

Outcome Evaluation of the 2006–2007 Montgomery County Public Schools 21st Century Community Learning Centers Program

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Executive Summary

The 21st Century Community Learning Centers Program (21st CCLC) is a federally-funded program administered by the Maryland State Department of Education (MSDE). The goal of the 21st CCLC Program in Montgomery County Public Schools (MCPS) is to help schools achieve and maintain Adequate Yearly Progress (AYP) by offering activities that complement the academic program and by supporting family literacy. The 21st CCLC Program provides cultural arts and recreational activities to rising kindergarten through Grade 5 students in a summer program at 10 Title 1 schools. The 21st CCLC Program, held in the afternoon, complements a morning program of reading and mathematics instruction provided through the Extended Learning Opportunities Summer Adventures in Learning Program (ELO SAIL) (MCPS, 2008). To promote family literacy, the 21st CCLC Program partners with Linkages to Learning which offers classes for adults in English-speaking skills as well as ways to support their students' academic achievement.

This evaluation used a mixed method approach to assess the impact of the 21st CCLC Program for summer 2007 and for family literacy classes held in 2006–2007. Data sources included surveys administered to students in Grades 3, 4, and 5 and to parents of students in the 21st CCLC Program; program attendance data; and results of standardized tests administered to students during the 2007–2008 school year.

Survey responses from parents and students showed high levels of satisfaction with the 21st CCLC Program. Artists also were positive in their perceptions of the impact of the program. Students who attended the 21st CCLC Program had better attendance at the morning academic program than students who only attended the morning program. In addition, progress was made toward a major goal of the program—that 75% of participants achieve proficiency on standardized tests of reading and mathematics. In three of four grades tested, over 75% of the 21st CCLC Program students were proficient in reading and mathematics during the following school year.

Parents who attended Linkages to Learning classes reported that the classes helped improve their family literacy skills; these parents confirmed that they felt better prepared to help their child with reading and to work with teachers at their child's school.

The findings suggest the following recommendations: adjust procedures to increase response rate for parent surveys, consider additional methods of collecting feedback from parents attending family literacy classes, and explore more ways to link the afternoon art and recreation classes to the morning academic program.

Background

The 21st CCLC Program in MCPS began in summer 2003; previous evaluation studies addressed the implementation and outcome of programs held during the summers of 2003 and 2004 (Cooper-Martin & Wade, 2006) and the summer of 2005 (Wade & Cooper-Martin, 2007). Project partners are the Arts and Humanities Council of Montgomery County, Linkages to Learning, and the Recreation Departments of Montgomery County and the City of Gaithersburg. The 10 schools participating in the 21st CCLC Program are listed in Table A1 of the Appendix.

Evaluation Questions

This brief addresses the following questions to assess the impact of the 21st CCLC Program for summer 2007 and for family literacy classes held in 2006–2007:

- 1) What was the impact of participation in the 21st CCLC Program on attendance rates at the morning academic program?
- 2) What were the reading and mathematics proficiency rates of students after attending the 21st CCLC Program?
- 3) To what extent was the 21st CCLC Program perceived to be effective by participating students, their parents, and artists who taught in the program?
- 4) Did parents who attended Linkages to Learning classes report improved family literacy skills to support their students' academic achievement?

Methodology

Participation and attendance were documented with program records from MCPS, the 21st CCLC Program, and ELO SAIL. Attendance at the morning academic program was compared for students participating in the afternoon 21st CCLC Program and students attending the morning program only using analysis of covariance, controlling for demographic differences. Both programs were four weeks (20 instructional days) in nine schools and six weeks (29 instructional days) in one school.

Students' academic performance was measured using assessments administered at the end of the 2007–2008 school year. *TerraNova* Second Edition (TN/2) was used to measure reading and mathematics achievement in Grade 2 students; a national percentile rank (NCE) of 50 was used to establish proficiency on this test (Zhao & Von Secker, 2007). The Maryland School Assessment (MSA) was used for reading and mathematics in Grades 3–5. To examine the added value of the 21st CCLC Program, proficiency levels for students participating in both the 21st CCLC Program and ELO SAIL were compared with proficiency levels for students participating in ELO SAIL only. Statistical significance tests were calculated with regression analysis, controlling for differences in Free and Reduced-price Meals System (FARMS), special education, and English for Speakers of Other Languages (ESOL) status; racial/ethnic group; gender; and for Grades 4 and 5, previous year's MSA reading and mathematics scores.

Parents' perceptions and satisfaction with the summer program were assessed with a survey sent home during the last week of the program; the response rate was 29%. For a subset of parents who had attended family literacy classes, additional survey items assessed the impact of these classes on family literacy. Students enrolled in Grades 3, 4, and 5 completed a written survey during the last week of the summer program. The response rate was 74% (367 of 499 students, including 139 in Grade 3, 110 in Grade 4, 107 in Grade 5, and 11 students who did not indicate their grade.) Artists who taught the sessions reported on their perceptions of program effectiveness through surveys that were e-mailed at the completion of the program; 34 of 41 artists (83%) responded.

Results

Summer Program Description

Students. Students who registered for morning ELO SAIL at the 10 participating schools were invited to attend the 21st CCLC Program in the afternoon. The 21st CCLC Program at three schools included students entering kindergarten through Grade 5; the program at seven schools included students entering Grades 1–5. The number of openings was limited by funding; students were admitted on a first-come, first-served basis. Final enrollment was 939 students.

The students enrolled in the 21st CCLC Program were demographically similar to all students in the 10 participating schools (Appendix Table A2). There were no statistically significant differences between the percentage of students in the 21st CCLC Program and the percentage of all students in the ten 21st CCLC schools by race/ethnicity, gender, and current services provided.

Classes. The arts classes were taught by professional artists in a variety of specialties. Class enrollment was limited to 15 or fewer students so that students could work closely with the artists. Artists were recruited and selected in cooperation with the Arts and Humanities Council of Montgomery County and the 21st CCLC Advisory Committee. Each artist submitted a program proposal aligned with the MSDE Voluntary State Curriculum for the Fine Arts (MSDE, 2008). A full-day training session was offered to orient the artists to the program, review the ELO SAIL curriculum, and introduce class-room management techniques.

The 21st CCLC Program offered a range of arts and cultural experiences in the afternoon program (Table 1). Classes provided opportunities for children to experience such diverse activities as making a puppet, writing and acting in a play, performing a Cambodian classical dance, creating a book, or sculpting a city.

Table 1
Areas of Artists' Programs

Specialty area	Number of artists
Visual arts	13
Dance, creative movement	10
Theater, story theater	9
Music, world music, songwriting	7
Creative writing	2

Summer Program: Student Outcomes

Attendance at academic program. As noted above, students enrolled in the 21st CCLC Program also attended ELO SAIL in the morning. The 21st CCLC students attended more days of the morning academic program than students enrolled in ELO SAIL only (Figure 1). The mean difference in attendance rate was 7.7 percentage points, or about 1.5 days of the 20-day program (held in nine schools) and 2.2 days of the 29-day program (held in one school). The difference in attendance rates was statistically significant ($F(7,2423)=13.22, p<.001$).

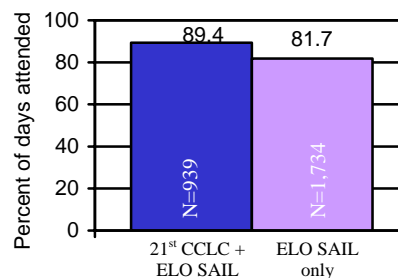


Figure 1. Attendance rates at ELO SAIL by program group.

Reading and mathematics proficiency. Percentages of students who were proficient in reading or mathematics during the 2007–2008 school year are shown in Table 2. Results are shown for two program groups—ELO SAIL plus the 21st CCLC, and ELO SAIL only—as well as for all students in the ten 21st CCLC schools.

Addressing a major program goal, proficiency rates of at least 75% were achieved by the 21st CCLC participants in most of the grades tested. Among students attending at least 75% of the 21st CCLC sessions, all assessment groups except Grade 2 were proficient in both reading and mathematics at rates higher than 75% (Table 2).

Table 2
Spring 2008 Proficiency Rates by Subject and Program Group for High Attendance Students and for All Students in 10 Participating Schools

Grade level	21 st CCLC + ELO SAIL Summer 2007		ELO SAIL only Summer 2007		Students in 10 21 st CCLC schools 2007–2008	
	Group N	Profic. %	Group N	Profic. %	Group N	Profic. %
Reading						
Grade 2	131	49.6	174	54.6	647	52.2
Grade 3	136	84.5	167	79.7	637	80.8
Grade 4	99	92.9	142	89.4	591	91.5
Grade 5	117	87.2	156	87.2	683	86.3
Mathematics						
Grade 2	131	57.3	174	56.3	656	55.0
Grade 3	136	82.3	169	81.0	657	80.5
Grade 4	99	86.9	143	86.0	609	85.4
Grade 5	117	85.4	158	83.0	699	81.8

Note. Profic.=proficiency. Grade 2 based on TN/2, percent NCE≥50. Grades 3, 4, and 5 based on MSA, percent proficient or advanced. Includes only students who attended at least 75% of sessions.

The proficiency rates of students in the 21st CCLC Program, who also attended ELO SAIL, were not significantly different from those of ELO SAIL only students, based on logistic regression analysis at each grade level (detailed results are available from the authors).

Summer Program Effectiveness

Students. Overall, students had positive ratings for the afternoon program (Figure 2). The highest rates of agreement were in response to items about having a chance to do new activities (87% agreed) and feeling proud of what they did in the afternoon program (85% agreed). The item with the lowest rate of agreement, although still showing agreement by a majority of the students, addressed the connection between the afternoon activities and the morning academic program: “The afternoon program helped me understand more about what I learned during the morning” (53% agreed).

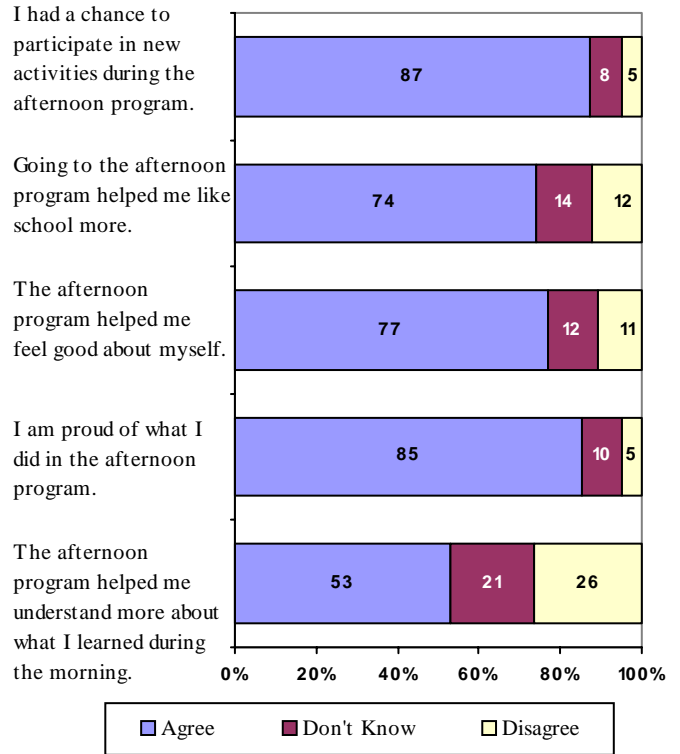


Figure 2. Response to survey questions about 21st CCLC Program by Grade 3, 4, and 5 students (N=367)

In response to three open-ended survey questions, 96% or more of the students provided answers. When students were asked what they liked most about the program, they named a range of activities, including:

- Recreation time (24%)
- Dancing (12%)
- Art (11%)
- Drama (6%)
- Music (4%)
- Everything (3%)

It should be noted that all students participated in recreation time, but specific art classes differed across schools and across age groups.

When students were asked what they would change about the program, 155 of 354 responding students (44%) said they would change “nothing;” students did make suggestions for better snacks (7%), more field trips (9%) and the chance to swim (12%). Finally, students were asked to list two reasons why they came to the afternoon program. Two thirds of the responding students (233 of 353, or 66%) answered that they came to have fun. Many students (21%) replied that their parent signed them up (or that their parent made them come). Students also responded that they came to learn (18%). One enthusiastic participant wrote, “It’s where the fun begins! Because it’s like school but short!”

Artists. Artists were highly positive in their perceptions of the impact of the program on students (Table 3). All respondents agreed with items related to providing additional experiences and opportunities for students, adding to students' background knowledge and reading skills, and providing a safe environment.

Table 3
Percentage of Positive Responses from Artists about Impact of the 21st CCLC Program (N=41)

The 21 st CCLC Program:	Strongly Agree or Agree %
Provides experiences that students otherwise would not have	100.0
Allows students to develop skills or talents outside traditional academic areas	100.0
Provides opportunities for students to excel	100.0
Adds to student's background knowledge	100.0
Provides a safe and secure environment	100.0
Allows students to integrate reading skills into other areas	100.0
Increases student's interest in the arts	97.5
Develops oral language and vocabulary skills	97.5
Improves student's self-confidence	97.5
Improves student's social relationships	95.1
Allows students to integrate math skills into other areas	90.2

Parents. Parent survey results showed a high level of satisfaction with the 21st CCLC Program (Table 4). Over 95% of the parents reported that their child learned new things in the 21st CCLC Program (i.e., the afternoon program) and that the program helped their child develop new interests and increased their child's interest in going to the morning ELO SAIL program. It is important to note that 86% of parents reported that they needed the 21st CCLC Program in the afternoon so that their child could attend the ELO SAIL morning program.

Table 4
Percentage of Positive Responses from Parents about the 21st CCLC Program

Survey item	Group N	Strongly Agree or Agree %
My child learned new things in the afternoon program	273	98.9
The afternoon program helped my child develop new interests	271	97.8
The afternoon activities increased my child's interest in going to the morning program	272	96.3
My child enjoyed the afternoon program	271	98.2
I would recommend the program to other parents	272	98.5
I needed to have my child in a full-day program for him/her to participate in ELO SAIL	263	85.9

Family Literacy Program

The 21st CCLC Program supported family literacy by partnering with Linkages to Learning to provide classes for parents. Linkages to Learning offered classes in building English language skills (i.e., ESOL/Acculturation classes), as well as developing skills to support their student's academic achievement (e.g., Parent Homework Club and Linkages to the Library). Fifteen classes were offered during the 2006–2007 school year for parents of students in the participating schools. Classes were held one or two times per week for 90 minutes per session. Classes ranged from six sessions (e.g., Linkages to Literacy) to 60 sessions (e.g., ESOL/Acculturation).

Of the 274 respondents to the parent survey, 65 (24%) indicated that they had attended at least one Linkages to Learning class for family literacy during the 2006–2007 school year. Among this group, the largest percentages reported attending Parenting Classes (34%), ESOL classes (25%), and Family Reading (25%).

Almost all of these respondents felt that their Linkages to Learning class(es) helped improve their family literacy skills (Table 5). Parents reported that they felt better prepared to help their child with reading and to work with teachers at their child's school.

Table 5
Percentage of Positive Responses from Parents about Family Literacy Skills Gained Through Linkages to Learning Classes

Survey item	Group N	Strongly Agree or Agree %
Because of my class, I am better at helping my child with reading	62	95.2
My class helped me work with teachers and others at my child's school	62	95.2
My class helped me improve my English	60	96.7

Conclusions

This evaluation addressed outcomes of the two components of the 21st Century Community Learning Centers Program in MCPS: the summer 2007 elementary arts and recreation program and the 2006–2007 family literacy component.

Attendance at the morning ELO SAIL academic program was better for the 21st CCLC students than for students who attended only the morning program. Results indicated that for Grades 3, 4, and 5, over 75% of the students who attended the 21st CCLC Program on a regular basis scored at the proficient level or above on standardized reading and mathematics tests during the school year following the summer program; reaching this rate of proficiency was a major goal of the program. In

addition, 21st CCLC Program parents who attended Linkages to Learning classes reported that they felt better prepared to help their child with reading and to work with teachers at their child's school.

Feedback from all surveyed stakeholders was positive. Parents and students reported high levels of satisfaction with the program, and artists were positive in their perceptions of the impact of the program. In addition, survey data collected for the evaluation of the ELO SAIL morning academic program (Wang, 2008) reinforced the value of the afternoon program. Eighty-two percent of principals and ELO SAIL administrators in 21st CCLC schools (14 out of 17) agreed that the afternoon component enhanced program effectiveness.

Reinforcing academic skills through the arts has been shown to be an important factor in improving student achievement (Reardon, 2005). The 21st CCLC Program provides a summer program that is engaging and fun, consistent with research recommendations that "summer programs for disadvantaged children should supplement academics with a heavy dose of physical activity and enrichment experiences" (Alexander, Entwisle, & Olson, 2001). The increased attendance at the academic program and the feedback collected from parents and students indicate that the 21st CCLC Program is promoting students' participation in the academic program. In addition, survey results from students, parents, and artists suggest that the 21st CCLC Program is providing opportunities for students to learn new things, try new activities, and develop new interests.

Recommendations

The findings suggest the following recommendations as the program moves forward:

- Continue efforts to collect feedback from all stakeholders. Continue current methods of surveying students and artists. Examine the procedures for administering parent surveys and adjust to increase response rate. Consider additional methods of collecting feedback from parents attending family literacy classes.
- Explore additional ways to link the afternoon art and recreation classes to the morning academic program. Specific examples of activities supporting academic topics may be helpful for new artists.

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Appendix

Table A1
21st Century Community Learning Centers Program
Enrollment for Summer 2007

Elementary School	Number of 21 st CCLC participants 2007
Broad Acres	198
Burnt Mills	62
Gaithersburg	70
Harmony Hills	105
Highland	123
Kemp Mill	86
Rosemont	96
Summit Hall	51
Weller Road	77
Wheaton Woods	71
Total	939

Table A2
Characteristics of Students in the 21st CCLC, ELO SAIL,
and All 21st CCLC Schools

Demographic characteristic	21 st CCLC participants Summer 2007 (N=939)	ELO SAIL participants ^a Summer 2007 (N=1734)	21 st CCLC schools 2007–2008 (N=5584)
Race/ethnicity	%	%	%
African American	28.9	25.1	28.5
American Indian	0.2	0.1	0.3
Asian American	9.6	8.5	8.0
Hispanic	53.5	59.5	54.5
White	7.8	6.8	8.7
Gender			
Female	48.5	49.8	48.5
Male	51.5	50.2	51.5
Service provided (current)			
ESOL	43.9	53.9	37.9
Special Education	10.0	8.6	10.2
FARMS	68.5	70.4	64.8

^aIncludes students participating in ELO SAIL only (not in the 21st CCLC Program)