



# Evaluation Matters

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## Summer Waves of Learning: *R-Learning Wave (Remediation), 2011-2012*

### **1. What is the purpose of this report?**

This report examines the outcomes of the R-Learning Wave, the remediation component of Summer Waves of Learning, a three-pronged initiative developed by the Superintendent to provide access to supplemental instruction for students in need of remediation, compensation, or enrichment. At the elementary grades, the R-Learning Wave is comprised of four programs: Third Grade Summer Reading Camps<sup>1</sup>, Rising Literacy for Third and Sixth Grade Students, Extended School Year Special Education Services, and Voluntary Prekindergarten. These programs are focused on stimulating readiness skills and strengthening reading comprehension. At the secondary grades, the R-Learning Wave is comprised of three programs: Algebra I End-of-Course Examination (EOC) Remediation, Course Recovery, and Post Secondary Educational Readiness Test Remediation. These programs are focused on advancing progression and promotion, supporting postsecondary readiness, and increasing opportunity for graduation.

### **2. Which populations are targeted in this report?**

The samples for the study included all students in grades 3 through 10 who entered during the first three days of the summer reporting cycle and remained enrolled in the respective program for the duration of the cycle. Comparison groups were also defined for those programs by identifying non-participating students having pre- and post- test data who were matched to the students in the program groups on selected demographic and achievement variables. Students who did not have valid pre- and post- test scores at consecutive grades or who partially participated in any summer program, were excluded from the analysis.

### **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. The impact of each program for which a comparison group was defined was analyzed by statistical procedures, which adjusted the test scores of students to remove the influence of initial ability (i.e., pretest) and demographic differences, and then compared the outcomes for students

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<sup>1</sup> Third Grade Summer Reading Camps are mandated by the state, and implemented yearly. The results of this program are discussed in a separate stand-alone evaluation report.

who participated in the program with students who did not. The analyses for programs for which comparison groups were not defined were limited to descriptive statistics.

#### 4. What are the outcomes of the Rising Literacy Program for Third and Sixth Grade Students?

The curriculum for third graders was a research-based intervention program that utilized whole group and small group instruction that targeted reading comprehension skills, phonics instruction and fluency practice. The curriculum for the sixth graders utilized both whole group, small group instruction, and independent reading supplemented by FCAT Explorer and Discovery Education technology. The sections that follow examine both participation in and impact of the program.

- **Participation.** Table 1 lists the number and percentage of registered students who completed the Rising Literacy Program, participated and withdrew prior to completion, and registered but did not participate in the Rising Literacy Program, by grade.

**Table 1. Participation in the Rising Literacy Program**

Summer Grade	Participation						Total
	Full <sup>a</sup>		Partial <sup>b</sup>		None <sup>c</sup>		
	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%	
3	2,529	62.6	68	1.7	1,441	35.7	4,038
6	774	40.5	110	5.8	1,026	53.7	1,910
Total	3,303	55.5	178	3.0	2,467	41.5	5,948

<sup>a</sup> Students who completed the program. <sup>b</sup> Students who participated and withdrew prior to completion. <sup>c</sup> Students who initially registered but did not attend (i.e., no shows).

- Nearly 6,000 students registered for the program.
  - Nearly two-thirds of third graders and two-fifths of sixth graders who registered to participate, completed the program.
- **Impact.** Statistical regression procedures, were used to adjust the pretest scores of all students tested to account for the influence of demographic characteristics. Then comparison groups of non-participating students were identified by matching to each participating student based on their pretest scores and demographic characteristics. Finally, 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 initial ability (i.e., SAT/FCAT pretest) and demographic differences. The outcome, for each grade, was whether or not students exceeded their expected score on the current (2012) baseline benchmark assessment (i.e., the typical percent correct score obtained by students of similar ability as the participants on the previous (2011) baseline benchmark assessment).
    - Participating third and sixth graders were found to be more likely than their non-participating counterparts to exceed the expected score for their grade, but the advantage was not statistically significant.

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

The Algebra I remediation program is an intervention designed to prepare students who did not receive passing scores (i.e., Level 3 and above) on the Algebra I End of Course Assessment (EOC) to retake the test, achieve a passing grade, and earn high school credit. The program focused on reviewing and strengthening specific skills. High school students who failed both the exam and the course were offered a full credit course, while middle and high school students who failed only the exam were offered a half credit course.

- **Participation.** Table 2 lists the number and percentage of registered students who completed the Algebra I Remediation Program, participated and withdrew prior to completion, and registered but did not participate in the program, by grade. Participation is listed separately for the half credit and full credit programs.

**Table 2. Participation in the Algebra I EOC Remediation Program**

Summer Grade	Participation						Total
	Full <sup>a</sup>		Partial <sup>b</sup>		None <sup>c</sup>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
<b>Algebra Remediation (Half Credit)</b>							
7	46	58.2	4	5.1	29	36.7	79
8	166	59.9	20	7.2	91	32.9	277
9	103	61.7	30	18.0	34	20.4	167
10	3,229	83.3	240	6.2	407	10.5	3,876
11	47	65.3	8	11.1	17	23.6	72
12	27	64.3	3	7.1	12	28.6	42
Total <sup>d</sup>	3,707	80.0	315	6.8	613	13.2	4,635
<b>Algebra Remediation (Full Credit)</b>							
9	170	44.2	79	20.5	136	35.3	385
10	1,726	69.0	281	11.2	496	19.8	2,503
11	122	72.6	10	6.0	36	21.4	168
12	46	73.0	7	11.1	10	15.9	63
Total <sup>d</sup>	2,160	65.6	389	11.8	743	22.6	3,292

*Note.* The summer grade of on-track middle school students is the same as their spring grade, while the summer grade of on-track high school students is one grade higher than their spring grade.

<sup>a</sup> Students who completed the program. <sup>b</sup> Students who participated and withdrew prior to completion. <sup>c</sup> Students who initially registered but did not attend (i.e., no shows). <sup>d</sup> Includes a small number of students whose grade levels were not identified.

- Nearly 8,000 students enrolled in the program, of which about 60% (4,635) took the half credit course.
- Eighty percent of students in the half credit program completed it, as did nearly two thirds of students in the full credit program.
- Over three quarters of the participants were tenth grade students.

- **Impact.** Statistical regression procedures were used to adjust the test scores of students to remove the influence of initial ability (i.e., spring Algebra I EOC pretest) and demographic differences and to compare the outcomes for students who participated in the programs with those of students who did not. The outcome established for each grade was passing the summer Algebra I EOC by scoring Level 3 or higher. Table 3 lists the following information separately for the full credit and half credit courses, by future grade: the total number of students, the percent of students who passed the end of summer Algebra I EOC exam for the participants and non-participant comparison group, followed by indications of the result of the statistical procedures used to gauge the differences between the groups' pass rates.

**Table 3. Pass Rates for the End of Summer Algebra I EOC Examination by Grade**

	Half Credit Course				Full Credit Course <sup>a</sup>			
	Completed		Non Participant Comparison Group		Completed		Non Participant Comparison Group	
	N	%	N	%	N	%	N	%
08	71	67.6	42	64.3	--	--	--	--
09	169	56.2	101	56.4	83	19.3	126	48.4
10	2,667	35.4*	501	38.7	1,278	22.5*	299	21.4 <sup>‡</sup>
11	35	28.6	16	43.8	44	34.1	11	54.5 <sup>‡</sup>
Total	2,942	37.3	660	43.2	1,405	22.6	436	30.0

*Note.* The future grade is used as in lieu of summer grade to permit comparisons with non-participants who do not have a summer grade. The future grade of on-track students is one grade higher than their spring grade.

<sup>a</sup> Includes all students registered, whether or not they previously failed an Algebra course.

- Around 80% of students who completed the half credit course, and over 65% of students who completed the full credit course in Table 2, took the end of summer Algebra I EOC exam.
- Eighth graders who completed the half credit course and tenth graders who completed the full credit course had higher passing rates than non-participants on the end of summer Algebra I EOC exam.
- Completion of the full credit course improved the chances of 10<sup>th</sup> graders and 9<sup>th</sup> graders who had previously failed an Algebra course, of passing the end of summer Algebra I EOC, relative to those of non-participants, once their initial ability and demographic characteristics were taken into account. The benefits for tenth graders were statistically significant.
- The half credit course improved 8<sup>th</sup> and 10<sup>th</sup> graders' chances of passing the end of summer Algebra I EOC relative to those of non-participants, once their initial ability and demographic characteristics were taken into account. The benefits were not statistically significant.

## 6. What are the outcomes of the Credit Recovery Program?

The Credit Recovery program provided an opportunity for secondary school students who failed to accumulate the expected number of credits in core courses for their age and grade to accumulate

additional credits during the summer. For the purposes of this evaluation, participation in the Algebra I Remediation Program is not included in the Credit Recovery Program.

- **Participation.** Table 4 lists the number and percentage of registered students who completed the program, registered and withdrew prior to completion, and registered but did not participate in the program, by grade.
  - Nearly 1,000 students enrolled in the program, of which three-fourths completed it.
  - Program completion rates were higher at the senior high school grades than at the middle school grades.

**Table 4. Participation in the Credit Recovery Program**

Summer Grade	Participation						Total
	Full <sup>a</sup>		Partial <sup>b</sup>		None <sup>c</sup>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
6	27	49.1	8	14.5	20	36.4	55
7	63	56.8	15	13.5	33	29.7	111
8	142	70.6	16	8.0	43	21.4	201
9	67	63.8	22	21.0	16	15.2	105
10	81	77.1	15	14.3	9	8.6	105
11	50	84.7	4	6.8	5	8.5	59
12	304	89.4	22	6.5	14	4.1	340
Total	734	75.2	102	10.5	140	14.3	976

<sup>a</sup> Students who completed the program. <sup>b</sup> Students who participated and withdrew prior to completion. <sup>c</sup> Students who initially registered but did not attend (i.e., no shows).

- **Course Completion.** Table 5 provides separate listings for the full and partial completion categories within each grade of the total number of students who participated, the average number of credits attempted, and the percentage of those credits that earned a grade of D or higher.

**Table 5. Results of the Credit Recovery Program by Participation Status**

Summer Grade	Full <sup>a</sup>			Partial <sup>b</sup>		
	Total Students	Average		Total Students	Average	
		Credits Attempted	Completion Rate		Credits Attempted	Completion Rate
6	27	1.15	87.1	8	2.13	32.4
7	63	1.25	83.4	15	3.10	21.5
8	142	1.06	97.3	16	1.81	37.9
9	67	1.79	40.0	22	2.50	14.5
10	81	2.04	22.4	15	1.97	18.6
11	50	1.93	16.1	4	1.75	0.0
12	304	1.38	42.6	22	1.20	0.0
ALL	734	1.45	48.8	102	2.06	19.0

<sup>a</sup> Students who completed the program. <sup>b</sup> Students who participated and withdrew prior to completion.

- While more than 85% of fully participating 6<sup>th</sup> - 8<sup>th</sup> graders earned passing grades in their courses, only 40% of fully participating 11<sup>th</sup> and 12<sup>th</sup> graders, and 20% of 9<sup>th</sup> and 10<sup>th</sup> graders did.
- Students who fully participated fared more than twice as well as students who partially participated.

## **7. What are the outcomes of the Postsecondary Education Readiness Test (PERT) Remediation Program?**

PERT is the state's college placement test used to determine whether 11th grade students are ready for college level coursework in Reading, Writing, and/or Mathematics. The PERT Remediation program was offered to eligible high school students who did not achieve a passing score on PERT or concordant score(s) on the SAT or ACT in the corresponding subject area(s).

- **Participation.** Of the 296 students who registered for PERT Remediation, 95% percent completed the program.
- **Pass Rates.** Of the 282 students who completed the program, 56% passed the PERT posttest administered at the end of summer.

## **8. What are the principal conclusions of this report?**

The results for the inaugural year of the Summer Waves of Learning, R - Learning Wave indicate that component programs had a beneficial impact on the achievement of secondary school students who used them. Impact at the elementary grades was likely depressed by low completion program completion rates.