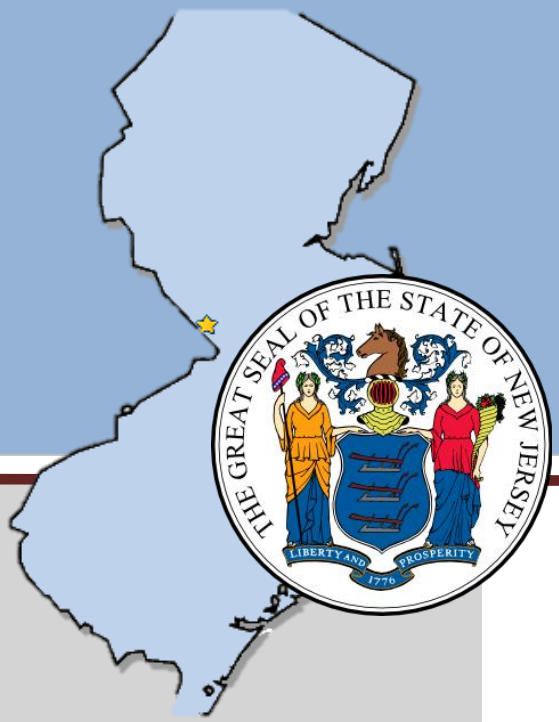

NEW JERSEY 21st CENTURY COMMUNITY LEARNING CENTERS

Evaluation Summary for 2013-14

21st CCLC Evaluation Findings for 2013–14

AMERICAN INSTITUTES FOR RESEARCH®

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The information in this report is from data collected and analyzed as part of a statewide evaluation of the 21st CCLC program in New Jersey, currently being conducted by American Institutes for Research.

For almost a decade, 21st Century Community Learning Centers (21st CCLC) operating across the state of New Jersey have provided students in high-poverty communities the opportunity to participate in various types of youth development, academic enrichment, and support activities. These activities, varying extensively in character from one program to the next, are designed to enhance the academic well-being of participating youth. In an effort to identify the actual impact these programs are having on participating youth, on behalf of the New Jersey Department of Education (NJDOE), American Institutes for Research (AIR) has attempted to evaluate the effectiveness of these programs. Most recently these efforts have yielded a full program study (the third report in a series of five planned reports) that covers programming offered during the 2013–14 school year. The results presented in this shortened report are taken from that full impact study.

This summary is far from exhaustive but has been designed to present the most salient findings from the latest impact report. This report therefore contains basic data on the 21st CCLCs operating in New Jersey during the 2013–14 school year, along with highlights from the impact analysis carried out as part of the study.

Funding Statement

This project was funded in its entirety from the federal Elementary and Secondary Education Act, Title IV, Part B, 21st CCLC grant through a contract with the NJDOE.

Program Characteristics

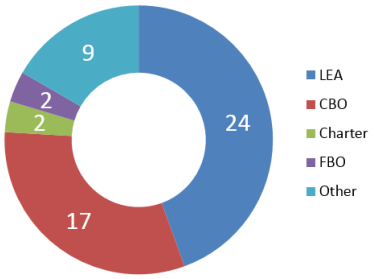
Five-year 21st CCLC grants are awarded by NJDOE based on a grant competition. The term "**grantee**" as used here refers to the organization that serves as the fiduciary agent of an awarded 21st CCLC grant (i.e., the recipient of the grant). These agencies may be school districts, community-based organizations, or other entities. In all cases, however, these entities manage the grant funds and oversee one or several physical locations where 21st CCLC activities take place.

The term "**center**" refers to the actual program locations operated by each grantee. These programs can vary tremendously one from the next; not all centers have the same format or model. Staffing, the number of youth served, the specific needs of the student population, community resources available, and so on all have a large impact on the nature of a given 21st CCLC program. Because of this, summary statistics only present a "bird's eye" view of programming in New Jersey, masking a wide variety of program types and approaches.

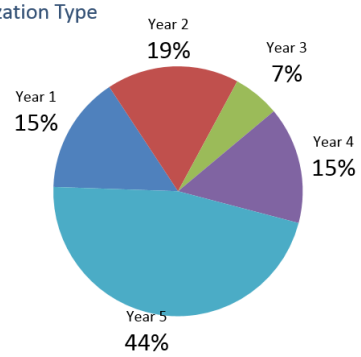
In all cases, however, the programs are intended to "supplement the education of students in Grades 4–12," and "assist students in attaining the skills necessary to meet New Jersey's Curriculum Content Standards" (State of New Jersey, Department of the Treasury, 2013, p. 1).

52 Grantees

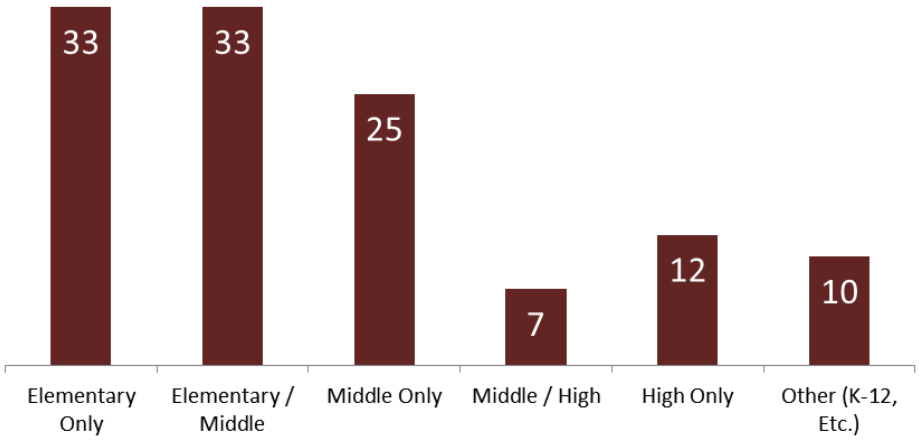
Programming Year



Organization Type

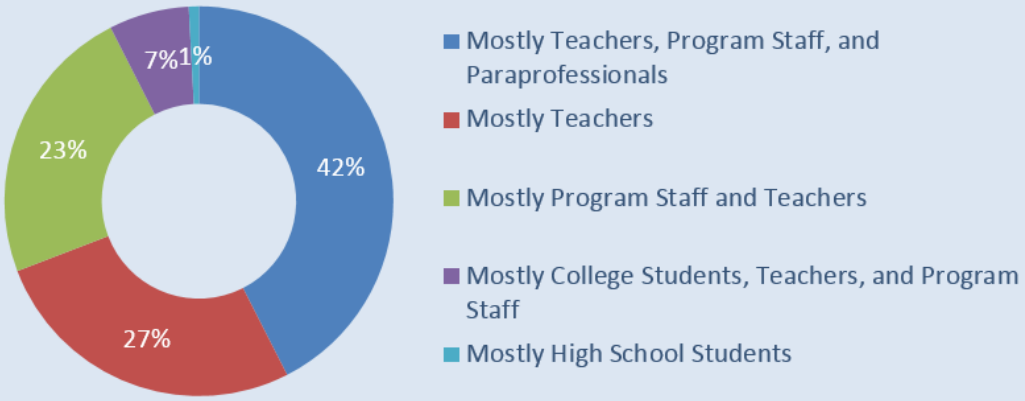


120 Centers



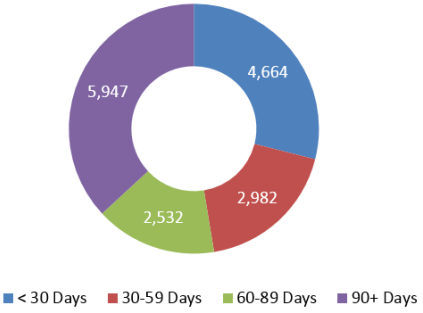
Percent of Centers by Staffing Profile

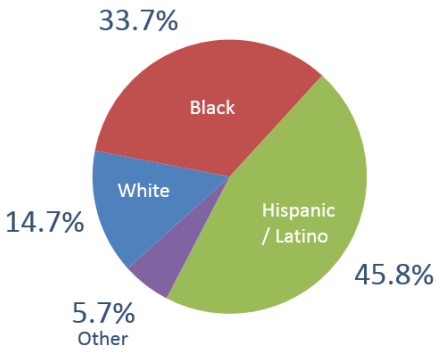
A program's staffing configuration says a lot about a program's activities and character. While a variety of configurations are reflected in New Jersey's programs, note that most programs make use of school day teachers at least to some extent.



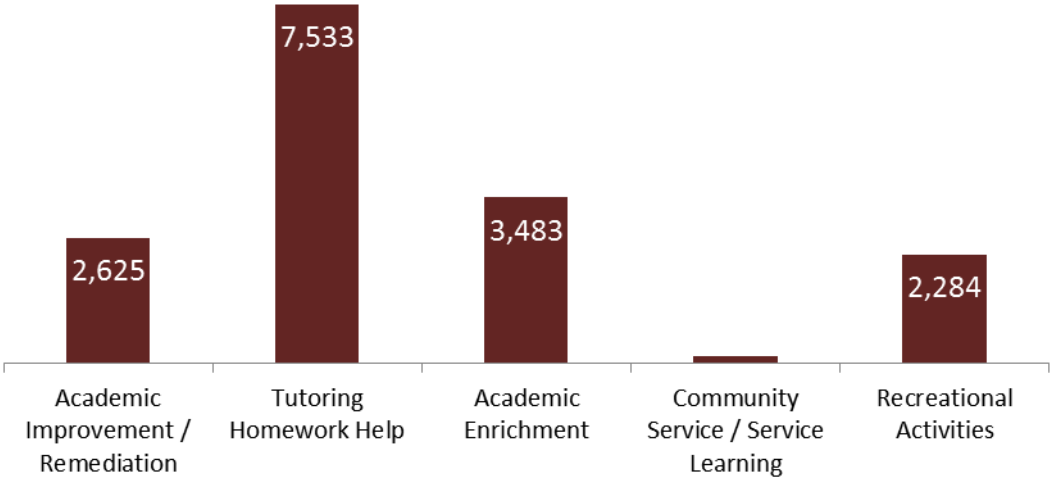
16,071 Total Attendees

11,407 Regular Attendees

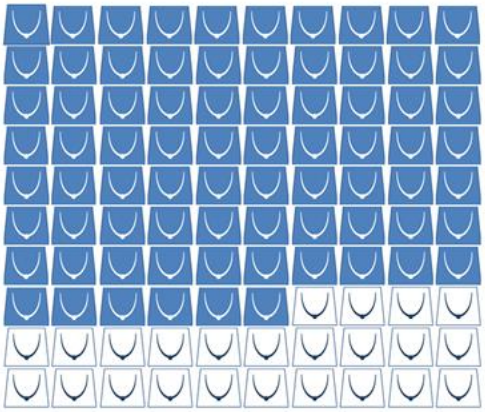




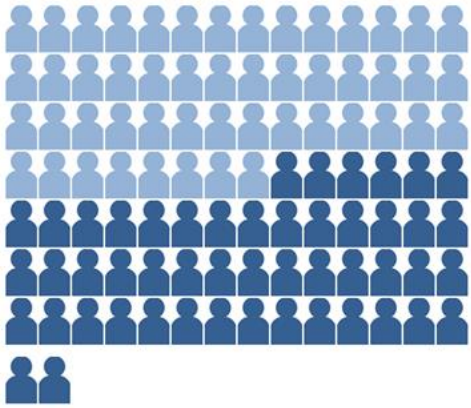
Number of Youth by Center Activity Emphasis



76% Free or Reduced Price Lunch



50% Female, **50%** Male



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Average Youth to Staff Ratio

Attendee Information

During the course of the 2013–14 school year, 16,071 students participated at some level (i.e., attended programming for at least one day during the school year) in 21st CCLC programming at 120 centers active during this period. Of these, 11,407 students were **regular attendees** or attended at least 30 days or more.

The attendee population was diverse. Generally, however, the population of students served during the 2013–14 school year was Black or Hispanic; was enrolled in elementary or middle school, especially in Grades 4–6; attended a center with an emphasis on tutoring or academic enrichment; and was eligible for the free or reduced-price lunch programs.

Activity Emphasis

The **activity emphases** (e.g., tutoring, academic enrichment) were determined at the center level by analyzing the proportion of each center's time dedicated to a given type of activity. If a center *mostly* offered academic improvement, for example, that center was classified in the "Academic Improvement or Remediation" activity emphasis. This does *not* mean that no other types of activities were offered, however.

Average Total Hours of Reading and Mathematics (Per Student)

21 hrs Reading

14 hrs Math

What About Causality?

Causality is hard to pin down, especially when it is not possible to conduct a true experiment with random assignment. So, for AIR's analysis of the impact of New Jersey's 21st CCLC programs, we used a technique called "**propensity score matching**" (PSM) to replicate random assignment of students (to participate or not to participate). It is not perfect, but essentially we created a group of nonparticipating *but similar* youth to use as a control group for participants. That is, we looked at the participants in terms of demographics, grade level, and so on, and *constructed* a group of nonparticipants with the same characteristics. We used this group for our outcome comparisons.

This technique enables us to control for all factors included in the model (about 51 variables), which means we can generally attribute differences in observed outcomes to the effect of the program—with one caveat: we can only control variables included in the initial model.

The bottom line, then, is that this method is rigorous and yields solid findings (stronger than simple correlation), but it is not quite as strong as a true random assignment experiment would be.

Impact Findings

A primary objective of the statewide evaluation undertaken by AIR was to understand the relationship between participation in 21st CCLC-funded programs and student outcomes. Employing program participation and outcome data associated with the 2013–14 programming period, a series of analyses were undertaken to assess the extent of program impact on state assessment results (reading and mathematics) and truancy rates. (Retention rates were also investigated, but the data did not yield many meaningful findings.) These analyses were based on a rigorous quasi-experimental design (see sidebar at left) that compared outcomes of 21st CCLC program participants with matched nonparticipating students using a Propensity Score Matching (PSM) approach.

Highlights from these separate analyses follow. Full impact analysis results may be found in the complete impact report prepared by AIR.

Reading and Mathematics Results

The evaluation team analyzed reading and mathematics assessment improvement rates, looking at participants versus nonparticipants (using PSM):

- For youth below proficiency in the prior year who attended *30 days or more*, participation in 21st CCLC led to a statistically significant increase of **0.095 standard deviation units in mathematics** and **0.044 standard deviation units in reading**.
- For youth below proficiency in the prior year who attended *70 days or more*, participation in 21st CCLC led to a statistically significant increase of **0.100 standard deviation units in mathematics** and **0.034 standard deviation units in reading**.

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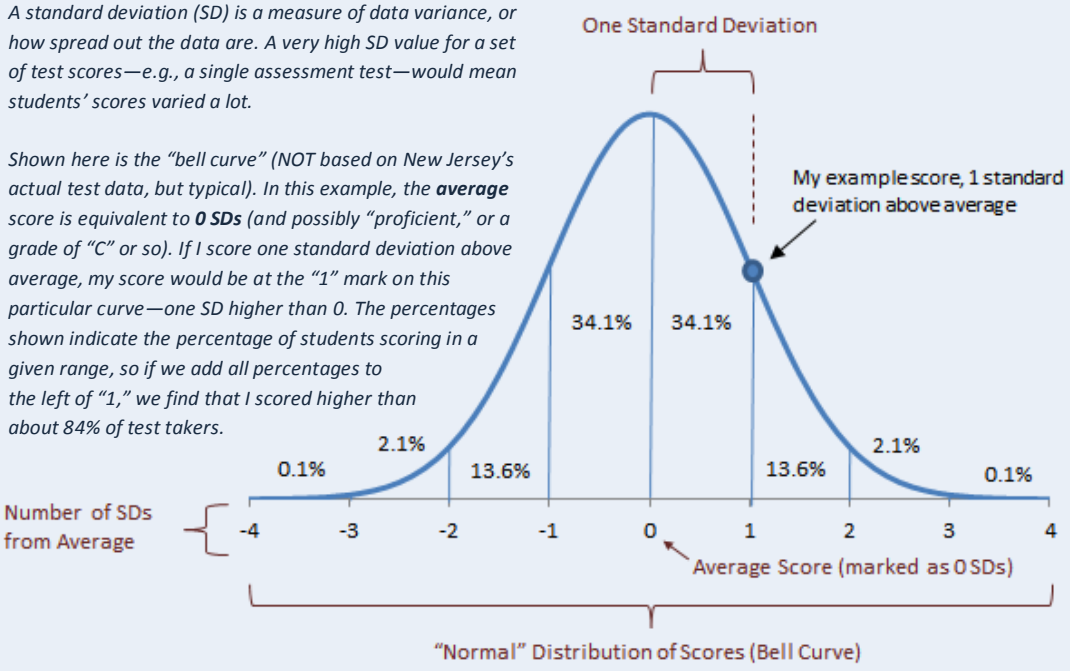
What Is a Standard Deviation Unit?

A standard deviation (SD) is a measure of data variance, or how spread out the data are. A very high SD value for a set of test scores—e.g., a single assessment test—would mean students' scores varied a lot.

*Shown here is the "bell curve" (NOT based on New Jersey's actual test data, but typical). In this example, the **average** score is equivalent to **0 SDs** (and possibly "proficient," or a grade of "C" or so). If I score one standard deviation above average, my score would be at the "1" mark on this particular curve—one SD higher than 0. The percentages shown indicate the percentage of students scoring in a given range, so if we add all percentages to the left of "1," we find that I scored higher than about 84% of test takers.*



- The most notable results were obtained in mathematics among students below proficient in the prior year, notably for youth 21st CCLC participants who were in seventh grade. This group saw the following improvement in mathematics :
  - If they attended 30 days, 0.149 standard deviation units
  - If they attended 70 days, 0.155 standard deviation units

To help place these results in context, note that Hill, Bloom, Black, and Lipsey (2008) found that, on average, **the effect of *a whole year* of learning on assessment results (counting time *both in and out of school*) averaged 0.31 standard deviation units for reading and 0.42 standard deviation units for mathematics.** (See also Naftzger, Devaney, & Newman, 2015.) These findings are very promising.

Truancy Results

In a similar fashion, the evaluation team compared truancy rates between participants and nonparticipants:

- All results relating to truancy (from all analyses) were highly statistically significant, with reductions in truancy observed for every grade level in comparison to similar nonparticipants.
- Youth attending 21st CCLC for at least 30 days had a school truancy rate about **13% lower** than that of similar but nonparticipating youth.
- Youth attending 21st CCLC for at least 70 days had a school truancy rate about **24% lower** than that of similar but nonparticipating youth.

These results are particularly noteworthy due to the fact truancy has not previously been investigated as an outcome for New Jersey grantees.

Conclusion

Impact results to date have been encouraging and deserve to be explored further. The truancy analysis results, given that these data have not been investigated before, indicate a potential for a great deal to be discovered about how the program is affecting participating youth. The results related to assessment outcomes are notably encouraging, however, as the effect sizes observed here indicate that the program is having a meaningful, positive impact on youth in terms of academic growth. This is especially true for those youth below proficiency in the prior year.

Data Sources

To compile the results in this report brief, the evaluation team relied on **PARS21** data, which is the data system used by 21st CCLC grantees to report federally required information. This dataset includes attendance, activities, operations, and similar data. Also, we used **NJSMART** data sent directly by NJDOE, which includes assessment scores, student demographics, nonparticipant data, and school-related variables.

References

Hill, C. J., Bloom, H. S., Black, A. R. & Lipsey, M. W. (2008). Empirical benchmarks for interpreting effect sizes in research. *Child Development Perspectives, 2*: 172–177.

Naftzger, N., Devaney, E., & Newman, J. (2015). *National scan of 21st CCLC data, impact and quality improvement systems project—findings report.* Washington, DC: American Institutes for Research.

State of New Jersey Department of the Treasury. (2013). *Request for proposals: Statewide evaluation of the 21st Century Community Learning Centers program.* Trenton, NJ: Author.

What Comes Next?

The evaluation being conducted by AIR will continue through summer 2018, and this next calendar year (2015–16) will be one of transition. This is for several reasons: First, New Jersey is changing assessment tests, which means there will be no stabilized assessment benchmark data (prior year data) available for some time following this report. Second, the evaluation team is in the midst of revising certain aspects of New Jersey's 21st CCLC data collection (based on previous findings and lessons learned from prior data collection). Finally, at the time of this report writing, fall 2015, steps are being taken to collect youth outcome data using a youth survey, which will be included in future analyses. For all these reasons, future evaluation work will look somewhat different from what is presented here. This transition, however, is a welcome one and will yield rich, valuable data for use in further explorations of 21st CCLC program impact in New Jersey.