

**Massachusetts Department of Elementary and Secondary Education
21st Century Community Learning Centers
Summer Learning Programs
Program Evaluation Report – Summer 2012**

EXECUTIVE SUMMARY

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Prepared by:

National Institute on Out-of-School Time
Wellesley Centers for Women, Wellesley College

**Massachusetts Department of Elementary and Secondary Education
21st CCLC Summer Learning Program (2012)
Evaluation Report
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This report was prepared by: NIOST
Georgia Hall, Ph.D., Principal Investigator
Kristen Fay, Ph.D.
Julie Dennehy, M.A.
Diane Gruber, M.A.

Introduction

During the summers of 2011 and 2012, the Massachusetts Department of Elementary and Secondary Education 21st Century Community Learning Centers (ESE 21st CCLC) Grant Program funded four summer learning programs with a special emphasis on utilization of project-based learning approaches, outreach to diverse learners, and a blended academic and enrichment learning approach. Each of the selected sites had existing summer programs in place. Participation in this initiative facilitated program expansion to a larger and more diverse student population. Program sites funded were located in North Adams, Salisbury (Triton Regional School District), Springfield, and Wareham. These program sites were selected through a rigorous request for proposal process.

These four selected pilot sites were fully enrolled and served high proportions of low-income, low-performing students. Programs were organized around a variety of themes, but generally all focused on (a) stemming summer learning loss; (b) reinforcing the academic skills learned during the school year; and, (c) helping prepare students to succeed in the upcoming school year in the context of a blended academic and enrichment learning experience. This executive summary presents findings from the evaluation conducted by the National Institute on Out-of-School Time (NIOST) at Wellesley College of the 2012 summer programs.

Methods

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

The child-level assessment used was the Survey of Academic Youth Outcomes (SAYO). SAYO is designed specifically for use in out-of-school time programs and is a research-based scientifically-tested instrument. The SAYO is based on a “menu” approach, in which programs collect data from classroom teachers and afterschool program staff on those outcomes that are aligned with their goals and program practices. Each outcome area is measured by asking teachers and staff to respond to four or five questions related to observable youth behaviors. Outcomes selected for the ESE 21st CCLC program evaluation included a combination of outcome domains from the teacher and afterschool program staff versions of the SAYO. These outcomes included Science, Reading, Verbal Communication, Written Communication, Mathematics Communication, Mathematics Reasoning, Mathematics Problem Solving, Learning Skills, Behavior, Initiative, Relations with Adults, and Relations with Peers.

The Assessment of Afterschool Program Practices Tool (APT) was used to evaluate characteristics related to the overall structure/organization and functioning of the program, as well as features of the academic and enrichment activities. During a program visit, researchers observed the overall program according to five dimensions: (a) informal program time (e.g., arrival time), (b) academic organization, (c) youth participation, (d) staff management of academic learning time, and (e) overall social-emotional environment. In addition, researchers also evaluated each of the academic and enrichment activities that they observed according to six dimensions: (a) organization and nature of the activity, (b) staff ability to promote youth engagement and stimulate thinking, (c) staff ability to positively guide youth behavior, (d) staff build relationships and support individual youth,

(e) youth participation in activity time, and (f) youth relations with others. Researchers rated each of the items that comprised these dimensions on a scale from 1 (*not true*) to 4 (*very true*). Individual item ratings for each of the dimensions were combined, and then an overall mean score was created for each of the dimensions described above.

Program Models

The North Adams “Imagineering” Summer Science Camp, located at Brayton Elementary School, enrolled 325 children in pre-K through (rising) grade 6. The overall goals of the summer program were to (a) stem summer learning loss; (b) reinforce the academic skills learned during the school year; and, (c) help prepare students to succeed in the upcoming school year through project-based science and “Imagineering” activities. Nurturing students’ social and emotional well-being and growth was also a program priority and prompted the inclusion of the *MindUP*TM curriculum. **Salisbury’s Summer Adventures program** included children in kindergarten through grade 5 in the Triton Regional School District. Program goals for 2012 were to build on the success of the 2011 summer program by providing an enriching and stimulating experience that blends academic content with project-based learning while emphasizing STEAM (science, technology, engineering, arts, and mathematics) skills. **Springfield’s Summer Learning Program at Van Sickle Middle School** incorporated the Summer Olympics as the backdrop for a robotics-focused STEM (science, technology, engineering, and mathematics) learning experience. Managed by Springfield’s Department of Parks, Buildings and Recreation Management (DPBRM), the program provided youth (Grades 3 through 9) the opportunity to learn team-building skills, develop positive relationships, and increase self-confidence through participation in a blend of academic and enrichment activities. A key partner for the program was Springfield College’s Leaders in Academics, Community Engagement, and Service (LACES) program, a comprehensive youth development program that helps youth develop as community leaders and engage in citizenship through team-building and trust exercises. **The Wareham Community, Academic, Recreation, and Enrichment (CARE)** summer learning program at the Wareham Middle School served 189 youth in grades 3 through 9. The program goal was the successful delivery of academic and enrichment classes that focused on STEM and project-based learning. The STEM focus was chosen because science, in particular, remains a targeted need/goal for the district, especially among elementary students. A continuing priority of CARE was to utilize the surrounding natural environment, such as marshlands and beaches, as well as other regional resources as part of their program curriculum.

Findings

Interviews with Program Leaders

Researchers from NIOST interviewed teaching staff at each of the summer learning program sites to gain an understanding of their summer program experiences.

When teachers were asked about the actualization of their summer program goals, many of the staff attributed their positive experiences to two major factors. First, many staff reported they had increased direction prior to the start of the program as compared to last year’s program. They also felt that the level of training and preparation were key elements to the success of their programs. Such trainings not only helped staff acquire new (and successful) ideas and teaching strategies to

implement in their summer program, but they helped staff get acquainted with one another. Many teachers emphasized that they learned the importance of teamwork and collaboration among their colleagues, and are now mindful of building and strengthening these professional connections.

Second, aligning with an organizational partner who shared similar goals and a vision for student success allowed for a more holistic agenda for staff and an enhanced sense of teamwork. In addition to strengthening staff relationships, teachers described the positive impact that youth-staff relationships had on youth behaviors and on creating a stronger sense of community within their program. Some staff commented that teaching in summer learning programs provided them with a renewed sense of purpose as to why they started teaching in the first place. For others, the summer experience helped them to discover the learning approaches that youth were passionate about, which they could then integrate into learning experiences during the academic year.

Survey of Academic Youth Outcomes

The SAYO is designed specifically for use in out-of-school time programs and is a research-based, scientifically-tested instrument. Teachers and staff respond to questions related to observable youth behaviors that measure outcomes that are aligned with their goals and program practices. Outcomes selected for the ESE 21st CCLC program evaluation included Science, Reading, Verbal Communication, Written Communication, Mathematics Communication, Mathematics Reasoning, Mathematics Problem Solving, Learning Skills, Behavior, Initiative, Relations with Adults, and Relations with Peers.

Across the four ESE Summer sites, students generally showed 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 Learning Skills, Behavior, Initiative, and Relations with Adults. Table 1 shows mean change on pre- and post-SAYO assessments across all four ESE 21st CCLC pilot summer sites. The largest percent changes appear in Mathematics Communication (21 percent), Relations with Adults (16 percent), and Initiative (15 percent). With regard to learning skills, a larger average percent change was observed for Science Skills (10 percent) than for Reading Skills (8 percent).

Table 1: Change in SAYO Pre/Post Scores Across All Program Sites, 2012

Domain	N	Average Change Pre-Post	Average Percentage Change
Science	429	0.2	10
Reading	429	0.1	8
Verbal Communication	386	0.3	14
Written Communication	288	0.3	12
Mathematics Communication	144	0.4	21
Mathematics Reasoning	93	0.1	7
Mathematics Problem Solving	371	0.2	12
Learning Skills	638	1.7	13
Behavior	638	2.1	11
Initiative	638	2.6	15
Relations w/Adults	638	2.6	16
Relations w/Peers	494	2.2	13

With regard to student demographic characteristics, boys and girls generally showed similar percent change from pre- to post-assessment across all domains. Boys showed greater average percent change in six domains (Science Skills, Mathematics Communication, Mathematics Problem-solving, Behavior, Initiative, and Relations with Peers). Girls showed greater average percent change than boys in the domains of Verbal Communication, Written Communication, Mathematics Reasoning, and Learning Skills. Our examination of racial/ethnic differences showed that all subgroups made positive gains in nearly all SAYO domains. Black students showed significantly greater improvement in Initiative (26 percent), Relations with Adults (29 percent), and Relations with Peers (27 percent) compared to their White and Mixed race peers. Youth receiving SPED services showed greater average percent change compared to their non-SPED peers. Low income youth also demonstrated consistently positive gains in their average SAYO scores across all domains, with the largest gain in the area of Mathematics Communication (22 percent).

Program Quality

Using the APT, researchers conducted program observations at the four sites on the programmatic structure/organization of the program as well as the features of both academic and enrichment activities. Two observations were conducted per site. A total of 40 separate activity sessions were observed. Ten of the forty (25 percent) activity observations were coded as primarily “enrichment.”

Salisbury showed the strongest ratings in overall program delivery, especially in the cultivation of youth-staff relationships, the promotion of student engagement and stimulated thinking, positively guiding student behavior, and peer relationships. Findings showed that North Adams program leaders and teachers were consistently the strongest across all programs in structuring, organizing, and delivering the overall program experience.

Stemming Summer Learning Loss

Given the overarching focus on stemming summer learning loss, data which could potentially indicate impact of program participation on summer learning gain/loss were requested and collected from each program site. There was no requirement as part of participation in the summer program to collaborate on a cross-site or district measurement, so the type of data collected varied widely between programs. For example, data sources included the DIBELS, GRADE, GMADE, and district benchmark assessments. In some instances, a pre-post assessment with a comparative group of district peers was available, but this was not the case in every site.

North Adams summer program participants ($M=-8.68$) showed less learning loss from June to September compared to non-participating youth ($M=-9.07$), although these effects were non-significant, $p>.05$. Among summer participants, “rising” second-graders ($n=49$) were the only subgroup of youth, by grade, that showed an increase in average DIBELS ORF scores between both assessments ($M=.49$). The highest average decrease in scores was observed for third-grade youth ($n=46$; $M=-18.46$).

All Salisbury youth in grades K through 2 were administered the Triton District Grade Test for Reading in the spring and fall of 2012. A 16 percent drop in students’ reading at grade level was observed among kindergarteners (rising 1st graders) at Salisbury Elementary. This decline was comparatively low relative to scores for youth at the Pine Grove and Newbury Elementary Schools (37 percent and 30 percent, respectively). Students in grade 1 and grade 2 at the two other

elementary schools performed better at retest than Salisbury students participating in the summer program.

In Springfield, participating youth in Grades 4 through 8 ($M=-14.20$; $SD=17.31$) showed no significant differences in mathematics change scores relative to non-participants ($M=-10.88$; $SD=18.42$), $p>.05$. Although youth participants in all grades showed decreases in their average mathematics scores from pre- to post-test, Grade 6 participating youth ($n=25$) showed the largest decrease in mean mathematics scores ($M=-23.00$; $SD=18.36$) and youth in Grade 8 ($n=15$) showed the smallest decrease ($M=-6.87$; $SD=14.13$).

Wareham youth scores on several academic assessments (i.e., DIBELS, GRADE, and GMADE, and summer reading grade scores) were examined. With regard to DIBELS test scores, a significant average decline in scores was observed among summer program participants between pre- and post-test assessment ($M= -48$). In addition, GRADE ($n=43$) and GMADE ($n=42$) assessment scores also significantly decreased between pre- and post-test assessments ($M= -.65$ and $M= -1.0$, respectively; $p<.05$). Comparisons of average summer reading grades between summer program participants ($n=68$) and non-participants ($n=48$) supported that summer program participants ($M=2.69$) showed higher average summer reading grades compared to non-program participants ($M=2.58$). However, these differences were non-significant, $p>.05$. Among summer program participants, the highest and lowest average summer reading grades were observed for Grade 4 ($n=4$; $M=3.50$) and Grade 6 youth ($n=9$; $M=1.89$), respectively.

Summary and Recommendations

Many aspects and characteristics of the ESE 2012 Summer Learning programs were quite successful, and facilitated youth socio-emotional and academic growth. Youth perceptions of the programs were very positive, as evidenced by the mean attendance rate of 81.5 percent and that only 10 percent of youth attended less than fifty percent of scheduled program days.

Although there was variability in programmatic opportunities and experiences across the four participating sites, staff universally perceived this summer to be even more successful than the previous summer and some teachers felt renewed as educators after participating. For example, many teachers and staff reported feeling a stronger sense of direction and planning this summer as compared to last summer. In addition, when it came to hiring for this summer's program, several respondents emphasized that they were able to learn from the previous summer which staff were particularly strong and should be retained. Another factor that made this summer's program more successful was the improved parent communication about program expectations and offerings. Consistent with this idea, greater transparency and communication in the relationships with their partnering organization also were important to a more successful program. Teachers felt that this summer experience equipped them with more varied and engaging teaching strategies, thereby diversifying their "teaching toolkits." In addition, staff perceived youth experiences as generally very positive, particularly with regard to behavioral improvements and stronger relationships with adults and peers.

Findings from the SAYO-T supported that teachers perceived improvement by youth across all domains. Mathematics Communication and Relations with Adults were the domains showing the most improvement from pre- to post-assessment. Few significant effects in average change scores

were found based on selected students' demographic characteristics, which suggests that the programs generally worked equally well for boys and girls and youth of diverse racial/ethnic groups.

Analysis of summer learning loss data showed some positive results. Where comparison of participants and non-participants was possible, there was some evidence such as North Adams DIBELS ORF scores, Salisbury kindergarten reading scores, and Springfield summer reading grades that summer program participants experienced "less" learning loss than their non-participating peers. Differences were not necessarily significant, though, and not reflected in other grade groups. However, along with data from the 2011 summer program, evidence is building that such a blended academic and enrichment summer learning program model can make a valuable contribution to stemming summer learning loss.

Based on these findings, researchers recommended the following actions toward continued program improvement:

- 1. Continue to strengthen the STEM content curriculum.** Emphasizing Science Skills to a greater degree in the curriculum content, as well as aspects of Mathematics Reasoning, may help to diversify students' STEM skill base and understanding. Although Reading Skills are not embedded in a STEM-focused curriculum, finding ways to integrate these skills and abilities into the content of the program is critical given that many teachers perceived that youth Reading Skills showed the least gains.
- 2. Balance youth existing knowledge with new skill-building.** Better alignment of the curriculum content with the summer program learning goals and students' pre-existing knowledge base would help to build upon and strengthen youth understanding of the curriculum content. Introducing content that cultivates new skill development and that poses a challenge to youth existing knowledge fosters more engagement with the material.
- 3. Provide more leadership and choice opportunities for youth.** Because the infrastructure and curriculum of these programs are already quite strong and well-developed, it may be useful to engage students in some of the planning efforts and decision-making around daily activities. In addition, youth-to-youth mentoring opportunities may foster stronger peer relationships and benefit youth behavior as well.
- 4. Maintain transparent and open communication.** Because staff consistently attributed this summer's program success to greater planning and training opportunities, this element of program development and function should be a primary consideration for subsequent summer learning programs.
- 5. Maximize the unique contexts offered by each of the program sites.** Improvements on a more granular level that recognize the variations within and across program sites, in terms of their strengths and weaknesses, would be helpful to overall quality improvement. Harnessing the unique strengths of each of the programs in particular socio-emotional and academic domains may be beneficial to those community programs where such practices

were not as strong. Exchanging effective and successful strategies at a pre-summer cross-site conference or meeting to target specific academic and socio-emotional goals would be extremely beneficial.

This Executive Summary of the Evaluation Report is based on the research and evaluation activities taking place between June and September 2012. It is with great hope that these findings and recommendations will contribute valuable insight to continued program improvement and a clearer vision for future summer learning experiences.