Nita M. Lowey 21st Century Community Learning Centers

2022-2023 Evaluation

West Virginia Board of Education
2022-2023

L. Paul Hardesty, President
Nancy J. White, Vice President
F. Scott Rotruck, Financial Officer

Robert W. Dunlevy, Member
Victor L. Gabriel, Member
Daniel D. Snavely, M.D., Member
Christopher A. Stansbury, O.D., Member
Debra K. Sullivan, Member
James S. Wilson, D.D.S., Member

Sarah Armstrong Tucker, Ph.D., Ex Officio
Chancellor
West Virginia Higher Education Policy Commission
West Virginia Council for Community and Technical College Education

David L. Roach, Ex Officio
State Superintendent of Schools
West Virginia Department of Education

Table of Contents

Program Description **4**

Background and Context 4

Evaluation History **7**

Evaluation Overview and Questions **9**

Evaluation Rationale and Philosophy 9

Evaluation Synopsis 10

Evaluation Questions 11

Standards Use and Metaevaluation **12**

Data Sources and Collection **13**

Data Collection Procedures 13

School-Day Teacher Survey 13

Program Director Survey 14

Program Director Focus Group 14

Artifacts and Extant Data 14

Methods **15**

Overview 15

Procedures for Creating Matched Samples 15

Approach 15

Data Inclusion Criteria 16

Program Operations 17

EQ1 17

EQ2. 18

Social-Emotional Skills and Behavior 18

Resilience 18

EQ3. 19

EQ4. 19

EQ5. 19

Findings **20**

Program Operations 20

EQ1 22

EQ2. 24

Social-Emotional Skills and Behavior 24

Resilience 26

EQ3. 27

EQ4. 28

Supplemental Funding 28
Volunteer Hours 29
EQ5. 30
End-of-Year Recommendations 33
Commendations 33
Recommendations 33
References 35
Programmatic, Theoretical, and Methodological 35
Software 36
Appendix A. Evaluation Logic Model 37
Appendix B. Teacher Survey (with Consent Language) 39
Informed Consent of Parents/Guardians 39
E-mail Notifications for Teacher Survey 40
Teacher Survey Questions 44
Appendix C. Program Director Survey 45
Section 1. Student literacy and numeracy skill development 45
Section 2. Student social/emotional skill development 46
Section 3. Quality of programs, safe and supportive environments 48
Section 4. Program sustainability 48
Section 5. Community and Family Involvement 49
Section 6. Successes, Challenges, and Recommendations 50
Appendix D. Details for Technical Analyses 51
Evaluation Question 1: ELA and Math Improvement 51
Equation Set 1: Absence Rates 53

Program Description

Background and Context

The Nita M. Lowey 21st Century Community Learning Centers (21st CCLC) program is a formula grant program maintained by the Office of Academic Improvement within the Office of Elementary and Secondary Education at the United States Department of Education (USED) to support the "creation of community learning centers that provide academic enrichment opportunities during non-school hours for children, particularly students who attend high-poverty and low-performing schools" (USED, 2022). The 21st CCLC program was authorized under Title IV, Part B, of the Elementary and Secondary Education Act (ESEA; 20 U.S.C. 7171), which transferred administration of the program from the USED to state education agencies when No Child Left Behind was enacted.

In line with federal legislation, the West Virginia Department of Education (WVDE) administers 21st CCLC in the state to provide opportunities for communities to establish or expand activities that:

1. provide opportunities for academic enrichment, including providing tutoring services to help students—particularly students who attend low-performing schools—to meet state and local student academic achievement standards in core academic subjects, such as reading and mathematics (ESEA § *4201*(a)(1));

2. offer students a broad array of additional services, programs, and activities—such as youth development activities; drug and violence prevention programs; counseling programs; art, music, and recreation programs; technology education programs; mathematics, science, career and technical programs; and character education programs—that are designed to reinforce and complement the regular academic program of participating students (ESEA § *4201*(a)(2)); and

3. offer families of participating students opportunities for literacy and related educational development (ESEA § *4201*(a)(3)).

A summary of the federally-based funding provided to the WVDE for 21st CCLC over the past 14 years is displayed in Figure 1 for informational purposes. Using available federal funding, the WVDE provides for competitive local grants to eligible organizations for supporting the implementation of community learning centers that aid student learning and development. Eligible applicants are public and private agencies, city and county governmental agencies, faith-based organizations, institutions of higher education, and for-profit corporations.

During the 2022-2023 school year, there were a total of 42 subgrantees with active projects spanning 135 fiscally unique sites (with 110 public school locations, 17 community-based locations, and 8 faith-based locations). Identifying information for these subgrantees by grant type is contained in Table 1.

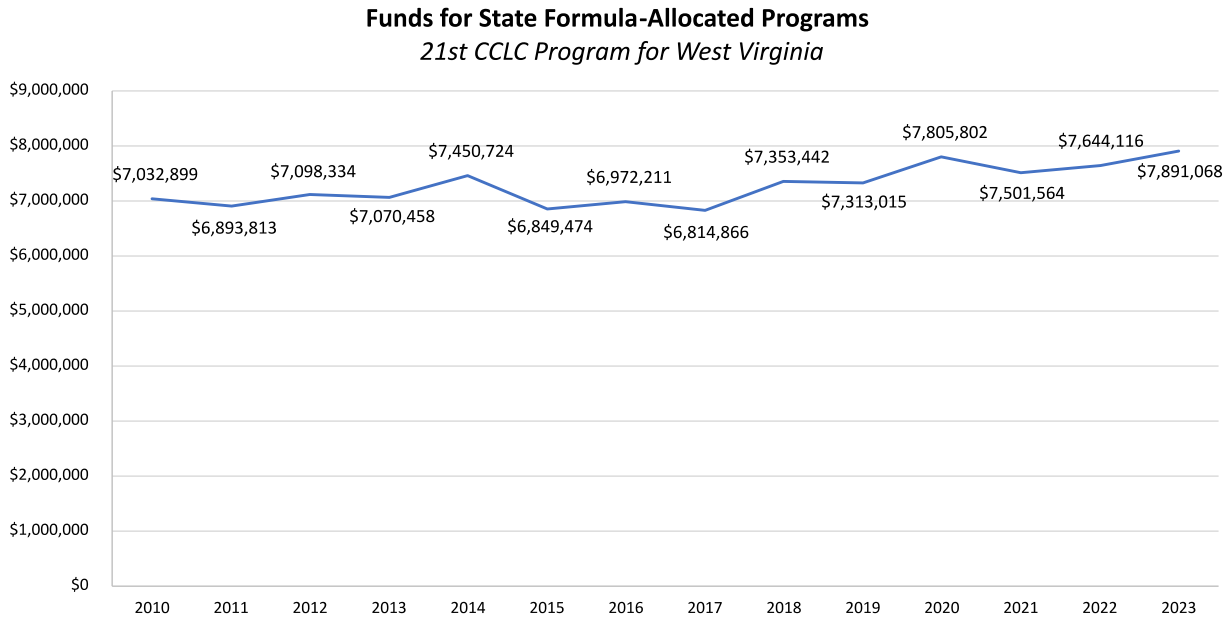


Figure 1. Federal funding made available to WVDE for 21st CCLC. FY22 includes funds provided under the Consolidated Appropriations Act (2022) and the Bipartisan Safer Communities Act.

Table 1. List of grantees.

Grant Type	Grantee/County
Community Based	Boys and Girls Club of Parkersburg
	Coda Mountain Academy - Fayette
	Mountaineer Connections (Mountaineer Boys and Girls Club)* - Monongalia
	PATCH 21 - Roane (2018-2023)
	PATCH 21 - Wirt (2021-2026)
	Playmates Child Development Centers - Wayne (2021-2026)
	Playmates Child Development Centers – Wayne (2017-2022)
	Playmates Child Development Centers – Wayne (2018-2023)
	Playmates Child Development Centers – Wayne (2019-2024)
	Southern Educational Services Cooperative - Webster
	Southern Educational Services Cooperative - Fayette, Summers, Webster (2018-2023)
	Step By Step - Kanawha Teen Centers
	Step By Step - Logan Community
	Step by Step: Kanawha (2018-2023)
	Step by Step - Lincoln/Logan
	Step by Step – Man (Logan)

Grant Type	Grantee/County
Faith Based	Bob Burdette Center, Inc. (Kanawha) Partnership of African American Churches (Kanawha) Salvation Army Boys and Girls Club of Charleston (Kanawha) Save the Children - Calhoun Save the Children - Fayette (2021-2026) Save the Children - Fayette Save the Children - Gilmer Save the Children - Nicholas World Vision, Inc. - Barbour (2018-2023) World Vision, Inc. - Barbour (2019-2024)
School District	Boone County Schools (Project GOAL 2.0) Cabell County Schools (Save the Children) Clay County Schools (REACH 1) Clay County Schools (REACH 2) Greenbrier County Schools (Go Greenbrier) Greenbrier County Schools (Building E-STEAM) Greenbrier County Schools (2019-2024) Harrison County Schools Project ISAAC (2021-2026) Harrison County Schools - Project ISAAC (Monongalia and Randolph) Lincoln County Schools (Project Pride) Marion County Schools Morgan County Schools (2019-2024) Morgan County Schools (2020-2025) Nicholas County Schools Preston County Schools (2019-2024) Preston County Schools (2019-2024)

** Fiscal agent transferred to Monongalia County Schools.*

Within West Virginia, there are two platforms that support 21st CCLC data collection activities and serve as repositories of information across each of the program sites. The first is the WVDE 21st CCLC data application, which houses fields for data entry (e.g., program details, site information, activities, student information, attendance) and contains the ability to export reports by topic (e.g., activities, participation, staffing, outcomes). Use of this platform is primarily to collect and summarize information that is subsequently uploaded into the federal data reporting system, 21APR. The second West Virginia-specific application is the WVDE 21st CCLC monitoring application, which is used to meet required compliance monitoring and allows for program directors to upload evidence in support of various critical elements that demonstrate fidelity to implementation.

Online professional learning and technical assistance for 21st CCLC is made available by USED through the *You for Youth* (Y4Y) professional learning community. Resources and networking opportunities exist for state coordinators, program directors, site coordinators, and other 21st CCLC practitioners. However, this resource site has been archived, though is still accessible. Additionally, the 21st CCLC coordinators at the WVDE provide similar support for all the subgrantees throughout the state, including a robust and expansive OneNote repository that contains documentation and resources for all subgrantees.

Evaluation History

A cursory overview of the evaluation history is provided in Table 2. The highlights/recommendations contained within the table are either direct quotes or paraphrased excerpts from the final evaluation reports for the relevant years.

Revisiting the history of program evaluation activities is important for setting the expectations under which the stakeholders have interacted with the WVDE evaluator(s). The use of teacher surveys and program director surveys has been a component of all evaluations listed in Table 2. The exigency for the surveys in the current evaluation plan is continued based on their historical usefulness in making claims related to program effectiveness from critical stakeholder groups.

In general, the evaluation described for 2022-2023 builds upon program evaluation designs from more recent years. The evaluation questions and logic model were developed in 2016 and are still in use for the current evaluation due to their utility. The evaluation logic model (see Appendix A; also, see Hammer, 2018), for example, only has minor updates from the previous years' evaluations. One recommendation in the 2017-2018 program evaluation report was to further focus the logic model in subsequent years. As a result, the last evaluation question (i.e., EQ6) from previous evaluation studies has been omitted in the current investigation. However, the other five evaluation questions remain intact. Maintaining this continuity in the evaluation studies, as desired by the Office of Federal Programs & Support at the WVDE, has allowed for trend analyses and a more complete understanding of implementation fidelity over time. Using recommendations from previous years' evaluations, the methodology of the 2022-2023 evaluation should ideally capture perceptions of program effectiveness from multiple angles by incorporating new stakeholder measures (e.g., perceptions of student engagement).

Table 2. Highlights and recommendations from the past five years of program evaluation activities.

Year	Highlights/Recommendations
2017-2018	• Regarding safe and supportive environments, two of three indicators of output implementation showed improvement. Training at the spring conference on trauma-informed environments, as well as reported improvements in outputs to improve student 21st CCLC attendance may be responsible for these higher ratings. The higher ratings in the area of student 21st CCLC attendance coincide with improvements in student attendance overall and at the elementary level. • Regarding family and community development, programs reported advanced levels of implementation in their evidence-based practices to maintain and enhance family involvement.
2018-2019	• Site management, as it supports quality of programs with respect to safe and supportive environments, was reported to have a small correlation with year of grant (i.e., year of program implementation), while other factors (i.e., family programming/engagement, breadth and depth of enrichment programs offered to students, and use and influence of

Year	Highlights/Recommendations
	advisory council) were reported to have moderate correlations. Primarily, this effect could be attributed to some sites having stronger site management observed in just years one or two of grant implementation, while the other factors tend to take longer to develop. • The results of the teacher survey, while parsimonious, cannot be readily interpreted as to whether or not the observed changes in the noted indicators (i.e., homework completion and class participation, and student behavior) actually led to positive outcomes (just changes). Therefore, a modification to the instrument is needed for the 2019-2020 program evaluation in order to simultaneously gather information about performance and progress.
2019-2020	• A series of analyses aimed at the usability of the WVDE 21st CCLC data application were conducted. In short, a new data entry system was recommended to better ensure long-term sustainability and interpretability of the data, documentation practices within the data system itself, and ease of use and access for subgrantee program directors and their staff. • Increased availability of data summaries for the 21st CCLC State Education Agency (SEA) coordinators as well as subgrantee program directors led to improvements in the fidelity of data entry, as well as enhanced data quality verifications. Similar summaries were recommended for standard operational use in future implementation years.
2020-2021	• A new data entry system was used operationally, which was widely regarded by all stakeholder groups as a substantial improvement. • The response of the WVDE 21st CCLC team to the coronavirus pandemic continued to be flexible and adaptive to unique needs that have arisen because of the pandemic, particularly with the renewability policy, summer addendum opportunity, and allowability of grant rollovers and rejection of grant funds. • While the program celebrated successes and has many strengths, one recommendation was that the WVDE should consider including criteria within the RFP scoring process that considers the fidelity of implementation of previous grantees who are reapplying for a 21st CCLC grant.
2021-2022	• Recovery from the pandemic was reported to be a daunting task for many subgrantees. Many students spent a great deal of time isolated in ways that impacted their social and emotional learning skills, as well as their academic engagement. 21st CCLC afterschool program staff were able to provide individualized attention to help students successfully re-adjust to social settings and behave in appropriate ways. • Family members benefited from the increased communication protocols that were started initially as a result of the pandemic. Blended modality/formats for program activities were reported to have increased family involvement in 21st CCLC activities. • High school participants in 21st CCLC programming were reported to have benefited with credit recovery.

Evaluation Overview and Questions

Evaluation Rationale and Philosophy

Evaluation is typically defined as judging the merit or worth of a program, policy, or system (Scriven, 1991). The purpose of this program evaluation is to provide information about the implementation and outcomes of the 21st CCLC program in West Virginia, during the period from July 2022 through June 2023. For clarification purposes, the evaluand (which is the subject/program which is being evaluated) is the 21st CCLC program in West Virginia. The key stakeholders invested in the success of the program are the WVDE Federal Programs staff, subgrantee program directors and site coordinators, community partners, and the students and their families who are involved with the 21st CCLC sites outside of normal school hours.

Ultimately, the evaluation serves a *summative* interpretation and use for the implementation of the 21st CCLC program statewide during the 2022-2023 school year. Though, after initial client meetings with the WVDE Office of Federal Programs & Support, it has been determined that it is appropriate to include a *formative* component of the evaluation that addresses the desire to improve program implementation and sustainability even within the current school year. Formative evaluations "provide information for program improvement [and] often, such evaluations provide information to judge the merit or worth of one part of a program" (Fitzpatrick, Sanders, & Worthen, 2011, p. 20). Process evaluation provides information about how to modify 21st CCLC implementation according to how well it is currently being implemented across all sites, the barriers to success, supports for implementation, etc. Altogether, the evaluation provides information that can be used in program decision-making such as how to increase the effectiveness and/or efficiency of program implementation at schools that have already adopted the program, as well as potential types of technical assistance to provide with future groups of subgrantees.

The evaluator for this project was Dr. Jonathan D. Rollins III, who works as a coordinator within the Data Analysis and Research Services team in the Office of Data Management and Information Systems at the WVDE. For this reason, the scope of any analyses was part of an *internal* evaluation in that it was conducted by an evaluator employed within the same SEA. However, the evaluator is not part of the Office of Federal Programs and Support, and reports to a different set of supervisors in a separate part of the organizational structure, which may reduce bias with respect to 21st CCLC.

The evaluation is defined in part by including aspects of a *utilization-focused* evaluation approach that centered on increasing the use of the evaluation findings. Utilization-focused evaluation is a decision-oriented approach based on two primary assumptions: (1) "The primary purpose of evaluation is to inform decisions," and (2) "Use is most likely to occur if the evaluator identifies one or more stakeholders who care about the evaluation and are in a position to use it" (Fitzpatrick et al., 2011, p. 179). Additionally, according to Patton (1997), "Intended users are more likely to use evaluations if they understand and feel ownership of the evaluation process and findings; they are more likely to understand and feel ownership if they've been actively involved" (p. 22). The evaluator has met with the 21st CCLC WVDE coordinators to obtain their perspectives and expectations for what the evaluation will accomplish; doing so will hopefully increase use of the evaluation findings.

For purposes of this evaluation, the evaluator's role is "evaluator as teacher" (Patton, 1997). This responsibility means that the evaluator pays careful attention to ensuring that the clients (the WVDE Federal Programs staff), as well as other stakeholders, are able to understand the findings by taking as much time as necessary to explain any findings from the evaluation. Weekly to monthly evaluation meetings are currently being implemented to promote transparency and understanding of the program evaluation process.

Evaluation Synopsis

In fall 2016, an evaluation logic model was developed by the former program evaluator. Stakeholder input on the logic model was gathered at the October 2016 multi-state conference in Chattanooga, Tennessee. The final logic model delineated the following outcomes:

1. High quality enrichment programs that increase students' literacy and numeracy skills;
2. High quality enrichment programs that increase students' social/emotional skills, behavior, and resilience;
3. All programs operating as high quality, safe, and supportive environments;
4. Increasing sustainability; and
5. Increasing family and community involvement.

The 2022-2023 program evaluation continues to be based on this evaluation logic model (with only minor modifications). The evaluation logic model can be found in Appendix A.

Evaluation Questions

A total of five questions were specified for this evaluation. Evaluation questions, like research questions, guide the inquiry and methodology and are tightly coupled with the overarching purpose.

The following evaluation questions (EQs) were investigated:

To what extent did:

EQ1. Participation in 21st CCLC enrichment programs increase students' literacy and numeracy skills?

EQ2. Participation in 21st CCLC enrichment programs improve students' social/emotional skills, behavior, and resilience?

EQ3. Programs operate as high quality, safe, and supportive environments?

EQ4. The sustainability of programs improve?

EQ5. Community and family involvement increase?

Standards Use and Metaevaluation

The guiding practices of the evaluation will be based upon the Joint Committee on Standards for Educational Evaluation (Yarbrough, *et. al.*, 2011). Essentially, the standards are typically used to ensure that (1) the evaluation is geared toward meeting the stakeholders' needs, (2) the process is accurate and timely, (3) the practices are ethical, (4) the evaluation is honest and trustworthy, and (5) the evaluation will have proper documentation and accountability. The evaluator reviewed the standards to ensure that all applicable standards were addressed appropriately in design, implementation, analysis, and reporting. Limitations of the evaluation were considered as well.

As it relates to the quality of the evaluation, a metaevaluation will also be performed. Stufflebeam (2001) provides a fairly comprehensive checklist which will be used to ensure that all reasonable steps are being taken to structure and help ensure a fair and accessible evaluation. A more recent metaevaluation checklist provided by the Joint Committee on Standards for Educational Evaluation (2018) will also be used.

The metaevaluation will be performed alongside the evaluation to verify findings and retain objectivity. Any discrepant findings will be discussed and resolved prior to reporting the results. The metaevaluation is being performed to maintain a bias-free and fair interpretation of the findings (Datta, 2000). This step is particularly important in the context of internal evaluations. For instance, trying to de-emphasize the values of the evaluator also implies not placing value on one stakeholder group over another, such as colleagues in an SEA (King & Stevahn, 2002). The benefits are not only for objectivity in reporting the findings, but also in boosting accountability and client and stakeholder protection within the evaluation. A final consideration is that the use of the Joint Committee on Standards for Educational Evaluation (2011) also brings in third-party objective guidelines, which help bolster the validity of reaching more objective conclusions.

Additionally, ethical implications of the findings must be clarified. Although an unintended consequence, the evaluation might have lead program directors to become more acutely aware of family involvement and engagement as a result of a survey and focus group discussion. While this consequence is not a bad outcome, it is important to note as a possibility. Furthermore, admissions of bias are important considerations for understanding how metaevaluation can be specifically applied to the evaluation results. The evaluator may be a single person for an unspecified period of time, which could allow the possibility of a narrower perspective in the interpretation of the findings. However, reviews of documents by other WVDE staff and the use of the metaevaluation techniques outlined above will largely mitigate any unintended outcomes.

Data Sources and Collection

Data Collection Procedures

Various data collection procedures were employed to answer each of the evaluation questions. Survey data addressing implementation questions were analyzed using qualitative and descriptive data analysis. Analysis of extant data, using matching groups of participating and nonparticipating students, allowed for comparisons of student outcomes. Details about the output implementation indicators and the outcome impact indicators can be found in the logic model in Appendix A.

The evaluation design included both quantitative and qualitative methods. Using a combination of the two methodological approaches produces a better representation of the program as a whole. Data collection consisted of multiple data sources, including surveys, focus groups, and artifacts and secondary data, as a way to increase the validity and accuracy of the evaluation findings.

All surveys described herein were based upon a cross-sectional design (i.e., collecting data at one point in time). Surveys were administered to two stakeholder groups: school-day teachers and subgrantee program directors. Since the entire population of relevant school-day teachers and program directors received copies of their respective surveys, no sampling considerations were needed. Survey implementation considerations consisted primarily of strategies to bolster response rates in the respective populations. The focus group data also were collected from program directors at a single timepoint.

The formal evaluation plan was submitted to the WVDE IRB and approved with Expedited status (IRB-WVDE-048).

School-Day Teacher Survey

Surveys were used to collect information regarding student engagement in learning from school-day teachers of students who attended the 21st CCLC program for any duration of time, were enrolled in grades 1–5, and whose parents had not denied consent for their participation in the study. Consent forms were given to parents at the time they registered their children; parents were instructed that if they agreed to allow their children be part of the evaluation, no action was necessary. If they denied consent, they returned the signed form, which was kept in program directors' offices until March of each year, and then sent to the WVDE Office of Data Management and Information Systems. Denial of consent was logged into the 21st CCLC database maintained at the WVDE by the data application developer.

The survey given to school-day teachers asked the question about student engagement in learning with a pre-post retrospective format. That is, teachers were asked to provide a rating for the students' level of engagement at the time they began working with the student versus the end of the year when they are currently answering.

Each participant received an introductory email outlining the purpose of the evaluation, the methods of data collection in which they are being asked to participate, the timeline for the data collection, and contact information for follow-up questions. Teachers were then emailed

an anonymous link to the survey and were able to give electronic consent at the start of the survey.

A copy of the teacher survey instrument, accompanied by the consent language, can be found in Appendix B.

Program Director Survey

The overarching purpose of the program director survey was to capture self-reported measures of program effectiveness, program sustainability, and areas for improvement that the program directors have observed across each of their sites. The survey contained items that align with each of the five evaluation questions. The program director survey remains largely unchanged from the previous year's evaluation.

A copy of the program director survey instrument can be found in Appendix C.

Program Director Focus Group

A structured focus group was convened in April 2023 with the primary focus being to gather information from program directors regarding their experiences with the 21st CCLC data application that their sites use as well as family engagement practices. Potential participants were selected based upon the number of grant cycles that they have led (i.e., first-time, experienced), the type of organization (i.e., non-profit/religious, school district), and the grade span served through the grant (i.e., elementary, middle/high, both). A total of six program directors provided consent and participated in the focus group. Three questions were asked related the 21st CCLC data application (e.g., monitoring tools/reports, training new site coordinators and site staff with the application, and exploring the possibility of student-level activity data collection), and an additional three questions regarding family engagement practices (i.e., objectives in continuation reports, data collection and analysis within local/subgrantee program evaluation).

Artifacts and Extant Data

Data previously collected by the program were also analyzed. Relevant items include program fliers, banners, and other written or visual representations of program activities. As outlined in the next section in more detail, additional data were queried (for one or more years, when appropriate) and used to answer evaluation questions as they relate to the evaluation logic model: demographic information, summative assessment scores, attendance during regular school day, attendance at 21st CCLC program site (i.e., dose strength), and teacher survey data.

Methods

Overview

The below table provides a mapping between the EQs and general aspects of the methodology, including the data sources, sample characteristics, and analyses involved. Extant data came from both the 21st CCLC database as well as the West Virginia Education Information System (WVEIS, the statewide longitudinal data system for regular school day data). Collected data included surveys, focus group notes, and artifacts.

More detailed information for each EQ is provided in the narrative that follows the table.

Table 3. General methodology details by evaluation question.

Evaluation Question	Data Source(s)	Sample Characteristics	Analyses
EQ1. ELA and Math Improvement	• End of Year (EOY) assessment data	• Matched sample of 21st CCLC participants and other students	• Quasi-experimental design looking for within- and between-group differences
EQ2. Social-Emotional Improvement	• EOY attendance data (regular school day) • EOY Discipline • Program director survey • Teacher Survey	• Matched sample of 21st CCLC participants and other students	• Quasi-experimental design looking for within- and between-group differences
EQ3. Safe and Supportive Environment	• Continuation/Progress Reports • Artifacts (e.g., media articles)	• Current program directors as of Spring 2023	• Thematic analysis • Artifact analysis
EQ4. Program Sustainability	• Program director survey	• Current program directors as of Spring 2023	• Descriptive and trend analyses
EQ5. Community/ Family Involvement	• Program director focus group	• Current program directors as of Spring 2023	• Content and thematic analysis of focus group notes

Procedures for Creating Matched Samples

Approach

Coarsened Exact Matching (CEM; Iacus, King, & Porro, 2012; Iacus, King, Porro, & Nielsen, 2021) is a statistical procedure that creates a matched comparison set for a given data set. For example, 21st CCLC is considered a "treatment," in research terms, in that it provides an intervention that is intended to increase student performance among various indicators. CEM creates a matched data set for a "control" group who did not receive an intervention through 21st CCLC. The data are matched on an individual student basis, with the option of allowing a

one-to-many match (i.e., for each 21st CCLC student, allowing for multiple non-21st CCLC matches that are weighted accordingly to account for the amount of data).

A total of seven categorical variables were used in the matching process in the below quasi-experimental analyses. For categorical variables, CEM conducts an exact match across all variables. For continuous variables, CEM "coarsens" it into categories/bins that can either be specified in advance of the analysis or during it. For example, grade-levels were collapsed into grade spans (i.e., K–02, 03–05, 06–08, 09–12), and race was collapsed to be dichotomous (i.e., white, non-white). Previous year absence status was collapsed into three categories (i.e., chronically absent, needs attention, and no absence issues).

Table 4. Seven categorical variables used in the CEM procedure.

Variable	Variable Type
School ID	Categorical
Grade-Span *(Collapsed Categories)*	Categorical
Gender	Categorical
Race *(Collapsed Categories)*	Categorical
Special Education Status	Categorical
Direct Certification *(Proxy for low SES status)*	Categorical
Previous Year Absence Status *(Three Categories)*	Categorical

Data Inclusion Criteria

Students were included in the "treatment" group when the following criteria were met:

- had WVEIS IDs;
- participated in 21st CCLC in SY 2022-2023; and,
- had WVEIS outcome data during 2021-2022 and 2022-2023.

Students were excluded from the "control" group when the following criteria were met:

- did not have a WVEIS ID; and,
- participated in 21st CCLC in either SY 2021-2022 or SY 2022-2023.

For the below analyses, the data inclusion criterion and CEM procedure yielded a total of 7,625 students who participated in 21st CCLC programming in SY 2022-2023 and a corresponding match of 25,593 students who did not (see Table 5). Of the remaining 1,100 records with 21st CCLC attendance for which no matches could be found, the primary reason was because an exact match could not be found across the list of demographic variables within each relevant school. While additional follow-up procedures could have been conducted to find matches for those records (e.g., propensity score matching, Mahalanobis distance matching), there was concern that doing so would further contaminate the more precise controls used to create the original matched sample.

Table 5. The breakdown of matched and unmatched records yielded by the CEM procedure.

	Control Group	Treatment Group
All Records	208,181	8,725
Matched Records	25,593	7,625
Unmatched Records	182,588	1,100

Program Operations

Descriptive statistics are presented in tabular and graphical form to better understand 21st CCLC attendance as a function of grade-span as well as time of year.

EQ1. To what extent did participation in 21st CCLC enrichment programs increase students' literacy and numeracy skills?

The evaluator conducted a quasi-experimental examination of existing student general summative assessment data obtained from WVEIS in English/language arts (ELA) and mathematics for students who participated at a 21st CCLC site during 2022-2023 compared with a matched group of students identified as non-participants. Using two years of data from the West Virginia General Summative Assessment (WVGSA), students in fourth grade through eighth grade were compared in terms of growth.

In order to determine if a given student in grades 04-08 maintained or improved (i.e., gained) their performance, scale score ranges commensurate with those used in the WVDE's accountability system, the West Virginia Balanced Scorecard, was used (see Table D1 in Appendix D). The weighted percentages of students who maintained or gained, as well as the weighted percentage of students who gained, were calculated. The percentages were weighted using the individual record weights from the CEM procedure specific to EQ1.

Specifically for this evaluation question (EQ1), the coarsened exact matching procedure was expanded to include two additional matching variables, namely prior year ELA achievement increment level (e.g., 1.1, 2.3, 3.2, etc.) and prior year mathematics achievement increment level. This further refining of the sample meant that students were closely matched not only on the seven variables in Table 4, but also academic history variables. This further matching entailed a control group sample size equivalent to 1,567 students and a treatment group of 1,042 students. One limitation is that the analysis did not find matches for the majority of the 21st CCLC participants that are considered under the other evaluation questions due to the strict matching criteria, so the results may not be readily generalizable to the full population of students participating in 21st CCLC.

Inferences between groups and relative differences were also calculated. The outcome measures of interest were the WVGSA scores from spring 2023 for ELA and mathematics. A quasi-experimental approach was used to compare proficiency rates and effect sizes of program participants by attendance amount for spring 2023 WVGSA scores to corresponding matches in the control group.

EQ2. To what extent did participation in 21st CCLC enrichment programs improve students' social/emotional skills, behavior, and resilience?

Social-emotional skills and behavior were analyzed using four primary sources of data: teacher survey responses, program director survey data, End of Year (EOY) discipline data, and attendance data (both regular school day and 21st CCLC).

Social-Emotional Skills and Behavior

Similar to EQ1, descriptive statistics were used to summarize the proportion of students whose teachers perceived improvement in engagement from the start to the end of the school year by 21st CCLC attendance bands. One limitation of the WVEIS discipline data is that many minor misbehaviors in the classroom are corrected through routine classroom management techniques and do not require the formality of referrals. Particularly, elementary students do not receive as many referrals as secondary students, and hence the results have limited utility on their own. For the teacher survey responses, the quasi-experimental approach was not possible because there were not survey responses for non-participants. Additionally, the lowest amount of participation considered for the survey was 15 days of attendance in 21st CCLC programming (which differs intentionally from the 30-day requirement which is required for reporting purposes in 21APR). Descriptive statistics were used to summarize the proportion of students whose teachers perceived improvement from the start to the end of the school year and split by 21st CCLC attendance bands. Results are displayed in a side-by-side bar plot. Historically, reported attendance bands for 21st CCLC attendance (i.e., 1–29 days, 30–59 days, 60–89 days, and 90+ days) were used as the grouping variable for program participants.

EOY discipline data was analyzed for those students who attended 21st CCLC within the matched sample. For each given grade-band and 21st CCLC attendance band, the percentage of students who did not receive any referrals after their first day of 21st CCLC attendance was calculated. One limitation in these calculations is that the practice of issuing discipline referrals often differs among schools, as well as grade-span. Furthermore, the calculations are simple in that they do not directly account for the amount of regular school day attendance and enrollment with respect to when a student began their 21st CCLC attendance. However, given the larger sample sizes, this limitation may be somewhat mitigated. To provide a point of triangulation, and to probe for what supports may be needed, program director survey data was used to provide additional context. Descriptive statistics are reported.

Resilience

Attendance data were used as a single proxy indicator for resilience. The reason for doing so is because students who are growing in resilience are anticipated to adapt in response to adverse scenarios and be integrated within the school environment on a more regular basis. Furthermore, although attendance is an indirect indicator, it is not dependent upon subjective interpretation (either self-reported or via observation).

A linear mixed model was specified to analyze and isolate the impact of 21st CCLC attendance on improving absence rates during the regular school day (see Equation Set 1 in Appendix D for supporting technical details). The model allowed for variability in attendance and absence rates across 21st CCLC sites, accounted for students' regular-day school, and controlled for students' previous school year absence rates. A brief narrative is used to capture the primary

findings in the Results section, but an extended set of findings is available in Appendix D for interested readers.

EQ3. To what extent did programs operate as high quality, safe, and supportive environments?

A thematic analysis was done of the Continuation/Progress reports submitted by grantees in the Grants and Planning System (GPS). These reports are required annually by all grantees at the conclusion of years 1–4 of their grants. Narratives presented within the Continuation/Progress reports were screened for success stories that were participant-oriented and provided granular details about specific observable or measurable changes that occurred in behavior and/or performance. The goal of the thematic analysis was to identify convergent and divergent topics between the Continuation/Progress reports, as well as analyze how the reported successes differed across different stakeholder groups.

EQ4. To what extent did the sustainability of programs improve?

The sustainability of 21st CCLC programming is much more involved than just securing additional funding streams. In order to provide a more complete picture, program director survey data related to professional learning and technical assistance with grant writing and fund raising was analyzed. Furthermore, descriptive statistics were calculated on self-reported supplemental funds.

Volunteer hours were also examined as a contributing factor to sustainability. Specifically, descriptive analyses were performed with both self-reported volunteer hours as well as program director survey data on successes and challenges in recruiting community members and family members as volunteers.

EQ5. To what extent did community and family involvement increase?

In complement with the data presented for EQ4, a multiple methods approach was taken to answer EQ5. Firstly, a structured focus group with program directors was conducted in April 2023 to gain in-depth commentary and experiential reflections on family engagement practices. Content analysis (for overt topics, words, and phrases) as well as thematic analysis (for latent topics, trends, and assumptions) were conducted using notes from the discussion to arrive at convergent and divergent themes. The meeting was held virtually through Microsoft Teams, and five program directors participated in the video call. Three question prompts were prepared and asked throughout the flow of discussion in order to ensure that the following topics were covered: (1) objectives related to family engagement within continuation reports, (2) the ways in which family engagement practices have been included as part of local program evaluations, and (3) how they collect and store data related to family engagement. To complement this qualitative approach, a block of survey questions from the Program Directors' survey was analyzed to identify any potential three-year trends.

Findings

Program Operations

While attendance requirements for programmatic offerings are based upon hours, the historical measure of days was used for its dependability across all sites (that is, some sites were not entering in hours of participation correctly, resulting in unreasonable time spans). In total, 9,956 distinct students with WVEIS IDs attended a 21st CCLC site at some point between 07/01/2022 and 06/30/2023. Attendance for the 9,956 students is presented in terms of attendance durations in Table 7. Of the students who participated, approximately 3 in 7 (42.0%) participated 30 days or more across all grade-levels.

Table 7. Number of participants by attendance amount (in days).

21st CCLC Attendance Amount (Days)	Number of Students	Percentage of Students
1 – 29 Days	5,771	58.0 %
30 – 59 Days	1,545	15.5 %
60 – 89 Days	1,282	12.9 %
90+ Days	1,358	13.6 %

Of the 9,956 students, further refinements were made to keep only student records that had a full set of associated demographic variables (which included prior year school attendance) needed for matching purposes, which resulted in 8,725 student records eligible for subsequent analyses. Table 8 contains 21st CCLC attendance summary data that has been split by grade span. In addition to the student counts, the percentage of each students within each grade-span is presented according to how many days of 21st CCLC attendance they had. The percentage point values within a given column of the table, therefore, add to 100%.

Table 8. 21st CCLC attendance summary by grade band.

Students with Participation in Current Year:	K – G02	G03 – G05	G06 – G08	G09 – G12
Count	2,364	2,879	2,114	1,368
1-14 Days	29.4 %	30.9 %	48.5 %	63.7 %
15-29 Days	15.6 %	15.6 %	19.3 %	18.9 %
30-59 Days	16.0 %	17.1 %	16.2 %	12.9 %
60-89 Days	13.9 %	19.6 %	10.1 %	3.1 %
90+ Days	25.1 %	16.9 %	5.9 %	1.3 %

A state-level summary of distinct/unique student participant counts is displayed below in Figure 2. Overall, the highest volumes of participation occur between October (which is when many programs begin during the school year) through April. Summer programming appears to engage the greatest number of students in July, with the least amount of participation occurring in August. In Figure 3, the student counts are traced cumulatively to better understand when students begin participating during the school year. While more than 7,000 distinct students have been served by the end of October, nearly 3,000 additional students will attend 21st CCLC programs prior to the end of the fiscal year. Both Figures 2 and 3 would have very small increases in the counts if students without WVEIS IDs were to be considered, particularly for summer months (e.g., out-of-state students visiting family).

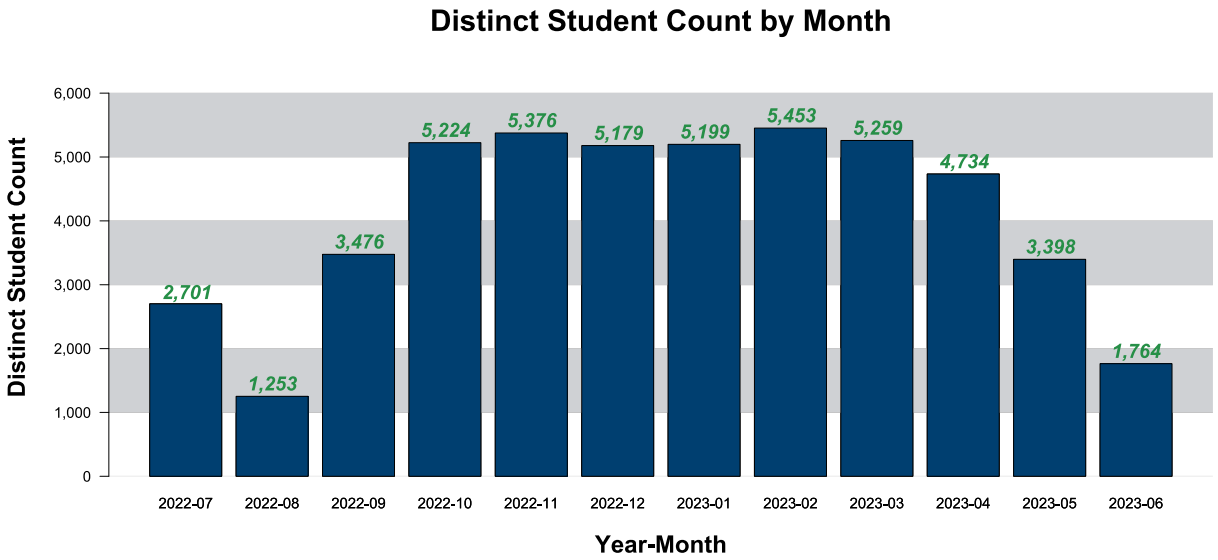


Figure 2. The count of unique/distinct of students who participated in 21st CCLC programming by month.

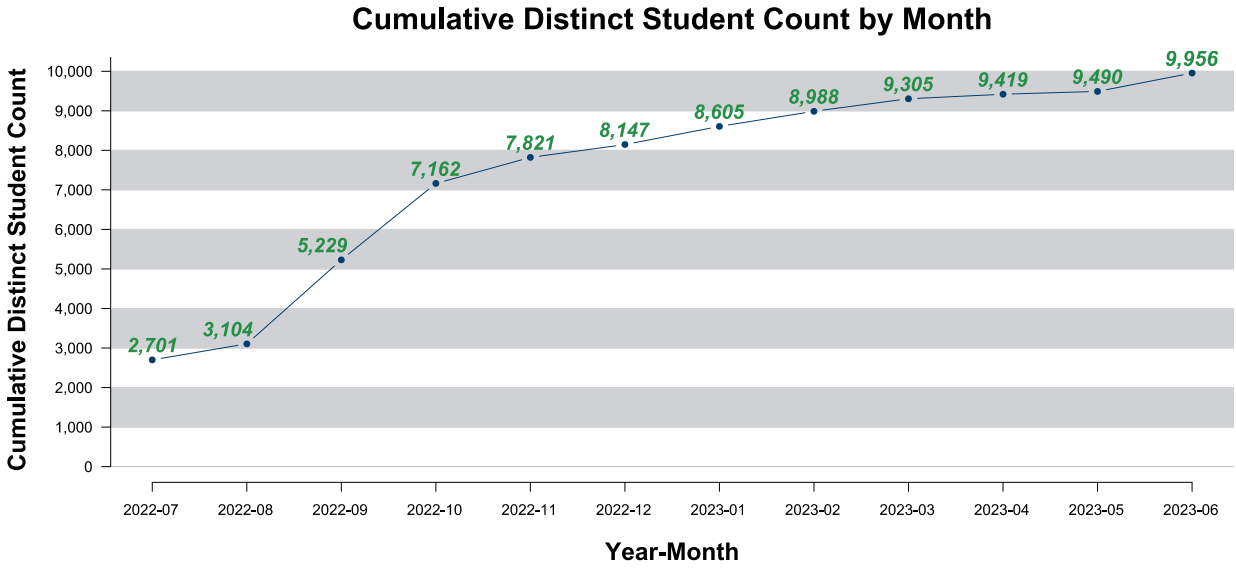


Figure 3. The cumulative count of unique/distinct students who participated in 21st CCLC programming by month.

EQ1. To what extent did participation in 21st CCLC enrichment programs increase students' literacy and numeracy skills?

The analyses presented within this section only consider Grades 04–08; those are the only grade-levels in which students take a summative assessment and could possibly have prior year scores used for matching and analysis purposes. As displayed in Table 9 below, students who participated in 21st CCLC, compared to matched students in the control group, generally made slightly more progress in ELA and mathematics. One notable exception was for ELA with middle school students, in which the 21st CCLC participants were no more likely to make progress than their control group counterparts.

Table 9. Progress/growth of 21st CCLC participants compared with control group students.

Grade-Span	Student Group	Weighted Sample Size	Weighted Percentage of Group Who Maintained *or* Gained		Weighted Percentage of Group Who Gained	
			ELA	*Math*	*ELA*	*Math*
04–05	*21st CCLC*	229.00	76.86 %	68.56 %	48.91 %	45.41 %
	Control	344.38	72.89 %	67.61 %	47.36 %	43.58 %
06–08	*21st CCLC*	713.00	71.39 %	67.32 %	40.11 %	34.64 %
	Control	1,069.88	70.15 %	66.64 %	40.76 %	32.49 %

Figure 4 contains the ELA proficiency rates on EOY summative assessments for the matched samples of 21st CCLC attendees and the respective matching students in the control group. Because the control group and 21st CCLC participants were matched based on their EOY school and prior ELA and math achievement, it would have been reasonable to expect similar proficiency rates between both groups. However, Figure 3 reveals that students with at least 30 days of participation were somewhat more likely to obtain proficiency on the GSA. More specifically, the Cohen's *h* values for the four pairs of bars within the graph were (from left-to-right): -0.019, 0.053, -0.057, and 0.041. While these effect sizes were fairly small, it is important to note that the direction of the effect not only flipped once students were attending 30 or more days (which seems to suggest that increased participation in 21st CCLC led to consistently higher performance at an aggregate level), but a higher degree of difference was also observed for middle school students.

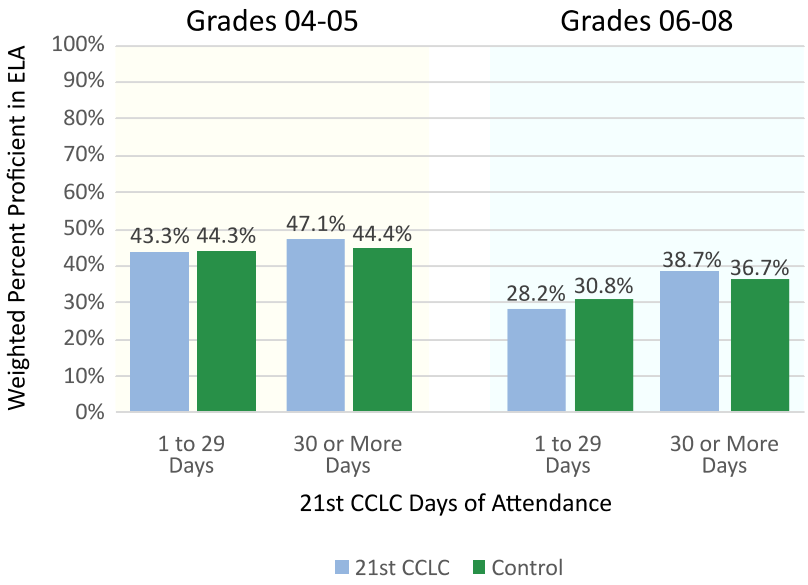


Figure 4. Comparison of ELA proficiency rates between 21st CCLC attendees, split by 21st CCLC attendance bands, and matched samples.

Figure 5 contains similar information for mathematics. More specifically, the Cohen's *h* values for the four pairs of bars within the graph were (from left-to-right): -0.028, 0.125, 0.014, and -0.011. The findings differ from those for ELA in a couple of ways. Firstly, the performance of grades 04-05 students with at least 30 days of 21st CCLC participation was considerably better than their control group matches. The observed effect size of 0.125 may seem small compared to typical rule-of-thumb criteria, but it is higher than what is typically observed even for randomized control trials. For comparison, an empirical distribution of 588 effect sizes from randomized control trials of education interventions with standardized achievement outcomes in mathematics had a median effect size measure of 0.07 (see Table 1 in Kraft, 2020). In other words, there seems to be considerable evidence that regular and consistent 21st CCLC programming in West Virginia is associated with modest improvement in math for elementary school students, though similar evidence does not currently exist for middle school students.

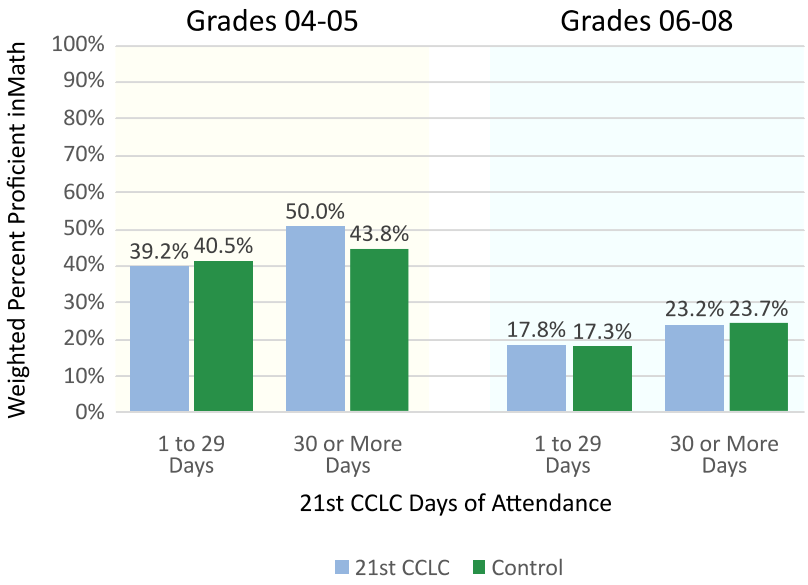


Figure 5. Comparison of mathematics proficiency rates between 21st CCLC attendees, split by 21st CCLC attendance bands, and matched samples.

EQ2. To what extent did participation in 21st CCLC enrichment programs improve students' social/emotional skills, behavior, and resilience?

Social-Emotional Skills and Behavior

Teacher-reported measures were first analyzed to determine if the impact of 21st CCLC was observed by teachers in the classroom. Figure 6 parses the improvement rates for the student engagement question by the amount of 21st CCLC attendance. There were no discernable trends except that students appeared to benefit ever slightly more with 30 or more days of 21st CCLC attendance when compared with the group having 15 to 29 days of attendance. This finding is similar to previous years. Nevertheless, while increased 21st CCLC attendance was not associated with perceptions of improved engagement, educators were still reporting that at least 6 in 10 students were showing improvement. In previous years, the teacher survey also asked about student behavior, but that question was dropped from the survey to reduce response burden, and because referral data could be analyzed instead.

Interestingly, Figure 6 also has a slightly lower percentage point value for the students with 90+ days of participation when compared with students who participated 30 to 59 and 60 to 89 days. While it may be possible to interpret the finding as suggesting that there is a diminishing return when participation exceeds 90 days (as some researchers have found with extracurricular participation more generally; e.g., Wilson, 2009), it is more likely that there are more influential factors in students' lives outside of school/afterschool and in their primary nighttime residences that may be influencing perceived levels of engagement. Furthermore, accounting for the standard error of proportion between the bars suggests that the difference could be due simply to sampling fluctuation and is fairly trivial.

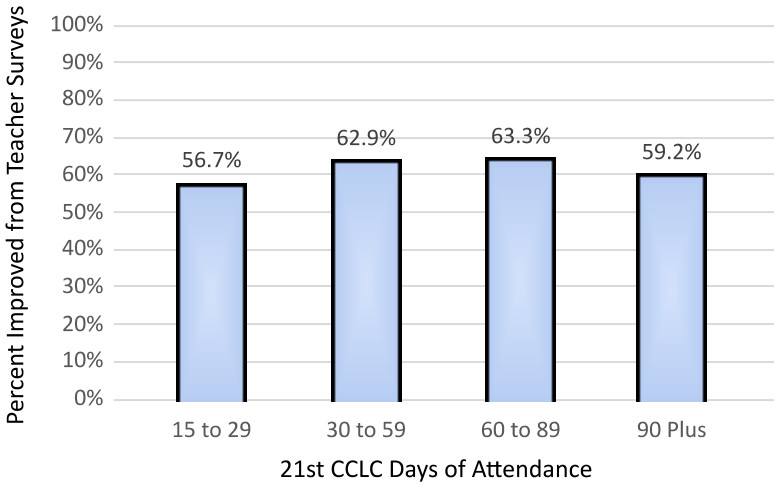


Figure 6. Improvement reported on student engagement through the teacher survey, split by 21st CCLC attendance bands.

When examining EOY discipline data with the group of students who participated in 21st CCLC programming, it appeared that students with more than 90 days of participation were more likely to have no discipline referrals after they began participating in 21st CCLC (see Table 10). However, that is not to say that increased 21st CCLC attendance necessarily leads to fewer discipline referrals. An alternative hypothesis that would need to be considered is that as students have an increased propensity to follow rules/norms, it may follow that those same students are likely to view attendance as part of those same social conventions. Irrespectively, the findings do showcase that there is some association with increased 21st CCLC attendance and being less likely to have any discipline referrals during the school year. Incredibly complex research and statistical designs would need to be created to attempt to truly isolate the impact of 21st CCLC on day-to-day classroom behaviors. In lieu of quantifying that aspect of the issue, additional insight can be gleamed from other data sources.

Table 10. Percentage of students with no discipline referrals, split by grade span and amount of 21st CCLC attendance.

Grade-Span	21st CCLC Attendance Amount (in Days)	Count of Students	Percentage of Students with No Referrals After First Day Of 21st CCLC Attendance
K–02	1 to 29	671	92.8%
	30 to 59	367	93.4%
	60 to 89	341	93.5%
	90 +	529	94.1%
03–05	1 to 29	942	86.1%
	30 to 59	461	83.5%
	60 to 89	583	85.9%
	90 +	421	90.3%
06-08	1 to 29	1,115	64.4%
	30 to 59	329	63.1%
	60 to 89	207	66.2%
	90 +	105	70.9%

Grade-Span	21st CCLC Attendance Amount (in Days)	Count of Students	Percentage of Students with No Referrals After First Day Of 21st CCLC Attendance
09-12	1 to 29	879	67.6%
	30 to 59	166	65.4%
	60 to 89	40	71.8%
	90 +	11	72.7%

Program directors were asked to self-report the extent to which they believed their programs had been implementing specific practices related to social-emotional well-being. Two highlights are shared in Figure 7. Taken altogether, subgrantees may need additional technical assistance with implementing programs related to a trauma-informed environment. Providing more support for these activities, as well as activities that prevent bullying behavior and address its root causes, will lend themselves to additional benefits for students.

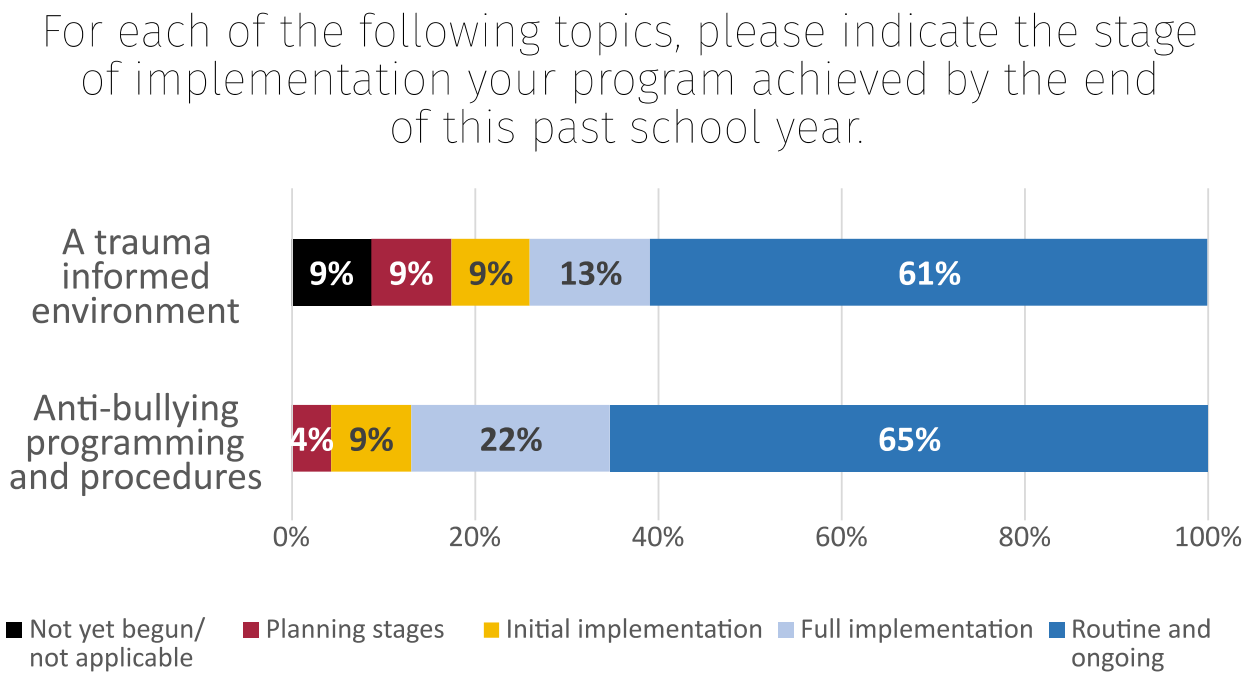


Figure 7. Self-reported perceptions of implementation related to trauma-informed environment and anti-bullying.

Resilience

To illustrate the findings with an example, assume there was a student who was absent 20% of the 2021-2022 school year. On average, across all hypothetical pairings of schools and afterschool sites, attending 21st CCLC programming for approximately 43 days would be associated with one less absence during the regular school day in 2022-2023 school year (see Equation Set 1 in Appendix D for supporting technical details). While this finding seems paramount, it is important to caution against sweeping generalizations. In particular, 29.1% of the variability ($R^2_m = .291$) in absence rates was accounted for by the regression model fixed effects (i.e., days of afterschool attendance in SY 2023 and absence rates in SY 2022), which

entails that 70.9% of the variability was not explained by the fixed effects. While this magnitude is not unusual for the social sciences, and might even be considered large in some contexts, the R^2 value for the null model was of a similar magnitude, which suggests that 21st CCLC attendance was not truly predictive of regular school day attendance. The findings suggest that other factors are more likely to predict regular school day attendance, which includes variables that cannot be directly controlled or influenced by schools or 21st CCLC sites.

EQ3. To what extent did programs operate as high quality, safe, and supportive environments?

An informal case study was done of the Continuation/Progress reports submitted by grantees. Although trying to attribute causation based on the quantitative data available may be neither practical nor feasible, the rich narratives provide a deeper view into the impact that 21st CCLC programming has on not only students, but family members and staff as well. The success stories shared by program directors underscore the importance of 21st CCLC afterschool programs in providing students with high quality, safe, and supportive environments.

For students, the success stories spanned students from early kindergarten through high school graduation. Across grade spans, students were able to make gains academically, in both course grades and benchmark assessments. Students gained proficiency with emergent and early literacy skills (typically with elementary school students, though one story related to a middle school student). Students built confidence in approaching math problems and found ways to involve their family members. Older students were able to participate in credit recovery opportunities, find passions that aligned with new post-secondary interests, build grades for athletic eligibility, and gain experience with applying more advanced technologies (e.g., technology labs, ArcGIS, robotics).

Beyond academic benefits, other whole-child supports were provided. Some subgrantees described specific evidence-based practices and programs they were using to help students with social and emotional difficulties. Many students improved their behaviors and dispositions, sometimes drastically (e.g., stopped being physically violent with others, stopped substance abuse). Students with disabilities were reported to have safer environments to build and expand social connections. Larger themes emerged across stories that students were able to increase their confidence, increase self-expression through project-based learning, as well as find basic security. Students were often described as growing from being shy to becoming confident, as well as starting out as disruptive and becoming leaders and mentors for their peers. Others mentioned the importance of the afterschool program in establishing healthy eating habits and for some students, simply having any food at all.

For families, parents/caregivers benefitted from attending activities and becoming more engaged in their children's learning. In some cases, parents/caregivers even helped with planning and leading certain activities. Schools also benefited with assistance in communicating regularly with family members, as well as students receiving individualized attention and support with homework completion and concept attainment.

Even the staff of the afterschool program were reported to benefit from 21st CCLC programming. One story emerged of a college student who stepped in to be a teacher for the afterschool program while a teacher was on family leave. The college student, as well as other

staff in the program, quickly realized her natural gift for working with students; as a result, the college student changed majors to elementary education. Another story told of the steadfast care and love an afterschool teacher showed towards two students who faced particular challenges with their misbehavior. As it was described, the teacher "taught an entire afterschool program staff genuine caring, patience, and the ability to start each day as a brand-new opportunity to make a positive difference in the life of a child."

Even with all of these successes, there were some subgrantees' continuation reports that did not successfully portray the impact they have had on students. Other evidence (anecdotally and empirically) suggests that such an impact exists, but the details in their continuation reports did not advocate for the success of their programming. This shortfall is important for the WVDE coordinators to further address because these subgrantees in particular may need technical assistance with "telling their story" as they seek out supplemental funding and build toward a more sustainable future.

EQ4. To what extent did the sustainability of programs improve?

Supplemental Funding

Supplemental funding has direct ties with the sustainability of a 21st CCLC program. Sustainability is a 15-point component of the scoring model for responses to the Request for Proposals. Indeed, a key focus of the grant funding for 21st CCLC is to promote long-term planning and implementation of community learning centers even after the cessation of grant funding. In particular, reapplicants are supposed to provide details on how sustainability efforts from their previous grants have lessened the need for the same amount of funding with another five-year grant cycle.

In total, 24 of the grants specifically were not able to claim that they had any supplemental funding during 2022-2023, representing a little more than half of the subgrantees. Of those who did report having received supplemental funding, the average value was approximately $54,376 (while the median value was $11,000), which was less than what was observed during the pandemic era in 2020-2021. Some program directors specifically recommended that the WVDE provide additional training related to allowable fundraising, sustainability practices of programs ending their grant cycles, budgeting, and staffing. Figure 8 contains the program directors' perspectives on professional learning and technical assistance in topics which relate to sustainability. It is important to note that the question does not specifically mention professional learning or technical assistance offered solely by the WVDE, but in more general terms. Nearly one-third of the respondents indicated that they needed professional development and technical assistance but did not receive it, in both grant writing and fund raising. However, given the findings, it seems prudent that the WVDE could take action to fill in the gap with additional technical assistance.

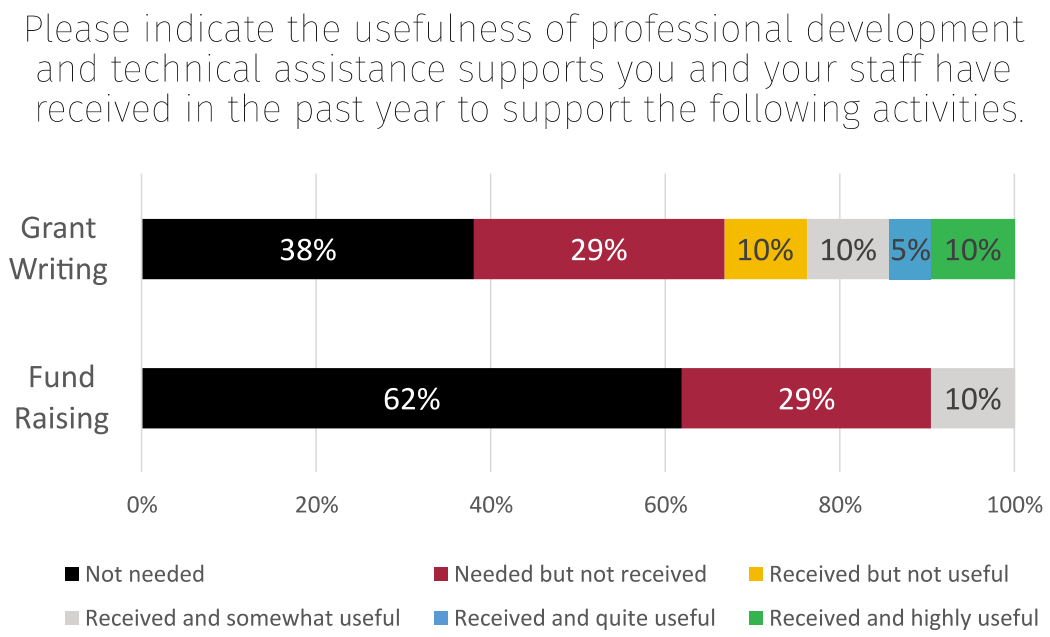


Figure 8. Self-reported perceptions of professional development and technical assistance needed and/or received.

The question of fundraising is particularly relevant given that pandemic era funds have supplemented district efforts. The period for which county school districts must obligate ARP ESSER funds is set to conclude on September 30, 2024 (including the Tydings Amendment period), and many districts are still actively spending those funds. The responses for fund raising may very well change once school districts no longer have access to ESSER funds.

Volunteer Hours

Even more so than during the pandemic, 19 of the grants specifically were not able to claim that they had any volunteer hours during 2022-2023. Of grantees who were able to secure volunteers during 2022-2023, the average number of volunteer hours was 168 (and the median was 35 hours). One program director specifically mentioned having volunteers, which included "lawyers, senators and doctors" who visited the afterschool site to "read to our students."

Program directors were also asked to rate the degree of success that they had in being able to recruit community members and family members as volunteers (see Figure 9). In short, grantees reported having more issues in recruiting family members than community members. This finding supports the notion that grantees may need additional support from the WVDE in developing innovative recruiting strategies or access to toolkits that can be used to increase the volunteer rates of family members. Although volunteer recruitment efforts may not be able to overcome some obstacles (e.g., family members' work schedules), program staff may be able to explore other asynchronous strategies to invite volunteers during non-operational hours

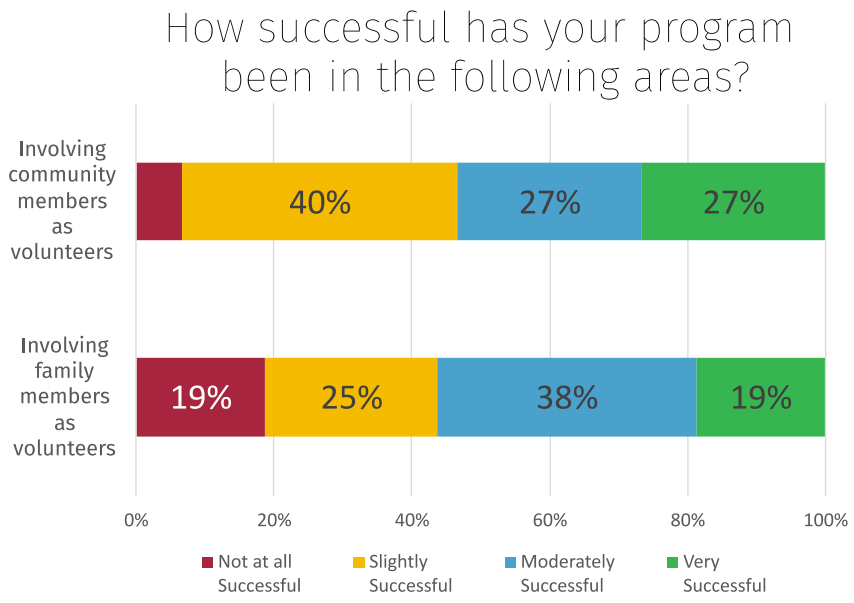


Figure 9. Self-reported successes (and difficulties) in recruiting community and family member volunteers.

EQ5. To what extent did community and family involvement increase?

A structured focus group with program directors in April 2023 revealed mostly similar approaches, though a few variations were noted, in how 21st CCLC programs were approaching the measurement of impact on family members. All of the program directors provided details regarding the ways in which they used annual surveys to collect summative stakeholder feedback. These survey results are generally shared with the local advisory councils as part of updates provided over the summer months or immediately prior to the start of the school year. To provide an example practice, one subgrantee asks survey questions that are directly mapped onto the objectives contained in their annual continuation reports. They shared sample findings (e.g., 85% of parents/caregivers were confident in the ways that they can support their child academically at home, while 50% strongly agreed that they are welcome in their child's school). The results were used to make modifications to activities/programming and outreach to help build relationships between grandparent caregivers and the children, as well as exploring blended formats that could help with non-traditional family units.

Furthermore, program directors self-reported a need to conduct more focus groups (both informally and formally) with family members. They mentioned a primary motivation would be that it would help families not feel like "outsiders" and would allow them opportunities to feel connected with what their children are doing in the afterschool programs. One program director mentioned that they also used such opportunities to directly involve caregivers in the development of family outreach activities. Another program director mentioned they created a specific staff role to help communicate with both educators and caregivers related to social-emotional struggles that a student may be experiencing during their time in the afterschool program.

For comparison, a multi-year summary of self-reported family engagement practices is presented in Figure 10. For the most part, more than half of the subgrantees self-report that they are in “full Implementation” or implementing “routine and ongoing” family engagement practices. Roughly 5 in 6 program directors reported having adequate and welcoming space to engage families, with a slightly higher amount in 2023 than prior years. But perhaps the starkest finding is the degree of difference between 2023 and prior years when helping support families and their basic needs. One program director described one of the main challenges their program encountered in 2022-2023 was a “Lack of BOE-provided suppers.” While not mentioned in the comments, there are other initiatives (i.e., Communities In Schools) which are providing additional funding and resources to better meeting family needs.

Taken as a whole, program directors are reporting a collectively high level of implementation with family engagement practices. While these successes were reported, some subgrantees still need technical assistance from the WVDE in reaching at least full implementation.

To what extent would you say you have implemented the following family engagement practices?

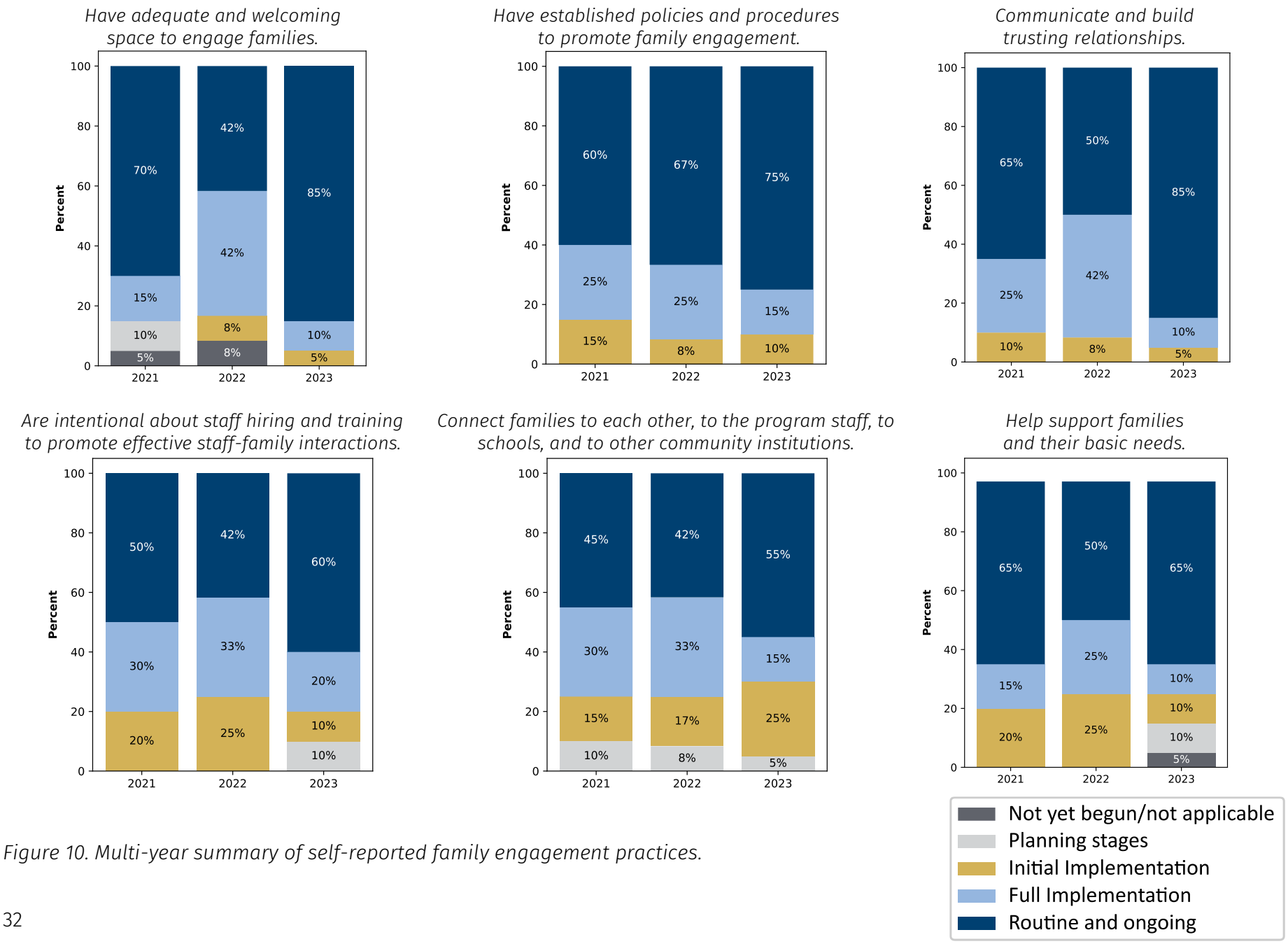


Figure 10. Multi-year summary of self-reported family engagement practices.

End-of-Year Recommendations

Commendations

It is important to highlight aspects of 21st CCLC implementation in West Virginia that were especially successful in the 2022-2023 school year. The items in this list may not necessarily align with specific evaluation questions but demonstrate the general implementation of 21st CCLC statewide in support of the program goals.

C1. The continual development of internal documentation of standard operating procedures (SOP) has been significant. For instance, the creation of the yearly work cycle calendar, in addition to links to individual SOP documents from it, have allowed for the 21st CCLC SEA-level activities to be more robust to staffing changes and consistency of implementation across years.

C2. Program directors shared high accolades of the support offered by the WVDE Coordinators. Specifically, the program directors made mention of the Sharepoint Notebook repository, which contains various documents ranging from trainings/meetings, forms, listings of requirements, and webinar links, among other document types. To specifically use a stakeholder's perspective, one of the program directors said that the WVDE staff "do a great job of staying in contact with grantees and are always available and helpful."

C3. Multiple supplemental grant opportunities were offered to subgrantees throughout the 2022-2023 grant year. A total of $111,000 was awarded for summer literacy proposals, $10,500 for professional development proposals, and more than $132,000 for transportation funds.

Recommendations

While the program celebrated successes and has many strengths, a few areas should be considered for programmatic improvement. These recommendations relate to state-level policy decisions and do not necessarily reflect recommendations related to daily programmatic operations of subgrantees.

R1. The 21st CCLC program should seek strategies to ensure that the supports it provides are in harmony with WVDE-led initiatives in ELA and mathematics. In particular, the WVDE implemented the *Ready, Read, Write, West Virginia* initiative (with practices aligned with the Science of Reading) to increase the literacy proficiency of all students, as well as the *Unite with Numeracy* initiative to increase the mathematics proficiency of all students. This recommendation coincides with the requirement in ESEA § 4201(a)(1) for academic enrichment being provided in reading and mathematics. Stronger alignment between the WVDE initiatives and 21st CCLC programmatic activities would potentially promote a more unified message, allow for 21st CCLC subgrantees to draw directly from resources used in those initiatives, and

build connections between the regular school day and afterschool that will help schools and districts better meet the requirements set forth in the *Third Grade Success Act* (HB 3035, 2023 Regular Session).

R2. The WVDE might wish to review and modify the item-level scoring scales in the Request for Proposal (RFP) evaluation process to ensure consistent scoring across all individual rubric items. For instance, all items could be assigned the same score points, such as {0, 1, 2, 3}. While there is not anything that is incorrect or invalid with the current scoring structure, it may be advantageous to both raters and applicants to have a scoring structure that is commensurately scaled across items. Doing so may afford benefits with ease of scoring, interpretation of score point values, and ensuring that individual items are measuring single variables/topics in a unilinear manner. Future evaluation analyses could be used to help answer this question, if desired by the Office of Federal Programs & Support.

R3. Due to the transition in the time measurement for student attendance (i.e., minutes/hours instead of days), additional consideration should be given to per pupil calculations and allocations. For reference, the per pupil expenditures are reported on the West Virginia Balanced Scorecard website in terms of state/local funds as well as grand total dollars, and requirements for minutes of instruction are delineated in W. Va. Code §18-5-45. This linkage would allow for per pupil calculations for 21st CCLC to be similar in proportion by accounting for the usual cost per instructional hour as well as the hours per week requirement stipulated in the 21st CCLC RFP. Additional constraints and restrictions may need to co-occur in order to better ensure that funds are distributed in a balanced fashion.

References

Programmatic, Theoretical, and Methodological

Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2011). Program evaluation: Alternative approaches and practical guidelines. Upper Saddle River, NJ: Pearson Education, Inc.

Grossman, J. B., Lind, C., Hayes, C., McMaken, J., & Gersick, A. (2009). The cost of quality out-of-school-time programs. *Philadelphia, PA: Public/Private Ventures*.

Hammer, P. C. (2018). *21st Century Community Learning Centers: 2017-2018 evaluation*. Charleston: West Virginia Department of Education, Office of Data Analysis and Research.

Hedges, L. V. (2007). Effect Sizes in Cluster-Randomized Designs. *Journal of Educational and Behavioral Statistics*, *32*(4), 341–370.

Joint Committee on Standards for Educational Evaluation. (2018). *Checklist of the program evaluation standards statements*. Retrieved from https://wmich.edu/evaluation/checklists

Iacus, S. M., King, G., & Porro, G. (2012). Causal inference without balance checking: Coarsened exact matching. *Political analysis*, *20*(1), 1-24.

King, J. A. & Stevahn, L. (2002). Three frameworks for considering evaluator role. In K.E. Ryan and T.A. Schwandt (eds.), *Exploring evaluator role and identity* (pp. 1-16) Greenwich, CT: IAP.

Kraft, M. A. (2020). Interpreting Effect Sizes of Education Interventions. *Educational Researcher*, *49*(4), 241-253. Retrieved from: https://doi.org/10.3102/0013189X20912798.

Patton, M. Q. (1997). Utilization-focused evaluation: The new century text. 3rd Ed. Thousand Oaks, CA: Sage.

Scriven, M. (1991). Evaluation Thesaurus (4th eds.). Newbury Park, CA: Sage.

Stufflebeam, D. (2001). Evaluation Contracts Checklist. In *The Evaluation Center*. Retrieved from https://wmich.edu/sites/default/files/attachments/u350/2018/eval-contracts-stufflebeam.pdf.

U.S. Department of Education. (2022). Purpose and Program Description. In 21st Century Community Learning Centers. Retrieved from https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/21st-century-community-learning-centers/.

Wilson, N. (2009, May). *Impact of Extracurricular Activities on Students* (Master's thesis). https://minds.wisconsin.edu/bitstream/handle/1793/43405/2009wilsonn.pdf?se

Yarbrough, D. B., Shulha, L. M., Hopson, R. K., & Caruthers, F. A. (2011). The program evaluation standards: A guide for evaluators and evaluation users (3rd ed.). Thousand Oaks, CA: Sage.

Software

Bates, D., Maechler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using lme4. Journal of Statistical Software, 67(1), 1-48. doi:10.18637/jss.v067.i01.

Bollinger, T., Eckert, A., & Wurst, M. (2018). ibmdbR: IBM in-Database Analytics for R. R package version 1.50.0. https://CRAN.R-project.org/package=ibmdbR.

Hester, J., & Wickham, H. (2021). odbc: Connect to ODBC Compatible Databases (using the DBI Interface). R package version 1.3.3. https://CRAN.R-project.org/package=odbc.

Iacus, S. M., King, G., Porro, G., & Nielsen, R. (2021). cem: Coarsened Exact Matching. R package version 1.1.29. https://CRAN.R-project.org/package=cem.

Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B (2017). lmerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, *82*(13), 1-26. doi: 10.18637/jss.v082.i13 (URL: https://doi.org/10.18637/jss.v082.i13).

R Core Team (2022). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria.URL https://www.R-project.org/.

R Special Interest Group on Databases (R-SIG-DB), Wickham, H., & Müller, K. (2021). DBI: R Database Interface. R package version 1.1.2. https://CRAN.R-project.org/package=DBI.

Wickham, H., & Bryan, J. (2022). readxl: Read Excel Files. R package version 1.4.0. https://CRAN.R-project.org/package=readxl.

Appendix A. Evaluation Logic Model

Work Area	Inputs	Outputs	Data Sources	Outcomes	Outcome Indicators and Data Sources		Impacts
What are major components of this effort?	*Who will support the work?*	*What services and products will be created?*	*How will we know the status of the outputs?*	*What will be the results?*	*What evidence do we have that we are progressing toward envisioned outcomes?*		*What will be the ultimate impact?*
					Data source/Methods of analysis	*Indicators of success*	
1. Student literacy/ numeracy	Programs	[1.I.a] Collaborations with other entities to support literacy [1.I.b] Engaged students in various literacy activities [1.I.c] Written, intentional teaching in literacy [1.I.d] Collaborations with other entities to support mathematics [1.I.e] Engaged students in various mathematics activities [1.I.f] Written, intentional teaching in mathematics	Program director survey	Higher quality enrichment programs that increase students' literacy and numeracy skills	WVEIS and 21st CCLC database/Descriptive statistics, quasi-experimental comparison of students in the program with matching students not in the program by dose strength Breakdown by rural/urban and poverty levels (see Excel files with USDA designation by county and Census Bureau with poverty levels)	Comparative improvement in student WVSGA scores in [1.O.a] English/language arts [1.O.b] Mathematics	A statewide system that supports students' academic and social/ emotional development and positive behavior outcomes
	Programs/ WVDE	[1.I.g] Regional and statewide face-to-face meetings for professional learning, networking, and sharing best practices in literacy and math skills support.	WVDE coordinators survey				
2. Student social/ emotional skills, behavior, confidence	Programs	[2.I.a] Collaborations with regional organizations (formerly RESAs), LEAs, Extension, other entities to provide activities for students to support social/emotional skill development, positive behavior, persistence to graduation, and other character development [2.I.b] Service learning and community service activities for students	Program director survey	Higher quality enrichment programs that increase students' social/ emotional skills, behavior, and resilience	WVEIS and 21st CCLC database/Descriptive statistics, quasi-experimental comparison of students in the program with matching students not in the program	Comparative improvement in [2.O.a] Regular school attendance [2.O.b] Discipline referrals	
					21st CCLC Teacher Survey/Comparison of teacher ratings for students with 30, 60, 90, and 120+ days of attendance	[2.O.c] Teacher ratings	
	WVDE	[2.I.c] Ongoing training for program staff on social/emotional development [2.I.d] State/regional meetings with social/emotional focus	Program director survey, WVDE coordinators survey		21st CCLC database	[2.O.d] Self-reported improvement from program directors	

Work Area	Inputs	Outputs	Data Sources	Outcomes	Outcome Indicators and Data Sources		Impacts
What are major components of this effort?	*Who will support the work?*	*What services and products will be created?*	*How will we know the status of the outputs?*	*What will be the results?*	*What evidence do we have that we are progressing toward envisioned outcomes?* *Data source/Methods of analysis*	*Indicators of success*	*What will be the ultimate impact?*
3. Quality of programs; safe and supportive environments	Programs	[3.I.a] Child protection/mandatory reporter training for all staff [3.I.b] Anti-bullying programming and procedures	Program director survey	All programs operating as high quality, safe, and supportive environments	Annual student supporting environment survey/*Descriptive statistics* by program	[3.O.a] Improvements in student perceptions about safety and supportiveness of programs	A statewide system that supports students' academic and social/ emotional development and positive behavior outcomes
	WVDE	[3.I.c] Consistent 21st CCLC attendance guidance, and procedures to monitor and maintain/increase attendance	WVDE coordinators survey		21st CCLC database/Average days of participation by program (growth trend from 2015-2016)	[3.O.b] Improvements in student retention	
4. Program sustainability	Programs/ WVDE	[4.I.a] Ongoing PD and mentoring in strategic planning PD for program leadership/staff on resource development via: [4.I.b] outreach, advocating, marketing, and educating community and local/ statewide decision makers about the program [4.I.c] fund raising and grant writing [4.I.d] Support for program leadership in working with schools to have them include 21st CCLC in their school strategic plans	Program director survey	Increase in the sustainability	Program directors survey/ Frequencies, trend analysis Report statewide and by program	Percentage increases by grant year in: [4.O.a] Partner MOUs- including value of in-kind and committed resources [4.O.b] Supplemental grants/funding obtained	
						[4.O.c] Growth in the percentage of sites whose schools include their 21st CCLC program in their annual strategic plans	
5. Community and family involvement	Program	[5.I.a] Advisory councils where family and community members are well represented [5.I.b] Use of multiple resources to engage with students, families, and community members [5.I.c] Initial training for volunteers and inclusion in ongoing staff/volunteer development [5.I.d] Volunteer and community partners recognition/celebrations	Program director survey	Increase in family and community involvement	Program directors survey/ Descriptive statistics and trends	Increase in [5.O.a] Involving family members/guardians in supporting their children's learning [5.O.b] Participation in activities planned for families [5.O.c] Participation in activities inviting the community [5.O.d] Involving family members as volunteers [5.O.e] Involving community members as volunteers	
	WVDE	[5.I.e] Approved partner list [5.I.f] Examples of family needs assessment surveys	WVDE coordinators survey				

Appendix B. Teacher Survey (with Consent Language)

Informed Consent of Parents/Guardians

Note: The following readability indices were calculated for the below parent letter:
Coleman-Liau Grade-Level = 9.82
Flesch-Kincaid = 8.58
Mean Sentence Length = 15.88
Mean Word Syllables = 1.52

[Printed on WVDE letterhead]

2022-2023 Evaluation of West Virginia's
21st Century Community Learning Center Program

Parent/Guardian Denial of Consent

I understand that the afterschool program my child will attend will be evaluated by the West Virginia Department of Education (WVDE). The purpose of the evaluation study is *to find out how well the program is working.* What the WVDE learns from this study may help improve the program in the future. Later this school year, we would like to ask your child's teacher about the amount of progress your child has made. Any information we would gather would be protected and your child would never be identified. The information provided would be combined with information from others, and reported as a group.

Allowing your child to take part in this study in the way just described will put your child at no more risk than he or she would experience during any normal day. Although your child may not benefit directly by being part of the study, it is possible that because of what we learn, the program may improve to better meet his or her needs or the needs of other students.

Neither you nor your child will receive any money or other reward for taking part in this study. Allowing your child to be part of the study is completely voluntary. If you decide not to allow your child to be part of it, there will be no penalties or loss of benefits to you or your child.

To allow us to collect this information from your child's teacher there is no action you need to take. Thank you!

If you do NOT want your child to be part of the study, just fill in the information below and return this form to the afterschool program coordinator.

☐ Do NOT include my child in the evaluation study.

Child's name (please print): _____

Parent/guardian signature: _____ Date: _____

Name of afterschool program: (to be filled in by program staff):
_____

For more information about the education program we are studying, you may contact Sherry Swint (sherry.swint@k12.wv.us). If you have questions about this evaluation study, you may contact Jonathan Rollins (jonathan.rollins@k12.wv.us). This study has been reviewed and approved by the West Virginia Department of Education Institutional Review Board (IRB-WVDE-048)).

Parents: Keep a copy of this form for your records.

E-mail Notifications for Teacher Survey

[The below message is the initial e-mail invitation that a given teacher receives.]

Dear West Virginia Educator,

We have contacted you because you have at least one student who has participated in a 21st Century Community Learning Centers (21st CCLC) afterschool program site and we need your feedback. The form is very easy to fill out and is an important part of the Annual Performance Report that WV is required to complete in order to continue receiving federal funding for 21st CCLC.

You will be asked to answer a brief set of multiple-choice questions about any changes you may have seen in your students' performance during the past school year regarding classroom engagement. **To complete the feedback form**, just **click here**. This link will take you directly to the feedback form where you can answer the single question for each student listed.

Make sure that you click SUBMIT when finished.

Please note that parents of the students listed have provided consent for us to collect this information. Further, your responses will be completely confidential. We will report this information only in aggregate, so neither you nor your students will be identified.

Thank you so much for your time!

The West Virginia Department of Education

This message was automatically generated. Any replies to this e-mail will be redirected to surveys.wvde@k12.wv.us.

[The below message is the first e-mail reminder that a given teacher receives if they have not responded within two weeks of initially receiving the survey invitation.]

Dear West Virginia Educator,

Around one or two weeks ago, a message was sent to you and other teachers across the state asking for a very brief (1-question) progress report on students attending 21st Century Community Learning Centers (21st CCLC) afterschool programs. Some teachers were apprehensive about the message because it asked people to click on a link. Please be assured that the request is legitimate and takes you to a form generated by the West Virginia Department of Education.

This e-mail is a quick reminder that you have at least one student who has participated in a 21st CCLC afterschool program site and we need your feedback as part of the Annual Performance Report that WV is required to complete in order to continue receiving federal funding for 21st CCLC.

The form consists of only one multiple-choice question for each student listed to get your feedback on any changes you may have seen in your students' performance during the past school year regarding classroom engagement.

To complete the feedback form, please click here. This link will take you directly to the feedback form.

Make sure that you click SUBMIT when finished.

Please note that parents of the students listed have provided consent for us to collect this information. Further, your responses will be completely confidential. We will report this information only in aggregate so neither you nor your students will be identified.

Thank you so much for your time!

The West Virginia Department of Education

This message was automatically generated. Any replies to this e-mail will be redirected to surveys.wvde@k12.wv.us.

[The below message is the second e-mail reminder that a given teacher receives if they have not responded within four weeks of initially receiving the survey invitation.]

Dear West Virginia Educator,

In the preceding weeks a message was sent to you and other teachers across the state asking for a very brief (1-question) progress report on students attending 21st Century Community Learning Centers (21st CCLC) afterschool programs. Some teachers were apprehensive about the message because it asked people to click on a link. Please be assured that the request is legitimate and takes you to a form generated by the West Virginia Department of Education.

We are contacting you to remind you again that you have at least one student who has participated in a 21st CCLC afterschool program site, and we are requesting your feedback as part of the Annual Performance Report that WV is required to complete in order to continue receiving federal funding for 21st CCLC.

The feedback form we are requesting you fill out is quick and easy. It consists of only one multiple-choice question for each student listed to get your feedback on any changes you may have seen in your students' performance during the past school year regarding classroom engagement.

Click here to go directly to the feedback form.

Make sure that you click SUBMIT when finished.

Again, the parents of the students listed have provided consent for us to collect this information, and your responses will be completely confidential. We will report this feedback information only in aggregate so neither you nor your students will be identified.

Thank you so much for your time!

The West Virginia Department of Education

This message was automatically generated. Any replies to this e-mail will be redirected to surveys.wvde@k12.wv.us.

[The below message is the e-mail invitation that a given teacher receives if they have already completed the survey but additional students have met the criteria for being included in the survey collection before the close of the survey window.]

Dear West Virginia Educator,

Firstly, thank you for completing the feedback form regarding your students who have participated in a 21st Century Community Learning Centers (21st CCLC) afterschool program site.

We are contacting you again to let you know that more of your students have been added to the survey list because they have recently had attendance at a 21st CCLC afterschool program entered for the first time, and we ask that you give your feedback. Remember that this feedback is an important part of the Annual Performance Report that WV is required to complete in order to continue receiving federal funding for 21st CCLC.

To complete the feedback form for these additional students, please click here.

Make sure that you click SUBMIT when finished.

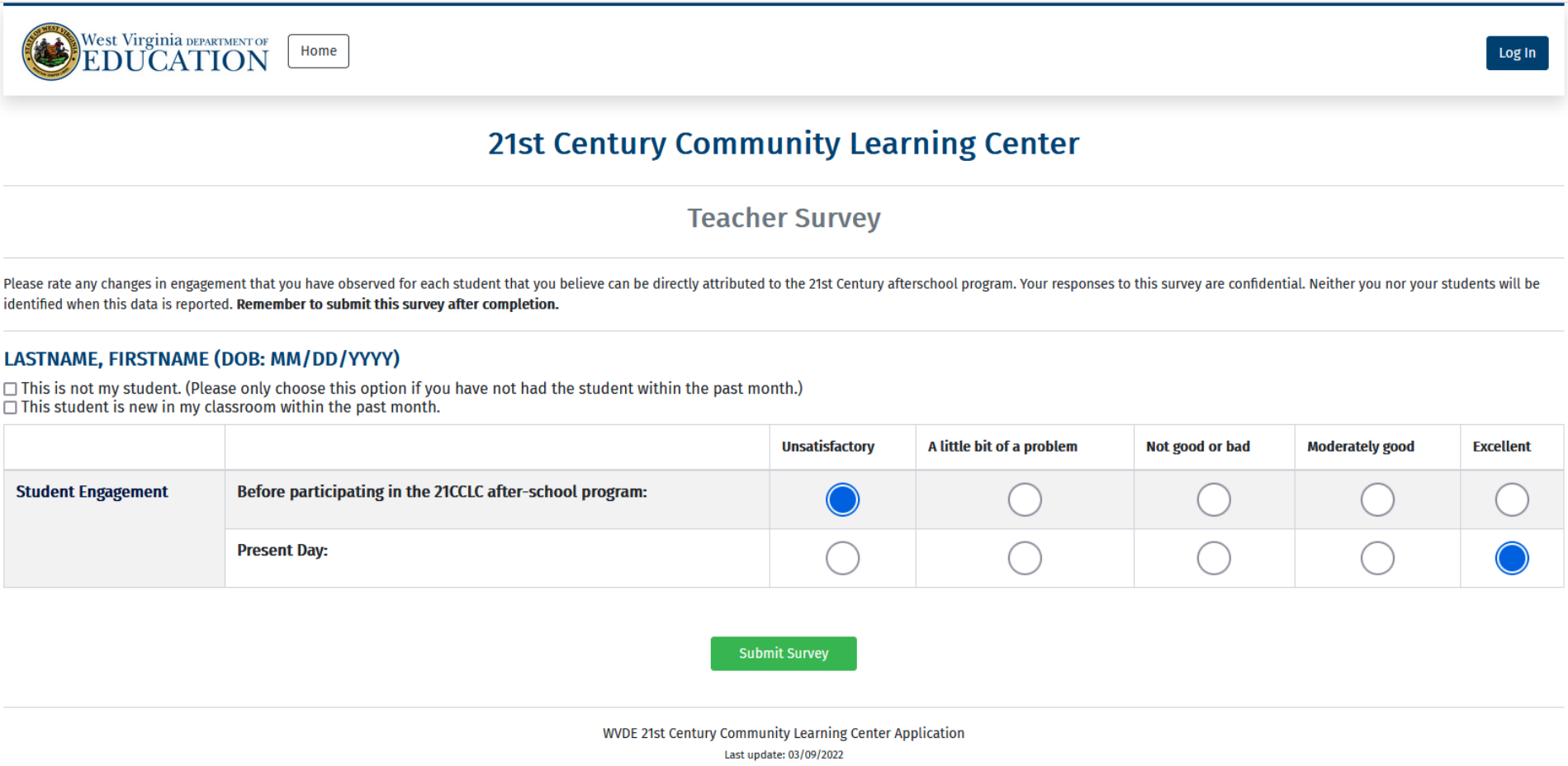
We would like to remind you that the parents of the students listed in this feedback form have provided consent for us to collect this information and your responses will be completely confidential as feedback will be reported only in aggregate so neither you nor your students will be identified.

Thank you so much for your time!

The West Virginia Department of Education

This message was automatically generated. Any replies to this e-mail will be redirected to surveys.wvde@k12.wv.us.

Teacher Survey Questions



West Virginia DEPARTMENT OF EDUCATION

Home

Log In

21st Century Community Learning Center

Teacher Survey

Please rate any changes in engagement that you have observed for each student that you believe can be directly attributed to the 21st Century afterschool program. Your responses to this survey are confidential. Neither you nor your students will be identified when this data is reported. **Remember to submit this survey after completion.**

LASTNAME, FIRSTNAME (DOB: MM/DD/YYYY)

☐ This is not my student. (Please only choose this option if you have not had the student within the past month.)
☐ This student is new in my classroom within the past month.

		Unsatisfactory	A little bit of a problem	Not good or bad	Moderately good	Excellent
Student Engagement	**Before participating in the 21CCLC after-school program:**	◉	○	○	○	○
	Present Day:	○	○	○	○	◉

Submit Survey

WVDE 21st Century Community Learning Center Application
Last update: 03/09/2022

Appendix C. Program Director Survey

Section 1. Student literacy and numeracy skill development

1. [Implementation] During this past regular school year, to what extent has your program worked with staff from the following agencies to engage students in READING or LITERACY activities?

	Not at all	To a small extent	To a moderate extent	To a large extent	To a very large extent
Host or feeder school(s)	◯	◯	◯	◯	◯
County central office	◯	◯	◯	◯	◯
Regional organization	◯	◯	◯	◯	◯
County extension agent, 4H, or FFA	◯	◯	◯	◯	◯
Local partners or community organizations	◯	◯	◯	◯	◯
WVDE	◯	◯	◯	◯	◯
Other agencies	◯	◯	◯	◯	◯
Describe					

2. [Implementation] For this past regular school year, please estimate about what percentage of students in your program have engaged in the following READING OR LITERACY activities during their hours in 21st CCLC?

	0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	60%-70%	70%-80%	80%-90%	90%-100%
Receiving reading/literacy tutoring	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Reading/literacy games or hands-on activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Helping other students with reading/literacy	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Other reading/literacy activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Describe										

3. [Implementation] During this past regular school year, to what extent has your program worked with staff from the following groups to engage students in MATH activities?

	Not at all	To a small extent	To a moderate extent	To a large extent	All the time or nearly all the time
Host or feeder school(s)	◯	◯	◯	◯	◯
County central office	◯	◯	◯	◯	◯
Regional organization	◯	◯	◯	◯	◯
County extension agent, 4H, or FFA	◯	◯	◯	◯	◯
Local partners or community organizations	◯	◯	◯	◯	◯
WVDE	◯	◯	◯	◯	◯
Other agencies	◯	◯	◯	◯	◯

	Not at all	To a small extent	To a moderate extent	To a large extent	All the time or nearly all the time
Describe					

4. [Implementation] During this past regular school year, approximately what percentage of your students have engaged in the following **MATH activities** during their hours in 21st CCLC?

	0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	60%-70%	70%-80%	80%-90%	90%-100%
Receiving math tutoring	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Math games or hands-on math activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Helping other students with math	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Other math activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Describe										

5. [Implementation] To what extent does your staff engage in **written, intentional teaching** for the following content areas:

	Not at all	To a small extent	To a moderate extent	To a great extent	Always or nearly always
Reading/literacy	◯	◯	◯	◯	◯
Math/numeracy	◯	◯	◯	◯	◯

Section 2. Student social/emotional skill development

6. [Implementation] During this past regular school year, to what extent has your program worked with staff from the following groups to engage students in ***social/emotional*** **activities or services**, such as persistence to graduation, positive behavior support, service learning, community service, or other related topics?

	Not at all	To a small extent	To a moderate extent	To a large extent	To a very large extent
Host or feeder school(s)	◯	◯	◯	◯	◯
County central office	◯	◯	◯	◯	◯
Regional organization	◯	◯	◯	◯	◯
County extension agent, 4H, or FFA	◯	◯	◯	◯	◯
Local partners or community organizations	◯	◯	◯	◯	◯
WVDE	◯	◯	◯	◯	◯
Other	◯	◯	◯	◯	◯
Describe					

7. [Implementation] During this past regular school year, to what extent has your program worked with staff from the following groups to engage students in ***social/emotional*** **activities or services**, such as resiliency training, prevention programs, group counseling, teamwork strategies, or other related topics?

	Not at all	To a small extent	To a moderate extent	To a large extent	To a very large extent
Host or feeder school(s)	◯	◯	◯	◯	◯
County central office	◯	◯	◯	◯	◯
Regional organization	◯	◯	◯	◯	◯
County extension agent, 4H, or FFA	◯	◯	◯	◯	◯
Local partners or community organizations	◯	◯	◯	◯	◯
WVDE	◯	◯	◯	◯	◯
Other	◯	◯	◯	◯	◯
Describe					

8. [Implementation] For this past regular school year, please estimate about what percentage of your students have engaged in the following **activities during their hours in 21st CCLC**?

	0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	60%-70%	70%-80%	80%-90%	90%-100%
Service-learning projects	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Community service	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Social-emotional or character education activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Other social/emotional or character building activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Describe										

9. [Implementation] For each of the following topics, please estimate what percentage of your site staff participated in professional development that you have offered to them.

	0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	60%-70%	70%-80%	80%-90%	90%-100%
Developing students' social/emotional skills	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Supporting students' persistence toward graduation	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Providing positive behavior supports / behavior management	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Planning service learning or community service activities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

Section 3. Quality of programs, safe and supportive environments

10. [Implementation] For each of the following topics, please indicate the stage of implementation your program achieved by the end of this school year.

	Not yet begun/not applicable	Planning stages	Initial implementation	Full implementation	Routine and ongoing
Child protection/mandatory reporter staff training	◯	◯	◯	◯	◯
Anti-bullying programming and procedures	◯	◯	◯	◯	◯
A trauma informed environment	◯	◯	◯	◯	◯
Handle With Care WV	◯	◯	◯	◯	◯
Positive Youth Development	◯	◯	◯	◯	◯

Section 4. Program sustainability

11. [Implementation] Please indicate the usefulness of professional development and technical assistance supports you and your staff have received in the past year to support the following activities.

	Not needed	Needed but not received	Received but not useful	Received and somewhat useful	Received and quite useful	Received and highly useful
Strategic planning	◯	◯	◯	◯	◯	◯
Outreach to schools for inclusion of the 21st CCLCs in supporting schools' strategic plans	◯	◯	◯	◯	◯	◯
Resource development outreach and marketing	◯	◯	◯	◯	◯	◯
Forming partner MOUs	◯	◯	◯	◯	◯	◯
Fund raising	◯	◯	◯	◯	◯	◯
Grant writing	◯	◯	◯	◯	◯	◯

12. [Outcome] For each of the grants your program administers, please provide the following information

Grant ID	Grant year just completed (1 to 5)	Number of volunteer hours received (whole number)	Total dollars obtained through supplemental grants or fund raising (Do **not** include a $ sign)

13. [Outcome] How many schools does your program serve? _____

14. [Outcome] In how many of those schools' strategic plans is 21st CCLC included? _____

Section 5. Community and Family Involvement

15. [Implementation] Please provide the following information about the make-up of your advisory council:

Total number of advisory council members	Number of participant parents/guardians	Number of partner staff members	Number of other community members

16. [Implementation] Family and community volunteers in our program receive training on the following schedule:

Volunteers do not receive training at this time	When first signing up as a volunteer only	Annually	Two times a year	Three or more times a year
◯	◯	◯	◯	◯

17. [Implementation] To what extent would you say you have implemented the following family engagement practices?

	Not yet begun/not applicable	Planning stages	Initial implementation	Full implementation	Routine and ongoing
Have adequate and welcoming space to engage families.	◯	◯	◯	◯	◯
Have established policies and procedures to promote family engagement.	◯	◯	◯	◯	◯
Communicate and build trusting relationships.	◯	◯	◯	◯	◯
Are intentional about staff hiring and training to promote effective staff-family interactions.	◯	◯	◯	◯	◯
Connect families to each other, to the program staff, to schools, and to other community institutions.	◯	◯	◯	◯	◯
Help support families and their basic needs.	◯	◯	◯	◯	◯

Note: Items in this set based on Little (2013).

18. [Implementation] How frequently do you celebrate or recognize volunteer and community partners? Check one.

Seldom or never	Every other year	Annually	Every session or term	At least monthly
◯	◯	◯	◯	◯

19. [Outcome] How successful has your program been in the following areas?

	Not at all successful	Slightly successful	Moderately successful	Mostly successful	Very successful
Involving family members/ guardians in supporting their children's learning	◯	◯	◯	◯	◯
Achieving hoped-for turnouts at activities planned for families	◯	◯	◯	◯	◯
Achieving hoped-for turnouts for activities inviting the community	◯	◯	◯	◯	◯
Involving family members as volunteers	◯	◯	◯	◯	◯
Involving community members as volunteers	◯	◯	◯	◯	◯

Section 6. Successes, Challenges, and Recommendations

20. Briefly describe up to three successes your program experienced this year.

21. Briefly describe up to three challenges your program experienced this year.

22. Please make up to three recommendations for improving West Virginia's 21st CCLC program in the coming years.

Appendix D. Details for Technical Analyses

Evaluation Question 1: ELA and Math Improvement

Table D1. Progress score ranges and increments by grade-level and subject area.

Grade	ELA		Math		Achievement Designations	
	Start	End	Start	End	Increment Level	Achievement Level
3	420	462	300	333	1.1	1
	463	506	334	366	1.2	1
	507	549	367	400	1.3	1
	550	561	401	408	2.1	2
	562	573	409	417	2.2	2
	574	585	418	425	2.3	2
	586	595	426	432	3.1	3
	596	605	433	440	3.2	3
	606	615	441	447	3.3	3
	616	660	448	550	4.1 - 4.3	4
4	430	473	310	346	1.1	1
	474	518	347	384	1.2	1
	519	562	385	421	1.3	1
	563	574	422	432	2.1	2
	575	586	433	444	2.2	2
	587	598	445	455	2.3	2
	599	608	456	462	3.1	3
	609	618	463	470	3.2	3
	619	628	471	477	3.3	3
	629	682	478	610	4.1 - 4.3	4
5	450	495	320	362	1.1	1
	496	541	363	405	1.2	1
	542	587	406	448	1.3	1
	588	598	449	461	2.1	2
	599	610	462	473	2.2	2
	611	621	474	486	2.3	2
	622	632	487	495	3.1	3
	633	643	496	503	3.2	3
	644	654	504	512	3.3	3
	655	706	513	660	4.1 - 4.3	4
6	460	505	330	377	1.1	1
	506	550	378	425	1.2	1
	551	596	426	473	1.3	1
	597	610	474	488	2.1	2
	611	624	489	502	2.2	2
	625	638	503	517	2.3	2
	639	652	518	528	3.1	3
	653	665	529	538	3.2	3
	666	679	539	549	3.3	3
	680	729	550	720	4.1 - 4.3	4

Grade	ELA		Math		Achievement Designations	
	Start	End	Start	End	Increment Level	Achievement Level
7	470	513	340	393	1.1	1
	514	557	394	448	1.2	1
	558	601	449	502	1.3	1
	602	615	503	517	2.1	2
	616	629	518	532	2.2	2
	630	643	533	547	2.3	2
	644	657	548	559	3.1	3
	658	670	560	570	3.2	3
	671	684	571	582	3.3	3
	685	739	583	750	4.1 - 4.3	4
8	480	523	350	409	1.1	1
	524	568	410	468	1.2	1
	569	612	469	528	1.3	1
	613	626	529	547	2.1	2
	627	641	548	567	2.2	2
	642	655	568	586	2.3	2
	656	669	587	596	3.1	3
	670	683	597	606	3.2	3
	684	697	607	616	3.3	3
	698	754	617	830	4.1 - 4.3	4

Equation Set 1: Absence Rates

The below equations and output are for the quasi-experimental analysis of absence rate data for EQ2.

Subscripts for the variables include:

- i = Student
- j = 21st CCLC site
- k = Regular-day school

The following model specification assumptions were made:

- The effect of 21st CCLC is not assumed to be the same for all sites (due to different operating schedules, for example), where both site-specific intercepts are freed-up for estimation as well as the slopes for days attended (while the slopes for previous year absence rate are fixed): *TFSTCCLC_DAYSATTENDED|TFSTCCLC_SITESATTENDED).*
- The model should account for students' previous year absence rate (where the 2021-2022 absence rate is a continuous fixed effect, or covariate).
- The model should account for the influence of the current school a student is in, in which by-school variability is taken into consideration (as a random effect with freed-up intercepts but fixed slopes): *(1|SchoolID).*

The below equations are for the unstandardized solution to better facilitate interpretation.

$$\widehat{AbsenceRate}(SY2023)_{\iota} \sim N(\mu, \sigma^2) \tag{3a}$$

$$\mu = 0.0507_{\alpha_{j(i),k(i)}} - 0.0001_{\beta_{1j(i)}}\big(DaysAttendedAfterschool(SY2023)\big) + 0.4400_{\beta_2}\big(AbsenceRate(SY2022)\big) \tag{3b}$$

$$\widehat{AbsenceRate}(SY2023)_{\iota} = \alpha_{j(i),k(i)} - \beta_{1j(i)}\big(DaysAttendedAfterschool(SY2023)\big) + \beta_2\big(AbsenceRate(SY2022)\big) \tag{3c}$$

$$\alpha_j \sim N(0, \sigma = 0.0056) \tag{3d}$$

$$\alpha_k \sim N(0, \sigma = 0.0189) \tag{3e}$$

The *lmer* model summary with <u>unstandardized</u> coefficients was as follows:

```
Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']
Formula: RateCurrentYear ~ TFSTCCLC_DAYSATTENDED + RatePriorYear + (TFSTCCLC_DAYSATTENDED |
    TFSTCCLC_SITESATTENDED) + (1 | SchoolID)
   Data: m.data2
Weights: weights
Control: lmerControl(optCtrl = list(maxfun = 3e+05))

REML criterion at convergence: -72593.8

Scaled residuals:
     Min       1Q   Median       3Q      Max
-12.5428  -0.4217  -0.1112   0.2557  21.9652

Random effects:
```

```
 Groups                 Name                    Variance  Std.Dev.  Corr
 TFSTCCLC_SITESATTENDED (Intercept)             3.148e-05 5.611e-03
                        TFSTCCLC_DAYSATTENDED 6.908e-10 2.628e-05 -0.99
 SchoolID               (Intercept)             3.564e-04 1.888e-02
 Residual                                       3.679e-03 6.065e-02
Number of obs: 33212, groups:  TFSTCCLC_SITESATTENDED, 300; SchoolID, 275

Fixed effects:
                        Estimate Std. Error         df t value Pr(>|t|)
(Intercept)            5.065e-02  1.772e-03  1.730e+02  28.589  < 2e-16 ***
TFSTCCLC_DAYSATTENDED -1.309e-04  1.628e-05  1.050e+03  -8.043 2.35e-15 ***
RatePriorYear          4.400e-01  4.241e-03  3.271e+04 103.745  < 2e-16 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:
            (Intr) TFSTCC
TFSTCCLC_DA -0.419
RatePriorYr -0.209  0.040
optimizer (nloptwrap) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
```

The *lmer* model summary with <u>standardized</u> coefficients was as follows:

```
Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']
Formula: RateCurrentYear ~ TFSTCCLC_DAYSATTENDED + RatePriorYear + (TFSTCCLC_DAYSATTENDED |
    TFSTCCLC_SITESATTENDED) + (1 | SchoolID)
   Data: m.data3
Weights: weights
Control: lmerControl(optCtrl = list(maxfun = 3e+05))

REML criterion at convergence: 94915.8

Scaled residuals:
     Min       1Q   Median       3Q      Max
-12.5330  -0.4209  -0.1127   0.2549  21.8792

Random effects:
 Groups                 Name                    Variance  Std.Dev. Corr
 TFSTCCLC_SITESATTENDED (Intercept)             0.0138255 0.11758
                        TFSTCCLC_DAYSATTENDED 0.0006072 0.02464  -1.00
 SchoolID               (Intercept)             0.0287124 0.16945
 Residual                                       0.5718832 0.75623
Number of obs: 33212, groups:  TFSTCCLC_SITESATTENDED, 300; SchoolID, 275

Fixed effects:
                        Estimate Std. Error         df t value Pr(>|t|)
(Intercept)           -7.769e-03  2.005e-02  2.093e+02  -0.388    0.699
TFSTCCLC_DAYSATTENDED -4.614e-02  6.080e-03  2.788e+02  -7.589 4.87e-13 ***
RatePriorYear          4.970e-01  4.775e-03  3.275e+04 104.093  < 2e-16 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:
            (Intr) TFSTCC
TFSTCCLC_DA -0.503
RatePriorYr  0.011  0.038
optimizer (nloptwrap) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
```

A null model was specified by removing the variables related to 21st CCLC (i.e., AbsRateCurrentYear ~ AbsRatePriorYear + (1|SchoolID)). Because the null model was nested within the full model, a likelihood ratio test was performed. The findings could be interpreted to support that 21st CCLC attendance added to the predictive utility of the model a significant amount ($\chi^2(4)=130.98$, $p < .001$), as well as the statistical significance of the fixed effect for days attendance in 21st CCLC.

Model	npar	AIC	BIC	logLik	deviance	Chisq	df	Pr(>Chisq)
Null	4	95,031	95,065	-47,512	95,023			
Full	8	94,908	94,976	-47,446	94,892	130.98	4	< 0.001

However, the practical significance of the model was not supported in two ways. First, the R^2 value of the fixed effect(s) within the full model did not have very much explanatory power ($R_m^2 = .291;\ R_c^2 = .341$), which was even less than the null model ($R_m^2 = .293;\ R_c^2 = .326$), albeit negligibly. Second, an effect size calculation (c.f., Hedges, 2007) that examines the ratio of the contribution of the fixed effect in question (i.e., Days of Attendance in 21st CCLC) with respect to the variability from the random effects (which are essentially the "error" variability components controlled for statistically within the model). This effect size can be interpreted similarly to Cohen's *d* or Hedge's *g*. The equations for the calculation, and the derived value, are presented below. When using the standardized coefficients, which allows for commensurate scaling of the variables, the equation yields a fairly small effect size of -0.059.

$$\delta_t = \frac{\beta_{DAYSATTENDED2021}}{\sqrt{\sigma^2_{\alpha_{j(i)}} + \sigma^2_{\alpha_{k(i)}} + \sigma^2_{\beta_{1j}} + \sigma^2_{\varepsilon}}}$$

$$\delta_t = \frac{-0.04614}{\sqrt{0.0138255 + 0.0287124 + 0.0006072 + 0.5718832}}$$

$$\delta_t = \frac{-0.04614}{0.78423740}$$

$$\delta_t = -0.058834225$$

WEST VIRGINIA
DEPARTMENT OF EDUCATION
STATE OF WEST VIRGINIA
MONTANI SEMPER LIBERI