grades were calculated by recoding traditional report card grades to a 0-4 scale (A=4, B=3, C=2, D=1, F=0). In some cases, centers also included +/-. To allow for consistent comparisons, these grades were converted to the traditional scale.

MULTI-YEAR ANALYSIS: GRADES 3-8

For students in grades 3-8, there was a statistically significant relationship between years of regular attendance (60+) and final average English/language arts grades (p < .001). The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades 3-8. Students who attended regularly for four years had significantly higher spring grades than students who never attended regularly (p < .001), attended regularly in one year (p < .001), or attended regularly higher spring grades than students who never attended regularly (p < .001), attended regularly in one year (p < .001), or attended regularly in two years (p = .003). Effect sizes were small.

For students in grades 3-8, there was a statistically significant relationship between years of regular attendance (60+) and final average math grades (p < .001). The effect was small, with afterschool attendance level explaining approximately 2% of the variance in final average grades for students in grades 3-8. Students who had never attended regularly had significantly lower final grades compared to students attending regularly for one year (p = .01), two years (p = .002), three years (p < .001), and four years (p < .001). Additionally, students who attended regularly for four years had significantly higher grades than students who attended regularly in one year (p < .001) and two years (p < .001). Finally, students who attended regularly for three years had significantly higher grades than students who attended regularly in one year (p < .001) and two years (p = .01). Effect sizes were small.

Figure 44: Multi-year Attendance (Grades 3-8) by English/Language Arts & Math Final Grades – 2021-2022

On average, 21st CCLC participants attending **60+ days** in multiple years had higher spring grades than students who attended less frequently.



Table 24: Multi-year 60+ Days Participation (Grades 3-8) by Average Final Grade – 2021-2022

English/Language Arts & Math: 21st CCLC participants attending 60+ days across multiple years by average final spring grades

		Grades 3 to 8 Years Attending 60+ days											
2021-2022	0 Y	ears	1 Y	ear	2 Y	ears	3 Ye	ears	4 Y	ears			
	n	mean	n	mean	n	mean	n	mean	n	mean			
English/ Language Arts ^a	2600	2.57	1523	2.63	647	2.70	385	2.83	290	2.99			
Matha	2401	2.50	1491	2.64	629	2.70	364	2.95	276	3.08			

^a Statistically significant.

^{*}See Appendix B for a detailed description of results.

MULTI-YEAR ANALYSIS: GRADES 9-12

For grades 9-12, no statistically significant relationships between years of regular attendance and final average English/language arts or math grades were observed. However, when viewed descriptively, results suggested that high school students who attended at higher levels in multiple years had higher grades.

Figure 45: Multi-year Attendance (Grades 9-12) by English/Language Arts & Math Final Grades – 2021-2022

No significant relationships were noted; however, when viewed descriptively, results suggested that high school students who attended regularly in multiple years had higher spring grades.

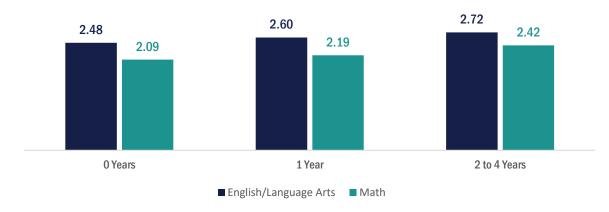


Table 25: Multi-year 60+ Days (Grades 9-12) by Average English/Language Arts & Math Final Grade – 2021-2022

English/Language Arts & Math: 21st CCLC participants attending 60+ days across multiple years by average final spring grades

	Grades 9 to 12 Years Attending 60+ days								
2021-2022	0 Y	ears	1	Year	2 to	4 Years			
2021-2022	n	mean	n	mean	n	mean			
English/Language Arts	308	2.48	208	2.60	59	2.72			
Math	295	2.09	206	2.19	57	2.42			

^{*}See Appendix B for a detailed description of results.

High School Course Completion by Multi-Year 21st **CCLC Participation**

The number of years participants attended 60 or more days in programming was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' annual total high school credits obtained, ELA credits obtained, math credits obtained, and science credits obtained. Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years.

Annual Credits Obtained Multi-year analysis: Grades 9-12

For grades 9-12, there was a significant relationship between years of regular attendance and total credits obtained (p = .02). The effect was small, with years of regular (60+ day) participation explaining approximately 1% of the variance in credits obtained for students in grades 9-12. Students who had never attended regularly obtained significantly fewer credits compared to students attending regularly for two to four years (p = .04). Effect sizes were small.

For grades 9-12, there was a significant relationship between years of regular attendance and math credits obtained (p = .04). The effect was small, with years of regular (60+ day) participation explaining approximately 1% of the variance in credits obtained for students in grades 9-12. Students who had never attended regularly obtained significantly fewer credits compared to students attending regularly for one year (p = .04). Effect sizes were small.

Figure 46: Multi-year Attendance (Grades 9-12) by English/Language Arts & Math Final Grades - 2021-2022

Students in grades 9-12 who attended regularly in multiple years earned significantly more total credits compared to students who had never attended regularly.

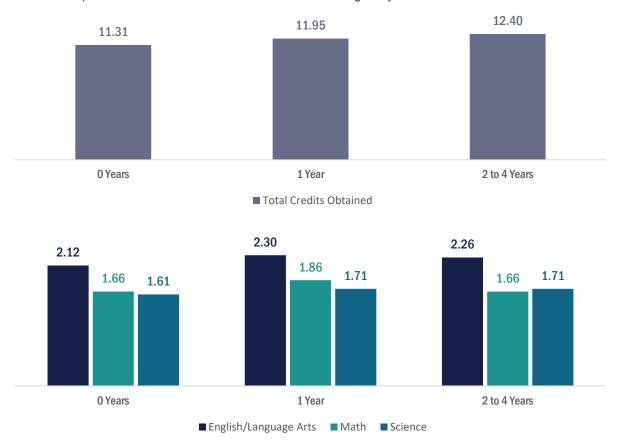


Table 26: Multi-year 60+ Days (Grades 9-12) by Average Annual Credits Obtained – 2021-2022

Total, English/Language Arts, Math, & Science: 21st CCLC participants attending 60+ days across multiple years by average credits obtained

	Grades 9 to 12 Years Attending 60+ days								
2021-2022	0 Y	'ears	1	/ear	2 to 4	4 Years			
2021-2022	n	mean	n	mean	n	mean			
Total ^a	440	11.31	218	11.95	68	12.40			
English/Language Arts	432	2.12	213	2.30	68	2.26			
Math ^a	414	1.66	208	1.86	65	1.66			
Science	380	1.61	198	1.71	58	1.71			

^a Statistically significant.

^{*}See Appendix B for a detailed description of results.

High School Graduation by Multi-Year 21st **CCLC Participation**

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with 12th grade participants' high school graduation status. Due to smaller sample sizes in the higher participation levels among 12th grade students, the maximum number of years was collapsed into two or more years.

GRADUATION MULTI-YEAR ANALYSIS: GRADE 12

Attendance rates were similar across groups. No significant relationships were observed.

Figure 47: Multi-year Attendance (Grade 12) by Graduation Status – 2021-2022

Graduation rates were similar across groups of attendees.



Table 27: Multi-year 60+ Days (Grade 12) by Graduation Status – 2021-2022

Graduation: 21st CCLC participants attending 60+ days across multiple years by graduation status

	Grade 12 Years Attending 60+ days							
2021-2022	0 Years n/N %		1 Ye n/N	1 Year n/N %		Years %		
Graduation	73/76	96%	29/34	85%	n/N 12/14	86%		

Descriptive Analysis: Behavioral Improvement and 21st CCLC Participation

Teacher-Reported Behavioral Improvement by 21st **CCLC Participation**

As part of the United States Department of Education (USDOE) requirements for providing 21st CCLC programs, centers are required to administer surveys to teachers regarding participants who attend afterschool programs. The purpose of the teacher survey is to ask regular school day teachers to report on the extent to which certain behaviors exhibited by a center's attendees improved or did not improve during the reporting period. In Indiana, grantees may choose one of two versions of the survey for each of their sites: a K-12 survey or 6-12 survey. Many items overlap between the K-12 and 6-12 surveys, as identified in Tables 28 and 29.

In 2022, a total of 11,920 teacher surveys were collected. This included 10,621 K-12 surveys and 1,299 grade 6-12 surveys. As part of the survey, teachers were asked to rate the extent to which participants changed in various behaviors from the beginning of the school year. If a student did not need to improve in a selected behavior, teachers were asked to note this on the rating scale. As shown in Tables 28 and 29, the majority of participants were identified as needing improvement on both the K-12 and 6-12 surveys. Academic performance was the highest improvement need reported across both surveys.

Table 28: Teacher-Reported Behaviors Needing Improvement – K-12 Survey - 2021-2022

Percentage of participants reported by teachers as needing to improve in specific school-related behaviors

School-Related Behaviors (K-12 Survey)	2021-2022 (N=10,621)
Participating in class ^a	65%
Getting along well with other students ^a	60%
Behaving well in class ^a	59%
Academic performance ^a	73%
Helping others ^a	58%
Completing assignments, even when challenging ^a	69%
Responsible decision-making ^a	64%
Self-confidence	69%
Accepting responsibility for their actions	62%
Identifying their own emotions	58%
Homework completion ^a	60%

^a Included on both K-12 and 6-12 surveys.

Table 29: Teacher-Reported Behaviors Needing Improvement – 6-12 Survey - 2021-2022

Percentage of participants reported by teachers as needing to improve in specific school-related behaviors

School-Related Behaviors (6-12 Survey)	2021-2022 (N=1,299)
Participating in class ^a	66%
Getting along well with other students ^a	55%
Behaving well in class ^a	55%
Academic performance ^a	75%
Helping others ^a	55%
Completing assignments, even when challenging ^a	72%
Responsible decision-making ^a	62%
Coming to class prepared to learn	62%
Being receptive to feedback on assignments	59%
Time management	69%
Homework completion ^a	69%

^a Included on both K-12 and 6-12 surveys.

Teachers were asked to indicate if they believed students had benefited from participating in the afterschool program.

Table 30: Teacher-Reported Benefit by Attendance Gradation – 2021-2022

Percentage of participants attending 30+ and 60+ days who benefited from participating in the afterschool program, as reported by teachers

	2021	2021-2022			
	>=30 Days	>=60 Days			
K-12 Survey	95%	96%			
6-12 Survey	89%	91%			

Teachers were asked to rate improvement on a three-point scale (1 - Behavior Declined, 2 - No Change in Behavior, or 3 - Behavior Improved). The figure below depicts improvement for participants attending 60 or more days in the program who needed to improve. Tables 31 and 32 include participants who attended 30 or more and 60 or more days.

Figure 48: Teacher-Reported Improvement (K-12 Survey and 6-12 Survey) – 2021-2022

At least 6 out of 10 participants attending 60+ days in the 21st CCLC program and identified as needing to improve their school-related behaviors were reported by their teacher as improving in self-confidence, academic performance, homework completion, and class participation for K-12 students and improving in homework completion, class participation, academic performance, and receptiveness to feedback for 6-12 students.

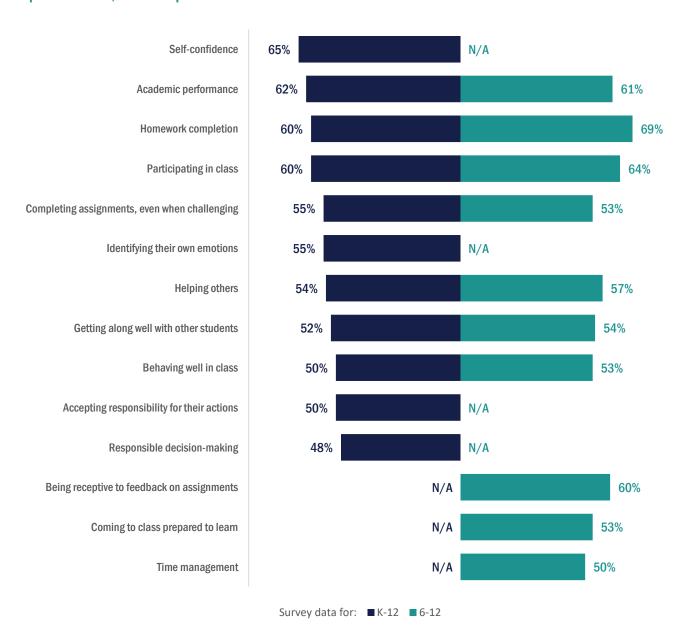


Table 31: Teacher-Reported Improvements by Attendance Gradation – K-12 Survey – 2021-2022

Percentage of participants attending 30+ and 60+ days (and identified as needing to improve by their teachers) who improved school-related behaviors

	2021	-2022
K-12 Survey	>=30 Days	>=60 Days
Participating in class	58%	60%
Getting along well with other students	51%	52%
Behaving well in class	48%	50%
Academic performance	61%	62%
Helping others	52%	54%
Completing assignments, even when challenging	54%	55%
Responsible decision-making	46%	48%
Self-confidence	63%	65%
Accepting responsibility for their actions	48%	50%
Identifying their own emotions	53%	55%
Homework completion	58%	60%

Table 32: Teacher-Reported Improvements by Attendance Gradation – 6-12 Survey – 2021-2022

Percentage of participants attending 30+ and 60+ days (and identified as needing to improve by their teachers) who improved school-related behaviors

	2021	-2022
6-12 Survey	>=30 Days	>=60 Days
Participating in class	53%	64%
Getting along well with other students	47%	54%
Behaving well in class	46%	53%
Academic performance	54%	61%
Helping others	46%	57%
Completing assignments, even when challenging	48%	53%
Responsible decision-making	42%	50%
Coming to class prepared to learn	45%	53%
Being receptive to feedback on assignments	50%	60%
Time management	42%	50%
Homework completion	60%	69%

School Day Attendance by 21st CCLC Participation

To examine the relationship between 21st CCLC participation and school day attendance, a subset of participants was examined. IDOE successfully matched school day attendance data with 14,379 (92%) of the 15,565 K-12 students who attended 21st CCLC programming during the school year. This subset was further filtered to include only participants with minimum enrollment periods of 162 days, which is consistent with IDOE accountability (see Appendix B for methodology). In 2022, school day attendance data were available for 12,763 K-12 participants attending at least one day in the 21st CCLC program during the school year.

SCHOOL DAY ATTENDANCE

There was a significant relationship between afterschool attendance frequency and school day attendance for grades K-12 (p < .001). The effect was small, with afterschool attendance frequency explaining approximately 4% of the variance in school day attendance. Post-hoc comparisons revealed that students attending 90+ days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001), 30-59 days (p < .001), and 60-89 days (p < .001). Students attending 60-89 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001) and 30-59 days (p = .007). Students attending 30-59 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001). Effects were small.

For K-5 students, there was a significant relationship between afterschool attendance frequency and school day attendance (p < .001). The effect was small, with afterschool attendance level explaining approximately 3% of the variance in school day attendance for K-5 students. Post-hoc comparisons revealed that students attending 90+ days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001), 30-59 days (p < .001), and 60-89 days (p < .001). Students attending 60-89 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001). Students attending 30-59 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p = .008). Effects were small.

For students in grades 6-8, there was a significant relationship between afterschool attendance frequency and school day attendance (p < .001). The effect was small, with afterschool attendance level explaining approximately 3% of the variance in school day attendance for 6-8 students. Post-hoc comparisons revealed that students attending 90+ days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001) and 30-59 days (p < .001). Students attending 60-89 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001) and 30-59 days (p = .007). Students attending 30-59 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p = .01). Effects were small. Detailed analyses are described in Appendix B.

Figure 49: Participant Attendance Gradations by School Day Attendance Rate - 2021-2022

For all grade levels, 21st CCLC participants attending 21st CCLC programs more frequently had significantly higher levels of school day attendance in 2021-2022 compared to participants who attended less.

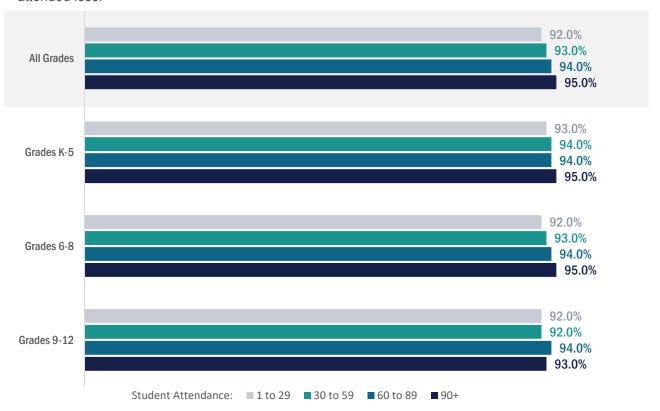


Table 33: Participant Attendance Gradations by School Day Attendance Rate – 2021-2022

School day attendance rate for 21st CCLC participants by attendance gradations

2021-2022	1-29 days		30-59	30-59 days		60-89 days		90+ days	
2021-2022	n	mean	n	mean	n	mean	n	mean	
All Grades ^a	4546	92%	2291	93%	1673	94%	4253	95%	
K-5 ^a	2437	93%	1460	94%	1152	94%	3750	95%	
6-8ª	1744	92%	635	93%	360	94%	470	95%	
9-12	365	92%	196	92%	161	94%	53	93%	

^a Statistically significant.

School Discipline by 21st **CCLC Participation**

To examine the relationship between 21st CCLC participation and school behavior, a subset of participants was examined. IDOE successfully matched school behavior data with 14,818 (93%) of the 15,917 K-12 students who attended 21st CCLC programming during the school year. Data were available for in-school and out-of-school suspensions.

IN-SCHOOL SUSPENSION

When examining all grade levels, there was a significant association between afterschool attendance and in-school suspensions (p < .001). Specifically, students attending 90 or more days were less likely to be suspended compared to students who attended less frequently. Detailed analyses are described in Appendix B.

Figure 50: Participant Attendance Gradations by In-School Suspension Rate – 2021-2022



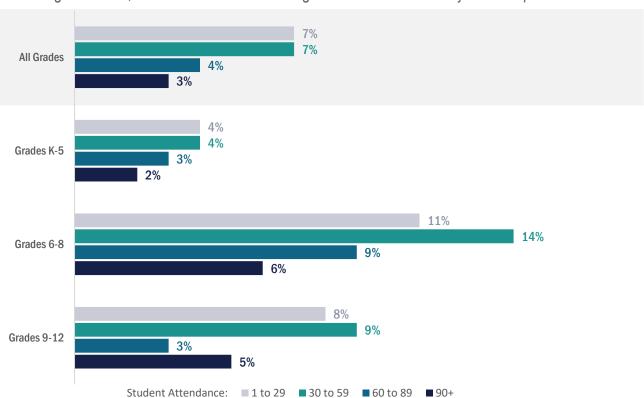


Table 34: Student Attendance Gradations by In-School Suspension Rate – 2021-2022

Behavior: Percentage of 21st CCLC participants receiving at least one in-school suspension

2021-2022	1-29 da	1-29 days		30-59 days		lays	90+ days	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	358/5086	7%	184/2566	7%	81/1854	4%	135/4754	3%
K-5 ^a	111/2796	4%	73/1675	4%	40/1295	3%	100/4136	2%
6-8 a	213/1879	11%	92/679	14%	35/381	9%	31/542	6%
9-12	34/411	8%	19/212	9%	6/178	3%	4/76	5%

^a Statistically significant association.

OUT-OF-SCHOOL SUSPENSION

When examining all grade levels, there was a significant association between afterschool attendance and out-of-school suspensions (p < .001). Specifically, students attending 60 or more days were less likely to be suspended compared to students who attended less frequently. Detailed analyses are described in Appendix B.

Figure 51: Participant Attendance Gradations by Out-of-School Suspension Rate – 2021-2022

21st CCLC participants attending at higher levels were less likely to receive an out-of-school suspension in 2022 compared to participants attending less frequently for all grade levels.

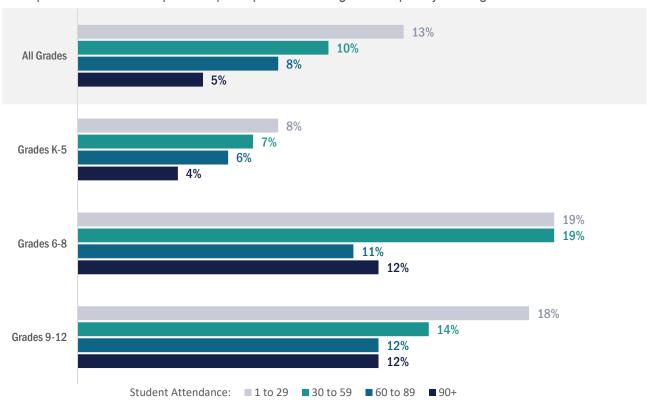


Table 35: Student Attendance Gradations by Out-of-School Suspension Rate – 2021-2022

Behavior: Percentage of 21st CCLC participants receiving at least one out- of-school suspension

2021-2022	1-29 days		30-59 days		60-89 days		90+ days	
	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	645/5086	13%	267/2566	10%	139/1854	8%	230/4754	5%
K-5 ^a	223/2796	8%	110/1675	7%	76/1295	6%	156/4136	4%
6-8 a	350/1879	19%	127/679	19%	42/381	11%	65/542	12%
9-12	72/411	18%	30/212	14%	21/178	12%	9/76	12%

^a Statistically significant association.

Descriptive Analysis: Behavior and 21st CCLC Participant Subgroups

School Day Attendance by Multi-Year 21st CCLC Participation

Analyses were conducted to examine the relationship between multiple years of participation in 21st CCLC and school day attendance. The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was then linked with participants' school day attendance data from 2021-2022 and disaggregated by the number of years (zero years, one year, two years, three years, or four years) students attended 60 or more days. Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis (see Appendix B for school day attendance methodology). Note: students who did not attend 60 days during any year = zero years.

Multi-year Analysis - School Day Attendance Rate: Grades 3-8

For 3-8 students, there was a significant relationship between years of regular attendance and school day attendance (p < .001). The effect was medium, with years of regular attendance explaining approximately 6% of the variance in school day attendance for 3-8 students. Post-hoc comparisons revealed that students who had never attended regularly attended a significantly lower percentage of days enrolled compared to students attending regularly for one year (p < .001), two years (p < .001), three years (p < .001). Additionally, students attending regularly for four years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001), two years (p < .001), and three years (p = .001). Students attending regularly for one year (p < .001). Students attending regularly for two years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001). Students attending regularly for two years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001).

Figure 52: Multi-year Attendance (Grades 3-8) by School Day Attendance Rate – 2021-2022

On average, 21st CCLC participants attending **60+ days** during multiple years had the highest school day attendance rates.

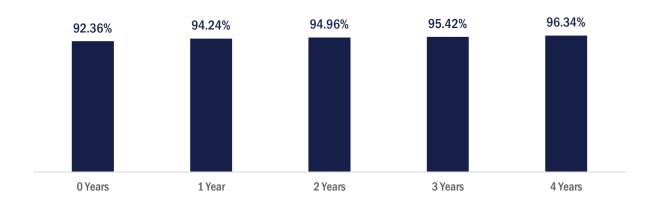


Table 36: Multi-year 60+ Days Participation (Grades 3-8) by School Day Attendance Rate – 2021-2022

School Day Attendance: 21st CCLC participants attending 60+ days across multiple years by school day attendance rate

Grades 3 to 8 Years Attending 60+ days												
2021-2022	0 Y	'ears	1	Year	2١	ears/	3 Y	'ears	4 \	ears/		
	n	mean	n	mean	n	mean	n	mean	n	mean		
Attendance Rate ^a	4334	92.36%	2260	94.24%	934	94.96%	608	95.42%	410	96.34%		

^a Statistically significant.

^{*}See Appendix B for a detailed description of results.

Multi-year Analysis - School Day Attendance Rate: Grades 9-12

For 9-12 students, there was a significant relationship between years of regular attendance and school day attendance, *Welch's F*(2, 186.23) = 4.37, p = .01, $\omega^2 = .01$. The effect was small, with years of regular attendance explaining approximately 1% of the variance in school day attendance for 9-12 students. Posthoc comparisons revealed that students who had never attended regularly (M = 92.01) attended a significantly lower percentage of days enrolled compared to students attending regularly for one year (M = 93.60, p = .03, d = .19).

Figure 53: Multi-year Attendance (Grades 9-12) by School Day Attendance Rate – 2021-2022

Students in grades 9-12 who never attended regularly had the lowest attendance rate.

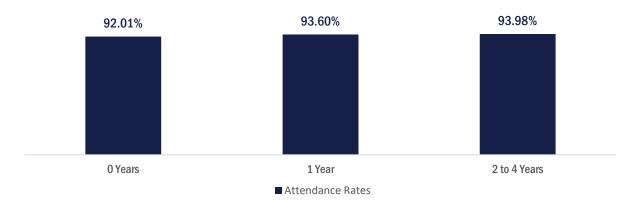


Table 37: Multi-year 60+ Days (Grades 9-12) by School Day Attendance Rate – 2021-2022

School Day Attendance: 21st CCLC participants attending 60+ days across multiple years by school day attendance rate

	Grades 9 to 12 Years Attending 60+ days						
2021-2022	0 Years		1	1 Year		4 Years	
2021-2022	n	mean	n	mean	n	mean	
School Day Attendance Rate ^a	501	92.01%	218	93.60	68	93.98	

^a Statistically significant.

^{*}See Appendix B for a detailed description of results.

School Discipline by Multi-Year 21st **CCLC Participation**

Multi-year attendance was linked with participants' school disciplinary data and disaggregated by the number of years (zero years, one year, two years, three years, or four years) they attended 60 or more days. Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis. Note: Students who did not attend 60 days during any year = zero years.

IN-SCHOOL SUSPENSION RATE MULTI-YEAR ANALYSIS: GRADES 3-8

When examining grade levels 3-8, there was a significant association between multi-year regular attendance and in-school suspensions (p < .001). This relationship was driven by students attending 60 or more days for three or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grade levels 3-5, there was a significant association between multi-year regular attendance and inschool suspensions (p = .02). This relationship was driven by students attending 60 or more days for three or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grade levels 6-8, there was a significant association between multi-year regular attendance and inschool suspensions (p < .001). This relationship was driven by students attending 60 or more days for one, two, or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently. Detailed results are described in Appendix B.

Figure 54: Years Attended by In-School Suspension Rate – 2021-2022

For grades 3-8, 21st CCLC participants attending **60 or more days** for **3 years** or **4 years** were less likely to receive an in-school suspension compared to those attending 60 or more days in fewer years.

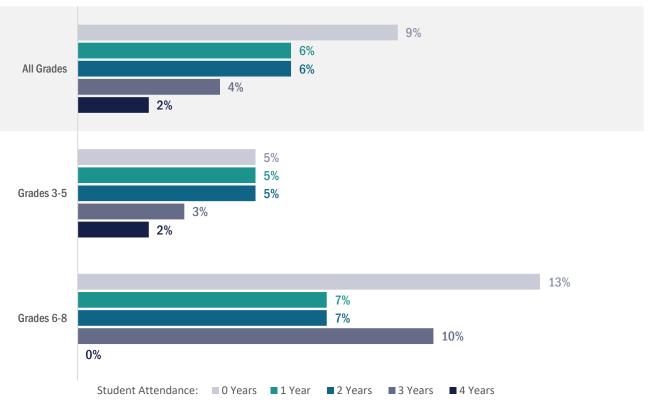


Table 38: Multi-year 60+ Days Participation (Grades 3-8) by In-School Suspension Rate – 2021-2022

In-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate

2021-2022	0 Years		1 Year		2 Years		3 Year	3 Years		ırs
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	444/4794	9%	140/2500	6%	57/1013	6%	28/664	4%	8/443	2%
3-5ª	121/2342	5%	78/1663	5%	36/728	5%	14/520	8%	8/378	2%
6-8ª	323/2452	13%	62/837	7%	21/285	7%	14/144	10%	0/65	0%

^a Statistically significant association.

In-School Suspension Rate Multi-year analysis: Grades 9-12

When examining grade levels 9-12, no significant relationships were observed; however, when viewed descriptively, students who attended during multiple years were less likely to receive an in-school suspension.

Figure 55: Multi-Year Attendance (Grades 9-12) by In-School Suspension Rate – 2021-2022

Participants attending **60 or more days** for **1 year** or **2-4 years** were less likely to receive an inschool suspension compared to participants who never attended regularly.



Table 39: Multi-Year 60+ Days (Grades 9-12) by In-School Suspension Rate – 2021-2022

In-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate

	Grades 9-12 Years Attending 60+ days						
2021-2022	0 Years		1 Year		2 to 4 Years		
2021-2022	n/N	%	n/N	%	n/N	%	
In-School Suspension Rate	46/556	8%	14/258	5%	5/77	6%	

OUT-OF-SCHOOL SUSPENSION RATE MULTI-YEAR ANALYSIS: GRADES 3-8

When examining grade levels 3-8, there was a significant association between multi-year regular attendance and out-of-school suspensions (p < .001). This relationship was driven by students attending 60 or more days for one year, two years, three years, or four years. Specifically, these students were less likely to be suspended compared to students who never attended 60+ days.

For grades 3-5, there was a significant association between multi-year regular attendance and out-of-school suspensions (p = .002). This relationship was driven by students attending 60 or more days for four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grades 6-8, there was a significant association between multi-year regular attendance and out-of-school suspensions (p < .001). This association was driven by students attending 60 or more days for one year and four years. Specifically, these students were less likely to be suspended compared to students who never attended regularly.

Figure 56: Years Attended by Out-of-School Suspension Rate – 2021-2022

For grades 3-8, participants attending **60 or more days** for **4 years, 3 Years, 2 Years,** and **1 Year** were less likely to receive an out-of-school suspension compared to those who never attended 60+ days.

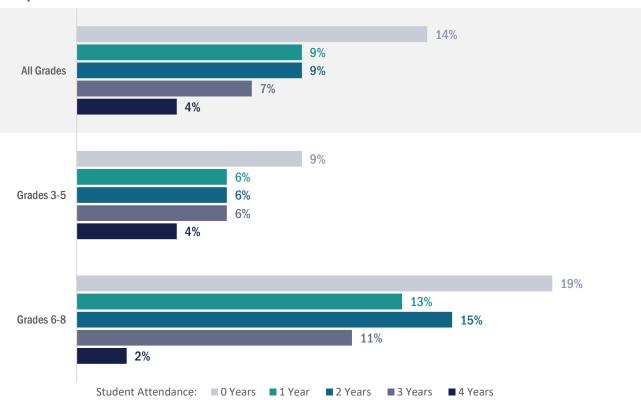


Table 40: Multi-Year 60+ Days Participation (Grades 3-8) by Out-of-School Suspension Rate – 2021-2022

Out-of-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate

2021-2022	0 Years		1 Year		2 Years		3 Years		4 Years	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades ^a	674/4794	14%	216/2500	9%	88/1013	9%	46/664	7%	16/443	4%
3-5ª	201/2342	9%	107/1663	6%	45/728	6%	30/520	6%	15/378	4%
6-8ª	473/2452	19%	109/837	13%	43/285	15%	16/144	11%	1/65	2%

^a Statistically significant.

OUT-OF-SCHOOL SUSPENSION RATE MULTI-YEAR ANALYSIS: GRADES 9-12

When examining grade levels 9-12, there was a significant association between multi-year regular attendance and out-of-school suspensions (p = .05). The association was driven by students attending 60 or more days during two or more years. Specifically, these students were less likely to be suspended compared to students who never attended regularly.

Figure 57: Multi-year Attendance (Grade 12) by Out-of-School Suspension Rate – 2021-2022

Students attending **regularly** for **2-4 years** were the least likely to receive an out-of-school suspension.

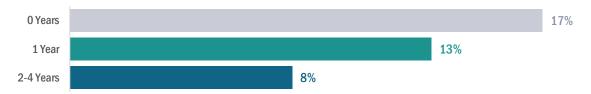


Table 41: Multi-year 60+ Days (Grades 9-12) by Out-of-School Suspension Rate – 2021-2022

Out-of-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate.

	Grades 9-12 Years Attending 60+ days						
2021-2022	0 Ye	ars	1 Year		2 to 4 Years		
2021-2022	n/N	%	n/N	%	n/N	%	
Out-of-School Suspension Rate ^a	96/556	17%	34/258	13%	6/77	8%	

^a Statistically significant.



Matched-Groups Analysis: Academic Performance and 21st CCLC Participation

Matched-Groups Analysis and Academic Performance

A series of analyses were completed to examine the impact of 21st CCLC participation on selected English/language arts (ELA) and math outcomes. Specifically, ILEARN data were utilized to examine academic achievement in English/language arts and math. The assessments were administered in the spring of 2022. ILEARN proficiency and growth (based on student growth percentile (SGP) and ILEARN growth targets) were reported. All data were provided by IDOE.

To control for potential differences between groups, propensity score matching was used to identify treatment students (i.e., students attending with high frequency) and comparison groups (students attending less frequently) that were balanced on key demographics, including prior academic performance. Specifically, the following matched groups were created for the analyses: (a) >=30 days attendance compared to <30 days attendance; (b) >=60 days compared to <60 days; and (c) >=90 days compared to <90 days. Because prior ILEARN performance was utilized as a matching variable, only students in grades 4 to 8 were included in the analysis.

It should be noted that while propensity score matching was used to create comparison groups that were similar to the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study. The analyses may be limited by the existence of variables that predict student attendance or academic performance but were not available to the evaluation team. These analyses should be interpreted as only preliminary evidence of program impacts (Naftzger et al., 2016; Somers et al., 2013). A detailed description of methodology is provided in Appendix B.

Overall sample size was determined by the number of students in both the treatment and comparison groups who could be successfully matched (i.e., were similar). Because there were fewer students who attended 90 or more days, there were smaller matched groups for these analyses. A summary of the matched groups created for these analyses is included in the table that follows.

Table 42: Sample Size for Matched Groups: Academics – 2021-2022

2021-2022	30 Day Attenda	nce Threshold	60 Day Attenda	ance Threshold	90 Day Attendance Threshold		
2021-2022	>= 30	< 30	>= 60	< 60	>= 90	< 90	
Academics ^a	1841	1841	1567	1567	1317	1317	

^a Students in grades 4-8 were included in the academic matched-groups analyses.

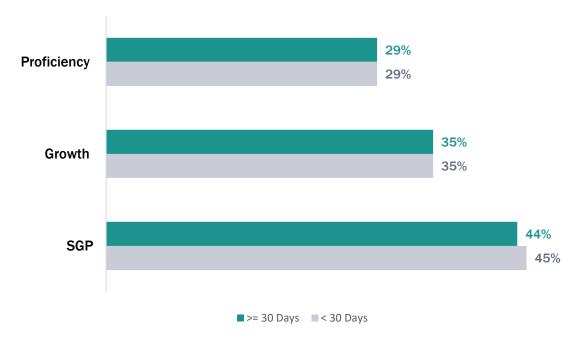
Propensity score matching was used to identify two groups of students: (1) students attending for 30 or more days and (2) students attending fewer than 30 days. These groups were balanced on key demographics, including prior academic performance. See Appendix B for detailed analyses.

ENGLISH/LANGUAGE ARTS

Both groups met ILEARN ELA growth targets, earned student growth percentile (SGP) greater than or equal to 50 (Indiana's 21st CCLC federal reporting target), and scored at or above proficiency at similar rates.

Figure 58: 30-Day Matched Groups for ILEARN ELA - 2021-2022

Both groups passed the ILEARN Assessment and demonstrated growth at similar rates. No significant differences were observed.

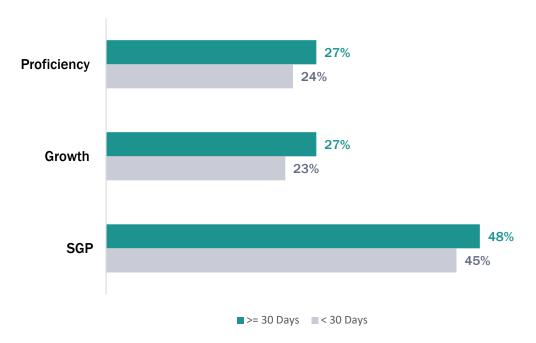


MATH

Students who attended for 30 or more days were statistically significantly more likely to meet their ILEARN math growth target (p = .02) and earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) (p = .04), compared to students who attended less frequently.

Figure 59: 30-Day Matched Groups for ILEARN Math – 2021-2022

Students who attended for **30 or more days** were statistically significantly more likely to meet their growth target and earn an SGP greater than or equal to 50, compared to students who attended less **than 30 days**.



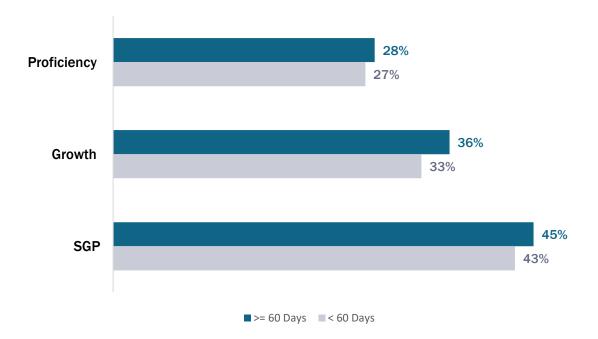
Propensity score matching was used to identify two groups of students: (1) students attending for 60 days or more and (2) students attending fewer than 60 days. As with the 30-day matched groups, these groups were balanced on key demographics, including prior academic performance. See Appendix B for detailed analyses.

ENGLISH/LANGUAGE ARTS

Students who attended for 60 or more days were more likely to meet their ILEARN ELA growth targets, earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target), and score at or above proficiency. However, these differences were not statistically significant.

Figure 60: 60-Day Matched Groups for ILEARN ELA – 2021-2022

Students who attended for **60 or more days** were more likely to meet their growth targets, earn an SGP greater than or equal to 50, and score at or above proficiency. However, these differences were not statistically significant.

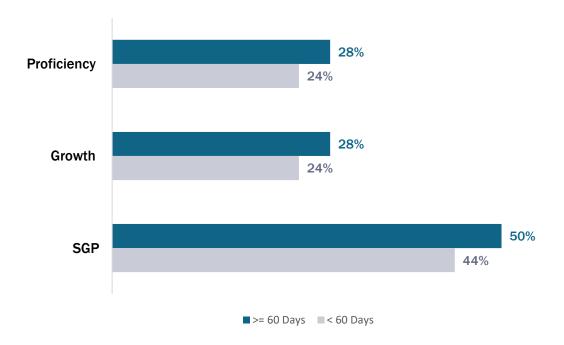


MATH

Students who attended for 60 or more days were statistically significantly more likely to meet their ILEARN math growth targets (p = .01) and earn an SGP greater than or equal to 50 (Indiana's 21^{st} CCLC federal reporting target) (p = .001).

Figure 61: 60-Day Matched Groups for ILEARN Math – 2021-2022

Students who attended for **60 or more days** were significantly more likely to meet their growth targets and earn an SGP greater than or equal to 50.



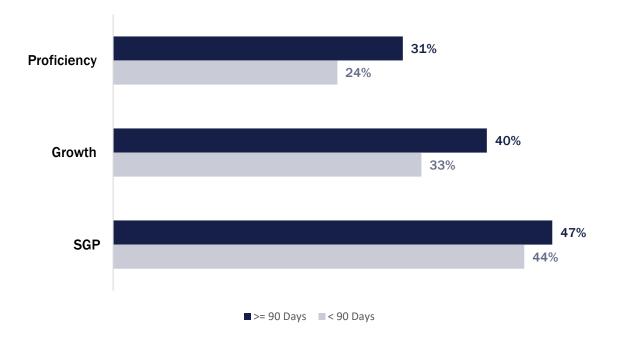
Propensity score matching was used to identify two groups of students: (1) students attending for 90 days or more and (2) students attending fewer than 90 days. Like the 30-day and 60-day matched groups, these groups were balanced on key demographics, including prior academic performance. See Appendix B for detailed analyses.

ENGLISH/LANGUAGE ARTS

Students who attended 90 or more days were more likely to meet their ILEARN ELA growth targets, earn an SGP greater than or equal to 50 (Indiana's 21^{st} CCLC federal reporting target), and score at or above proficiency. A significant difference was observed between groups for growth targets (p < .001) and proficiency (p < .001).

Figure 62: 90-Day Matched Groups for ILEARN ELA – 2021-2022

Students who attended for **90 or more days** were more likely to meet their growth targets, earn an SGP greater than or equal to 50, and score at or above proficiency. Significant differences were observed for growth target and proficiency.

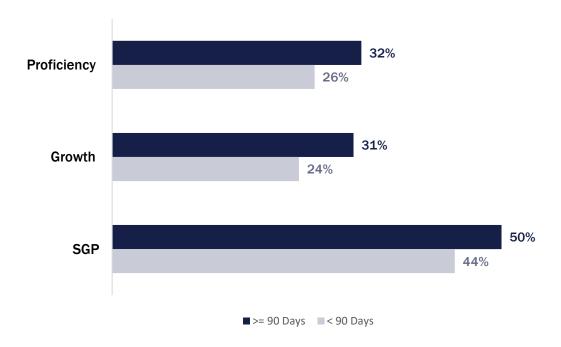


MATH

Students who attended for 90 or more days were statistically significantly more likely to meet their ILEARN math growth targets (p < .001), earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) (p = .002), and score at or above proficiency (p = .001).

Figure 63: 90-Day Matched Groups for ILEARN Math – 2021-2022

Students who attended for **90 or more days** were significantly more likely to meet their growth targets, earn an SGP greater than or equal to 50, and score at or above proficiency.



Matched-Groups Analysis: Discipline and **21**st CCLC Participation

Matched-Groups Analysis and Discipline

A series of analyses to examine the impact of 21st CCLC participation on selected in-school suspension (ISS) and out-of-school suspension (OSS) indicators were conducted. The numbers of ISS and OSS suspensions received for each participant were provided by IDOE. Based on these data, students who received an ISS or OSS were flagged. Analyses examined associations between participation levels and suspensions.

To control for potential differences between groups, propensity score matching was used to identify treatment students (i.e., students attending with high frequency) and comparison groups (students attending less frequently) that were balanced on key demographics (including prior year disciplinary data). Specifically, the following matched groups were created for the analyses: (a) >=30 days attendance compared to <30 days attendance; (b) >=60 days compared to <60 days; and (c) >=90 days compared to <90 days. Because prior year suspensions were utilized as a matching variable, students in grades 1 to 12 were included in the analysis.

It should be noted that while propensity score matching was used to create comparison groups that were similar to the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study. The analyses may be limited by the existence of variables that predict student attendance or academic performance but were not available to the evaluation team. These analyses should be interpreted as only preliminary evidence of program impacts (Naftzger et al., 2016; Somers et al., 2013). A detailed description of methodology is provided in Appendix B.

Sample size was determined by the number of students in both the treatment and comparison groups who could be successfully matched (i.e., were similar). A summary of the matched groups created for these analyses is included in the table that follows.

Table 43: Sample Size for Matched Groups: Discipline – 2021-2022

2021-2022	30 Day Attend	ance Threshold	60 Day Attend	ance Threshold	90 Day Attendance Threshold		
2021-2022	>= 30	< 30	>= 60	< 60	>= 90	< 90	
Discipline	3220	3220	3268	3268	2974	2974	

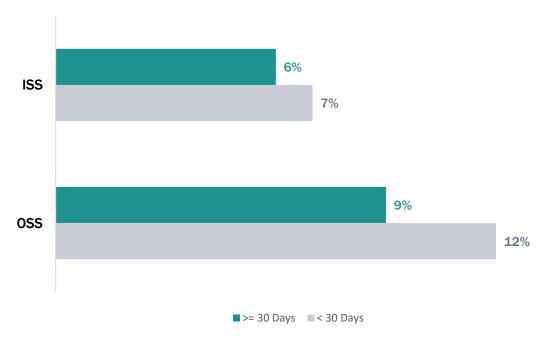
 $^{^{\}rm a}$ Students in grades 1-12 were included in the disciplinary matched-groups analyses.

Propensity score matching was used to identify two groups of participants: (1) students attending for 30 days or more and (2) students attending fewer than 30 days. These groups were balanced on key demographics and prior year discipline. See Appendix B for detailed analyses.

Students who attended for 30 or more days were significantly less likely to receive out-of-school suspensions (p < .001) compared to those who attended less frequently.

Figure 64: 30-Day Matched Groups for ISS and OSS – 2021-2022

Students who attended for **30 or more days** were less likely to receive in-school and out-of-school suspensions compared to those who attended less frequently. A significant difference was observed for out-of-school suspensions.

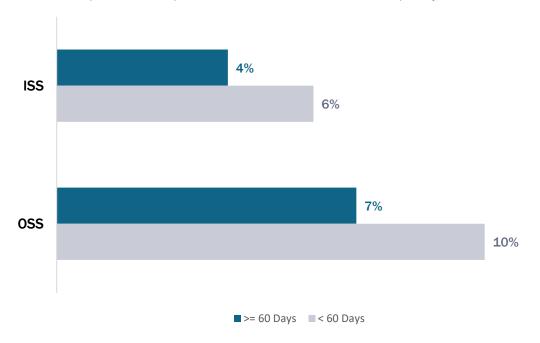


Propensity score matching was used to identify two groups of participants: (1) students attending for 60 days or more and (2) students attending fewer than 60 days. As with the 30-day matched groups, these groups were balanced on key demographics and prior year discipline. See Appendix B for detailed analyses.

Students who attended for 60 or more days were less likely to receive in-school (p = .001) and out-of-school suspensions (p < .001) compared to those who attended less frequently.

Figure 65: 60-Day Matched Groups for ISS and OSS - 2021-2022

Students who attended for **60 or more days** were significantly less likely to receive in-school and out-of-school suspensions compared to those who attended less frequently.

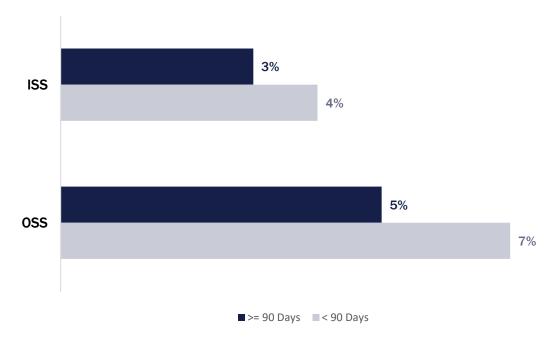


Propensity score matching was used to identify two groups of students: (1) students attending for 90 days or more and (2) students attending fewer than 90 days. Like the 30-day and 60-day matched groups, these groups were balanced on key demographics and prior year discipline. See Appendix B for detailed analyses.

Students who attended for 90 or more days were less likely to receive in-school and out-of-school suspensions compared to those who attended less frequently. Significant differences were observed for out-of-school suspensions (p = .002).

Figure 66: 90-Day Matched Groups for ISS and OSS - 2021-2022

Students who attended for **90 or more days** were less likely to receive in-school and out-of-school suspensions compared to those who attended less frequently. A significant difference was observed for out-of-school suspensions.





Summary of Indiana 21st CCLC Performance Measures

Summary of Indiana 21st CCLC Performance Measures

Beginning in 2019, Indiana's Performance Measurement Framework was revised to include a focus on Academic, Social/Behavioral, and Family Engagement outcomes. Specifically, each site is required to track and report on four to six Academic measures, two to four Social/Behavioral measures, and two Family Engagement measures. Within Academics, all sites are required to track English/language arts and math report card grades. Site-level results are reported in the Executive Summary of the yearly local evaluation reports required for each 21st CCLC grantee.

In fall 2022, 172 sites provided an Executive Summary detailing progress toward performance measures to the Indiana Department of Education (IDOE). For the 2021-2022 grant year, 36% of sites (n = 62) were unable to report on one or more measures due to various data limitations. Data were compiled and analyzed by the state evaluation team. Key findings are reported in the following sections.

Sites Reporting

Of the sites reporting performance measures, 66% served students in elementary school only, 15% served middle school only, and 5% served high school only (see Figure 67). The remaining 13% provided services to students of mixed grade-level groups: K-12 (3%), K-8 (6%), and middle and high school (3%).

Sites providing executive summaries evenly split between Cohort 10 (55%) or Cohort 9 (45%).

Over half (57%) of sites met their targets for regularly attending participants (RAPs). To be a regularly attending participant in 2021-2022, students must attend at least 45 days of school year programming.

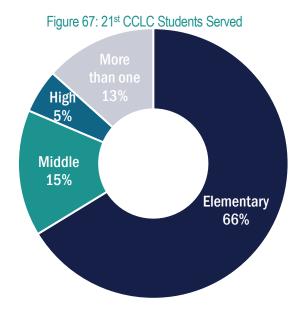
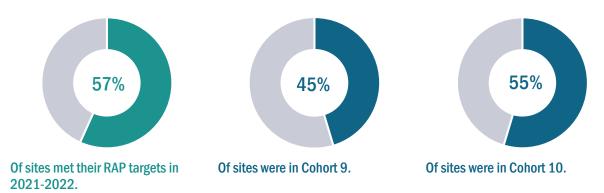


Figure 68: 21st CCLC Site Characteristics



Performance Measures Met

As noted above, each 21st CCLC site sets unique performance measures and targets for Academic, Social/Behavioral, and Family Engagement categories. As a result, this section aggregates all performance measures and provides an overview of the total number met.

ACADEMIC PERFORMANCE MEASURES

Four to six Academic performance measures were required for each site, and each site created unique measures with support from their local evaluator. Example measures included the percentage of students earning a B or higher or increasing their English/language arts grade from fall to spring and the percentage of students improving academic performance, as reported by classroom teachers. Data sources utilized by sites included, but were not limited to, report card grades, standardized test scores/proficiency, and the IDOE Teacher Survey.

- Across all sites, 75% of Academic performance measures were met (534/714).
- ❖ Within the Academic performance measures, all sites were required to include English/language arts and math grade measures. Across all sites, 75% of English/language arts grade measures (146/194) and 78% of math grade measures (151/193) were met.

SOCIAL/BEHAVIORAL PERFORMANCE MEASURES

Two to four Social/Behavioral performance measures were required for each site, and each site was given the opportunity to create unique measures. Example measures included the percentage of students reporting increased optimism about their school day and the percentage of students improving classroom behavior, as reported by classroom teachers. Data sources utilized by sites included, but were not limited to, the IDOE Teacher Survey, student surveys, afterschool staff surveys, and parent surveys.

• Of the 427 Social/Behavioral performance measures set by sites, 77% (330/427) were met.

FAMILY ENGAGEMENT

Two Family Engagement performance measures were required for each site, and unique measures were created by each site. Example measures included the percentage of parents attending school-sponsored family sessions and the percentage of parents reporting an increase in time spent reading with their child.

Data sources utilized by sites included, but were not limited to, afterschool staff surveys, parent surveys, and family event attendance.

Across all sites, 93% of all Family Engagement performance measures (280/302) were met.

Figure 69: Performance Measures Met Across All Sites



Figure 70: Percent of Performance Measures Met by Site Type

	# of Sites	Academic	Social/Behavioral	Family Engagement
Elementary School	114	78%	79%	93%
Middle School	26	73%	73%	92%
High School	9	50%	81%	100%
More than one	23	69%	72 %	90%
Cohort 9	78	81%	82%	93%
Cohort 10	94	70%	74%	93%
Not Met RAPTarget	74	72%	79%	91%
Met RAP Target	97	77%	76%	94%



Case Studies



Literacy Programming Case Study

2021-2022



Overview

Virtual interviews were conducted with three 21st CCLC afterschool grantees with a literacy programming focus: Boys and Girls Club of Wayne County, Cloverdale Community Schools, and YMCA of Muncie. Questions related to literacy programming were developed for the case studies. Unique aspects of literacy programming, types of cirricula used, program design, staffing, and school-day linkages were discussed.



Successes & Student Growth

Across all literacy programs, successes related to improved reading scores, greater confidence when reading, and general increases in excitement to participate in reading activities/reading tutoring were noted by those interviewed.

Programs reported tracking student growth both formally and informally using a variety of tools, strategies, and assessments:

- o I-Ready
- o I-READ
- o ILEARN
- o IXL
- Assessed Reading Levels BOY/ MOY/ EOY (Accelerated Reader AR)
- o Talking with school day teachers and tutors
- Checking grades
- Talking with parents and families

Program Design Strategies

Programs reported using a variety of methods to develop/plan literacy activities.



The Boys & Girls Club of Wayne County tests students' reading levels at the beginning of the year and tests again after students have attended 30 literacy activities.

Cloverdale Community Schools monitors I-Ready scores, along with feedback from parents and school day teachers to help identify areas where students need support.

The YMCA of Muncie collects feedback from parents, school day teachers, and reading volunteers to identify students who have shown improvement. Test scores and reading assessments from the previous year are also used as a baseline for gauging improvement as students progress through the program.



All programs provide students with access to classroom libraries or electronic databases of books (e.g., EPIC, MyON) to utilize while in the program. Further, all programs allow students to borrow or exchange books, receive free books, or purchase books from the school's book fair, ensuring students have access to reading materials at school and at home.

At some programs, specific curricula were used daily (LIT ART, I-Ready) and in others, staff members were given the opportunity to plan activities based on the needs and interests of their students. Students typically participated in designated literacy activities a minimum of two days a week; however, literacy skills and components were built into the majority of afterschool offerings.



INSTRUCTIONAL PRACTICES: All programs offer one-on-one reading support, homework help, or tutoring with an adult. The specific qualifications of the reading support/tutoring staff varied across programs and included community volunteers, library staff, and/or school day teachers.

Students also have opportunities for independent and paired reading (e.g., buddy reading/reading lab) during the program. During independent reading, students were given the choice to select reading materials.

For programs who utilized a specific curriculum, all students typically read the same story or book and then completed a series of lessons or activities. These are staff-led and follow along a predetermined set of instructions from the curriculum guide.



STAFFING: Across each of the participating programs, staff member characteristics varied. Programs often sought out participation from school day teachers but varied in access to teachers and success recruiting them. Programs that have difficulty recruiting school day teachers to participate in afterschool programs have relied on community organizations, college students, and volunteers to staff programs. 21st CCLC programs utilized a variety of staff to support literacy programming.

- School day teachers were typically utilized as tutoring staff.
- College students provided literacy lessons to participants as student teachers and classroom assistants.
- Public library staff oversaw reading activities or checking out books from library.
- Education coordinators/site coordinators planned programming.
- Community Organizations (e.g., United Way) provided volunteers for reading support.



SCHOOL DAY LINKAGES: Linkages with the school day varied across participating programs. All programs reported utilizing state standards and learning goals, and most programs utilized the same assessments and online educational programs used by the schools during the regular school day (e.g., IXL, EPIC, MyON, Accelerated Reader, I-Ready).

Programs that were school-based reported having an easier time of communicating with school day teachers or school personnel. For community-based organizations, employing school day staff as afterschool support can fulfill a valuable liaison role between the program and the school. Moreover, providing roles for school administration to support program decision making was also noted as a strength. Finally, being intentional about scheduling times to communication with school staff was critical for community-based organizations.

Grantee Spotlight

When hiring, <u>The Boys & Girls Club of Wayne</u>
<u>County</u> seeks out teachers/staff from the schools that participants attend.

<u>Cloverdale Community Schools</u> uses school day teachers to staff all afterschool positions. Theses staff are knowledgeable about all aspects of the curriculum and have to access to grades, classroom textbooks, and assignments.

At <u>The YMCA of Muncie</u>, the program director has monthly meetings with the school's principal. They use this time to connect about specific students or concerns. The director also meets bimonthly with the education director for Muncie Community Schools who leads curriculum and instruction for all local schools.

"As a separate organization, it can be a challenge to communicate with our schools, so having a tutor who is also a school day teacher serves as our link to our club member's school. We also have superintendents from each school who serve on our [Board of Directors]. This is helpful when collaborating with our schools on big-picture types of projects and programming."



Best Practices & Lessons Learned

Participating programs highlighted a variety of best practices that should be considered when planning and implementing literacy in afterschool programs.

USING AFTERSCHOOL PROGRAMS TO SUPPORT A LIFELONG LOVE OF READING: "Reading should never feel like a punishment for students, help students find something that they are interested in (maybe a magazine or a comic book)."

BUILDING LITERACY INTO ALL AFTERSCHOOL ACTIVITIES: "Literacy components can be incorporated into all enrichment and afterschool activities (opportunities for students to read, learn new vocabulary words, write, and share or speak about their perspective or experience) can occur in STEM, History, Cooking, Art."

PROVIDING SUFFICIENT PLANNING TIME & ADEQUATE RESOURCES FOR STAFF: "Ensure classroom staff have time away from programming to plan literacy activities, and that they have the necessary budget for supplies and games."

PARTNERING WITH THE COMMUNITY TO SUPPORT LITERACY: "Public library staff and community organizations such as the United Way can be a resource for supporting literacy programming afterschool."

INVOLVING FAMILY IN LITERACY: "Literacy nights are a great way to involve family members in reading activities."

ALIGNING ACTIVITIES WITH WHAT STUDENTS ARE LEARNING: "Identify textbooks, curriculum, and assessments the school is using, and make sure your activities are supporting that school-day learning."



Boys and Girls Club of Wayne County

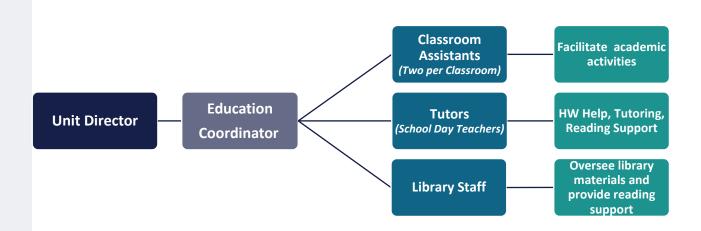
The Boys & Girls Club (BGC) of Wayne County served youth at three sites during the 2021-2022 school year. To keep youth voice and choice at the core of their program, afterschool staff refer to participants as "Club Members," and youth take part in "Open Programming," which means they can choose which rooms and activities they take part in each day.

With 21st CCLC funding, BGC of Wayne County has continued to focus on enhancing literacy-based program offerings for their students through the use of expanded library access (mini libraries), utilizing community library staff as afterschool literacy staff, offering tutoring and reading support, and incorporating electronic reading resources such as MyON for use at the program and at home.

BGC education coordinators are responsible for developing a monthly schedule of activities that is reviewed by the unit director. Unit staff provide feedback to the education coordinator related to incorporating literacy components into all activities (Cooking, Game Room, Physical Activities, STEM, Art).

Formal literacy activities are offered weekly; however, there are no restrictions on any student who wants to use the library or read independently. Participants reported that participants love having their own library in the program space.

"Our students love MyON. We like to describe MyON as Netflix for books. MyON has something for everyone, and [participants] can search for topics and interests based on what they want to read about. The kids love trying to come up with different combinations to see if they can stump MyON, like let's see if they have a book on earthworms in Africa."





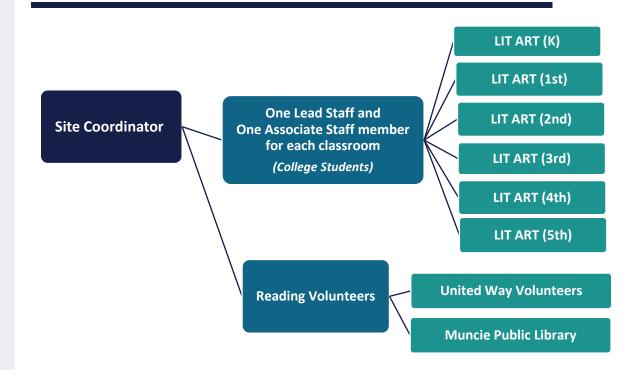
YMCA of Muncie at Grissom Gold

The YMCA of Muncie served students in grades K-5 at one site during the 2021-2022 school year. With the 21st CCLC funding, YMCA Muncie-Grissom Gold focuses on providing electronics-free, handson literacy activities. The site utilized the LIT ART curriculum. This curriculum provides specific activities that follow along with a selected book or story. Students read the book/story in their grade level groups, then complete activities that are related to the story (e.g., literacy, vocabulary, writing, SEL, physical activity, or art).

In addition to the activities built into the curriculum, the site provides one-on-one reading support each week. Volunteers are assigned to students and work with them on reading and literacy skills. Individual improvement and growth were noted for students who read weekly with the volunteers.

Collaboration and partnerships emerged as a key asset for the YMCA of Muncie. Specifically, Grissom Gold leverages community partnerships for staffing support and materials. Students from local universities and colleges prepare and deliver literacy-based lesson plans to the afterschool students, and the Delaware County Teacher Store provides free books to the afterschool program (donated by Scholastic).

"We have so many great community partnerships that have supported our literacy programming (United Way, Muncie Public Library, Ball State University, Ivy Tech Community College, and Delaware County Teacher Store)."





Cloverdale Community Schools

Cloverdale Community Schools provides 21st CCLC-funded afterschool programs in two sites: Cloverdale Elementary School and Cloverdale Middle School. The interview focused on literacy programming offered at the elementary school. Cloverdale Elementary served students in grades K-5 during the 2021-2022 school year. The elementary site focused their 21st CCLC funding to support literacy programming. The program demonstrates strong school day linkages, as all afterschool staff members are also school day teachers who are familiar with state standards as well as district curricula and individual classroom expectations.

Staff utilize the same educational assessments and online curriculum resources used during the school day during the afterschool program. Students complete online activities and lessons using IXL, I-Ready, EPIC, and Accelerated Reader computer programs. Specifically, students are required to complete IXL and/or I-Ready lessons at least twice a week. Cloverdale staff use these data and assessment scores to identify which students need additional support.

Afterschool staff also develop their own literacy activities and/or integrate literacy skills/concepts into other enrichment activities. Per the program director, "Literacy programming fits out-of-school time seamlessly. Kids may be working on a cooking lesson and don't realize they are using literacy skills. We try to incorporate literacy into everything we do."

The program also stresses the importance of reading and ensures all students have access to reading materials both at school and at home. Each student receives \$30 to purchase their own books from the school's book fair. Allowing the students to pick their own books lets them take ownership of their reading and gives them the opportunity to find something that is of interest to them.

"Within our program we approach literacy activities in a different way during the afterschool program. We give kids more choices on what they can read (EPIC), how they read (independently, small group, paired), and where they read (on the floor, in a chair, laying down)."





Appendix A: 21st CCLC Grantees

Table A1: 21st CCLC Grantees by County

	2021-2022
Grantee	Counties Served
Anderson Community School Corporation	Madison
AYS, Inc.	Marion
Ball State University	Delaware
Barbara B Jordan YMCA	Morgan
Bartholomew Consolidated School Corporation	Bartholomew
Bauer Family Resources	Tippecanoe
Bloomfield School District	Greene
Blue River Services, Inc.	Harrison, Washington
Boys & Girls Clubs of Adams County	Adams
Boys & Girls Clubs of Bloomington	Monroe
Boys & Girls Clubs of Elkhart	Elkhart
Boys & Girls Clubs of Fort Wayne	Allen
Boys & Girls Clubs of Harrison-Crawford Counties	Crawford, Harrison
Boys & Girls Clubs of Huntington County	Huntington
Boys & Girls Clubs of Indiana	LaPorte, Porter, Wells
Boys & Girls Clubs of Indianapolis	Marion
Boys & Girls Clubs of Lawrence County	Lawrence
Boys and Girls Clubs of St. Joseph County	St. Joseph
Boys and Girls Clubs of Wayne County	Wayne
Bremen Public Schools	Marshall
Burmese American Community Institute	Marion
Christel House Academy	Marion
City Life Center	Lake
Clinton Central School Corporation	Crawford
Cloverdale Community Schools Corporation	Putnam
Communities in Schools of Clark County	Clark
Crawfordsville Community School Corporation	Montgomery
Decatur County Family YMCA	Decatur
Edna Martin Christian Center	Marion
Elkhart Community Schools	Elkhart
Evansville Vanderburgh School Corporation	Vanderburgh
Family and Children First, Inc.	Floyd

	2021-2022
Grantee	Counties Served
Greencastle Community School Corporation	Putnam
Health and Science Innovations	Marion
Hobart Family YMCA	Lake
Hoosier Uplands	Lawrence, Martin, Orange, Washington
Indiana Alliance of Boys & Girls Clubs	Lake, Tipton
Indiana Council on Educating Students of Color	Marion
Indiana Math and Science Academy North	Marion
Indiana Parenting Institute Inc St Joseph County	St. Joseph
John H. Boner Community Center	Marion
Lafayette School Corporation	Tippecanoe
Lake Ridge Schools c/o Calumet New Tech HS	Lake
Martin Luther King Community Multi-Service Center	Marion
Medora Community Schools c/o Blue River Services	Jackson
Michigan City Area Schools/Safe Harbor	LaPorte
Monroe County Community School Corporation	Monroe
Mother Theodore Catholic Academies	Marion
MSD of Lawrence Township	Marion
MSD of Pike Township	Marion
MSD of Shakamak	Greene
MSD of Warren Township	Marion
Muncie Community Schools	Delaware
Muncie Public Library	Delaware
Near Eastside Innovation School Corporation	Marion
New Albany-Floyd County	Floyd
Perry Central Community School Corporation	Perry
Rising Sun-Ohio County Community School Corp.	Ohio
Scott County School District 1	Scott
Starke County Youth Club	Starke
Steuben County Literacy Coalition	LaGrange, Steuben
Switzerland County School Corporation	Switzerland
Tell City-Troy School Corp	Perry
The Center for Whitley County Youth	Whitley
Training Center Incorporated	Grant
Vigo County School Corporation	Vigo
Vincennes University	Allen
Wabash County YMCA	Wabash
YMCA of Greater Indianapolis	Marion
YMCA of Kokomo Indiana	Howard
YMCA of Southwestern Indiana	Vanderburgh

Appendix B: Methodology & Analysis

Mixed quantitative and qualitative methods were used to describe and explore the relationship between 21st CCLC program participation and various academic and behavioral outcomes. This section provides additional detail to support analyses presented throughout this report.

Dependent Measures

ACCESS for ELLs: ACCESS for ELLs is a suite of English language proficiency tests for K–12 students. Yearly, the assessment measures students' English language proficiency across four domains: listening, speaking, reading, and writing. LEAs and schools use results to guide instructional decisions related to ELL students (e.g., programming, course selection). Based on performance on discrete English language development standards defined by WIDA, students are scored for each domain and are assigned into one of six proficiency levels: Level 1 Entering, Level 2 Emerging, Level 3 Developing, Level 4 Expanding, Level 5 Bridging, and Level 6 Reaching. Based on guidance from IDOE, the current evaluation focused on these proficiency levels. For alignment with IDOE, benchmark values were defined as proficiency levels greater than or equal to Level 5 for the purpose of the evaluation. In Indiana, students scoring at or above a Level 5 are no longer considered ELLs (J. Woo, personal communication, March 22, 2022).

Average Final Grades: Final average grades were calculated by recoding traditional report card grades to a 0-4 scale (A=4, B=3, C=2, D=1, F=0). An average grade was calculated for all students who had grades entered on an A to F scale. In some cases, centers also included +/-. To allow for consistent comparisons, these grades were converted to the traditional scale.

Course Completion: Data from the IDOE Course Completion Report (DOE-CC) were available for the evaluation. Annually, course completion data are collected by IDOE from public schools (traditional and charter), accredited nonpublic schools, and non-accredited nonpublic schools participating in the Choice Scholarship program. The evaluation focused on *dual credits* and *high school credits*. IDOE defines dual credit courses as those that provide both high school credit and transcripted college credit from a post-secondary institution. Only credits from state-approved courses may provide dual credits.

Department of Education (DOE) Teacher Survey: Teacher-perceived school-related behaviors were assessed utilizing the DOE Teacher Survey, which is a required data element for Indiana 21st CCLC. The survey measures teacher perceptions of student improvement in 11 areas of behavior on the K-12 survey and in 10 areas of behavior on the middle and high school instrument.

Graduation: Data from the IDOE Graduate Report (DOE-GR) were available for the evaluation. Annually, graduation data are collected by IDOE from public schools (traditional and charter), accredited nonpublic schools, and non-accredited nonpublic schools participating in the Choice Scholarship program. Based on IDOE (2020) guidelines, a successful graduate is defined as meeting any of the following:

- 1. Student graduated in a previous year and was omitted from the DOE-GR submission.
- 2. Students attending an Adult Secondary Credit (ASC) program to obtain credit toward their diploma during the evening or after school hours AND enrolled at the high school.
- 3. Students completing their graduation requirements EARLY; whether a year early OR semester early.
- 4. Students completing their graduation requirements while attending an alternative education program or adult secondary credit program not located in the issuing diploma high school.
- 5. Students completing their graduation requirements while attending their last year of school in a foreign country as an exchange student.
- 6. Students completing their graduation requirements while attending somewhere other than the issuing diploma high school for other reasons.
- 7. Students earning a diploma before October 1 following an academic year.

Indiana 21st CCLC Academic Performance Indicators: Academic Performance Indicators were examined across various levels of program participation: (a) *High Academic Performance Indicator* defined as the percentage of 21st CCLC participants earning a B or better on their spring semester grade; and (b) *Satisfactory Academic Performance Indicator* defined as the percentage of 21st CCLC participants earning a C or better on their spring semester grade.

In-School Suspension: IDOE's discipline data layout (DOE-ES) defines in-school suspensions as incidents in which a "student is removed from an assigned class or activity to another setting in order to maintain an orderly and effective educational system" (n.p.). If "instructional time" (i.e., approved course, curriculum, or educationally related activity under the direction of a teacher) is provided to the student during the suspension, it is classified as an in-school suspension.

Out-of-School Suspension: If no "instructional time" (i.e., approved course, curriculum, or educationally related activity under the direction of a teacher) is provided to the student, the suspension in classified as an out-of-school suspension.

School Day Attendance: School day attendance records were provided by IDOE. School day attendance was based on the percentage of school days attended out of the total number of days enrolled (based on a minimum enrollment of 162 days). Prior to calculating attendance rates, frequencies on all enrollment and days attended were conducted. Some participants had enrollment periods that exceeded 180 days, which is the minimum instructional requirement for Indiana. To control for differences in school enrollments, each distribution was reviewed separately to determine the maximum cutoff based on extreme changes in data availability. For 2021-2022, the range for inclusion was 162 to 190 days.

Spring Final Grades: Spring grades from traditional grading scales (A to F, A+ to F) for math and English/language arts were utilized.

DATA AVAILABILITY

All data associated with this evaluation were provided by IDOE or derived from the Cayen Afterschool Attendance System, which grantees are required to utilize.

Table B1: Available Data from Cayen/IDOE

		2021-2022		2020-2021			
	(N = 14,887	a	(N = 15,391	a	
Outcome/Attendance Level	Number Available	Percent Available	Total Students	Number Available	Percent Available	Total Students	
Reading Spring Final Grade (A to F, A+ to F)							
1-29 days	2426	46%	5315	2754	43%	6371	
30-59 days	1429	54%	2670	1620	51%	3169	
60-89 days	1137	58%	1947	1078	52%	2065	
90+ days	2533	51%	4955	1877	50%	3786	
Total	7525	51%	14887	7329	48%	15391	
Math Spring Final Grade (A to F, A+ to F)							
1-29 days	2173	41%	5315	2570	40%	6371	
30-59 days	1395	52%	2670	1594	50%	3169	
60-89 days	1133	58%	1947	1062	51%	2065	
90+ days	2482	50%	4955	1790	47%	3786	
Total	7183	48%	14887	7016	46%	15391	
2057							
DOE Teacher Survey	2002	720/	F24F	067	150/	6271	
1-29 days	3893	73%	5315	967	15%	6371	
30-59 days	2088	78%	2670	2282	72%	3169	
60-89 days	1536	79%	1947	1577	76%	2065	
90+ days	4122	83%	4955	2960	78%	3786	
Total	11639	78%	14887	7786	51%	15391	
School Day Attendancebc							
1-29 days	4967	93%	5315	4800	75%	6371	
30-59 days	2495	93%	2670	2340	74%	3169	
60-89 days	1764	91%	1947	1630	79%	2065	
90+ days	4450	90%	4955	3253	86%	3786	
Total	13676	92%	14887	12023	78%	15391	
ILEARN ELA (grades 3-8) ^c							
1-29 days	2312	65%	3581	3336	82%	4051	
30-59 days	1037	61%	1688	1538	82%	1881	
60-89 days	630	56%	1134	1006	85%	1181	
90+ days	1425	55%	2594	1666	90%	1849	
Total	5404	60%	8997	7546	84%	8962	
ILEARN Math (grades 3-8) ^c							
1-29 days	2301	64%	3581	3323	82%	4051	
30-59 days	1032	61%	1688	1535	82%	1881	
60-89 days	625	55%	1134	1006	85%	1181	
90+ days	1420	55%	2594	1665	90%	1849	
Total	5378	60%	8997	7529	84%	8962	
WIDA ACCESS for ELLs Assessment ^c							
1-29 days	349	7%	5315	452	7%	6371	
30-59 days	163	6%	2670	218	7%	3169	
60-89 days	187	10%	1947	138	7%	2065	
90+ days	374	8%	4955	189	5%	3786	
	1						

		2021-2022 N =14,887)		2020-2021 (N =15,391) ^a			
Outcome/Attendance Level	Number Available	Percent Available	Total Students	Number Available	Percent Available	Total Students	
Total	1073	7%	14887	997	6%	15391	
High School Graduation (grade 12) ^c							
1-29 days	49	89%	55	217	100%	218	
30-59 days	36	97%	37	96	98%	98	
60-89 days	33	92%	36	28	97%	29	
90+ days	6	86%	7	38	97%	39	
Total	124	92%	135	379	99%	384	
Course Completion (grades 9-12) ^c							
1-29 days	305	65%	468	1033	97%	1062	
30-59 days	194	88%	220	302	85%	354	
60-89 days	158	84%	189	139	98%	142	
90+ days	56	72%	78	206	94%	219	
Total	713	75%	955	1680	95%	1777	
School Discipline ^c							
1-29 days	5159	97%	5315	6180	97%	6371	
30-59 days	2585	97%	2670	3036	96%	3169	
60-89 days	1870	96%	1947	1979	96%	2065	
90+ days	4837	98%	4955	3623	96%	3786	
Total	14451	97%	14887	14818	96%	15391	

^a Students attending school year programming. ^b The evaluation utilized an attendance rate calculated using days enrolled and days present. For both years, students enrolled 162-190 were retained for the analysis. ^c Data were provided by IDOE.

Race and Ethnicity

As noted elsewhere in the report, race and ethnicity are not entered separately in the Cayen system. Specifically, in a student registration dropdown menu labeled *Ethnicity*, Indiana Cayen users may select from the following categories: American Indiana/Alaskan Native, Asian, Black (Not of Hispanic origin), Hispanic, Native Hawaiian or Other Pacific Islander, Other/Unknown, Two or More Races, or White (Not of Hispanic origin). While the distinctions between race and ethnicity are understood, data availability hindered robust reporting of these demographics throughout the report.

Propensity Score Matching

PROPENSITY SCORE DEVELOPMENT: Propensity scores (i.e., the conditional probability of treatment assignment) were created using a logistic regression model that incorporated observable covariates or proxies theoretically related to participation in 21st CCLC programming and/or the academic outcomes explored (Austin, 2011; Caliendo & Kopeinig, 2008; D'Agostino, 1998; Rosenbaum & Rubin, 1983). The selection of covariates was informed by relevant literature and theory, institutional selection processes, and empirical methods (Austin, 2011; Blundell, Deardeb, & Sianesi, 2005; Caliendo & Kopeinig, 2008; Sianesi, 2004). Based on Naftzger et al. (2016), site- and student-level variables were included.

Student Level

USDA (2016a, 2016b) Urban Influence Code (Student Demographic, Indicator of Rural vs. Urban) Free/Reduced Lunch Status (Student Demographic, Indicator of Socioeconomic Status) Race (Student Demographic)

Limited English Proficiency (Student Demographic)

Special Education (Student Demographic)
Ethnicity (Student Demographic)
Sex (Student Demographic)
Spring 2021 ILEARN English/Language Arts Scale Score (Indicator of Prior Academic Achievement)
Spring 2021 ILEARN Math Scale Score (Indicator of Prior Academic Achievement)
2021-2022 Suspensions (Indicator of Prior Behavior)

Site Level

Average Number of School Year Days Attended Number of Students Receiving Free/Reduced Lunch

To account for missing data, the missing indicator method was used to model the relationship between the pattern of missing data and propensity to participate in 21st CCLC (Naftzger et al., 2016; Rosenbaum & Rubin, 1984). The model was fit separately for each definition of treatment condition (30+ days, 60+ days, 90+ days) (Naftzger et al., 2016), with exact matches on grade level.

MATCHING: To balance the treatment and comparison groups, the research team utilized nearest neighbor matching (with caliper) using the R-Essentials SPSS extension (D'Agostino, 1998; Ho, Imai, King, & Stuart, 2007). Simply, this process involved matching a treatment individual to the comparison individual with the most similar propensity scores (D'Agostino, 1998; Stuart, 2010). The use of the caliper was employed to reduce the number of poor matches utilized in the analysis (Stuart, 2010). A caliper width of 0.15 of the standard deviation of the propensity score was used (Austin, 2011; Rosenbaum & Rubin, 1985; Cochran & Rubin). Unmatched cases were excluded from the analysis.

These procedures yielded balanced samples. Multivariate and univariate tests revealed no evidence of imbalance. The overall balance chi-square tests (Hansen & Bowers, 2010) were nonsignificant, which indicated that no variable or linear combination of variables was significantly unbalanced after matching. Relative multivariate imbalance statistics (Iacus, King, & Porro, 2011) suggested improved balance following matching for each model. Finally, no standardized differences between treatment and control means exceeded .09 for any covariates, which indicated small differences between groups following matching and was consistent with recent recommendations (Ho, Imai, King, & Stuart, 2007).

Limitations: Based on the findings of Cook, Shadish, and Wong (2008) and Glazerman, Levy, and Meyers (2003), Somers et al. (2013) provide recommendations that quasi-experimental studies should employ to reduce bias and replicate randomized control trials. Specifically, Somers et al. (2013) suggest that to control bias effectively, a comparison group should 1) contain prescreened individuals with motivation and incentives (or deterrents) to participate that are similar to those of the treatment group, 2) contain individuals from close geographical proximity to the treatment group (e.g., regional), and 3) include those who have similar pretest scores on the outcome of interest compared to the treatment group. By utilizing a population of students who attended afterschool programs in Indiana-based programs (as opposed to including non-participants and/or students from other states), the current study satisfies the first two criteria, and prior-year ILEARN and/or behavior data were utilized to satisfy the third criterion. Because 2021 ILEARN data were utilized as a matching variable for academic analyses, matching was only completed for grades 4 through 8. For behavior analyses, prior year suspension data were used as a matching variable, and therefore, kindergarten students were excluded from the analysis. It should be noted that while propensity score matching was used to create comparison groups that were similar to

the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study. The analyses may be limited by the existence of variables that predict student attendance or academic performance but were not available to the evaluation team. These analyses should be interpreted as only preliminary evidence of program impacts (Naftzger et al., 2016; Somers et al., 2013).

Contextualizing Effect Sizes

Where applicable, effect sizes (odds ratios, Cohen's d, and omega-squared (ω^2)) were reported. Omnibus, univariate ANOVA, and ANCOVA effect sizes were reported using omega-squared (ω^2), Cohen's d for t-tests and post-hoc comparisons, and odds ratios for Pearson's chi-square (Field, 2009). Cohen's (1988) guidelines were utilized to interpret the magnitude of effect for the omega square (.01 is small, .06 is medium, and .14 or greater is large) and Cohen's d (.2 is small, .5 is medium, and .8 or greater is large) (Weinfurt, 1995). Interpretation of odds ratios were guided by Chen, Cohen, and Chen (2009). Finally, Coe's (2002) recommendations for interpreting effect sizes were employed where appropriate.

While these guidelines are utilized consistently across a variety of settings, it is also important to contextualize effect sizes contained in this report within the field of education. The literature provides a variety of alternative approaches that may be examined to contextualize evaluation findings in education. For example, Kraft (2018) notes that in education settings, standardized mean differences of .20 to .25 have been described as "of policy interest" (Hedges & Hedberg, 2007), "substantively important" (What Works Clearinghouse, 2014, p. 23), and "having educational significance" (Bloom et al., 2008). Moreover, the work of Hill et al. (2008) suggests that the effect of one year of in-school and out-of-school learning was .31 standard deviation units for reading and .42 for math. Finally, findings from evaluations of 21st CCLC outside of Indiana may be examined for additional context. While the effects described in the report were generally smaller than the education thresholds cited above, these descriptions may provide additional support when interpreting the results of this evaluation.

Table B2: Interpretations of Effect Sizes (Coe, 2002)

Cohen's d	Percentage of Control Group Below the Average Person in Treatment Group
0.0	50%
0.1	54%
0.2	58%
0.3	62%
0.4	66%
0.5	69%
0.6	73%
0.7	76%
0.8	79%
0.9	82%
1.0	84%
1.2	88%
1.4	92%
1.6	95%
1.8	96%
2.0	98%
2.5	99%
3.0	99.9%

Detailed Analysis Supporting Main Report Sections

Descriptively, data were analyzed using frequencies, descriptive statistics, and crosstabulations. To test the statistical significance of relationships, inferential statistics, including Pearson's chi-square, one-way analysis of variance (ANOVA), one-way analysis of covariance (ANCOVA), and independent-samples *t*-tests were utilized. Bonferroni, Tukey, Sidak, or Games-Howell post-hoc tests were employed, where applicable, and based on statistical assumptions. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

To ease interpretation, detailed text was minimized throughout this document. This section provides additional calculations supporting prior results, as applicable. In some cases, duplicated tables may have been inserted for clarity.

ENGLISH/LANGUAGE ARTS AVERAGE ILEARN SCALE SCORE BY 21ST CCLC PARTICIPATION

Participants' average English/language arts ILEARN scale scores were calculated and disaggregated by the four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Table B3: Student Attendance Gradations by Average English/Language Arts ILEARN Scale Score – 2021-2022

English/Language A	A <i>rts: 21st CCLC</i>	participants b	ov average ILEARI	<i>I scale score</i>

2021-2022	1-29	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n mean		n	mean	n	mean	n	mean	
3 rd	268	5465.98	178	5464.33	131	5471.70	394	5470.46	971
4 th	281	5471.45	190	5459.29	131	5459.85	406	5473.55	1008
5 th	390	5461.36	194	54.64.80	126	5468.25	304	5472.32	1014
6 th	398	5477.26	137	5480.34	76	5479.88	156	5472.32	767
7 th	482	5507.10	175	5497.99	90	5494.19	96	5483.67	843
8 th	493	5510.60	163	5506.04	76	5500.05	69	5482.16	801

MATH AVERAGE ILEARN SCALE SCORE BY 21ST CCLC PARTICIPATION

Participants' average Math ILEARN scale scores were calculated and disaggregated by the four attendance gradations (1-29 days, 30-59 days, 60-89 days, and 90+ days).

Table B4: Student Attendance Gradations by Average Math ILEARN Scale Score – 2021-2022

Math: 21st CCLC participants by average ILEARN scale score

2021-2022	1-29	1-29 days		30-59 days		60-89 days		90+ days	
2021-2022	n	mean	n	mean	n	mean	n	Mean	
3 rd	268	6446.65	178	6446.32	131	6442.90	393	6452.58	970
4 th	279	6454.45	187	6438.14	128	6441.39	406	6455.95	1000
5 th	384	6442.36	193	6449.02	126	6452.39	301	6458.35	1004
6 th	398	6456.51	134	6456.50	74	6454.20	155	6459.19	761
7^{th}	481	6473.30	176	6472.53	90	6473.34	96	6462.35	843
8 th	491	6475.16	164	6476.67	76	6468.54	69	6457.51	800

ENGLISH/LANGUAGE ARTS & MATH ILEARN PROFICIENCY BY MULTI-YEAR 21st CCLC PARTICIPATION

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' spring 2019 ILEARN proficiency and disaggregated by the number of years (zero years, one year, two years, three years, or four years). To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

ILEARN English/Language Arts

There was a significant association between years of 60 or more days attendance and ILEARN English/Language Arts proficiency (χ 2(4, N = 5856) = 12.24, p = .02). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for 3 or 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years. When examined by grade level band, there was a significant association between years of 60 or more days attendance and ILEARN English/Language Arts proficiency for students in grades 3-5 (χ 2(4, N = 3200) = 10.25, p = .03). For students in grades 3-5, standardized residuals suggest that this association was driven by students attending 60 or more days for 3 years or 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years.

Table B5: Multi-year 60+ Days Participation (Grades 3-8) by English/Language Arts ILEARN Proficiency – 2021-2022

English/Language Arts: Percentage of 21st CCLC participants attending 60+ days across multiple years passing ILEARN

2021-2022	0 Years		1 Year		2 Yea	2 Years		3 Years		4 Years	
	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%	
All Grades	871/3208	27%	411/1468	28%	169/592	29%	121/357	34%	80/231	35%	
3-5	384/1373	28%	252/945	27%	121/413	29%	95/274	35%	68/195	35%	
6-8	487/1835	27%	159/523	30%	48/179	27%	26/83	31%	12/36	33%	

ILEARN Math

There was a significant association between years of 60 or more days attendance and ILEARN Math proficiency ($\chi 2(4, N=5826)=27.97, p<.001$). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for 3 or 4 years. These students were more likely to pass the assessment compared to students who attended regularly for fewer years. When examined by grade level band, there was a significant association between years of 60 or more days attendance and ILEARN Math proficiency for students in grades 3-5 ($\chi 2(4, N=3181)=19.45, p=.001$) For students in grades 3-5, standardized residuals suggest that this association was driven by students attending 60 or more days for 4 years. These students were more likely to pass the assessment compared to students who attended regularly in fewer years.

Table B6: Multi-year 60+ Days Participation (Grades 3-8) by Math ILEARN Proficiency – 2021-2022

Math: Percentage of 21st CCLC participants attending 60+ days across multiple years passing ILEARN

2021-2022	0 Years		1 Year		2 Years		3 Years		4 Years	
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades	803/3186	25%	399/1462	27%	171/590	29%	117/357	33%	89/231	39%
3-5	395/1360	29%	257/940	27%	133/412	32%	94/274	34%	81/195	42%
6-8	408/1826	22%	142/522	27%	38/178	21%	23/83	28%	8/36	22%

ENGLISH/LANGUAGE ARTS & MATH FINAL AVERAGE GRADES BY 21ST CCLC PARTICIPATION

To examine the relationship between 21st CCLC participation and average final spring grades, a one-way analysis of variance (ANOVA) was utilized to examine the relationship between levels of afterschool attendance and final average report card grades. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

English/Language Arts Final Average Grades

There was a significant relationship between afterschool attendance frequency and final average English/language arts grade for grades K-12, Welch's F(3,7158) = 18.24, p < .001, $\omega^2 = .01$. The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades K-12. Post-hoc comparisons revealed that students attending 90+ days (M = 2.85) had significantly higher final grades on average compared to students attending 1-29 days (M = 2.62, p < .001, d = .19), 30-59 days (M = 2.63, p < .001, d = .18), and 60-89 days (M = 2.69, p = .001, d = .14). Effect sizes were small.

When examined by grade level band, there was a significant relationship between afterschool attendance frequency and final average English/language arts grade for grades K-5, Welch's F(3, 5.38) = 12.15, p = .001, $\omega^2 = .002$. The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades K-5. Post-hoc comparisons revealed that students attending 90+ days (M = 2.94) had significantly higher final grades on average compared to students attending 30-59 days (M = 2.81, p < .05, d = .12) and 60-89 days (M = 2.77, p < .05, d = .15). Effect sizes were small.

Table B7: Student Attendance Gradations by English/Language Arts Average Final Spring Grade – 2021-2022

English/Language A	l <i>rts: 21st CC</i>	CLC participants	by average fina	l grades

2021-2022	1-29 d	1-29 days		30-59 days		60-89 days		90+ days	
	n	mean	n	mean	n	mean	n	mean	
All Grades	2420	2.62	1427	2.63	1137	2.69	2531	2.85	7515
K-5	1146	2.90	831	2.81	713	2.77	2096	2.94	4786
6-8	1065	2.34	448	2.34	272	2.50	370	2.40	2155
9-12	209	2.56	148	2.49	152	2.61	65	2.46	574

Math Final Average Grades

There was a significant relationship between afterschool attendance frequency and final average math grade for grades K-12, Welch's F(3, 3305.65) = 35.47, p < .001, $\omega^2 = .01$. The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades K-12. Post-hoc comparisons revealed that students attending 90+ days (M = 2.88) had significantly higher final grades on average compared to students attending 1-29 days (M = 2.54, p < .001, d = .28), 30-59 days (M = 2.58, p < .001, d = .25), and 60-89 days (M = 2.67, p < .001, d = .18). Students attending 60-89 days had significantly higher final grades on average compared to students attending 1-29 days (p = .03, d = .10). Effect sizes were small.

When examined by grade level band, there was a significant relationship between afterschool attendance frequency and final average math grade for grades K-5, Welch's F(3, 1899.430) = 8.55, p < .001, $\omega^2 = .004$.

The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades K-5. Post-hoc comparisons revealed that students attending 90+ days (M = 2.97) had significantly higher final grades on average compared to students attending 1-29 days (M = 2.85, p = .03, d = .11), 30-59 days (M = 2.78, p < .001, d = .17), and 60-89 days (M = 2.97, p = .002, d = .16). Effect sizes were small.

When examined by grade level band, there was a significant relationship between afterschool attendance frequency and final average math grade for grades 6-8, Welch's F(3,790.24) = 2.71, p = .04, $\omega^2 = .002$. The effect was small, with afterschool attendance level explaining less than 1% of the variance in final average grades for students in grades 6-8. While the omnibus ANOVA was significant, there were no significant post-hoc comparisons.

Table B8: Student Attendance Gradations by Math Average Final Spring Grade – 2021-2022

Math: 21st CCLC participants by average final grades

2021-2022	1-29 c	1-29 days		30-59 days		days	90+ d	ays	N	
2021-2022	n	mean	n	mean	n	mean	n	mean		
All Grades	2167	2.54	1393	2.58	1133	2.67	2480	2.88	7173	
K-5	1001	2.85	822	2.78	718	2.79	2059	2.97	4600	
6-8	963	2.30	430	2.39	264	2.52	359	2.47	2016	
9-12	203	2.12	141	2.04	151	2.33	62	2.13	557	

ENGLISH/LANGUAGE ARTS & MATH FINAL AVERAGE GRADES BY MULTI-YEAR 21ST CCLC PARTICIPATION

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' final average English/language arts and math grades from spring 2022 and disaggregated by the number of years (zero years, one year, two years, three years, or four years). Because K-2 participants were not able to attend a full four years, these grade levels were excluded from the analysis. Due to small sample sizes for high school students, years two through four were collapsed. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%). Note: Students who did not attend 30 days during any year = zero years.

For students in grades 3-8, there was a statistically significant relationship between years of regular attendance (60+) and final average English/language arts grades, $Welch's\ F(4,\ 1176.30)=21.27,\ p<.001,\ \omega^2=.01.$ The effect was small, with afterschool attendance level explaining approximately 1% of the variance in final average grades for students in grades 3-8. Post-hoc comparisons revealed that students who attended regularly for four years (M=2.98) had significantly higher spring grades than students who never attended regularly ($M=2.57,\ p<.001,\ d=.32$), attended regularly in one year ($M=2.63,\ p<.001,\ d=.29$), or attended regularly in two years ($M=2.70,\ p=.003,\ d=.24$). Students who attended regularly for three years (M=2.83) had significantly higher spring grades than students who never attended regularly ($p<.001,\ d=.20$), attended regularly in one year ($p<.001,\ d=.16$), or attended regularly in two years ($p=.003,\ d=.11$). Effect sizes were small.

For students in grades 3-8, there was a statistically significant relationship between years of regular attendance (60+) and final average math grades, $Welch's\ F(4,1133.05)=25.65,\ p<.001,\ \omega^2=.02.$ The effect was small, with afterschool attendance level explaining approximately 2% of the variance in final average grades for students in grades 3-8. Post-hoc comparisons revealed that students who had never attended regularly (M=2.50) had significantly lower final grades compared to students attending regularly for one year ($M=2.64,\ p=.01,\ d=.10$), two years ($M=2.70,\ p=.002,\ d=.15$), three years ($M=2.94,\ p<.001,\ d=.33$), and four years ($M=3.08,\ p<.001,\ d=.44$). Additionally, students who attended regularly for four years had significantly higher grades than students who attended regularly for three years had significantly higher grades than students who attended regularly in one year ($p<.001,\ d=.37$) and two years ($p<.001,\ d=.32$). Finally, students who attended regularly for three years had significantly higher grades than students who attended regularly in one year ($p<.001,\ d=.26$) and two years ($p=.01,\ d=.21$). Effect sizes were small.

Table B9: Multi-year 60+ Days Participation (Grades 3-8) by Average English/Language Arts & Math Final Grade – 2021-2022

English/Language Arts & Math: 21st CCLC participants attending 60+ days across multiple years by average final spring grades

			(Grades 3 to	8 Years	Attending	60+ days			
2021-2022	0 Y	ears	1 Y	ear	2 Y	ears	3 Ye	ears	4 Y	ears
	n	mean	n	mean	n	mean	n	mean	n	mean
English/ Language Arts	2600	2.57	1523	2.63	647	2.70	385	2.83	290	2.99
Math	2401	2.50	1491	2.64	629	2.70	364	2.95	276	3.08

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

For grades 9-12, no statistically significant relationships between years of regular attendance and final average English/language arts or math grades were observed. However, when viewed descriptively, results suggested that high school students who attended at higher levels in multiple years have higher grades.

Table B10: Multi-year 60+ Days Participation (Grades 9-12) by Average English/Language Arts & Math Final Grade – 2021-2022

English/Language Arts & Math: 21st CCLC participants attending 60+ days across multiple years by average final spring grades

	Grades 9 to 12 Years Attending 60+ days							
2021-2022	0 Ye	ears	1 Y	'ear	2 to 4	4 Years		
2021-2022	n	mean	n	mean	n	mean		
English/Language Arts	308	2.48	208	2.60	59	2.72		
Math	295	2.09	206	2.19	57	2.42		

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

COURSE COMPLETION BY 21ST CCLC PARTICIPATION

Descriptive analyses were conducted to examine the relationship between levels of afterschool attendance and high school course completion. Course completion data were provided and matched with 21^{st} CCLC participation data to support these analyses. Analyses were completed only for 9^{th} to 12^{th} grade participants for whom a successful STN match was available. This included 891 (92%) of the 970 high school students participating in 21^{st} CCLC programs during the school year. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

Total Credits

There was a significant relationship between afterschool attendance frequency and the total number of credits obtained for grades 9-12, Welch's F(3, 229.70) = 3.78, p = .02, $\omega^2 = .01$. The effect was small, with afterschool attendance frequency explaining approximately 1% of the variance in total credits obtained. Post-hoc comparisons revealed that students attending 1-29 days (M = 11.17) obtained significantly fewer credits compared to students attending 60-89 days (M = 12.23, p = .01, d = .23). Effect sizes were small.

Table B11: Participant Attendance Gradations by Total Credits Obtained – 2021-2022

Total credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-2	1-29 days		30-59 days		9 days	90+	days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	305	11.17	194	11.71	158	12.23	56	12.13

ELA Credits

No significant relationships were observed.

Table B12: Participant Attendance Gradations by ELA Credits Obtained – 2021-2022

ELA credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-2	1-29 days		30-59 days		9 days	90+	days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	298	2.13	192	2.17	155	2.37	55	2.11

Math Credits

There was a significant relationship between afterschool attendance frequency and the total number of math credits obtained for grades 9-12, Welch's F(3, 202.18) = 6.01, p = .001, $\omega^2 = .02$. The effect was small, with afterschool attendance frequency explaining approximately 2% of the variance in math credits obtained. Students attending 60-89 days (M = 1.93) obtained significantly more math credits compared to students attending 1-29 days (M = 1.61, p = .001, d = .35) or 30-59 days (M = 1.67, p = .04, d = .30). Effect sizes were small.

Table B13: Participant Attendance Gradations by Math Credits Obtained – 2021-2022

Math credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-2	1-29 days		30-59 days		9 days	90+	days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	284	1.61	186	1.67	153	1.93	52	2.00

Science Credits

There were no significant relationships between afterschool attendance frequency and the total number of science credits obtained for grades 9-12.

Table B14: Participant Attendance Gradations by Science Credits Obtained – 2021-2022

Science credits obtained for 21st CCLC participants by attendance gradations

2021-2022	1-2	1-29 days		30-59 days		9 days	90+	days
2021-2022	n	mean	n	mean	n	mean	n	mean
9-12	266	1.60	169	1.65	139	1.75	50	1.70

HIGH SCHOOL COURSE COMPLETION BY MULTI-YEAR 21st CCLC PARTICIPATION

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' annual total high school credits obtained, ELA credits obtained, math credits obtained, science credits obtained. Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years.

Total Credits

For grades 9-12, there was a significant relationship between years of regular attendance and total credits obtained, Welch's F(2, 192.92) = 4.11, p = .02, $\omega^2 = .01$. The effect was small, with years of regular (60+ day) participation explaining approximately 1% of the variance in credits obtained for students in grades 9-12. Post-hoc comparisons revealed that students who had never attended regularly (M = 11.31) obtained significantly fewer credits compared to students attending regularly for two to four years (M = 12.40, p = .04, d = .27). Effect sizes were small.

English/Language Arts Credits

No significant relationships were observed.

Math Credits

For grades 9-12, there was a significant relationship between years of regular attendance and math credits obtained, Welch's F(2, 191.17) = 3.23, p = .04, $\omega^2 = .01$. The effect was small, with years of regular (60+ day) participation explaining approximately 1% of the variance in credits obtained for students in grades 9-12. Post-hoc comparisons revealed that students who had never attended regularly (M = 1.66) obtained significantly fewer credits compared to students attending regularly for one year (M = 1.86, p = .04, d = .21). Effect sizes were small.

Science Credits

No significant relationships were observed.

Table B15: Multi-year 60+ Days (Grades 9-12) by Average Annual Credits Obtained – 2021-2022

Total, English/Language Arts, Math, & Science: 21st CCLC participants attending 60+ days across multiple years by average credits obtained.

	Grades 9 to 12 Years Attending 60+ days							
2021-2022	0 Ye	ears	1 Y	'ear	2 to 4	4 Years		
2021-2022	n	mean	n	mean	n	mean		
Total	440	11.31	218	11.95	68	12.40		
English/Language Arts	432	2.12	213	2.30	68	2.26		
Math	414	1.66	208	1.86	65	1.66		
Science	380	1.61	198	1.71	58	1.71		

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

SCHOOL DAY ATTENDANCE BY 21ST CCLC PARTICIPATION

To examine the relationship between 21st CCLC participation and school day attendance, a subset of participants for whom IDOE successfully matched STN was examined. This subset was further filtered to include only participants with specific school enrollment periods. A one-way analysis of variance (ANOVA) was utilized to examine the relationship between levels of afterschool attendance and school day attendance. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

There was a significant relationship between afterschool attendance frequency and school day attendance for grades K-12, Welch's F(3,5124.18) = 174.54, p < .001, $\omega^2 = .04$. The effect was small, with afterschool attendance frequency explaining approximately 4% of the variance in school day attendance. Post-hoc comparisons revealed that students attending 90+ days (M = 95.15) attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (M = 92.43, p < .001, d = .45), 30-59 days (M = 93.26, p < .001, d = .36), and 60-89 days (M = 93.89, p < .001, d = .27). Students attending 60-89 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001, p < .001,

- For K-5 students, there was a significant relationship between afterschool attendance frequency and school day attendance, $Welch's\ F(3,3252.23)=105.66$, p<.001, $\omega^2=.03$. The effect was small, with afterschool attendance level explaining approximately 3% of the variance in school day attendance for K-5 students. Post-hoc comparisons revealed that students attending 90+ days (M=95.20) attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (M=92.89, p<.001, d=.44), 30-59 days (M=93.3, p<.001, d=.35), and 60-89 days (M=93.80, p<.001, d=.31). Students attending 60-89 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p<.001, d=.15). Students attending 30-59 days attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p=.008, d=.10). Effects were small.
- For students in grades 6-8, there was a significant relationship between afterschool attendance frequency and school day attendance, Welch's F(3, 1140.10) = 37.21, p < .001, $\omega^2 = .03$. The effect was small, with afterschool attendance level explaining approximately 3% of the variance in school day attendance for 6-8 students. Post-hoc comparisons revealed that students attending 90+ days (M = 95.20) attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (M = 92.89, p < .001, d = .41) and 30-59 days (M = 93.53, p < .001, d = .33). Students attending 60-89 days (M = 93.80) attended a significantly greater percentage of days enrolled compared to students attending 1-29 days (p < .001, d = .30) and 30-59 days (p = .007, p = .00
- For 9-12 students, no significant relationships were observed.

Table B16: Participant Attendance Gradations by School Day Attendance Rate – 2021-2022

School day attendance rate for 21st CCLC participants by attendance gradations

2021-2022	1-29 days		30-59	9 days	60-89	60-89 days 90+ da		
2021-2022	n	mean	n	mean	n	mean	n	mean
All Grades	4546	92%	2291	93%	1673	94%	4253	95%
K-5	2437	93%	1460	94%	1152	94%	3750	95%
6-8	1744	92%	635	93%	360	94%	470	95%
9-12	365	92%	196	92%	161	94%	53	93%

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

SCHOOL DAY ATTENDANCE BY MULTI-YEAR 21st CCLC PARTICIPATION

The number of years participants attended 60 or more days was calculated for 21st CCLC participants from 2019 to 2022. Multi-year attendance was linked with participants' final average English/language arts and math grade from spring 2022 and disaggregated by the number of years (zero years, one year, two years, three years, or four years). Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%). Note: Students who did not attend 60 days during any year = zero years.

For 3-8 students, there was a significant relationship between years of regular attendance and school day attendance, Welch's F(4, 1910.4) = 126.16, p < .001, $\omega^2 = .06$. The effect was medium, with years of regular attendance explaining approximately 6% of the variance in school day attendance for 3-8 students. Post-hoc comparisons revealed that students who had never attended regularly (M = 92.36) attended a significantly lower percentage of days enrolled compared to students attending regularly for one year (M = 94.24, p < .001, d = .27), two years (M = 94.96, p < .001, d = .37), three years (M = 95.42, p < .001, d = .43), and four years (M = 96.34, p < .001, d = .55). Additionally, students attending regularly for four years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001, d = .41), two years (p < .001, d = .32), and three years (p = .001, d = .23). Students attending regularly for three years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001, d = .23). Students attending regularly for two years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001, d = .23). Students attending regularly for two years attended a greater percentage of school days enrolled compared to those attending regularly for one year (p < .001, d = .23). Students attending regularly for one year (p < .002, p = .003, p = .004, p = .004,

Table B17: Multi-year 60+ Days Participation (Grades 3-8) by School Day Attendance Rate– 2021-2022

School Day Attendance: 21st CCLC participants attending 60+ days across multiple years by school day attendance rate

	s									
2021-2022	0 Y	'ears	1	Year	2١	ears/	3 Y	'ears	4 \	ears/
	n	mean	n	mean	n	mean	n	mean	n	mean
Attendance Rate	4334	92.36%	2260	94.24%	934	94.96%	608	95.42%	410	96.34%

For 9-12 students, there was a significant relationship between years of regular attendance and school day attendance, Welch's F(2, 186.23) = 4.37, p = .01, $\omega^2 = .01$. The effect was small, with years of regular attendance explaining approximately 1% of the variance in school day attendance for 9-12 students. Posthoc comparisons revealed that students who had never attended regularly (M = 92.01) attended a significantly lower percentage of days enrolled compared to students attending regularly for one year (M = 93.60, p = .03, d = .19). Effect sizes were small.

Table B18: Multi-year 60+ Days (Grades 9-12) by School Day Attendance Rate 2021-2022

English/Language Arts & Math: 21st CCLC participants attending 60+ days across multiple years by school day attendance rate

		Grades 9	to 12 Yea	rs Attending 6	60+ days	
2021-2022	0 Years		1 Year		2 to 4 Years	
2021-2022	n	mean	n	mean	n	mean
School Day Attendance Rate	501	92.01%	218	93.60	68	93.98

IN-SCHOOL SUSPENSION BY 21ST CCLC PARTICIPATION

To examine the relationship between 21st CCLC participation and in-school suspensions, a subset of participants for whom IDOE successfully matched STN was examined. Pearson's chi-square analyses were conducted to examine the relationship between levels of 21st CCLC participation (1-29 days, 30-59 days, 60-89 days, 90+ days) and receiving at least one in-school suspension. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

When examining all grade levels, there was a significant association between afterschool attendance and in-school suspensions (χ 2(3, N = 14260) = 108.76, p < .001). A review of the standardized residuals suggests that this association was driven by students attending 90 or more days and those attending less than 60 days. Specifically, students attending more than 90 days were less likely to be suspended compared to students who attended less frequently. When examined by grade level band, there was a significant association between afterschool attendance and in-school suspensions for students in grades K-5 (χ 2(3, N = 9902) = 20.22, p < .001) and 6-8 (χ 2(3, N = 3481) = 21.62, p < .001). For students in grades K-5 and 6-8, standardized residuals suggest that this association was driven by students attending 90 or more days. These students were less likely to be suspended compared to students who attended less frequently.

Table B19: Student Attendance Gradations by In-School Suspension Rate – 2021-2022

Behavior: Percentage of 21st CCLC participants receiving at least one in-school suspension

2021-2022	1-29 da	ays	30-59 d	30-59 days		lays	90+ days		
2021-2022	n/N	%	n/N	%	n/N	%	n/N	%	
All Grades	358/5086	7%	184/2566	7%	81/1854	4%	135/4754	3%	
K-5	111/2796	4%	73/1675	4%	40/1295	3%	100/4136	2%	
6-8	213/1879	11%	92/679	14%	35/381	9%	31/542	6%	
9-12	34/411	8%	19/212	9%	6/178	3%	4/76	5%	

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

In-School Suspension By Multi-Year 21st CCLC Participation

Multi-year attendance was linked with participants' school disciplinary data and disaggregated by the number of years (zero years, one year, two years, three years, or four years). Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis. Note: Students who did not attend 60 days during any year = zero years.

When examining grade levels 3-8, there was a significant association between multi-year regular attendance and in-school suspensions ($\chi 2(4, N = 9414) = 72.04, p < .001$). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for three or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grade levels 3-5, there was a significant association between multi-year regular attendance and inschool suspensions (χ 2(4, N = 5631) = 11.64, p = .02). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for three or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grade levels 6-8, there was a significant association between multi-year regular attendance and inschool suspensions (χ 2(4, N = 3783) = 34.65, p < .001). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for one, two, or four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

Table B20: Multi-year 60+ Days Participation (Grades 3-8) by In-School Suspension Rate – 2021-2022

In-School Suspension: Percentage of 21st CCLC participants attending 60+ days across multiple years by in-school suspension rate

2021-2022	0 Years		1 Year		2 Years		3 Years		4 Years	
	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades	444/4794	9%	140/2500	6%	57/1013	6%	28/664	4%	8/443	2%
3-5	121/2342	5%	78/1663	5%	36/728	5%	14/520	3%	8/378	2%
6-8	323/2452	13%	62/837	7%	21/285	7%	14/144	10%	0/65	0%

When examining grade levels 9-12, no significant relationships were observed; however, when viewed descriptively, students who attended during multiple years were less likely to receive an in-school suspension.

Table B21: Multi-year 60+ Days (Grades 9-12) by In-School Suspension Rate – 2021-2022

In-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate.

	Grades 9-12 Years Attending 60+ days							
2021-2022	0 Yea	rs	1 Ye	ar	2 to 4 Years			
2021-2022	n/N	%	n/N	%	n/N	%		
In-School Suspension Rate	46/556	8%	14/258	5%	5/77	6%		

OUT-OF-SCHOOL SUSPENSION BY 21ST CCLC PARTICIPATION

To examine the relationship between 21st CCLC participation and out-of-school suspensions, a subset of participants for whom IDOE successfully matched STN was examined. Pearson's chi-square analyses were conducted to examine the relationship between levels of 21st CCLC participation (1-29 days, 30-59 days, 60-89 days, 90+ days) and receiving at least one out-of-school suspension. To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

When examining all grade levels, there was a significant association between afterschool attendance and out-of-school suspensions ($\chi 2(3, N=14260)=196.36, p<.001$). Specifically, students attending more than 60 days were less likely to be suspended compared to students who attended less frequently. When examined by grade level band, there was a significant association between afterschool attendance and out-of-school suspensions for students in grades K-5 ($\chi 2(3, N=9902)=57.90, p<.001$) and 6-8 ($\chi 2(3, N=3481)=24.33, p<.001$). For students in grades K-5, standardized residuals suggest that this association was driven by students attending 90 or more days. For students in grades 6-8, standardized residuals suggest that this association was driven by students attending 60 or more days. These students were less likely to be suspended compared to students who attended less frequently.

Table B22: Student Attendance Gradations by Out-of-School Suspension Rate – 2021-2022

Behavior: Percentage of 21st CCLC participants receiving at least one out-of-school suspension

2021-2022	1-29 days		30-59 d	30-59 days		days	90+ days	
	n/N	%	n/N	%	n/N	%	n/N	%
All Grades	645/5086	13%	267/2566	10%	139/1854	8%	230/4754	5%
K-5	223/2796	8%	110/1675	7%	76/1295	6%	156/4136	4%
6-8	350/1879	19%	127/679	19%	42/381	11%	65/542	12%
9-12	72/411	18%	30/212	14%	21/178	12%	9/76	12%

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

OUT-OF-SCHOOL SUSPENSION BY MULTI-YEAR 21st CCLC PARTICIPATION

Multi-year attendance was linked with participants' school disciplinary data and disaggregated by the number of years (zero years, one year, two years, three years, or four years) students attended 60 or more days. Due to smaller sample sizes in the higher participation levels among high school students, the maximum number of years was collapsed into two or more years. Because K-2 participants in prior years were not able to attend a full four years, these grade levels were excluded from the analysis. Note: Students who did not attend 60 days during any year = zero years.

When examining grade levels 3-8, there was a significant association between multi-year regular attendance and out-of-school suspensions ($\chi^2(4, N = 9414) = 101.13$, p < .001). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for one year, two years, three years, or four years. Specifically, these students were less likely to be suspended compared to students who never attended 60+ days.

For grades 3-5, there was a significant association between multi-year regular attendance and out-of-school suspensions ($\chi^2(4, N=5631)=16.93, p=.002$). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for four years. Specifically, these students were less likely to be suspended compared to students who attended less frequently.

For grades 6-8, there was a significant association between multi-year regular attendance and out-of-school suspensions ($\chi^2(4, N=3783)=33.83, p<.001$). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days for one year and four years. Specifically, these students were less likely to be suspended compared to students who never attended regularly.

Table B23: Multi-Year 60+ Days Participation (Grades 3-8) by Out-of-School Suspension Rate – 2021-2022 Out-of-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate

2021-2022	0 Years		1 Year		2 Years		3 Years		4 Years	
	n/N	%	n/N	%	n/N	%	n/N	%	n/N	%
All Grades	674/4794	14%	216/2500	9%	88/1013	9%	46/664	7%	16/443	4%
3-5	201/2342	9%	107/1663	6%	45/728	6%	30/520	6%	15/378	4%
6-8	473/2452	19%	109/837	13%	43/285	15%	16/144	11%	1/65	2%

When examining grade levels 9-12, there was a significant association between multi-year regular attendance and out-of-school suspensions ($\chi^2(4, N=891)=5.92, p=.05$). A review of the standardized residuals suggests that this association was driven by students attending 60 or more days during two or more years. Specifically, these students were less likely to be suspended compared to students who never attended regularly.

Table B24: Multi-year 60+ Days (Grades 9-12) by Out-of-School Suspension Rate – 2021-2022

Out-of-School Suspension: 21st CCLC participants attending 60+ days across multiple years by suspension rate.

	Grades 9-12 Years Attending 60+ days							
2021-2022	0 Yea	rs	1 Ye	ear	2 to 4 Years			
2021-2022	n/N	%	n/N	%	n/N	%		
Suspension Rate	96/556	17%	34/258	13%	6/77	8%		

MATCHED-GROUPS ANALYSIS

A series of analyses were completed to examine the impact of 21st CCLC participation on selected English/language arts (ELA), math, and disciplinary outcomes. Specifically, ILEARN data were utilized to examine academic achievement in English/language arts and math, and ISS and OSS rates were used to examine school discipline.

To control for potential differences between groups, propensity score matching was used to identify treatment students (i.e., students attending with high frequency) and comparison groups (i.e., students attending less frequently) that were balanced on key demographics, including prior academic performance. Specifically, the following matched groups were created for the analyses: (a) >=30 days attendance compared to <30 days attendance; (b) >=60 days compared to <60 days; and (c) >=90 days compared to <90 days. Because prior ILEARN performance was utilized as a matching variable, only students in grades 4 to 8 were included in the academic analyses. Because prior year suspensions were utilized as a matching variable, students in grades 1 to 12 were included in the disciplinary analyses.

It should be noted that while propensity score matching was used to create comparison groups that were similar to the students attending the program at high levels, the process cannot control all bias and should not be considered equivalent to a true experimental study. The analyses may be limited by the existence of variables that predict student attendance or academic performance but were not available to the evaluation team. These analyses should be interpreted as only preliminary evidence of program impacts (Naftzger et al., 2016; Somers et al., 2013). A detailed description of methodology is provided in Appendix B.

Overall sample size was determined by the number of students in both the treatment and comparison groups who could be successfully matched (i.e., were similar). Because there were fewer students who attended 90 or more days, there were smaller matched groups for these analyses. A summary of the matched groups created for these analyses is included in the table that follows.

Table B25: Sample Size for Matched Groups: Academics – 2021-2022

2021-2022	30 Day Attenda	ance Threshold	60 Day Attend	ance Threshold	90 Day Attendance Threshold		
2021-2022	>= 30	< 30	>= 60	< 60	>= 90	< 90	
Academics ^a	1841	1841	1567	1567	1317	1317	
Discipline ^b	3220	3220	3268	3268	2974	2974	

^a Students in grades 4-8 were included in the academic matched-groups analyses.

^b Students in grades 1-12 were included in the disciplinary matched-groups analyses.

Matched-Group Analysis: Academics - ILEARN ELA

30+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 30 or more days and (2) students attending fewer than 30 days. Both groups met ILEARN ELA growth targets, earned student growth percentile (SGP) greater than or equal to 50 (Indiana's 21st CCLC federal reporting target), and scored at or above proficiency at similar rates.

Table B26: ILEARN ELA Performance by Matched Group Attendance Type (≥ 30 Days vs. < 30 Days)

English/Language Arts: Percentage of 21st CCLC participants by ILEARN performance

		≥ 30 □	ays	< 30 E	ays			
ILEAR	N ELA Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2024	Proficiency ^a	504/1716	29%	487/1675	29%	.04	.85	1.01
2021- 2022	Growth Target ^b	578/1645	35%	561/1596	35%	.00	.99	.99
2022	SGP ^c	716/1645	44%	718/1596	45%	.70	.40	.96

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

60+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 60 or more days and (2) students attending fewer than 60 days. Students who attended for 60 or more days were more likely to meet their ILEARN ELA growth targets, earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target), and score at or above proficiency. However, these differences were not statistically significant.

Table B27: ILEARN ELA Performance by Matched Group Attendance Type (≥ 60 Days vs. < 60 Days)

English/Language Arts: Percentage of 21st CCLC participants by ILEARN performance

		≥ 60 🗅	ays	< 60 D	ays			
ILEAR	N ELA Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2024	Proficiency ^a	403/1435	28%	378/1416	27%	.69	.40	1.05
2021- 2022	Growth Target ^b	493/1385	36%	442/1337	33%	1.94	.16	1.07
2022	SGP ^c	621/1385	45%	569/1337	43%	1.44	.23	1.05

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

^c Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

^c Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

90+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 90 or more days and (2) students attending fewer than 90 days. Students who attended 90 or more days were more likely to meet their ILEARN math growth targets, earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target), and score at or above proficiency. A significant difference was observed between groups for growth target (χ 2(1, N = 2252) = 12.33, p < .001) and proficiency (χ 2(1, N = 2348) = 14.60, p < .001).

Table B28: ILEARN ELA Performance by Matched Group Attendance Type (≥ 90 Days vs. < 90 Days)

English/Language Arts: Percentage of 21st CCLC participants by ILEARN performance

		≥ 90 □	ays	< 90 Days				
ILEARN ELA Outcome		n/N	%	n/N	%	χ² (1) ρ	Odds Ratio	
2024	Proficiency ^a	374/1190	31%	282/1158	24%	14.60	< .001	1.29
2021-	Growth Target ^b	461/1156	40%	359/1096	33%	12.33	< .001	1.21
2022	SGPc	544/1156	47%	481/1096	44%	2.28	.13	1.07

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

Matched-Group Analysis: Academics - ILEARN Math

30+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 30 or more days and (2) students attending fewer than 30 days. Students who attended for 30 or more days were statistically significantly more likely to meet their ILEARN math growth targets (χ 2(1, N = 3235) = 5.39, p = .02) and earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) (χ 2(1, N = 3235) = 4.20, p = .04).

Table B29: ILEARN Math Performance by Matched Group Attendance Type (≥ 30 Days vs. < 30 Days)

Math: Percentage of 21st CCLC participants by ILEARN performance

		≥ 30 [ays	< 30 [ays			
ILEARN	N Math Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2024	Proficiency ^a	456/1699	27%	403/1657	24%	2.79	.10	1.10
2021- 2022	Growth Target ^b	440/1641	27%	371/1594	23%	5.39	.02	1.15
2022	SGP ^c	792/1641	48%	712/1594	45%	4.20	.04	1.08

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

^c Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

 $^{^{\}rm c}$ Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

60+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 60 or more days and (2) students attending fewer than 60 days. Students who attended for 60 or more days were statistically significantly more likely to meet their ILEARN math growth targets (χ 2(1, N = 2714) = 6.59, p = .01) and earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) (χ 2(1, N = 2714) = 11.86, p = .001).

Table B30: ILEARN Math Performance by Matched Group Attendance Type (≥ 60 Days vs. < 60 Days)

Math: Percentage of 21st CCLC participants by ILEARN performance

		≥ 60 Days		< 60 [< 60 Days			
ILEARI	N Math Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2021	Proficiency ^a	395/1431	28%	343/1404	24%	3.71	.05	1.13
2021- 2022	Growth Target ^b	387/1381	28%	316/1333	24%	6.59	.01	1.18
2022	SGP^c	692/1381	50%	580/1333	44%	11.86	.001	1.15

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

90+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 90 or more days and (2) students attending fewer than 90 days. Students who attended for 90 or more days were statistically significantly more likely to meet their ILEARN math growth targets (χ 2(1, N = 2243) = 12.91, p < .001), earn an SGP greater than or equal to 50 (Indiana's 21st CCLC federal reporting target) (χ 2(1, N = 2243) = 8.35, p = .002), and score at or above proficiency (χ 2(1, N = 2342) = 10.42, p = .001).

Table B31: ILEARN Math Performance by Matched Group Attendance Type (≥ 90 Days vs. < 90 Days)

Math: Percentage of 21st CCLC participants by ILEARN performance

		≥ 90 □	ays	< 90 [Days			
ILEARI	N Math Outcome	n/N	%	n/N	%	χ² (1)	р	Odds Ratio
2021	Proficiency ^a	378/1187	32%	298/1155	26%	10.42	.001	1.23
2021- 2022	Growth Target ^b	353/1151	31%	261/1092	24%	12.91	< .001	1.28
2022	SGP ^c	575/1151	50%	479/1092	44%	8.35	.004	1.13

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

^c Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

^a Percentage of participants scoring at or above ILEARN proficiency.

^b Percentage of participants meeting their ILEARN growth target.

^c Percentage of participants earning a student growth percentile (SGP) greater than or equal to 50.

Matched-Group Analysis: Discipline

30+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 30 or more days and (2) students attending fewer than 30 days. Students who attended for 30 or more days were less likely to receive out-of-school suspensions ($\chi 2(1, N = 6260) = 13.98, p < .001$) compared to those who attended less frequently.

Table B32: Suspension Rate by Matched Group Attendance Type (≥ 30 Days vs. < 30 Days)

Discipline: Percentage of 21st CCLC participants by suspension rate

-		≥ 30 D	ays	< 30 D	ays			
Discipline	e Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2021 2022	ISS	199/3134	6%	214/3126	7%	.63	.43	.96
2021-2022	OSS	277/3134	9%	366/3126	12%	13.98	< .001	.75

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

60+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 60 or more days and (2) students attending fewer than 60 days. Students who attended for 60 or more days were less likely to receive in-school (χ 2(1, N = 6329) = 10.54, p = .001) and out-of-school suspensions (χ 2(1, N = 6329) = 19.34, p < .001) compared to those who attended less frequently.

Table B33: Suspension Rate by Matched Group Attendance Type (≥ 60 Days vs. < 60 Days)

Discipline: Percentage of 21st CCLC participants by suspension rate

		≥ 60 D	≥ 60 Days		< 60 Days			
Discipline	Outcome	n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2021-2022	ISS	133/3163	4%	190/3166	6%	10.54	.001	.70
2021-2022	OSS	221/3163	7%	319/3166	10%	19.34	<.001	.69

Note: To control for Type I error across multiple comparisons, Benjamini-Hochberg (1995) corrections were applied (False Discovery Rate = 10%).

90+ Days: Propensity score matching was used to identify two groups of students: (1) students attending for 90 or more days and (2) students attending fewer than 90 days. Students who attended for 90 or more days were less likely to receive in-school and out-of-school suspensions ($\chi 2(1, N = 5775) = 9.31, p = .002$) compared to those who attended less frequently.

Table B34: Suspension Rate by Matched Group Attendance Type (≥ 90 Days vs. < 90 Days)

Discipline: Percentage of 21st CCLC participants by suspension rate

-		≥ 90 D	ays	< 90 D	ays			
Discipline Outcome		n/N	%	n/N	%	χ² (1)	p	Odds Ratio
2021-2022	ISS	97/2896	3%	125/2879	4%	3.84	.05	.77
2021-2022	OSS	146/2896	5%	200/2879	7%	9.31	.002	.73

Appendix C: Data Tables

Program Context

Program context data were entered by program staff into the Cayen AfterSchool (Cayen) data collection software during the 2021-2022 grant year. Data were entered as part of normal 21st CCLC implementation using policies and procedures determined by IDOE. Data accuracy and quality are determined by grantees, IDOE, and various subcontractors (e.g., technical assistance providers, local evaluators). Program context contained in this report reflects the raw data exported from Cayen in summer 2022. No alterations were made by the state evaluation team in the preparation of this report.

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0.2%

PROGRAM CONTEXT: 2021-2022 Table C1: 21st CCLC Indiana Counties

Martin

	2021-	2022
County	Students	Percent
Adams	137	0.9%
Allen	409	2.6%
Bartholomew	247	1.6%
Clark	231	1.5%
Crawford	390	2.5%
Decatur	61	0.4%
Delaware	197	1.2%
Elkhart	738	4.7%
Floyd	139	0.9%
Grant	59	0.4%
Greene	276	1.7%
Harrison	272	1.7%
Howard	55	0.3%
Huntington	390	2.5%
Jackson	46	0.3%
LaGrange	29	0.2%
Lake	644	4.1%
LaPorte	594	3.8%
Lawrence	495	3.1%
Madison	1,166	7.4%
Marion	2,652	16.7%
Marshall	66	0.4%

		2021	-2022
County	St	udents	Percent
Monroe		395	2.5%
Montgomery		538	3.4%
Morgan		242	1.5%
Ohio		356	2.2%
Orange		118	0.7%
Perry		1,214	7.7%
Porter		22	0.1%
Putnam		245	1.5%
Scott		159	1.0%
St. Joseph		376	2.4%
Starke		202	1.3%
Steuben		300	1.9%
Switzerland County		122	0.8%
Tippecanoe		207	1.3%
Tipton		137	0.9%
Vanderburgh		1,044	6.6%
Vigo		291	1.8%
Wabash		66	0.4%
Washington		125	0.8%
Wayne		248	1.6%
Wells		46	0.3%
Whitley		60	0.4%
T	otal 1	5,839	

Table C2: Grantee Types

		2021	-2022
		Grantees	Percent
Charter School		3	4.2%
College/University		2	2.8%
Community Based		38	53.5%
School District		27	38.0%
Other		1	1.4%
	Total	71	

Table C3: Activity Frequencies and Time Spent

		2021-	2022	
	Frequency	Mean Days	Mean Hours	Mean Hours/Day
Academic Enrichment	723	60.3	84.8	1 hr 20 min
Activities for English Learners	128	21.1	27.2	1 hr 05 min
Assistance to Truant, Suspended, or Expelled Students	26	70.2	96.1	1 hr 19 min
Career Competencies and Career Readiness	353	33.5	45.2	0 hr 42 min
Cultural Programs	4	3.3	3.0	1 hr 13 min
Drug and Violence Prevention and Counseling	168	37.7	55.3	1 hr 30 min
Healthy and Active Lifestyle	739	40.8	50.7	1 hr 53 min
Literacy Education	444	48.2	74.5	1 hr 25 min
Parenting Skills and Family Literacy	4	1.0	1.6	1 hr 35 min
Science, Technology, Engineering, and Mathematics, including Computer Science	864	34.0	50.2	1 hr 32 min
Well-rounded Education Activities (e.g., credit recovery or attainment)	1,557	33.9	45.4	1 hr 04 min
Missing	270	45.6	51.6	1 hr 22 min
Total	5,280			

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Table C4: Student Attendance Gradations by Grade Level

	2021-2022					
Grade		ident Attend			Total	
Level	<30	30-44	45-59	60+		
Pre-K	40.9% (n=85)	7.2% (n=15)	3.4% (n=7)	48.6% (n=101)	208	
K	28.6% (n=369)	8.7% (n=112)	8.1% (n=105)	54.6% (n=706)	1,292	
1	27.9% (n=473)	7.2% (n=122)	5.8% (n=99)	59.1% (n=1002)	1,696	
2	29.0% (n=568)	7.3% (n=144)	7.9% (n=154)	55.8% (n=1095)	1,961	
3	31.4% (n=617)	8.3% (n=164)	8.3% (n=164)	52.0% (n=1022)	1,967	
4	33.8% (n=649)	7.9% (n=151)	8.3% (n=160)	50.0% (n=959)	1,919	
5	39.5% (n=752)	9.8% (n=186)	8.9% (n=170)	41.8% (n=797)	1,905	
6	54.0% (n=732)	8.0% (n=108)	8.3% (n=113)	29.7% (n=403)	1,356	
7	58.7% (n=769)	9.1% (n=119)	9.2% (n=120)	23.1% (n=302)	1,310	
8	59.8% (n=711)	9.8% (n=117)	9.8% (n=116)	20.6% (n=245)	1,189	
9	49.4% (n=194)	10.4% (n=41)	10.4% (n=41)	29.8% (n=117)	393	
10	49.8% (n=122)	9.0% (n=22)	11.8% (n=29)	29.4% (n=72)	245	
11	56.6% (n=111)	12.2% (n=24)	13.3% (n=26)	17.9% (n=35)	196	
12	41.2% (n=56)	8.8% (n=12)	18.4% (n=25)	31.6% (n=43)	136	
Total	39.4% (n=6208)	8.5% (n=1337)	8.4% (n=1329)	43.7% (n=6899)	15,773	

Table C5: Student Attendance by GPRA and Grade Level Groupings

2021-2022 **Grade Level Groupings** Hours Total Pre-K K-5 6-8 9-12 42.0% 44.4% 1.1% 12.5% 1-15 hours 2,233 (n=25)(n=992) (n=937)(n=279) 0.8% 61.5% 30.7% 7.0% 16-45 hours 2,440 (n=20)(n=1500) (n=750)(n=170)1.5% 62.5% 29.7% 6.3% 46-90 hours 2,506 (n=37)(n=1567)(n=745)(n=157)1.6% 70.0% 24.4% 4.0% 91-135 hours 1,792 (n=28)(n=1255) (n=437)(n=72)0.8% 71.1% 20.4% 7.7% 136-180 hours 1,372 (n=11)(n=976)(n=280)(n=105)0.9% 75.1% 17.1% 6.9% 181-270 hours 2,017 (n=18)(n=1514) (n=345)(n=140)2.5% 84.8% 11.0% 1.6% 271-540 hours 2,276 (n=57)(n=1931)(n=251)(n=37)0.7% 1.1% 89.8% 8.5% >540 hours 1,044 (n=11)(n=937)(n=89) (n=7)68.1% 24.5% 6.2% 1.3% Total 15,680 (n=207) (n=10672) (n=3834) (n=967)

Table C6: Attendance by Term - Total 2021-2022

		2021-2022	
		Students	Percent
Summer 2021		2,382	15.0%
Spring 2021-2022		14,887	94.0%
To	tal	15,839	

^{*}Students may attend programming in the summer, fall, and/or spring, based on when 21st CCLC programming is offered at their site.

Table C7: Attendance by Term – In-Person and Virtual 2021-2022

	Summe	er 2021	School Year 2021-2022		
	Students	Percent	Students	Percent	
In-Person	2,245	94.2%	14,858	99.8%	
Virtual	137	5.8%	693	4.7%	
Total	2,382		14,887		

^{*}Programming was offered in-person, virtual, or hybrid. Hybrid programming included both in-person and virtual; therefore, a student could be counted in both. As a result, percent values may equal more than 100% and student counts may sum to more than the total for each season (e.g., summer 2021).

Table C8: Attendance by Student Race/Ethnicity Categories⁸

			2021-2022		
Race/Ethnicity	Stu	ion	Total		
Nace/ Litilicity	<30	30-44	45-59	60+	TOLAI
American Indian or Native Alaskan	65.7% (n=176)	10.4% (n=28)	10.4% (n=28)	13.4% (n=36)	268
Asian	48.3% (n=211)	12.6% (n=55)	14.6% (n=64)	24.5% (n=107)	437
Black (not of Hispanic origin)	37.1% (n=1235)	9.6% (n=318)	9.7% (n=323)	43.6% (n=1450)	3,326
Hispanic	39.8% (n=687)	7.5% (n=130)	5.6% (n=96)	47.1% (n=813)	1,726
Native Hawaiian or Pacific Islander	60.4% (n=55)	12.1% (n=11)	6.6% (n=6)	20.9% (n=19)	91
White (not of Hispanic origin)	39.6% (n=3425)	7.9% (n=681)	8.2% (n=714)	44.3% (n=3838)	8,658
Two or More Races	33.1% (n=382)	8.8% (n=102)	7.5% (n=87)	50.6% (n=584)	1,155
Another Race/Unknown*	53.9% (n=96)	7.3% (n=13)	7.9% (n=14)	30.9% (n=55)	178
Total	39.6% (n=6267)	8.4% (n=1338)	8.4% (n=1332)	43.6% (n=6902)	15,839

^{*}Another Race/Unknown includes students with missing race/ethnicity fields. Missing data included 103 students (0.7% of total students).

Table C9: Student Attendance Gradations by Free/Reduced Lunch (FRL)

		2021-2022				
	Stude	ent Attenda	ance Grad	ation	Total	
	<30	30-44	45-59	60+	TOtal	
Paid Lunch	39.3% (n=1748)	8.6% (n=382)	8.2% (n=363)	43.9% (n=1952)	4,445	
FRL	39.7% (n=4361)	8.4% (n=926)	8.5% (n=937)	43.4% (n=4768)	10,992	
Total	39.6% (n=6109)	8.5% (n=1308)	8.4% (n=1300)	43.5% (n=6720)	15,437	

⁸ Note: In the Cayen system, race and ethnicity are entered into the same variable. As a result, both race and ethnicity are reported together throughout the evaluation report (see Appendix B for more detailed discussion).

Table C10: Student Attendance Gradations by Limited English Proficiency (LEP)

		2021-2022				
	Stude	ent Attend	ance Grad	lation	Total	
	<30	30-44	45-59	60+	TOtal	
Non-LEP	39.1% (n=5729)	8.4% (n=1238)	8.6% (n=1256)	43.9% (n=6445)	14,668	
LEP	42.2% (n=429)	8.7% (n=88)	6.3% (n=64)	42.8% (n=435)	1,016	
Total	39.3% (n=6158)	8.5% (n=1326)	8.4% (n=1320)	43.9% (n=6880)	15,684	

Table C11: Student Attendance Gradations by Special Education (SE)

		2021-2022				
	Stude	ent Attend	ance Grad	ation	Total	
	<30	30-44	45-59	60+	TOLAI	
Non-SE	38.8% (n=5271)	8.4% (n=1136)	8.6% (n=1163)	44.3% (n=6010)	13,580	
SE	48.5% (n=839)	10.3% (n=178)	8.8% (n=152)	32.4% (n=561)	1,730	
Total	39.9% (n=6110)	8.6% (n=1314)	8.6% (n=1315)	42.9% (n=6571)	15,310	

Table C12: Student Attendance Gradations by Sex

			2021-2022				
		Stude	nt Attend	ance Grad	ation	Total	
		<30	30-44	45-59	60+	TOLAI	
Female		39.7% (n=3172)	8.7% (n=699)	8.0% (n=640)	43.6% (n=3489)	8,000	
Male		39.2% (n=3054)	8.2% (n=635)	8.8% (n=687)	43.8% (n=3407)	7,783	
	Total	39.4% (n=6226)	8.5% (n=1334)	8.4% (n=1327)	43.7% (n=6896)	15,783	

Table C13: Student Attendance Gradations by Student's Primary Language

		2021-2022					
	Stude	nt Attend	ance Gra	dation	Total		
	<30	30-44	45-59	60+	Total		
English	36.8% (n=4046)	8.2% (n=896)	8.0% (n=874)	47.0% (n=5164)	10,980		
Non-English	31.6% (n=306)	7.8% (n=76)	8.4% (n=81)	52.2% (n=506)	969		
Total	36.4% (n=4352)	8.1% (n=972)	8.0% (n=955)	47.5% (n=5670)	11,949		

Table C14: Student Attendance Gradations 2014-2015 through 2021-2022

	2014-2015		2015-2016		2016-2017	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<30	8,671	40.1%	8,698	39.3%	8,026	37.9%
30-44	2,193	10.1%	2,125	9.6%	2,094	9.9%
45-59	1,606	7.4%	1,537	6.9%	1,488	7.0%
60+	9,158	42.3%	9,783	44.2%	9,542	45.1%
Total	21,628		22,143		21,150	

	2017-2018		2018-2019		2019-2020	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<30	9,089	38.0%	10,004	44.2%	11,048	49.1%
30-44	2,328	9.7%	2,020	8.9%	2,040	9.1%
45-59	2,036	8.5%	1,861	8.2%	1,808	8.0%
60+	10,475	43.8%	8,725	38.6%	7,595	33.8%
Total	23.928		22.610		22.491	

	2020-2021		2021-2022	
	Frequency	Percent	Frequency	Percent
<30	6,897	30.7%	6,267	39.6%
30-44	1,779	7.9%	1,338	8.4%
45-59	1,390	6.2%	1,332	8.4%
60+	5,851	26.0%	6,902	43.6%
Total	15,917		15,839	

Table C15: Average Participants Per Site by Year

	Annual Trends				
	Number of Sites	Minimum	Maximum	Mean	Std. Deviation
2014-2015	202	9	582	107.1	89.5
2015-2016	202	11	650	109.6	94.7
2016-2017	199	18	686	106.3	94.2
2017-2018	250	5	595	100.3	95.3
2018-2019	214	6	941	105.7	111.1
2019-2020	220	11	557	102.2	97.9
2020-2021	228	1	513	69.81	76.13
2021-2022	198	11	558	80.0	82.1

Table C16: Annual Participants and Sites by Year

	Annual Trends		
	Number of Sites	Number of Participants	
2014-2015	202	21,628	
2015-2016	202	22,143	
2016-2017	199	21,150	
2017-2018	250	23,928	
2018-2019	214	22,610	
2019-2020	226	22,491	
2020-2021	228	15,917	
2021-2022	198	15,839	

Table C17: Certified Teacher

	2021-2022	
	Frequency	Percent
Certified Teacher	245	16.5%
Not Certified Teacher	697	46.8%
Missing	547	36.7%
Total	1,489	

Table C18: School District Employee

	2021-2022	
	Frequency	Percent
School District Employee	301	20.2%
Not School District Employee	641	43.0%
Missing	547	36.7%
Total	1,489	

Table C19: Years of Out-of-School-Time Experience

2021-2022 Frequency Percent 0 Years 42 2.8% 1-5 Years 25.5% 380 6-10 Years 110 7.4% 11-15 Years 53 3.6% 16-20 Years 45 3.0% 21-25 Years 14 0.9% 26-30 Years 12 0.8% 31-35 Years 4 0.3% 36+ Years 6 0.4% 823 55.3% Missing Total 1,489

Table C20: Staff & Volunteer Race/Ethnicity

2021-2022 Frequency Percent American Indian/Alaskan Native 1 0.1% Asian 16 1.1% Black (not of Hispanic origin) 233 15.6% Hispanic 28 1.9% White (not of Hispanic origin) 698 46.9% Two or More Races 22 1.5% Another Race/Unknown* 491 33.0% Total 1,489

Table C21: Staff & Volunteer Sex

		2021-2022	
		Frequency	Percent
Female		1,004	67.4%
Male		191	12.8%
Non-Binary		1	0.1%
Missing		293	19.7%
	Total	1,489	

^{*}Another Race/Unknown includes staff/volunteers with missing race/ethnicity fields.

Table C22: Staff & Volunteer Education Level

	2021-2022	
	Frequency	Percent
Less than High School	45	3.0%
High School Diploma or GED	185	12.4%
Some College or Associate's Degree*	170	11.4%
Bachelor's Degree	301	20.2%
Some Master's or Doctorate-Level Courses	14	0.9%
Master's or Doctorate Degree	129	8.7%
Missing	645	43.3%
Total	1,489	

^{*}The Some College or Associate's Degree education field is combined in the Cayen dataset and cannot be disaggregated.

Table C23: Full-Time or Part-Time Status

	2021-2022	
	Frequency	Percent
Full-Time	215	14.4%
Part-Time	587	39.4%
Missing	687	46.1%
Total	1,489	

Table C24: Staff & Volunteer Wage Type

		2021-2022	
		Frequency	Percent
Hourly		506	34.0%
Salary		50	3.4%
Volunteer		2	0.1%
Missing		931	62.5%
	Total	1,489	

Table C25: Staff & Volunteers by Year

	Annual Trends		
	Number of Staff & Volunteers	Number of Participants	
2016-2017	1,587	21,150	
2017-2018	1,951	23,928	
2018-2019	1,779	22,610	
2019-2020	2,194	22,491	
2020-2021	1,391	15,917	
2021-2022	1,489	15,839	

Appendix D: References

- Austin, P.C. (2011). An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research*, 46(3), 399-424.
- Beckett, M., Borman, G., Capizzano, J., Parsley, D., Ross, S., Schirm, A., et al. (2009). *Structuring out-of-school time to improve academic achievement* (NCEE 2009-012). Princeton, NJ: What Works Clearinghouse. Retrieved from https://eric.ed.gov/?id=ED505962.
- Beets, M.W., Tilley, F., Turner-McGrievy, G., Weaver, R.G., & Jones, S. (2014). Community partnership to address snack quality and cost in after-school programs. *Journal of School Health, 84,* 543-548.
- Bender, K., Brisson, D., Jenson, J.M., Forrest-Bank, S., Lopez, A., & Yoder, J. (2011). Challenges and strategies for conducting program-based research in after-school settings. *Child Adolescent Social Work Journal*, *28*, 319-334.
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society Series B Methodological*, 57(1), 289–300.
- Bertsekas, D. P., & Tseng, P. (1988). Relaxation methods for minimum cost ordinary and generalized network flow problems. *Operations Research*, *36*(1), 93-114.
- Bloom, H. S., Hill, C. J., Black, A. R., & Lipsey, M. W. (2008). Performance trajectories and performance gaps as achievement effect-size benchmarks for educational interventions. *Journal of Research on Educational Effectiveness*, 1(4), 289-328.
- Blundell, R., Dearden, L., & Siansi, B. (2005). Evaluating the effect of education on earnings: models, methods and results from the National Child Development Survey. *Journal of the Royal Statistical Society: Series A, 168*(3), 473-512.
- Bulanda, J.J., McCrea, K. (2012). The promise of an accumulation of care: Disadvantaged African American youths' perspectives about what makes an after school program meaningful. *Child Adolescent Social Work Journal*, *30*, 95-118.
- Caliendo, M. & Kopeinig, S. (2008). Some practical guidance for the implementation of propensity score matching. *Journal of Economic Surveys*, 22(1), 31-72.
- Child and Youth Care Certification Board (2020). Certification process. Retrieved from www.cyccb.org/get-certified.

- Chen, H., Cohen, P. & Chen, S. (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communication in Statistics*, 39(4).
- Cochran W.G. & Rubin D.B. (1973). Controlling bias in observational studies: A review. *The Indian Journal of Statistics, Series A., 35,* 417-466.
- Coe, R. (2002). It's the effect size, stupid: What effect size is and why it is important. Annual Conference of the British Educational Research Association. University of Exeter, England. September 12, 2002.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. New Jersey: Lawrence Erlbaum.
- Cook, T.D., Shadish, W.R., & Wong, V.C. (2008). Three conditions under which experiments and observational studies produce comparable causal estimates: New findings from within-study comparisons. *Journal of Policy Analysis and Management*, 27(4), 724-750.
- D'Agostino, R.B. (1998). Tutorial in biostatistics: Propensity score methods for bias reduction in the comparison of a treatment to a non-randomized control group. *Statistics in Medicine*, *17*, 2265-2281.
- Davies, S.C. & Peltz, L.J. (2012). At-risk students in after-school programs: Outcomes and recommendations. *Principal Leadership*, October 2012, 12-16.
- Devaney, E., Naftzger, N., Liu, F., Sniegowski, S., Shields, J., & Booth, E. (2016). *Texas 21st Century Community Learning Centers: 2014-15 Evaluation Report.* Washington, DC: American Institutes for Research.
- Devaney, E., Naftzger, N., Liu, F., Levings, J., Cristobal, S., Vinson, M., Hutson, M., Nistler, M., Shields, J., Shaw, S., Hillaker, B., Hallman, S. (2015). *Texas 21st Century Community Learning Centers: 2012-13 and 2013-14 Combined Evaluation Report.* Washington, DC: American Institutes for Research.
- Diehl Consulting Group (2020). *Indiana 21st Century Community Learning Centers Statewide Evaluation Report: 2017 & 2018.* Indianapolis, IN: Indiana Department of Education.
- Dodd, A. & Bowen, L.M. (2011). 21st Century Community Learning Centers Improving the academic performance of at-risk students: A Bronx tale. *Journal of Health and Human Services Administration*, 34(1), 10-41.
- Durlak, J. A., Weissberg, R. P, & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45, 294–309.
- Durlak, J. A., & Weissberg, R. P. (2013). Afterschool programs that follow evidence-based practices to promote social and emotional development are effective. In T. K. Peterson (Ed.), *Expanding Minds and Opportunities*. Washington DC: Collaborative Communications Group.

- Durlak, J. A., Mahoney, J. L., Bohnert, A. M., & Parente, M. E. (2010). Developing and improving after-school programs to enhance youth's personal growth and adjustment: A special issue of AJCP. *American Journal of Community Psychology*, 45(3–4), 285–293.
- Engels, H., Gretbeck, R., & Gretbeck, K. (2005). Promoting healthful diets and exercise: Efficacy of a 12-week afterschool program in urban African-Americans. *Journal of the American Diet Association*, 105, 455-459.
- Field, A. (2009). Discovering statistics using SPSS (3rd ed.). Los Angeles: Sage.
- Gale, N.K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13(117).
- Garvin, E. C., Cannuscio, C. C., & Branas, C. C. (2013). Greening vacant lots to reduce violent crime: A randomised controlled trial. *Injury Prevention*, 19(3), 198-203.
- Gersh, A., Smith, G., & McGovern, G. (2016). *Arkansas 21st Century Community Learning Centers Statewide Evaluation Report: 2014-2015 Annual Report.* Ypsilanti, MI: The Forum for Youth Investment.
- Glazerman, S., Levy, D.M., & Meyers, D. (2003). Nonexperimental versus experimental estimates of earnings impacts. *The Annals of the American Academy of Political and Social Science*, 589, 63-93.
- Goodyear, L., Mansori, S., Cox, J., & Rodriguez, S. (2018). *Illinois State Board of Education 21st Century Community Learning Centers Program State-Level Program Evaluation 2015-2016.* Waltham, MA: Education Development Center.
- Goodyear, L., Mansori, S., Cox, J., & Rodriguez, S. (2018). *Illinois State Board of Education 21st Century Community Learning Centers Program State-Level Program Evaluation 2014-2015.* Waltham, MA: Education Development Center.
- Goodyear, L., Mansori, S., Cox, J., Rodriguez, S., & Garcia, G. (2018). *Illinois State Board of Education 21st Century Community Learning Centers Program State-Level Program Evaluation 2016-2017.*Waltham, MA: Education Development Center.
- Ha, Y. & Park, H. (2017). Can after-school programs and private tutoring help improve students' achievement? Revisiting the effects in Korean secondary schools. *Asia Pacific Educational Review,* 18, 65-79.
- Hammer, P.C., & Whisman, A. (2017). 21st Century Community Learning Centers 2015-2016: A Descriptive Evaluation. Charleston, WV: West Virginia Department of Education.
- Hansen, B. B. (2004). Full matching in an observational study of coaching for the SAT. *Journal of the American Statistical Association*, *99*, 609-618.
- Hansen, B. B., & Bowers, J. (2008). Covariate balance in simple, stratified and clustered comparative studies. *Statistical Science*, *2*, 219-236.

- Hansen, B. B., & Klopfer, S. O. (2006). Optimal full matching and related designs via network flows. *Journal of Computational and Graphical Statistics*, 15(3).
- Hanson, B.B. & Bowers, J. (2010). RItools: Software for balance testing using randomization inference.
- Hargrave, C.P. (2015). Counter space: Analysis of educational structures of an after-school program that fosters black academic success narratives. *Journal of Negro Education*, 84(3), 348-361.
- Hedges, L. V., & Hedberg, E. C. (2007). Intraclass correlation values for planning group-randomized trials in education. *Educational Evaluation and Policy Analysis*, 29(1), 60-87.
- Ho, D., Imai K., King G., Stuart E. (2007). Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference. *Political Analysis*, 15(3), 199–236.
- Ho, D. E., Imai, K., King, G., & Stuart, E. A. (2011). MatchIt: Nonparametric preprocessing for parametric causal inference. *Journal of Statistical Software*, 42(8).
- Huang, D. & Cho, J (2010). Using professional development to enhance staff retention. *Afterschool Matters*, Fall, 9-10
- Huang, D., Cho, J., Nam, H., H., La Torre, D., Oh, C., Harven, Caverly, S. (2009). Examining practices of staff recruitment and retention in four high-functioning afterschool programs. (CRESST Report 769).
 Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Huang, D. and Dietel, R. (2011). *Making Afterschool Programs Better*. CRESST Policy Brief. National Center for Research on Evaluation, Standards, & Student Testing (CRESST), University of California, Los Angeles. Los Angeles, CA.
- Hopkins, M., Provenzano, A.M., & Spencer, M.S. (2005). Benefits, challenges, characteristics and instructional approaches in an El Sistema inspired after-school string program developed as a university—school partnership in the United States. *International Journal of Music Education*, 35(2), 239-258.
- Hu, X. Craig, S.D., Bargagliotti, A.E., Graesser, A.C., Okwumabua, T., Anderson, C., & Cheney, K.R. (2012). The effects of a traditional and technology-based after-school program on 6th grade student's mathematics skills. *Journal of Computers in Mathematics and Science Teaching, 31*(1), 17-38.
- lachini, A., Bell, B.A., Lohman, M., Beets, M.W., & Reynolds, J.F. (2016). Maximizing the contribution of afterschool programs to positive youth development: Exploring leadership and implementation with Girls on the Run. *Children & Schools*, 39(1), 43-51.
- lacus, S. M., King, G., & Porro, G. (2009). CEM: Software for coarsened exact matching. *Journal of Statistical Software, 30,* 1-27.
- lacus, S.M., King, G., & Porro, G. (2011). Multivariate matching methods that are monotonic imbalance bounding. *Journal of the American Statistical Association*, 106(493), 345-361.

- Indiana Department of Education (2019). *Indiana Department of Education Releases Spring 2019 ILEARN Results*. Retrieved from https://www.doe.in.gov/news/indiana-department-education-releases-spring-2019-ilearn-results.
- Indiana Department of Education (2020). 2019 ILEARN Grade 3-8 Statewide Summary Results. Retrieved from https://www.doe.in.gov/sites/default/files/accountability/ilearn-2019-grade3-8-final-statewide-summary.xlsx.
- Indiana Department of Education (2020). IDOE 21st CCLC policy manual. Indianapolis: Indiana Department of Education. Retrieved from www.doe.in.gov/sites/default/files/21stcclc/21st-cclc-policy-manual.pdf.
- James-Burdumy, S., Dyarnski, M., & Deke, J. (2008). After-school program effects on behavior: Results from the 21st Century Community Learning Centers Program National Evaluation. *Economic Inquiry*, 46(1), 13-18.
- Kataoka, S. & Vandell, D. L. (2013). Quality of afterschool activities and relative change in adolescent functioning over two years. *Applied Development Science*, 17(3), 123-134.
- Khashu, A., & Dougherty, N. (2007). Staffing practices of high-quality after-school programs. New York: The AfterSchool Corporation.
- Kim, J.S., Capostosto, L., Hartry, A., & Fitzgerald, R. (2011). Can a mixed-method literacy intervention improve the reading achievement of low-performing elementary school students in an after-school program results from a randomized controlled trial of READ 180 Enterprise. *Educational Evaluation and Policy Analysis*, 33(2), 183-201.
- Kraft, M.A. (2018). Interpreting Effect Sizes of Education Interventions. Brown University Working Paper.
- Kremer, K.P., Maynard, B.R., Polanin, J.R., Vaughn, M.G., Sarteschi, C.M. (2014). Effects of after-school programs with at-risk youth on attendance and externalizing behaviors: A systematic review and meta-analysis. *Journal of Youth Adolescence*, 44, 616-636.
- Leos-Urbel, J. (2013). What works after school? The relationship between after-school program quality, program attendance, and academic outcomes. *Youth & Society, 47*(5), 684-706.
- Lunceford, J.K. & Davidian, M. (2004). Stratification and weighting via the propensity score in estimation of causal treatment effects: A comparative study. *Statistics in Medicine*, *23*(19), 2937–2960.
- Magnify Learning (2021). What is project-based learning? Retrieved from https://www.magnifylearningin.org/what-is-project-based-learning.
- Malm, E.K., Hufsteler, S.M., Dietz, S.L., Malikina, M.V., Henrich, C.C. (2016). Associations of parent and staff factors with parent engagement in after-school programs. *Journal of Community Psychology*, *56*, 473-485.

- Mandel Morrow, L., Dougherty, S.M., Kunz, K., & Hall, M. (2017). Rutgers Reading Club: An after school program to motivate and enhance literacy for struggling readers. *Michigan Reading Journal*, 49(3), 49-52.
- Massachusetts After-School Research Study (MARS). (2005). Pathways to Success for Youth: What Count in After-School. Wellesley, MA: National Institute on Out-of-School Time and Arlington, MA:Intercultural Center for Research in Education.
- Maynard, B.R., Peters, K.E, Vaughn, M.G., & Sarteschi, C.M. (2013). Fidelity in after-school program intervention research: A systematic review. *Research on Social Work Practice*, 23(6), 613-623.
- McCloskey, W., Weir, J.B., Mooney, K., & Williams, M. (2017) 2015-16 North Carolina 21st CCLC Program State-Level Progress Monitoring Report (Cohort 10 and 11 Grantees). Browns Summit, NC: SERVE Center at UNCG.
- McSparrin Gallagher, B., Tang, Y., Vanelli, L., Muzzi, C., & Zoblotsky, T. (2018). *Virginia Department of Education Evaluation of 21st Century Community Learning Centers 2016-2017.* Memphis: University of Memphis.
- Measurement Inc. (2018). Statewide Evaluation of New York State 21st Century Community Learning Center Program: Annual Evaluation Report Year 1 (6/1/17 -5/31/18). White Plains, NY: Measurement Incorporated.
- Moroney, D., Marchand, J., Naftzger, N., Liu, F., Vinson, M., & Sparr, M. (2012). *Statewide Program Evaluation of 21st CCLC Grants: Oregon Department of Education*. Washington, DC: American Institutes for Research.
- Moullin, J.C., Sabater-Hernandez, D., Benrimoj, S. (2016). Qualitative study on the implementation of professional pharmacy services in Australian community pharmacies using framework analysis. *BMC Health Services Research*, *16*(439), 1-13.
- Naftzger, N., Manzeske, D., Nistler, M., Swanlund, A., Rapaport, A., Shields, J., Smith, C., Gersh, A., & Sugar, S. (2013). *Texas 21st Century Community Learning Centers: Year 2 Evaluation Report.*Washington, DC: American Institutes for Research.
- Naftzger, N., Vinson, M., Liu, F., Zhu, B., & Foley, K. (2014). *Washington 21st Century Community Learning Centers Program Evaluation: Year 2.* Washington, DC: American Institutes for Research.
- Neild, R.C., Wilson, S.J., & McClanahan W. (2019). *Afterschool Programs: A Review of Evidence Under the Every Student Succeeds Act*. Philadelphia: Research for Action.
- Niehaus, K., Moritz Rudasill, K., Adelson, J.L. (2012). Self-Efficacy, Intrinsic Motivation, and Academic Outcomes Among Latino Middle School Students Participating in an After-School Program. Hispanic Journal of Behavioral Sciences, 34(1), 118-136.
- Paluta, L.M., Lower, L., Anderson-Butcher, D., Gibson, A., Iachini, A.L. (2016). Examining the quality of 21st Century Community Learning Center After-School Programs: Current practices and their relationship to outcomes. *Children & Schools, 38*(1), 49-56.

- Pelcher, A. & Rajan, S. (2016). After-school program implementation in urban environments: Increasing engagement among adolescent youth. *Journal of School Health, 86*, 585-594.
- Pierce, K. M., Bolt, D. M., & Vandell, D. L. (2010). Specific features of after-school program quality: associations with children's functioning in middle childhood. *American Journal of Community Psychology*, 45(3–4), 381–393. https://doi.org/10.1007/s10464-010-9304-2.
- Pope, C., Ziebland, S., & Mays, N. (2000). Qualitative research in health care: Analysing qualitative data. *BMJ*, 320, 114-116.
- Rapp-Paglicci, L. A., Ersing, R., & Rowe, W. (2006). The effects of cultural arts programs on at-risk youth: Are there more than anecdotes and promises? *Journal of Social Science Research*, 33(2), 51-56.
- Ritchie J. & Spencer L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. Burgess (Eds.), *Analysing qualitative data* (pp. 173-94). London: Routledge.
- Rosenbaum P.R. & Rubin D.B. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score. *The American Statistician*, *39*, 33-38.
- Rosenbaum, P.R. & Rubin, D.B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70(1), 41-55.
- Sahin, A., Ayar, M.C., Adiguzel, T. (2014). STEM related after-school program activities and associated outcomes on student learning, *Educational Sciences: Theory & Practice, 14*(1), 309-322.
- Sharp, Laura. (2012). Stealth learning: Unexpected learning opportunities through games. *Journal of Instructional Research*, 1, 42-48.
- Shaw, S., Hillaker, B., & Halman, S. (2015). *Texas 21st Century Community Learning Centers: 2012-13 and 2013-14 Combined Evaluation Report.* Washington, DC: American Institutes for Research.
- Shernoff, D.J. (2010). Engagement in after-school programs as a predictor of social competence and academic performance. *American Journal of Community Psychology, 45,* 325-337.
- Sianesi, B. (2004). "An evaluation of the active labour market programmes in Sweden," The *Review of Economics and Statistics*, 86(1), 133–155.
- Sniegowski, S., Naftzger, N., Sutter, A., Vinson, M., Lederer, A., & Liu, F., (2019). Washington 21st Century Community Learning Centers Program Evaluation: 2015-16 Program Year. Washington, DC: American Institutes for Research.
- Sniegowski, S., Sutter, A., & Naftzger, N. (2018). *South Carolina 21st Century Community Learning Centers Statewide Evaluation: 2016–17 Program Year.* Washington, DC: American Institutes for Research.
- Sommers, M., Zhu, P., Jacob, R., Bloom, H. (2013). The validity and precision of the comparative interrupted time series design and the difference-in-difference design in educational evaluation. MDRC Working Paper on Research Methodology.

- Springer, K. & Diffily, D. (2012). The relationship between intensity and breadth of after-school program participation and academic achievement: Evidence from a short-term longitudinal study. *Journal of Community Psychology, 40*(7), 785-798.
- Stuart, E.A. (2010). Matching Methods for Causal Inference: A review and a look forward. *Statistical Science*, 25(1), 1-21.
- Taheri, S.A. & Welsh, BC. (2016). After-school programs for delinquency prevention: A systematic review and meta-analysis. *Youth Violence and Juvenile Justice*, *14*(3), 272-290.
- Thoemmes, F. (2012). Propensity score matching in SPSS. arXiv:1201.6385
- United States Department of Agriculture (2016a). *Rural-Urban Continuum Codes.* Retrieved from https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx.
- United States Department of Agriculture (2016b). *Rural-Urban Continuum Codes.* Retrieved from https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation.
- Vandell, D. L. (2013). Afterschool program quality and student outcomes: Reflections on positive key findings on learning and development from recent research. In T. K. Peterson (Ed.), Expanding Minds and Opportunities. Washington DC: Collaborative Communications Group.
- Vinson, M. & Hutson, M. (2014). *Rhode Island 21st Century Community Learning Center Program Evaluation: Descriptive Report.* Washington, DC: American Institutes for Research.
- Vinson, M. & Swanlund, A. (2017). *New Jersey 21st Century Community Learning Centers Year 4 Evaluation Report Impact Data for 2015–16.* Washington, DC: American Institutes for Research.
- Vinson, M., Marchand, J., Sparr, M., & Moroney, D. (2013). *Rhode Island 21st Century Community Learning Center Program Evaluation: Evaluation Report 2011-12.* Washington, DC: American Institutes for Research.
- Vinson, M., Snegowski, S., & Liu, F. (2015). *New Jersey 21st Century Community Learning Centers Year 2 Evaluation Report Impact Data for 2013–14*. Washington, DC: American Institutes for Research.
- Weinfurt, K. P. (1995). Multivariate analysis of variance. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 245-276). Washington, DC: American Psychological Association.
- What Works Clearinghouse. (2014). WWC procedures and standards handbook (Version 3.0). Washington DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, What Works Clearinghouse.
- Wu, H.J. & Van Egeren, L.A. (2018). *Michigan 21st Century Community Learning Centers Evaluation 2016-2017 Annual Report.* East Lansing: Michigan State University.