

New Jersey 21st Century Community Learning Centers Year Four Evaluation Report : Executive Summary



Executive Summary

Information summarized in this report is based on data collected and analyzed by American Institutes for Research (AIR) as part of a statewide evaluation of the New Jersey 21st Century Community Learning Centers (21st CCLC) programs, including data from 49 sub-grantees and 94 centers. Results represent findings based on activities delivered during the 2011–12 school year. The purpose of this executive summary is to (1) set the context for the evaluation design with regard to a primary focus on program quality, (2) outline the evaluation questions and methods, and (3) summarize key findings within each of the identified evaluation questions. To set the context for the evaluation design, a brief discussion on program quality, AIR’s framework for understanding afterschool program quality, and the leading indicators of afterschool program quality developed in collaboration with the New Jersey Department of Education (NJDOE) are provided. Following the discussion on program quality, the evaluation questions and methods are outlined and a summary of key findings within each of the identified evaluation questions is presented.

NJDOE Goals and Objectives and Program Quality

From the perspective of NJDOE, programs receiving 21st CCLC funding from the state should “supplement the education of students in Grades 4–12 and...assist students in attaining the skills necessary to meet New Jersey’s Curriculum Content Standards and Common Core State Standards” (State of New Jersey, Department of the Treasury, 2013, p. 1). The staff members at NJDOE responsible for administering the 21st CCLC program have taken steps to further operationalize this goal by specifying a series of objectives that outline what is to be achieved in this regard and by what means. Collectively, the domain of goals and objectives established by NJDOE either directly or indirectly reinforce the primacy of student achievement and behavioral change as the outcomes of greatest interest and suggest that programs can take steps to realize these outcomes as follows:

- Establish and maintain partnerships and collaborative relationships within the community.
- Adopt strategies and practices support student skill building and mastery, both academically and from a youth development perspective.
- Implement activities that promote parental involvement and provide opportunities for the development to the families of participating students.
- Ensure measure and approaches are in place to assess program quality and effectiveness, and use this information to support quality improvement.

Each of these operational elements and approaches are represented in recent efforts in the field of afterschool education to identify the features of high-quality afterschool program (Granger, Durlak, Yohalem, & Reisner, 2007; Little, 2007; Wilson-Ahlstrom & Yohalem, 2007; Vandell et al., 2005; Yohalem & Wilson-Ahlstrom, 2009). Generally, many of the measures developed and adapted for use in carrying out this evaluation are meant to assess how 21st CCLC grantees are performing across the operational elements and attributes embedded in NJDOE’s goals and objectives for the program and in those characteristics that the current best-practices literature

suggests are associated with program features likely to affect positively student achievement and related outcomes.

Leading Indicators

A primary goal of the statewide evaluation was to provide 21st CCLC grantees with data to inform program improvement efforts regarding their implementation of research-supported best practices. Building from the quality framework, AIR and NJDOE worked collaboratively to define a series of leading indicators predicated on data collected as part of the statewide evaluation. The leading indicators were meant to enhance existing information/data available to 21st CCLC grantees regarding how they fared in the adoption of program strategies and approaches associated with high-quality afterschool programming. Specifically, the leading indicator system was designed to do the following:

- Summarize data collected as part of the statewide evaluation in terms of how well the grantee and its respective centers¹ are adopting research-supported best practices.
- Allow grantees to compare their level of performance on leading indicators with similar programs and statewide averages.
- Facilitate internal discussions about areas of program design and delivery that may warrant additional attention from a program improvement perspective.

The leading indicators were first organized into three overarching domains defined by program level:

- *Organizational Processes* relate to practices that are defined for the full program and that provide an infrastructure to support implementation of effective practice in the design, delivery, and evaluation of afterschool programming.
- *Quality at the Point-of-Service* relates to practices that occur at the point-of-service, where staff members and youth directly interact during the provision of an activity or offering. The focus at this level is on the instructional practice of individual staff members.
- *Participation and Engagement* refers to the level of participation by youth and adults in activities provided by 21st CCLC programs. Participants cannot be expected to be positively impacted by the program unless they actually participate in program offerings and activities.

The leading indicators also can be organized into more specific domains of *quality practice*:

- Strategies and practices that support the academic development of participating youth
- Strategies and practices that support the development of participating youth from a youth development perspective

¹ Throughout this report, the term *center* is used to refer to the physical location where 21st CCLC programming is delivered. Each grantee operates at least one center, although it is more common for a given grantee to operate multiple centers. Most, but not all, centers are located in public schools. The term *site* also is commonly used to refer to an individual center.

- Strategies and practices that support the engagement and development of parents and adult family members
- Strategies and practices that support the utilization and engagement of partners
- Strategies and practices that support program improvement efforts

The information collected and analyzed in relation to the 2011–12 school year was meant to answer four primary evaluation questions related to the implementation of the New Jersey 21st CCLC program and related to the impact of the program on desired student outcomes:

1. What were the primary characteristics of programs funded by 21st CCLC and the students served?
2. How did centers perform on the leading indicators defined for the program, and how is this level of performance relevant to thinking about what additional supports, training, and professional development NJDOE should potentially invest in?
3. To what extent is there evidence of a relationship between select program and student characteristics and the likelihood that students demonstrated the following:
 - a. Higher levels of attendance in 21st CCLC
 - b. An improvement in behaviors likely to be supportive of better academic achievement
 - c. Higher academic achievement in reading/language arts and mathematics

To what extent is there evidence that students participating in services and activities funded by 21st CCLC demonstrated better performance on state assessments in reading and mathematics compared with similar students not participating in the program?

Data Sources

To address the aforementioned evaluation questions, data were collected from the following sources:

- **Program Activity and Review System (PARS21).** PARS21 is a Web-based data collection system developed and maintained by the NJDOE that collects directly from grantees a broad array of program characteristic, student demographic, attendance, and outcome data throughout the program year.
- **Staff Survey.** The purpose of the online staff survey was to obtain information from staff members working directly with youth in programs funded by 21st CCLC about the extent to which they engage in practices suggested by the afterschool research literature as likely to be supportive of both positive academic and youth development outcomes.
- **New Jersey 21st CCLC Evaluation Template and Reporting System.** The 21st CCLC Evaluation Template and Reporting System (ETRS) is a Web-based data collection application designed to obtain center-level information about the characteristics and performance of afterschool programs funded by 21st CCLC, based on information garnered from local evaluation efforts. The system is designed to collect information at

two time points: (1) midyear through a given school year and (2) at the end of a given programming cycle.

New Jersey Standards Measurement and Resource for Teaching (NJ SMART) Data

Warehouse. Steps also were taken in fall 2012 and in early 2013 to obtain access to New Jersey Assessment of Skills and Knowledge (NJASK) scores in reading and mathematics from the NJ SMART data warehouse maintained by NJDOE for 21st CCLC participants served during the course of the 2011–12 school for students in Grades 4 to 8. Similar scores also were obtained for 21st CCLC students in Grade 11 that took the High School Proficiency Assessment (HSPA) in spring 2012. Similar data also were obtained for those students attending the same schools as the 21st CCLC participant population that did not participate in the program during these periods.

Analysis

Descriptive analysis of PARS21 data on grantee, center, and student characteristics along with cluster analysis techniques were used to provide an overall description of New Jersey 21st CCLC operating in the 2011–12 school year. Both descriptive analysis and Rasch analysis of PARS21, ETRS, and staff survey responses were used to assess the extent to which centers implement research-supported best practices aligned with the previously described leading indicator system. To assess relationships among student and center characteristics and student outcomes, hierarchical linear modeling (HLM) was used to explore direct and indirect associations. Finally, to evaluate the impact of 21st CCLC programming on students' academic outcomes, propensity score matching was used to first identify a viable group on nonparticipating students and propensity scores (the probability of a student to participate in 21st CCLC programming) were used in HLM models comparing NJASK and HSPA reading and mathematics performance for 21st CCLC participants and nonparticipants.

Summary of Key Findings

A summary of key evaluation findings is provided below.

Primary Characteristics of Programs Funded by 21st CCLC and the Students Served

Grantee Characteristics

- A majority of grantees (75 percent) were in their third, fourth, or fifth year of program operation.
- Grantees were roughly split between the categories of school-based (57 percent) and non-school-based (43 percent) grantee.

Center Characteristics

- Centers were grouped into staffing clusters based on staffing configuration. A plurality of centers, 36 percent, were identified as employing mostly school day

- teachers; the next highest group of centers employed a mix of mostly school-day teachers, program staff members, and nonacademic staff members (31 percent of all centers).
- The average student-to-staff ratio was eight students for each program staff member.
 - Centers mainly served children in elementary and middle schools exclusively (72 percent of centers).
 - The majority of centers chose career exploration (41 percent) or science, technology, engineering, and mathematics (STEM)(34 percent) as their primary activity theme.

Student Characteristics

- A total of 13,752 students attended 21st CCLC programming for at least one day.
- Slightly more than two-thirds of the students (71.6 percent) attended 30 days or more, and slightly more than one third (38.2 percent) participated for 90 days or more.
- The typical student attended an average of 25 hours of reading activities and 20 hours of mathematics activities.
- Thirty-one percent of students attended 21st CCLC programming for two consecutive years or more.
- The most common activity profiles were associated with youth who spent the majority of their time participating in academic enrichment activities (28 percent) or tutoring (30 percent).
- A majority of 21st CCLC participants were Hispanic (46 percent) or African American (34 percent). Most attendees (77 percent) qualified for free or reduced-price lunch.

Leading Indicator Results

Steps were taken in preparation of the 2011–12 report to summarize center performance relative to each of leading indicators adopted by NJDOE. Primary findings are summarized by each of the five quality domains underpinning the indicator system. Note: Excepting the scale titles, language in italics indicates survey response categories as provided to respondents.

Leading indicators related to strategies and practices that support the academic development of participating youth. Centers operating 21st CCLC programming during the course of the 2011–12 school year demonstrated the following practices:

- Widespread adoption of specific instructional strategies to support academic skill building among participating students (leading indicator 1), with a statewide mean scale score of 70.0 (aligning with *Significant Strategy Usage*). (Note: Language in italics indicates survey response categories as provided to respondents.)
- Access to school-based data on student academic functioning and needs (leading indicators 2 and 3). For leading indicator 2, there was a statewide mean scale score of 66.8, meaning student academic information was *somewhat accessible*, there was *common* use of linking to the school day as a strategy, and communication with school-

day teachers happened about *monthly or once per grading period*. Eighty-six percent of centers indicated they were able to measure student academic functioning of participating youth in core academic areas (leading indicator 3).

- Regular lines of communication with school-day teachers (leading indicator 2, as outlined in the preceding bullet point).
- *Frequent* intentionality in designing activity sessions to impart skills and knowledge to participating youth (leading indicator 18), with a statewide mean scale score of 60.81. (Note: Language in italics indicates survey response categories as provided to respondents.)

Less common was the offering of academic-related sessions and participation in academic-related activities in accordance with the performance targets specified for indicators 5 and 21.²

Leading indicators related to strategies and practices that support the development of participating youth from a youth development perspective. Centers operating 21st CCLC programming during the course of the 2011–12 school year were characterized by the following levels of performance on the indicators associated with this quality domain:

- Roughly half of centers were (a) taking steps to assess youth functioning on social and emotional competencies (leading indicators 7 and 8), with 51 percent and 40 percent of centers respectively meeting the performance threshold and (b) meeting goals for the infusion of components meant to support youth development-related behaviors and social-emotional learning (SEL) functioning of participating youth and actual youth participation targets for the fall semester of 2011 (indicators 9 and 20), with 58 percent and 59 percent of centers respectively meeting the performance threshold. In the case of the latter set of findings (pertaining the indicators 9 and 20), the performance thresholds are perhaps questionable. However, little is known regarding what is an appropriate dosage for youth participation in youth development-related behaviors and SEL and how best to assess implementation of these efforts outside direct observation (though NJDOE believes SEL should be infused throughout the program). Although many questions remain regarding how centers are infusing youth development and SEL components into programming, the leading indicators related to this quality domain seem to suggest a significant portion of the New Jersey 21st CCLC programs are dedicating meaningful effort to the design and delivery of this type of programming.
- In terms of activities provided at the point-of-service meant to support youth development, statewide averages on the *Staff Capacity to Create Interactive and Engaging Environment* scale (leading indicator 16) and the *Practices Supportive of Positive Youth Development and Opportunities for Youth Ownership* scales of the staff survey (with both scales' items composing leading indicator 17) suggest staff adoption of such practices are more common than not: for leading indicator 16, the mean statewide scale score was 62.3 (the *Agree* portion of the scale), indicating staff members believe

² For indicator 5 to be met, fifty percent or more of a given program's activity sessions had to have been intended to support student growth and development in either mathematics and/or reading/language arts. For indicator 21 to be met, 75 percent of participants attending 15 days or more during the first semester had to have participated in activities that intentionally support growth in mathematics and/or reading/language arts for at least 50 percent of their total time in the program.

their peers largely are providing interactive and engaging settings for youth; for leading indicator 17, the mean statewide scale score was 62.1, indicating that select opportunities for youth development were available *occasionally* and that staff largely *agree* that youth ownership opportunities are provided. However, for each of these indicators, 29 percent and 26 percent of centers (respectively) had an average scale score which indicated these practices were only occurring *occasionally* to largely *not at all*. It is this set of programs that could likely benefit from additional technical assistance on how best to implement these types of supports and opportunities for participating youth.

Leading indicators related to strategies and practices that support the engagement and development of parents and adult family members. Centers operating 21st CCLC programming during the course of the 2011–12 school year were characterized by the following levels of performance on the indicators associated with this quality domain:

- In terms of engaging in practices to support and cultivate parent involvement and engagement (leading indicator 14), most centers were found to do so just *sometimes* (75 percent of centers fell within this range of the scale), as opposed to *never* (7 percent of centers) or *frequently* (19 percent).
- Fifty percent of centers indicated adopting measures to assess the program’s impact on parent education and involvement (leading indicator 15).
- Only a small percentage of programs (6 percent) were able to engage parents or other adult family members in activities for at least 15 percent of the students served in the program during the fall semester of 2011.

Many of these findings are consistent with previous leading indicator results and demonstrate the ongoing challenges of reaching out to an engaging parents and adult family members of participating 21st CCLC students.

Leading indicators related to strategies and practices that support the utilization and engagement of partners. Centers operating 21st CCLC programming during the course of the 2011–12 school year were characterized by the following levels of performance on the indicators associated with this quality domain:

- In terms of engaging partners in collaborative efforts to promote a shared vision and understanding of the work (leading indicator 12), the mean statewide scale score was 43.0, indicating that most centers engaged in such practices *informally* (as opposed to doing such things with partners on a *formal* basis) or *not at all*, and that partner staff members were *moderately* involved in the provision of select activities.
- A small percentage of activity sessions (less than one percent) delivered during the fall semester of 2011 were provided by staff members employed directly by a partner (leading indicator 13). It is not clear if this low percentage is the failure of proper data entry in PARS21 or if partner involvement in the delivery of activities was truly such a small proportion of overall activity delivery.

It is our sense that a clearer articulation of what effective partnerships may look like in relation to the design and delivery of 21st CCLC programming may be warranted, particularly in terms of

using partners strategically to expand the domain and diversity of activities that can be offered to participating youth.

Leading indicators related to strategies and practices that support program improvement efforts.

Centers operating 21st CCLC programming during the course of the 2011–12 school year were characterized by the following levels of performance on the indicators associated with this quality domain:

- Eighty-two percent of centers reported engaging in some form of self-assessment process employing a specific tool or instrument during the 2011–12 school year (leading indicator 10).
- The average statewide scale score for internal communication (leading indicator 11) was 55.5, which indicates collaborative efforts were undertaken *a couple of times per year/once a month*. Scale response options included *never, a couple of times per year, about once a month, and nearly every week*. This suggests that collaborative efforts were somewhat frequently implemented during the 2011-12 programming period.

Within the afterschool field, self-assessment processes have become one of the primary mechanisms of supporting quality improvement efforts. There are new opportunities to capitalize on this approach in New Jersey as well with the development of a self-assessment tool by the New Jersey School-Age Care Coalition aligned with the state’s newly adopted state afterschool standards. Finding ways to make use of this tool to support 21st CCLC implementation efforts will be an important task to undertake in the future.

Relationship between Leading Indicator Status and Outcomes

Indicators associated with each of the five quality domains were analyzed using hierarchical cluster analysis to create quality profiles that triangulated data from the multiple indicators to sort 21st CCLCs into a given quality type. Three types of situations are believed to be of particular interest:

1. When all indicators suggest a high level of implementation in relation to a given quality domain.
2. When all indicators suggest a low level of implementation in relation to a given quality domain.
3. Mismatches in indicators in relation to a given quality element, with some indicating a high level of implementation and others indicating a low level of implementation.

Variables summarizing a center’s status relative to five quality clusters³ were then included in a series of correlational, multilevel models to explore if cluster membership was associated with teacher-reported improvement in student behaviors, the NJ ASK reading and mathematics results, and attendance in the 21st CCLC program. It was expected that cluster membership

³ The five clusters are divided according to strategies and practices that support: 1) the academic development of participating youth, 2) the development of participating youth from a youth development perspective, 3) the engagement and development of parents and adult family members, 4) the utilization and engagement of partners, and 5) program improvement efforts.

indicating a high level of performance would be positively associated with outcomes and that cluster membership indicating a low level of performance would be negatively associated with outcomes. The latter hypothesis was more likely to be supported by the results yielded from these models, particularly in the following instances:

- *Academic Development—Most means below average.* Centers were assigned to this cluster if the center’s scores on five of the six leading indicators under consideration were below average. Centers in this cluster would be considered to have a lower degree of implementation on strategies and practices that support academic development relative to the other two cluster types. There were 48 centers assigned to this cluster. Membership in this cluster was negatively associated with mathematics assessment results ($p < .01$) and teacher assessment of student behavior improvement in terms of *Participating in Class* ($p < .05$). (Note: *Participating in Class* is a teacher survey item.)
- *Youth Development (YD)—YD/SEL offerings and participation below average.* Thirty-seven centers were assigned to this cluster where scores on indicators related (a) to the offering of programming with components infused to support youth development-related behaviors and SEL functioning and (b) to the degree of student participation in these offerings were found to be below average. Center membership in this cluster was found to be negatively related to teacher assessment of student behavior improvement in terms of *Participating in Class* ($p < .10$) and *Behaving Well in Class* ($p < .10$). In terms of state assessment outcomes, membership in this cluster also was negatively associated with mathematics state assessment results ($p < .10$). (Note: *Participating in Class* and *Behaving Well in Class* are teacher survey items.)
- *Parent Involvement—Both means below average.* Thirty-one centers were assigned to this cluster where scores on indicators related (a) to the extent to which center staff members engaged in practices supportive of parent involvement and engagement and (b) to the degree of parent and family member participation in center offerings were both found to be below average. Center membership in this cluster was found to be negatively associated with teacher assessment of student behavior improvement in terms of *Participating in Class* ($p < .05$), *Behaving Well in Class* ($p < .10$), and school-year 21st CCLC attendance ($p < .01$). (Note: *Participating in class* and *Behaving Well in Class* are teacher survey items.)

Program Impact Estimates

The evaluation team employed a quasi-experimental research design to examine the impact of 21st CCLC program participation on reading and mathematics achievement as measured by the NJ ASK and HSPA assessments. Key findings from these analyses follow.

For reading achievement, there was no significant impact of 21st CCLC program participation on students pooled across grade levels (at the 0.10 significance level). This was true in relation to both NJ ASK and HSPA scores, when participation in the program was defined at either 30+ days or 70+ days, and when results for students scoring below proficiency in 2010–11 were solely considered. However, significant positive effects were found for students in Grades 6 and 7 when participation was defined at 70+ days. These effects were small, with 21st CCLC participants achieving 0.075 and 0.116 standard deviations units higher than the comparison

group, respectively. A small negative effect of $-.065$ standard deviation units also was associated with students in Grade 4 attending programming for 30+ days.

For mathematics, there was a statistically significant positive impact of 21st CCLC program participation for 70+ day participants (looking at all students pooled across grades levels at all 94 sites). This group achieved .049 standard deviation units higher than the comparison group. These findings indicate that there was a small, significant impact of 21st CCLC participation on mathematics achievement. When students scoring below proficiency in 2010–11 were solely considered, there was a statistically significant positive impact of 21st CCLC program participation at both the 30+ day (0.061 standard deviation units) and 70+ day thresholds (0.054 standard deviation units). The largest effects were in relation to mathematics performance in Grade 7, which ranged from 0.086 to 0.144 standard deviations units depending upon the population examined.

Recommendations

Analyses conducted during the course of 2011–12 evaluation suggest some of the leading indicators require revisiting, particularly in relation to the timing of when leading indicator data are collected and analyzed and how best to make use of data related to the provision of certain types of offerings like those targeting reading and mathematics and student participation in them. Because there is some indication that some clusters performing at lower levels on the indicators are related negatively to student outcomes, it may make sense to examine the practices articulated in these quality domains; to refine measurement approaches; to work through a process of defining what constitutes proficient levels of practices in each; and to collaborate with the state's technical assistance provider to find ways to build capacity in these areas.

These matters will be taken up in the next evaluation contract, providing specific program improvement areas for investigation and follow up. During 2013-14, the first year of the next contract, the evaluation team will begin holding discussions with NJDOE and the Evaluation Advisory Group (EAG) regarding overall revision to the leading indicators based on actual use, available data, and potential or desired use in the future. The timing of data-collection activities that support the population of the leading indicators will also be considered. Further, feedback on the use of leading indicator reports will be collected from the grantees during the summer data session in 2014.

Based on findings in this evaluation report, discussions with NJDOE and the EAG, and grantee feedback regarding the leading indicators, the evaluation team will create a plan for revision of the leading indicators during late 2014. Pending revision and NJDOE or EAG decisions, the goal will be to implement the revision plan during the first half of 2015 in time for data collection activities in the second half of 2015.