

Montgomery County Public Schools 21st Century Community Learning Centers Program: Implementation and Outcomes for Summer 2005

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Background

The 21st Century Community Learning Centers (21st CCLC) Program in the Montgomery County Public Schools (MCPS) provides cultural arts and recreational activities to students during out-of-school times at ten Title I schools (Table A1). The 21st CCLC Program is a federally funded program administered by the Maryland State Department of Education (MSDE). The goal of the 21st CCLC Program is to help schools achieve and maintain Adequate Yearly Progress (AYP) by offering activities that complement the academic program and by supporting family literacy. 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.

One of the 21st CCLC Program offerings is a four-week summer program for students about to enter kindergarten through Grade 5 at selected Title I schools. In this afternoon program, students attend arts and recreation sessions, with snack and transportation home provided free or at a minimal fee. In the morning, all students receive academic instruction through the Extended Learning Opportunities-Summer Adventures in Learning Program (ELO-SAIL) (see MCPS, 2007). To support the 21st CCLC Program's goal that 75% of participants reach proficiency in reading and mathematics, the objectives of the afternoon sessions include: reinforcing the morning ELO-SAIL academic program; developing oral language skills; adding to students' background knowledge; and preparing a culminating activity.

To promote family literacy, the 21st CCLC Program provides financial support to Linkages to Learning, which offers classes for adults in English-speaking skills and skills to support their students' academic achievement.

This brief focuses on the implementation and outcomes for the summer program and the family literacy component of the 21st CCLC Program in summer of 2005.

Methodology

Program records from MCPS, the 21st CCLC Program, and ELO-SAIL were used to document participation and attendance. Program implementation was examined with classroom observations; a project evaluator visited one full session for 38 of the 41 artists and recorded activities supporting the 21st CCLC Program objectives with a structured observation checklist. Artist surveys provided additional measures of program implementation and also of student outcomes. Surveys were e-mailed to all artists at the completion of the program; 34 of 41 artists (83%) responded.

Students' academic performance was measured using assessments from the 2005–2006 school year. The MCPS Assessment Program for Primary Reading (MCPSAP-PR) was used for reading in Grades K–2, and 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, we compared test scores for students participating in both the 21st CCLC Program and ELO-SAIL with test scores for students participating in ELO-SAIL only. Statistical significance tests were calculated from independent t-tests and logistic regression analysis.

Parent satisfaction with the summer program was assessed with a survey sent home to parents during the last week of the program; the response rate was 63%. For a subset of parents that had attended family literacy classes, additional survey items assessed the impact of these classes on family literacy.

Summary of Findings

Students enrolled in the 21st CCLC Program had better attendance at the morning academic program than students enrolled in ELO-SAIL only. Parents reported high levels of satisfaction with the 21st CCLC Program, and artists also were positive in their perceptions of the impact of the program. Classroom observations and artist surveys provided evidence that the afternoon art activities reinforced the morning academic curriculum in

the majority of the 21st CCLC classes. In most grades tested, over 75% of students who attended the 21st CCLC Program were proficient in reading and mathematics during the following school year, although proficiency rates were not statistically significantly higher than those of students who attended ELO-SAIL only. Further integration of the ELO-SAIL academic curriculum into the 21st CCLC Program activities is recommended.

Detailed Findings

Summer Program: Implementation

Participation. All students entering Grades 1–5 who registered for ELO-SAIL at the ten participating schools were invited to attend the 21st CCLC Program; students entering kindergarten were also invited at four schools. A total of 902 students enrolled in the 21st CCLC Program. The number of openings at each school was limited by funding and students were admitted on a first-come, first-served basis. The students enrolled in the 21st CCLC Program were representative of all students in the ten participating schools on nearly all demographic characteristics (Table A2). There was one statistically significant difference; the percentage of students receiving English for Speakers of Other Languages (ESOL) services was somewhat smaller for the 21st CCLC Program (30%) than for all students in the ten 21st CCLC schools (35%). With this exception, the 21st CCLC Program succeeded in enrolling a group of students demographically representative of the students in the ten schools.

Description of classes. The 21st CCLC Program offered a wide range of arts and cultural experiences (Table 1). Class enrollment was limited to 15 or fewer students, so that students could work closely with the professional artists who served as teachers. 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, 2007). The 21st CCLC artists attended a full-day training session designed to orient them to the program, review the ELO-SAIL curriculum, and introduce classroom management techniques.

Class content. To identify classroom activities that reinforce the ELO-SAIL curriculum, classroom observations were conducted. Such activities were rated based on the relative number and importance within the session. A class with a brief mention of a single curriculum concept was rated “minimally evident,” a class with a few activities related to the curriculum was rated “evident,” and a session with several activities related to the curriculum or with a focus on a curriculum-related activity was rated “evident with emphasis.” Observers also recorded (as evident or not) activities that

were related to reading or mathematics, but were not included in the grade-specific ELO-SAIL curriculum.

Table 1
Number of Art Classes Offered by Type

Type of Class	Number of Classes
Visual arts	12
Dance, creative movement	10
Music, world music, songwriting	8
Theater, story theater	6
Creative writing	2

Overall, 66% of the sessions observed included at least one activity directly linked to the ELO-SAIL curriculum (either reading or mathematics) (Table 2). Further, 84% of the sessions included activities with either a general connection to reading or mathematics, or a direct link to the ELO-SAIL curriculum.

Table 2
Level of Evidence of Activities Related to Reading and Mathematics in ELO-SAIL Curriculum and Overall

Use of Activities Related to:	% of Class Sessions (N=38)			
	With Emphasis	Evident	Minimal	Not Evident
ELO-SAIL curriculum, reading <i>or</i> mathematics, or both		65.8		34.2
Reading <i>or</i> mathematics, curriculum or other*		84.2		15.8
ELO-SAIL reading curriculum	23.7	5.3	23.7	47.4
Reading curriculum or other reading*		68.4		31.6
ELO-SAIL mathematics curriculum	0.0	0.0	26.3	73.7
Mathematics curriculum or other mathematics*		44.7		55.3

* Coded only “Evident” or “Not Evident”

In 53% of the sessions, observers documented integration of the ELO-SAIL reading curriculum; of these, nearly half were rated as “minimal”, while another half were rated as “with emphasis”. The activities varied with grade level; more of the observed activities were related to the curricula for lower grades. The more frequently observed activities were “understanding characters;” “retelling;” “using connections;” and using “descriptive and sensory words.”

Observers also recorded activities that were related to reading, but were not included in the grade-specific ELO-SAIL reading curriculum, including various reading, writing, and word activities. When any reading activity was considered with either a general connection to reading or a direct link to the ELO-SAIL curriculum, 68% of the class sessions included reading activities.

Activities related to the ELO-SAIL mathematics curriculum were observed in fewer classes than activities related to the reading curriculum. Further, only minimal evidence was documented. The most frequently observed activity was some form of counting—for example, students counted materials, dance steps, musical beats, or syllables. There were few instances of more advanced curriculum topics, such as multiplication or place values.

Observers also recorded mathematics activities that were not included in the grade-specific ELO-SAIL curriculum. Examples included use of fractions, shapes, and geometry terms. When any mathematics activity was considered, with either a general connection to mathematics or a direct link to the ELO-SAIL curriculum, 45% of the class sessions included mathematics activities.

Classroom observations were also used to identify activities that supported the following the 21st CCLC Program objectives: developing oral language skills; adding to students’ background knowledge; and preparing a culminating activity. Artists’ reports provided a second source of information about the implementation of program objectives. The majority of classes included a culminating activity, based on both artists’ reports and observations (Table 3).

Table 3
Implementation of the 21st CCLC Program Objectives Based on Artists’ Survey Responses and Observations

Activities related to program objectives	% Artists Responding Yes (N=34)	% Class Sessions With Activity (N=38)
Preparing culminating activity	82.3	68.4
Developing oral language and vocabulary skills	NA	76.3
Adding to student’s background knowledge	NA	65.8
Integrating ELO-SAIL curriculum into classes	45.5	65.8

NA: Not Applicable

Class activities related to developing language and vocabulary skills, or to background knowledge, also were evident in the majority of classrooms observed. Finally, although integration of the reading or mathematics curriculum into the 21st CCLC classes was observed in two-thirds of the classes, fewer than half (46%) of artists reported using the ELO-SAIL curriculum in their classes.

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 (N=902) had better attendance at the morning academic program than students enrolled in ELO-SAIL only (N=1,946) (Figure 1). The average difference in attendance of 1.1 days, out of a 19-day program, was statistically significant (t=5.83, p<.01). Additional analysis with statistical control of demographic differences between the two groups confirmed the significant difference in attendance.

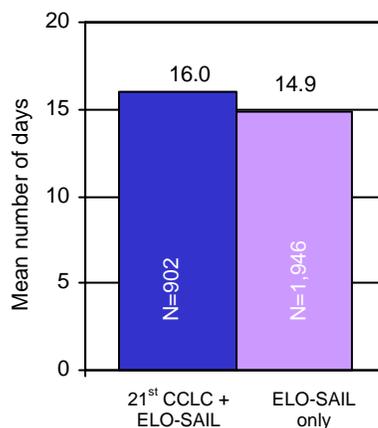


Figure 1. Attendance rates at ELO-SAIL by program group.

Reading and mathematics assessments. Percentages of students who were proficient in reading or mathematics, or met grade-level benchmark in reading, during the 2005–2006 school year are shown in Table 4. Results are shown for two program groups—ELO-SAIL plus the 21st CCLC, and ELO-SAIL only. Only high attendance students—those who attended at least 75% of their program sessions—are included in the two program groups. Note that four schools did not administer local reading assessments to the primary grades because they participated in the “Reading First” program, which required different assessments. To provide a broader context, proficiency rates for all students in the ten 21st CCLC schools are shown for 2005–2006, as well as for the previous school year.

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 Grades 1 and 2 in reading met benchmark or were proficient at rates higher than 75% (Table 4).

To examine the impact of the 21st CCLC Program beyond that of ELO-SAIL, test scores for students participating in both programs were compared with test scores for students participating in ELO-SAIL only. The proficiency rates of students in the 21st CCLC Program, who also attended ELO-SAIL, were not significantly higher than those of ELO-SAIL only students, based on logistic regression analysis at each grade level (detailed results are available from the authors). These regression analyses statistically controlled for differences in Free and Reduced-price Meals System (FARMS), special education, and ESOL status; racial/ethnic group membership; gender; and where available, for prior achievement (i.e., Grades 1–5 in reading and Grades 4 and 5 in mathematics).

Table 4
Proficiency Rates in Reading and Mathematics by Program Group for High Attendance Students and for All Students in Ten Participating Schools

Grade level	21 st CCLC + ELO-SAIL		ELO-SAIL only		Students in Ten 21 st CCLC schools	
	Group N	% Profic.	Group N	% Profic.	2004–2005	2005–2006
Reading						
K*	27	92.6	122	87.7	85.0	87.4
Grade 1*	92	66.3	140	62.9	67.8	62.3
Grade 2*	91	44.0	117	31.6	46.1	39.8
Grade 3	119	76.5	227	75.8	68.2	71.1
Grade 4	127	75.6	182	76.4	78.0	77.8
Grade 5	83	78.3	204	66.7	62.6	71.9
Mathematics						
Grade 3	119	80.7	227	75.3	74.4	75.1
Grade 4	127	84.3	182	72.5	77.3	79.4
Grade 5	83	78.3	204	68.6	64.9	73.8

* Results available for six schools only.

Artist reports. Overall, artists were highly positive in their perceptions of the impact of the program on students (Table 5), including 100% agreement with items related to providing additional experiences and opportunities for students. A smaller percentage of artists agreed that the program improves skills in reading or mathematics (72% and 66%, respectively).

Table 5
Percentage of Positive Responses from Artists about Impact of the 21st CCLC Program

The 21 st CCLC Program:	% “Strongly agree” or “Agree” (N=34)
Allows students to develop skills or talents outside traditional academic areas	100.0
Increases students’ interest in the arts	100.0
Provides experiences that students otherwise would not have	100.0
Adds to students’ background knowledge	100.0
Provides opportunities for students to excel	100.0
Improves students’ self-confidence	100.0
Provides a safe and secure environment	96.9
Improves students’ social relationships	96.9
Develops oral language and vocabulary skills	93.8
Improves reading skills	71.9
Improves skills in mathematics	65.7

Parent reports. Parent survey results showed a high level of satisfaction with the 21st CCLC Program (Table 6). Over 90% of the parents reported that their child learned new things in the 21st CCLC Program (i.e., the afternoon program activities), that the program helped their child develop new interests, and that the 21st CCLC Program increased their child’s interest in going to the morning ELO-SAIL program. It is important to note that 89% 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 6
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	548	98.5
The afternoon program helped my child develop new interests	545	96.9
The afternoon activities increased my child’s interest in going to the morning program	552	96.2
My child enjoyed the field trips offered in the afternoon	529	95.8
I needed to have my child in a full-day program for him/her to participate in ELO-SAIL	543	88.6

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 2004–2005 school year for parents of students in the ten 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 571 respondents to the parent survey, 259 (45%) indicated that they had attended at least one Linkages to Learning class for family literacy during the 2004–2005 school year. Among this group, the largest percentages reported attending the Family Reading Group (31%), ESOL classes (26%), and Linkages to Literacy (14%).

A large majority of these respondents felt that their Linkages to Learning class(es) helped improve their family literacy skills (Table 7). Parents reported that they felt better prepared to help their child with reading and to work with teachers at their child's school.

Table 7
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	225	96.0
My class helped me work with teachers and others at my child's school	230	96.5
My class helped me improve my English	206	94.7

Conclusions and Next Steps

To address the impact of the 21st CCLC Program, this evaluation examined both implementation and outcomes for the 2005 summer session.

Classroom observations and artist surveys were used to examine implementation of the objectives of the summer program. In two-thirds or more of the classrooms observed, activities that add to students' background knowledge and those that support language development were in evidence. Over three-quarters of the artists who responded to the survey reported including a culminating activity. Artists were highly positive about the effect of the program on students' development of skills and

interest in the arts, but less positive about the impact on academic skills.

Classroom observations revealed the use of activities directly related to the ELO-SAIL curriculum in 66% of the class sessions, and activities generally related to mathematics or reading in 84% of the sessions. Fewer than half of the artists (45%), however, indicated in their survey response that they incorporated activities supporting the morning ELO-SAIL academic curriculum, suggesting that some artists may not have understood the specifics of the ELO-SAIL curriculum.

Fully successful implementation of the 21st CCLC Program must include stronger integration of the concepts from the academic curriculum into the afternoon classes. Reinforcement of the academic curriculum through the arts has been shown to be an important factor in improving student achievement (Reardon, 2005), and it is a major objective of the 21st CCLC Program. It is recommended that additional training and support be provided to the artists in the specifics of the ELO-SAIL curriculum, including tips on linking activities to the academic topics.

Academic performance and attendance at the ELO-SAIL program were used to evaluate outcomes for the students attending the 21st CCLC Program; the findings suggest that the program is successfully addressing its major goals. The 21st CCLC goal that 75% of participants reach proficiency was achieved in four of six grades tested in reading, and all three grades tested in mathematics. In addition, the increased attendance by the 21st CCLC students at the morning ELO-SAIL sessions suggests that the 21st CCLC promotes more complete participation in the academic program. Finally, the feedback collected from parents and artists indicate that the 21st CCLC Program is meeting important needs and providing additional opportunities for MCPS students and their families.

References

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**Montgomery County Public Schools 21st Century Community Learning
Centers Program: Implementation and Outcomes for Summer 2005**

Appendix

Table A1
21st Century Community Learning Centers Program Enrollment for
Summer 2005, Linkages to Learning Sites, and Primary Reading Data

Elementary Schools	Number of 21 st CCLC Participants, 2005	Linkages to Learning Site	Grades K, 1, and 2 Local Reading Assessment Data (MCPS AP-PR) in Analysis
Broad Acres	144	Yes	Yes
Burnt Mills	63	No	Yes
Gaithersburg	70	No	Yes
Harmony Hills	141	Yes	Yes
Highland	83	Yes	No
Kemp Mill	85	No	Yes
Rosemont*	65	No	No
Summit Hall	74	Yes	No
Weller Road	106	No	Yes
Wheaton Woods	71	No	No
Total	902		

*Rosemont students attended the 21st CCLC Program at Gaithersburg.

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

Demographic Characteristics	21 st CCLC Participants Summer 2005	ELO-SAIL Participants* Summer 2005	21 st CCLC Schools 2005–2006
	902	1,946	5,476
Race/Ethnicity			
African American	27.9%	20.6%	26.7%
American Indian	0.4%	0.3%	0.2%
Asian American	9.2%	10.0%	8.7%
Hispanic	52.7%	61.9%	55.5%
White	9.8%	7.2%	8.8%
Gender			
Female	49.6%	47.8%	48.7%
Male	50.4%	52.2%	51.3%
Service Provided			
ESOL	30.0%	35.0%	35.1%
Special Education	9.3%	10.5%	10.1%
FARMS	65.6%	71.4%	66.6%

*Includes students participating in ELO-SAIL only (not in the 21st CCLC Program)