Evaluation Matters

Volume 9, Number 3 November 2019 Steven M. Urdegar, Ph.D., Director

Summer Programs:
An Analysis of Participation and Impact, 2019

1. What is the purpose of this report?

This report examines the outcomes of the in-class summer programs operated in the M-DCPS. The Summer Programs, offered to provide supplemental instruction for students in need of remediation, are comprised of Literacy for Rising 3rd Grade Students, Algebra I End-of-Course (EOC) remediation, and Course Recovery. Not included in this report is the state-mandated summer program for retained third graders, which is addressed in a separate evaluation.[1]

2. Which populations are targeted in this report?

The samples for the summer programs comprised students in Grade 3 (Literacy for Rising 3rd Grade Students), Grades 6 through 8 (Course Recovery) and Grades 9-12 (Algebra 1 Remediation) who registered for each component, entered within the first two days of the summer reporting cycle, and remained enrolled in the respective component for the duration of the summer session. Only students who were eligible to participate as delineated by the Department of Summer Services (2019) were included in the evaluation. Comparison groups were also defined for each component comprised of students who met the eligibility requirements, but who did not participate in the program. Students in the comparison group who partially participated in the program and students in both groups who did not have valid pre- and post-test scores at consecutive grades, were excluded from analyses of impact.

3. How were the data for this report collected and analyzed?

Participation data were obtained from the student course registration data file and examined through descriptive statistics. Each component with a defined comparison group was then analyzed by comparing the outcomes for students who participated in the component with students who did not, while considering the influence of demographic differences and baseline achievement. Each component without a defined comparison group was analyzed by gauging whether increased use was associated with superior outcomes, once students' demographic characteristics and baseline achievement were considered. The results for Course Recovery were limited to descriptive statistics.

[1] *Third Grade Summer Reading Camps, 2019 Evaluation* by Steven M. Urdegar, 2019, Miami, FL: Miami-Dade County Public Schools.

4. What are the outcomes of the Literacy for Rising 3rd Grade Students component?

The Literacy for Rising 3rd Grade Students provided students, whose scores fell between the 26th and the 49th percentiles on the Spring 2019 administration of the Stanford Achievement Test in Grade 2, the opportunity to bolster their reading skills. The curriculum used was a research-based intervention program called Flex Literacy, developed by McGraw Hill. It may be noted that this curriculum was also used in the Third-Grade Summer Reading Camps, offered to retained students. The curriculum utilized whole group and small group instruction to bolster reading comprehension skills. The curriculum included a self-directed technology component as well as a component that targeted reading comprehension, critical thinking, and writing skills. The sections that follow examine both the participation in and impact of these components.

- **Participation**. Table 1 lists the number and percentage of registered students who completed the Literacy for Rising 3rd Grade Students component, participated and withdrew prior to completion, and registered but did not participate.

Table 1. Participation in the Literacy for Rising 3rd Grade Students Component

	Participation					
	Full[a]		Partial[b]		None[c]	
Total	n	%	n	%	n	%
2,398	1,593	66.4	52	2.2	753	31.4

[a] Students who completed the component. [b] Students who participated and withdrew prior to completion. [c] Students who initially registered but did not attend (i.e., no shows).

  - A total of 2,398 students registered for the component.
  - Around two-thirds of the students who registered to participate, completed the component.

- **Impact**. Comparison groups of non-participating students were identified by examining their scores on the spring 2019 administration of the Reading Comprehension subtest of the SAT-10. Then, statistical regression procedures were used to compare the outcomes for students who participated in the program with students who did not, controlling for the influence of demographic differences and initial ability as measured by the iReady Diagnostic Test (IDT) administered during spring 2019. The outcomes were the students' composite scaled scores on the IDT administered during August-October 2019.

  - Students who participated in the Literacy for Rising 3rd Grade Students scored a statistically significant 5.3 scaled score points higher on the IDT posttest, administered during fall 2019.
  - The time within the IDT administration window (August 19 - September 27) that students were tested did not have a significantly impact on their posttest scores.

5. What are the outcomes of the Algebra I EOC Remediation Component?

The Algebra I EOC remediation component is designed to prepare students who did not receive passing scores on the Florida Standards Assessment (FSA) Algebra 1 End of Course (EOC) assessment, as required to meet the Algebra 1 graduation test criteria. The component, which focused on reviewing and strengthening specific skills, was revised to include new course materials, and to align more closely with the Florida Standards. High school students were offered the course through the adult education centers, while middle/high school students at selected alternative schools were offered the course at those locations.

- **Participation**. Table 2 lists the number and percentage of registered students who completed the Algebra I remediation component, participated and withdrew prior to completion, or registered but did not participate in the program, by grade level.

Table 2. Participation in the Algebra 1 EOC Remediation Component

Spring 2019		Full[a]		Partial[b]		None[c]	
Grade	Total	n	%	n	%	n	%
08	39	26	66.7	4	10.3	9	23.1
09	1,080	765	70.8	305	28.2	10	0.9
10	164	105	64.0	58	35.4	1	0.6
11	64	42	65.6	22	34.4	--	--
Total	1,368	946	69.2	402	29.4	20	1.5

Note. All totals include small numbers of 7th graders, 12th graders and students who were not active at any time during the 2018-19 school year.

[a]Students who completed the component. [b]Students who participated and withdrew prior to completion. [c]Students who initially registered but did not attend (i.e., no shows).

  - 1,368 students participated in the component.
  - 69.2% of participating students completed the program.
  - 80.9% of the students who completed the program were ninth graders during spring 2019.

- **Impact:** Statistical regression procedures were used to estimate the impact of demographic differences, baseline achievement (as measured by the spring Algebra I EOC) and program participation, on the students' chances of passing the summer Algebra 1 EOC. The passing score for the Algebra I EOC Is an achievement level of 3 and above.

  - **Pass rate:** Table 3 lists by participation type, the total number of students followed by the percent of students who passed the end of summer FSA Algebra I EOC exam, by EOC grade.
    - The pass rate for all students was 17.3%.
    - The pass rate for all students who completed the course was 11.8%, while the pass rates for students who did not attend was 22.9%.

Table 3. Pass Rates on the Summer FSA Algebra 1 EOC by Program Participation

Spring	Overall		Program Participation					
			Full		Partial		None	
Grade	All Students	%Passing	All Students	%Passing	All Students	%Passing	All Students	%Passing
9	1,081	19.9	534	12.5	64	6.3	483	29.8
10	258	10.5	63	6.3	11	9.1	184	12.0
11	71	5.6	13	7.7	--	--	58	5.2
12	19	5.3	--	--	1	0.0	18	5.6
Total	1,429	17.3	610	11.8	76	6.6	743	22.9

Note. Overall includes all students who took the summer Algebra 1 EOC. All participating students (Alternative Schools and Adult Centers) are included in the program participation counts. A small number of 7th and 8th grade students are excluded.

- As students who did not attend the Algebra 1 summer remediation program only came in to take the test but performed better on the Algebra 1 EOC than those who attended the program, differences in the characteristics of participants and non-participants was examined.

  - The Summer Algebra 1 Remediation program was designed to serve students who had not previously earned a passing grade in an Algebra 1 course and had also not previously earned a passing score on the Algebra 1 EOC test.
    - Indicators of Algebra achievement prior to summer remediation show an advantage for non-participants, while only 4% of the students who participated in the summer program had previously earned a passing grade in an Algebra 1 course, over 70% of the non-participants had previously done so.
    - The non-participants initially scored higher during the pretest (Spring 2019 Algebra 1 EOC administration) than those who participated in the summer remediation program.

  - Among Grade 9 students participating in the summer test administration, the following attributes were identified as significantly different for program participants:
    - Lower percentages of Female students
    - Lower percentages of Black students
    - Higher percentages of Hispanic Students
    - Higher percentages of ELL students (both current and former)
    - Higher percentages of students who were overage for grade (previously retained)

- **Effect:** To ascertain the extent to which the above student factors (initial achievement, demographic characteristics, and program participation) jointly contribute to students' test scores, a statistical analysis was conducted. The results showed that students who participated in Algebra 1 remediation were not significantly more likely to pass the FSA summer Algebra 1 EOC than their counterparts who did not take the course.

  - No significant programmatic effects were found at Grades 9, and there were insufficient data to analyze programmatic effects at Grades 10 through 12.

- The following non-programmatic effects were observed.
  - The higher students' pretest scores were, the more likely they were to pass the test.
  - The odds of passing were lower for students who were classified as disabled, or over age for grade; and higher for students were former-English language learners; than students not so classified.

6. What are the outcomes of the Credit Recovery component?

The Credit Recovery component provided an opportunity for middle school students who failed to earn core course credit, to do so during the summer. Algebra I remediation coursework is not included.

- **Participation**. Table 4 lists by grade; the total number of courses followed by the number and percent of courses in which students (a) registered and completed; (b) registered and withdrew prior to completion, and (c) registered, but did not participate.

Table 4. Participation in the Credit Recovery Component

		Completion					
Summer	Courses	Full[b]		Partial[c]		None[d]	
Grade	Enrolled	n	%	n	%	n	%
6	170	77	45.3	36	21.2	57	33.5
7	1,863	1,222	65.6	166	8.9	475	25.5
8	1,645	1,182	71.9	92	5.6	371	22.5
Total[a]	3,751	2,529	67.4	309	8.2	913	24.3

Note. Counts are duplicated as students could have attempted multiple courses. [a]Includes a small number of students (n=73) in Grades 9 through 12. [b]Students who completed the component. [b]Students who participated and withdrew prior to completion. [d]Students who initially registered but did not attend (i.e., no shows).

  - A total of 3,506 students attempted an average of 1.07 courses each, completing 67.4% (n=2,529) of them.
  - Most of the attempted courses were completed by seventh and eighth graders.

- **Course Completion**. Table 5 lists the academic grades earned during summer school by the students who completed the component and subsequently were awarded credit, by subject area.

Table 5. Academic Grades Earned by Students Who Completed the Component by Subject Area

			Final Grade									
	Courses	Percent	A		B		C		D		F	
	Completed	Graded	n	%	n	%	n	%	n	%	n	%
Language Arts	553	89.2	60	12.2	185	37.5	206	41.8	30	6.1	12	2.4
Mathematics	1,119	93.5	108	10.3	377	36.0	448	42.8	94	9.0	19	1.8
Science	414	91.8	72	18.9	181	47.6	94	24.7	20	5.3	13	3.4
History	443	93.7	49	11.8	191	46.0	129	31.1	42	10.1	4	1.0
Total	2,529	92.3	289	12.4	934	40.0	877	37.6	186	8.0	48	2.1

- Nearly all the students who completed the courses earned final grades.
- The majority of the students, 52.4%, earned grades of A or B, while 37.6% earned a grade of C.
- Students who took courses in science and history earned the highest percentage of A and B grades.

7. What are the principal conclusions of this report?

Overall, the Summer Programs were designed to provide remedial support to students who require it, and student outcomes indicate that they were successful at doing so. Students who participated in the Literacy for Rising Third Grade component enjoyed significantly better outcomes on the iReady Diagnostic Test administered in the fall than students who did not attend the summer sessions. However, the Algebra I remediation did not significantly improve the odds of passing the End of Course Assessment for summer participants at any grade. Finally, nearly all of the courses attempted by students who participated in Course Recovery were completed, 52.4% with grades of A or B and 37.6% with a grade of C, helping students to meet promotion criteria.

Reference

Department of Summer Services (2019). *2019 Summer Implementation Document.* Miami, FL: Miami-Dade County Public Schools. Retrieved July 26, 2019, from http://summerschool.dadeschools.net/pdfs13/implementation_doc.pdf