

**Massachusetts Department of Elementary and Secondary Education
21st Century Community Learning Centers
Summer Learning Expansion Pilot Programs
Program Evaluation Report**

EXECUTIVE SUMMARY

April 2012

Prepared for:

The Massachusetts Department
of Elementary and Secondary Education

Prepared by:

National Institute on Out-of-School Time
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21st CCLC Summer Learning Program (2011)
Evaluation Report
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My experience has been great...it's...rejuvenated me. It's blown new life into me it's what I have personally missed since I graduated...and it forces me to be the best person I can be every day. (Summer Learning Program Teacher)

Introduction

During the summer of 2011, the Massachusetts Department of Elementary and Secondary Education's (DESE) 21st Century Community Learning Center (21st CCLC) Programs funded four summer learning pilot programs with a special emphasis on utilization of project-based learning (PBL) approaches, outreach to diverse learners, and a blended academic and enrichment learning approach. In North Adams, Salisbury (Triton Regional School District), Springfield, and Wareham, existing 21st CCLC summer program sites were funded for expansion in size and number of hours offered.

These four selected pilot sites were fully enrolled and served high proportions of low-income low-performing students. Programs coalesced around a variety of themes, but generally all focused on stemming summer learning loss, reinforcing the academic skills learned during the school year, and helping prepare students to succeed in the upcoming school year in the context of a blended academic and enrichment learning experience. An evaluation was conducted by the National Institute on Out-of-School Time (NIOST) at Wellesley College.

Evaluation data were collected through: (a) program observations; (b) interviews with site directors, academic, and enrichment teachers; (c) review of child level assessment data collected by the school and site directors; and (d) post-interviews with parents and academic teachers.

Background on Summer Learning

Research on the achievement gap suggests that a large proportion of learning loss is associated with the absence of summer experiences that either sustain or advance school-year learning gains. The implementation of summer learning programs targeting summer learning loss has proven successful in reducing learning loss both in low-income and higher income students of all grade levels, with students in early primary and secondary school showing the most pronounced gains (Cooper, Charlton, Valentine, Muhlenbruck, & Borman, 2000). Summer learning programs are critical for the reduction of summer learning loss and for the success of low-performing students, and therefore should be accessible to all students, most importantly low-income students (McLaughlin, & Pitcock, 2009). Such innovative approaches have the potential to maximize learning gains, minimize summer learning loss, and decrease the achievement gap between low-income and higher income students (McCombs, et. al, 2011).

Program Models

The North Adams Reach for the Stars Summer Science Camp enrolled 258 students, Pre-K through grade 6, at Brayton Elementary School. The primary academic focus for Pre-K through grade 3 was literacy skill-development, and for grades 4-6 the focus was on math and problem-solving skills. Literacy and math activities were explored through science and astronomy-based projects. **Salisbury's Summer Adventures** was a summer learning program for 170 students at Salisbury Elementary School which is part of the Triton Public School District. Program goals for the summer were to provide an enriching and stimulating experience by blending academic

content with PBL helping to reinforce academic skills and stem summer learning loss. Students in grades 1- 6 participated in PBL activities in the morning which focused on math, English language arts, history, and science, followed by enrichment-based activities in the afternoon. **Springfield's Enhanced Summer Pilot Program at Van Sickle Middle School** was a comprehensive summer learning program organized by Springfield's Department of Parks, Buildings and Recreation Management (DPBRM) in collaboration with several partners including Springfield Public Schools District and Springfield College's Leaders in Academics, Community Engagement and Service (LACES) Program, a comprehensive youth development program that helps students develop as community leaders and engage in citizenship through team-building and trust exercises. The program enrolled 144 students between grades 4-9. The program took place at Van Sickle Middle School and Springfield College. Week three of the program provided a unique opportunity for students to live on the Springfield College campus. **The Wareham Community, Academic, Recreation, and Enrichment (CARE)** summer learning program was located at the Wareham Middle School and served 180 students in grades 2-8. Academic content and activities were particularly focused on Science, Technology, Engineering, or Math (STEM) with an emphasis on PBL approaches. Generally, all of the programs operated five days a week for six weeks during July and August. The total population served included approximately 60 percent low-income students and 21 percent students with Special Education (SPED) status. Twenty percent of students were non-white.

Findings

Survey on After-School Youth Outcomes (SAYO)

The SAYO is designed specifically for use in out-of-school time programs and is a research-based scientifically-tested instrument. Classroom teachers and after-school program staff respond to four or five questions related to observable behaviors that measure outcomes that are aligned with their goals and program practices. Outcomes selected for the DESE 21st CCLC program evaluation included a combination of outcome domains from the teacher and after-school program staff versions of the SAYO. These outcomes included: Science, Reading, Verbal Communication, Written Communication, Math Communication, Math Reasoning, Math Problem Solving, Learning Skills, Behavior, Initiative, Relations with Adults, and Relations with Peers.

Across the four DESE summer sites students showed strong positive gains in all SAYO domain areas measured. Given the different focus of each program site, programs did not utilize all of the same SAYO outcomes. All sites, however, measured change in math problem-solving, learning skills, behavior, initiative, and relations with peers and adults. The following table shows pre to post SAYO changes across all DESE summer sites. The largest percent changes appear in Initiative (20 percent), Relations with Adults (18 percent), and Learning Skills (17 percent).

Table 1. Change in SAYO Outcome Areas Across All Program Sites

Domain	N (total 768)	Mean Change Pre – Post	Mean % Change
Science	344	.17	12%
Reading	532	.14	9%
Verbal Communication	162	.19	10%
Written Communication	295	.08	6%
Math Communication	162	.13	8%
Math Reasoning	420	.09	7%
Math Problem Solving	665	.13	10%
Learning Skills	665	2.00	17%
Behavior	665	2.50	15%
Initiative	665	2.84	20%
Relations w/ Adults	665	2.33	18%
Relations w/ Peers	665	2.70	15%

Note: Values associated with “N” change given that not all sites measured the same SAYO outcomes; Data collected in the summer 2011 by DESE.

When divided by race, all subgroups continue to show positive gain in most SAYO domains. Percent of low-income population varied at each site, ranging from 41 percent (Salisbury) to 73 percent (Springfield) of the site’s students. In general, low-income students saw greater gains in many SAYO outcome areas as compared to their non-low income peers. The number of SPED students also varied by program site ranging from 29 percent of the students in North Adams to 13 percent in Salisbury and Springfield. Across sites SPED students showed positive change in all SAYO outcomes and greater percent change in many outcomes compared to non-SPED peers.

Summer Learning Loss

Given the overarching focus on stemming summer learning loss, data were requested and collected from each program site which could potentially indicate impact of program participation on summer learning gain/loss. There was no requirement as part of participation in the pilot summer program to collaborate on a cross-site or district measurement, so type of data collected varied widely between programs and included utilization of Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Grade Level examinations, and district benchmark assessments. The DIBELS are a set of empirically-derived scores that assess the adequacy and/or progress of students’ early literacy skills from grades K-6. The DIBELS measures assess the five major ideas in early literacy identified by the National Reading Panel, including *phonemic awareness, alphabetic principle, accuracy and fluency, vocabulary, and comprehension*. In some cases, a pre/post assessment with a comparative group of district peers was available, but not in every site.

In North Adams, summer program participants ($M=-12.14$, $SD=18.42$) showed less learning loss from June to September compared to non-participating students ($M=-15.28$, $SD=16.32$), although these effects were non-significant, $p>.05$. Among summer participants, those in grade 2 ($M=0.00$, $SD=13.28$) showed significantly less learning loss from June to September—specifically, on average, their assessment scores remained constant from time 1 to time 2—

compared to their grade 3 ($M=-19.86$, $SD=11.34$) and grade 4 peers ($M=-20.08$, $SD=20.65$), $F(2, 104)=20.57$, $p<0.001$. However, no significant differences were found between grade 3-4 participants with regard to average Oral Reading Fluency (ORF) change scores. Among Springfield students, participating students were not significantly different with regard to math change scores compared to non-participating students ($M=-10.15$, $SD=21.28$ and $M=-7.67$, $SD=20.31$, respectively, $p<0.05$). However, grade 6 participating students ($n=21$) showed an increase in math scores ($M=2.14$, $SD=20.35$), and participating students in grades 4, 5, and 7 showed a decrease in average raw scores between pre- and post-test assessments. Grade 5 students ($n=25$) showed the largest average decline ($M=-18.20$, $SD=17.43$) compared to grade 7 students ($n=7$) who showed the lowest mean change in scores ($M=-12.14$, $SD=22.52$). Wareham and Salisbury did not include comparison data for non-participants. However, among Wareham students, Group Reading Assessment and Diagnostic Evaluation (GRADE) scores significantly declined, on average, by 2.74 points between the spring and fall assessments, $p<0.001$. Grade 2 students ($n=30$; $M=-3.63$, $SD=6.70$) had the largest decline in GRADE test scores compared to both grade 3 ($n=37$; $M=-3.00$, $SD=6.94$) and grade 4 students ($n=26$; $M=-0.92$, $SD=8.84$). This decline in GRADE test scores among grade 2 participants was significant ($p<0.01$). No association existed between the number of hours students attended the summer program and the mean change in GRADE test scores ($r=0.07$, $p=0.53$). The majority of Salisbury students that participated in the program re-tested (DIBELS) at or above their pre-test score.

Parent and Teacher Post Program Interviews

During October 2011, researchers from NIOST contacted parents and teachers to collect their feedback on the benefits and challenges of the summer program experience.

Parents

Across all programs parents described concrete improvements their students made as a result of the summer learning program. Many parents found that the program greatly improved their children's social skills, with increased self-confidence, better understanding of peer interactions, and much greater independence, especially for students with learning/social disabilities. Child level improvements noticed by parents included better friendships and raised self-esteem. In addition to the social and emotional gains, many parents expressed surprise and pleasure at their children's academic gains. Parents described their children's greater abilities to focus, find joy in learning, and increased interest in science. Parents expressed satisfaction that their children were able to attend a summer program that helped them grow academically while having a great time.

One parent summarized:

I found it phenomenal, and to see my son who's very quiet, who's shy, standing in front of a large audience willing to speak...I was very impressed. It was probably the best thing I have ever done for him.

Teachers

Teachers were asked to reflect on what they learned from the summer learning program and what strategies and teaching approaches, if any, they added to their "teacher toolboxes" as a result of the summer experience. Many teachers commented that they wanted to incorporate more collaboration and teamwork into their classrooms. Some teachers following the summer have now done more research into teaching strategies, and found that their experiences in the summer

learning programs helped reinforce their confidence in themselves and their approaches to the classroom, toward a direction of building and encouraging more active learners. In comparing their summer and school year classroom experiences, numerous teachers mentioned the transition between the two, and how that was challenging for teachers and students alike. Teachers spoke about the increased rigidity of the school year and the difficulties that posed. However, they found that the transition back to school for students was made easier because of the new connections students had formed with faculty and staff during the summer program. Two teachers summarized:

I would definitely say I put a lot more value in the teamwork and team-building, have them figure out problems on their own, rather than trying to show them - I want them to see it for themselves...well, you know, I look at math time, and we have our lessons, and I find that it's really important to let them explore, which is something I probably wouldn't have done prior to the summer.

I'm more calm in the classroom. I'm taking that relaxed...feeling that I had [over the summer], and keeping my mouth closed when kids start to say something, and even I noticed today...instead of just standing up there talking away, I made myself ask more questions and let the kids have more answers.

Summary and Recommendations

The four DESE 21st CCLC summer learning programs had broad appeal to students, teachers, and families and represented significant expansion of existing summer programs and district efforts to address summer learning loss. Each program site engaged a high proportion of certified experienced (prior summer school or after-school program experience) teachers as lead teachers/facilitators. Across all sites, connections to community, arts, cultural, and recreational partners were extensive. Programs were also successful in meeting their population targets in serving proportionally almost 60 percent low-income students. In addition, each program invested significant pre-program time in staff training, planning and curriculum development. For many teachers the consistent utilization of PBL approaches as a teaching strategy was “new territory.” However, teachers regularly reported positive feelings about incorporating PBL and noted the strong support provided to them through training and planning time embedded in the schedule, and materials made available to their classrooms. These good results cannot be isolated from the rigorous “Request for Proposal” process that was required for participation in the initiative and that likely drove early planning, partner collaboration, and development of a strong program vision.

Program implementation for the 2011 summer was considered a pilot and naturally did include many challenges along the way, particularly related to measuring summer learning loss. Based on these report findings, the NIOST research team makes the following recommendations to DESE 21st CCLC towards continued program improvement:

1. Clarify Teacher Roles and Expectations: While a critical mass of teachers involved in the summer learning programs were highly skilled in traditional teaching practice, the strong focus on PBL and change to a more informal learning environment required a shift for

many in their teaching toolbox. Several teachers mentioned that it would be helpful to receive prior to when the program starts more detailed information on teaching responsibilities and expectations in as much as they differ from the standard school classroom and experience. A clear job description with an expected skill profile would be a helpful addition to teacher recruitment and preparation.

2. Sharpening Program Focus: All of the programs attempted to sustain a thematic purpose throughout the six weeks of programming. One program that seemed more narrowly focused (North Adams) showed marginally better summer learning loss results. Providing a very cohesive focus for students and clear linkage between academic activities and enrichment activities (including bridging teaching staff across both experiences) may contribute to stronger student uptake of curriculum content.
3. Standardize Summer Learning Loss Measurement: Given the pilot nature of the summer learning program initiative, program sites did not have adequate time or experience to negotiate with their school districts on the implementation of a standardized (across all four program sites) summer learning loss measurement tool. DIBELS or other grade assessments may not represent the most appropriate mechanism to examine summer learning loss. Selecting and negotiating between districts with guidance from DESE an appropriate summer learning loss measurement that is precisely tied to the academic content delivered across all four programs would be a significant asset to the implementation of the DESE initiative; and would make a valuable contribution to the field's understanding of the potential impact of informal summer learning experiences on stemming summer learning loss.
4. Maximizing On-Task Time: The findings from the After-School Program Practices Tool (APT) were overwhelming positive across all sites. However, comparative ratings showed that for all sites Students Participation in Activity Time (e.g., students are busy and engaged in activities; students appear to be enjoying activity) received the lowest average ratings among the observed program domains. Balancing project-based, cooperative, or students-directed learning approaches with teacher-directed academically rigorous instruction may be the most successful method to maximize student engagement and on-task time. With approaches such as project-based, cooperative, or students-directed learning it may be more challenging to keep students on-task and engaged in focused work. One teacher commented in retrospect that she would have included more "traditional" academic activities to support PBL, such as journaling.

This Executive Summary of the Evaluation Report is based on the research and evaluation activities taking place between June and September 2011. It is hoped that these findings and recommendations will contribute valuable insight to continued program improvement and a clearer vision for future summer learning experiences.

References

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