

Evaluation Matters

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Summer Programs: An Analysis of Participation and Impact, 2016

1. What is the purpose of this report?

This report examines the outcomes of the Summer Programs, a two-pronged initiative developed by the Superintendent to provide supplemental instruction for students in need of remediation and access to selected digital application for practice outside the regular school context. The Summer Programs are comprised of seven in-class components and one out-of-class component. Four of the in-class components; Third Grade Summer Reading Camps (a separately evaluated state-mandated program)¹ Literacy for Rising Third Grade Students, Extended School Year Special Education Services, and Voluntary Prekindergarten) targeted the elementary grades and focused on strengthening reading comprehension and stimulating readiness skills. The other two in-class components, Algebra I End-of-Course (EOC) remediation and Course Recovery, targeted the secondary grades and focused on advancing progression/promotion and increasing opportunities for graduation. The out-of-class component, iLearning on the Go, provided students with access to a variety of Internet-based software applications outside of the regular school setting through hypertext links available on the Student Portal. Access to the Reading Plus application was also made available to students during the summer on an ongoing basis.

2. Which populations are targeted in this report?

• In-Class components

The samples for the study included all students in grades 3 through 10 who entered within the first two days of the summer reporting cycle and remained enrolled in the respective component for the duration of the cycle. Comparison groups were also defined for those components by identifying non-participating students having pre- and post-test data: Third Grade Summer Reading Camps, Algebra 1 EOC remediation - all such students; and Literacy for Rising Third Grade Students – students who scored in the second quartile (26th- 49th percentile) on the Reading Comprehension Subtest of Stanford Achievement Test, Tenth Edition (SAT-10) administered in spring 2016 to second grade students. Students who did not have valid pre- and post-test scores at consecutive grades or who only partially participated in any component were excluded from the analysis.

• Out-of-Class components

The samples for the study included all students in grades K through 12 who accessed the appropriate page on the Student Portal during the summer reporting cycle. Participation and usage analyses included all students who accessed the appropriate page and/or used selected application software during the summer session. The examination of the amount of usage needed to benefit from the program (dose response analyses) included all students who used one of the specified software packages during the summer session. Students who did not have valid pre- and post- test scores at

¹Urdegar, S.M. (2016). *Third Grade Summer Reading Camps, 2016 evaluation*. Miami, FL: Miami-Dade County Public Schools (in progress).

consecutive grades were excluded from the analysis. No comparison group was provided.

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 taking into account the influence of demographic differences and baseline achievement, as measured by a pretest. 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 taken into account. The results for components without assessment data (e.g., Course Recovery) were limited to descriptive statistics.

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

The curriculum used in the Literacy for Rising Third Grade Students component for entering, firsttime third graders 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 with 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 Third Grade Students component, participated and withdrew prior to completion, and registered but did not participate.

			Participatio	n		
	Full ^a		Partial ^b		None ^c	
Total	n	%	n	%	n	%
2,998	1,619	54.0	111	3.7	1,268	42.3

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

^aStudents who completed the component. ^bStudents who participated and withdrew prior to completion. ^cStudents who initially registered but did not attend (i.e., no shows).

- Nearly 3,000 students registered for the component.
- More than half 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 2016 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 SAT-10 pretest. The outcomes were the students' composite scaled scores on the iReady Diagnostic Test administered during the fall of 2016.
 - Rising third graders who scored lower on the SAT-10 benefitted more from the program, those at or below the 28th percentile significantly so. Students' relative odds of testing on grade level, 1.18 to 1, were non-significant.
 - While differences in the date that students were given the iReady test did not influence the program's impact, the later that both participating and non-participating students took the iReady diagnostic, the lower they scored. This suggests that more struggling students tended to be tested later.

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

The Algebra I EOC remediation component is an intervention designed to prepare students who did not receive passing scores on the Next Generation Sunshine State Standards (NGSSS) or the Florida Standards Assessment (FSA) version of the Algebra 1 End of Course Assessments (EOC) to retake the test, achieve a passing grade, and meet the Algebra 1 graduation test criteria. The component focused on reviewing and strengthening specific skills. 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. It should be noted that beginning in 2016, both the NGSSS and FSA versions of the EOC were made available to students and separate analysis were conducted for each assessment.

• **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, listed separately by their spring 2016 grade level.

				Participat	ion		
Spring		Full ^a		Partial ^b		None	
Grade	Total	n	%	n	%	n	%
8	16	9	56.3	0	0.0	7	43.8
9	1,590	1,273	80.1	76	4.8	241	15.2
10	238	162	68.1	5	6.3	61	25.6
11	126	90	71.4	7	5.6	29	23.0
12	21	15	71.4	0	0	6	28.6
Total	1,991	1,549	77.8	98	4.9	344	17.3

Table 2. Participation in the Algebra I EOC Remediation Component

^aStudents who completed the component. ^bStudents who participated and withdrew prior to completion. ^cStudents who initially registered but did not attend (i.e., no shows).

- Nearly 2,000 students enrolled in the component.
- More than 80% of the participants in Grade 9 and around 70% of the participants in Grades 10-12 completed the program.
- Nearly 80% of the participants were students in Grade 9.
- Impact: Statistical regression procedures were used to estimate the impact of demographic differences, baseline achievement (as measured by the spring Algebra I EOC pretest), and program participation on the students' chances of passing the summer Algebra 1 EOC. Students who initially took the Algebra I EOC prior to spring 2015 were eligible to continue taking the Next Generation State Standards (NGSSS) version of the test as a retake opportunities beginning in summer 2015. The passing score for the spring and summer administrations of the NGSSS was an achievement level of 3 and above. Students who initially took the Florida Standards Assessment (FSA) version of the Algebra I EOC in spring 2015 were required to continue with that test.

FSA Algebra I EOC

 Pass rate: Table 3 separately lists for participants and non-participants, the total number of students, and the number and percent of students who passed the end of summer FSA Algebra I EOC exam, by EOC grade.

					Participation					
	-	Total		Par	ticipants	;	Non-P	articipa	nts	
EOC		Pass			Pas	S		Pas	S	
Grade	Total	n	%	Total	n	%	Total	n	%	
7	12	8	66.7				12	8	66.7	
8	73	52	71.2	6	0	0.0	67	52	77.6	
9	1,607	295	18.4	894	123	13.8	713	172	24.1	
10	315	69	21.9	48	11	22.9	267	58	21.7	
11	29	9	31.0	6	5	83.3	23	4	17.4	
12	3	1	33.3				3	1	33.3	
Total	2,039	434	21.3	954	139	14.6	1,085	295	27.2	

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

- A total of 14.6% of the students who completed the course, passed the end of summer FSA Algebra I EOC exam compared to 27.2% of the students who did not attend.
- Overall pass rates were much higher in Grades 7 and 8.
- **Effect:** A statistical analysis of students test scores did not find participating 9th and 10th graders to be significantly more likely to pass the FSA summer Algebra 1 EOC than their counterparts who did not take the course.
 - Ninth graders classified as gifted were more than 2.5 times more likely to pass the test than students who were not so classified.
 - No other significant effects for ninth and tenth grade students were found.
 - There were insufficient data to analyze programmatic effects at any other grade.

NGSSS Algebra I EOC

 Pass rate: Table 4 separately lists for participants and non-participants, the total number of students, and the number and percent of students who passed the end of summer NGSSS Algebra 1 EOC exam, by EOC grade.

					Participation						
	-	Total		Par	ticipants	;	Non-Pa	articipa	nts		
EOC		Pass			Pas	S		Pas	S		
Grade	Total	n	%	Total	n	%	Total	n	%		
9	3	0	0.0				3	0	0.0		
10	23	1	4.3	3	0	0.0	20	1	5.0		
11	127	22	17.3	13	2	15.4	114	20	17.5		
12	20	2	10.0				20	2	10.0		
Total	173	25	14.5	16	2	12.5	157	23	14.6		

Table 4. Pass Rates for the End of Summer Algebra I EOC/NGSSS Examination by Grade

- Only 16 students who completed the course were eligible to take the NGSSS EOC. Of those students, 12.5% passed the end of summer NGSSS Algebra I EOC exam.
- Pass rates were highest in Grade 11.
- Effect: Eleventh grade students who completed the program were not significantly more likely to pass the summer NGSSS Algebra 1 EOC posttest than their counterparts who did not take the course.

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

The Credit Recovery component provided an opportunity for middle 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. The totals do not include participation in the Algebra I remediation component.

• **Participation**. Table 5 lists the total number of courses followed by the number and percent of courses for which students registered and completed the component (i.e., entered within the first two days of summer school and did not withdraw prior to the end of summer school), registered and withdrew prior to completion, and registered but did not participate in the component.

				Com	pletion		
Summer	Courses	Ful	l _p	Р	artial ^c	Non	e ^d
Grade	Enrolled	n	%	n	%	n	%
6	528	343	62.6	47	8.6	158	28.8
7	1,728	1,146	66.3	116	6.7	466	27.0
8	1,918	1,433	74.7	127	6.6	358	18.7
Total ^a	4,194	2,922	69.7	290	6.9	982	23.4

Table 5. Participation in the Credit Recovery Component

Note. Counts are duplicated as students could have attempted multiple courses. ^aIncludes a small number of ninth graders. ^bStudents who completed the component. ^bStudents who participated and withdrew prior to completion. ^dStudents who initially registered but did not attend (i.e., no shows).

- Over 4,000 courses were attempted by students, many of whom took more than one. Over 2,900 courses were completed.
- Of the courses attempted, nearly 70% of were completed by 7th graders and nearly 80% were completed by 8th graders.
- **Course Completion**. Table 6 lists the academic grades earned during summer school by the students who completed the component and subsequently were awarded credit, by subject area.

				Final Grade							
	Number	Percent	А		E	3	C		D		
	Completed	Graded	n	%	n	%	n	%	n	%	
Language Arts	492	96.3	38	8.0	228	48.1	164	34.6	36	7.6	
Mathematics	1,088	96.6	68	6.5	326	31.0	442	42.1	193	18.4	
Science	521	97.1	65	12.8	221	43.7	196	38.7	18	3.6	
Social Studies	821	96.3	70	8.8	312	39.4	312	39.4	75	9.5	
Total	2,922	96.6	241	8.5	1,087	38.5	1,114	39.5	322	11.4	

Table 6. Academic Grades Earned by Students Who Completed the Component by Subject Area

- o Nearly all of the students who completed the courses earned grades.
- Students who took language arts and science courses earned the highest percentage of A and B grades.
- More than 45% of the students who completed the component earned grades of B or higher.

6. What are the outcomes for the iLearning on the Go component?

The iLearning on the Go component provided students access to a variety of software applications outside of the regular school setting. These applications included (a) Reading Plus and (b) a variety of Internet-based software applications accessed through the Student Portal.

• Reading Plus:

• **Usage:** Table 7 lists the number of students that used Reading Plus, the hours used by the "typical" student (50th percentile of usage), and by a "high-usage" student (95th percentile of usage) at each grade level and overall.

Table 7. R	eading Plus	s Summe	er Usage
		Perce	entiles
Grade	n	50	95
01	3	1.03	
02	40	1.17	7.02
03	146	1.34	7.50
04	235	1.74	7.98
05	83	3.25	12.63
06	56	4.52	9.91
07	54	4.37	11.09
08	50	3.10	9.07
09	45	0.65	9.11
10	35	3.42	12.31
11	29	0.62	12.54
12	6	4.32	
Total	782	2.16	9.57

- **Reading Plus** was used by nearly 150 students in Grade 3, nearly 250 students in Grade 4, and around 50 students in Grades 5 through 11. Around half of the students used the software for fewer than 2 hours, and 95% used it for fewer than 10 hours all summer.
- Impact: The iReady diagnostic assessment, administered to all students in grades K-8 in fall 2016, was designated as the outcome measure. As nearly 80% of the students who used Reading Plus during the summer subsequently attended charter schools that did not utilize the iReady diagnostic, insufficient outcome data were available to conduct an impact analysis.
- Web-based applications: This section includes Web-based applications accessible through the iLearning on the Go page that are not part of the Links to Learning suite. A complete list may be found in Table A at the end of this report with the Links to Learning applications shaded.
- **Participation:** Participation in the program was tracked by counting the total number of visits to the iLearning on the Go page of the Student Portal per sign-on. Access to Reading Plus (analyzed separately) is not included in this total. Figure 1 pictures the duplicated and unduplicated number of visits to the page during each of the days of the summer session, July 5 through August 1 includes weekends.

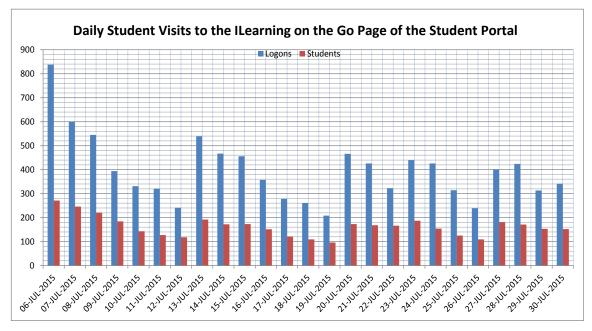


Figure 1. Daily web site visits.

- On a typical day, around 166 students visited the page between two and three times each.
- The number of students who visited were highest during the beginning of the week and lowest on weekends.

Types: The Web-based applications are categorized by subject area in Table 8.

	2	
Subject	Number	Percent
Mathematics	33	25.2
Science	29	22.1
Language Arts/Reading	26	19.8
Social Studies	21	16.0
Computer Technology	11	8.4
Arts & Music	7	5.3
Foreign Language	4	3.1
Total	131	100.0

Table 8. Number and Percent of iLearning on the Go Applications by Subject Area

• A total of 131 applications were offered to students.

• Mathematics and Science accounted for 25.2% and 22.1% of the offerings.

- Language Arts, 19.8%, and Social Studies, 16.0%, were only slightly less offered.
- Art and Music and Foreign language saw the fewest offerings.

Users: Usage of the program is broken down by grade level and subject area in Table 9.

Grade	n	%	Subject	n	%
1	337	5.6	Language Arts/Reading	2,013	33.2
2	513	8.5	Mathematics	1,888	31.1
3	751	12.4	Science	543	8.9
4	764	12.6	Arts & Music	446	7.4
5	723	11.9	Social Studies	195	3.2
6	550	9.1	Computer Technology	166	2.7
7	565	9.3	Foreign Language	110	1.8
8	633	10.4			
9	352	5.8			
10	416	6.9			
11	249	4.1			
12	215	3.5			

Table 9. Users' Access by Grade Level and Subject (n=6,208)

- The page was most often accessed by students who were in Grades 3-5 and 8.
- Language Arts/Reading and Mathematics were the subjects accessed the most often.

Most Popular: The programs accessed most often are listed in Table 10.

PBS Barney and Friends: Story time

Science Interactive

Table 10. Programs Accessed	l Most Oft	en (n=6	,208)
Title	n	%	Content
Power My Learning	1,170	19.3	Multiple
Achieve 3000	582	9.6	Language Arts/Reading
MyOn	428	7.1	Language Arts/Reading
Reflex	405	6.7	Mathematics
Gizmos	315	5.2	Science
Florida Virtual Curriculum Marketplace	204	3.4	Computer Technology
Math Jeopardy, Millionaire, Money and Math Games	181	3.0	Mathematics
Math Games	179	2.9	Mathematics
Penda Learning	179	2.9	Mathematics
FCAT 2.0 Reading	146	2.4	Language Arts/Reading
For telling a good story, explore narratives, then	116	1.9	Language Arts/Reading
Arts and Music Games	98	1.6	Arts & Music
Language Arts Games	89	1.5	Language Arts/Reading
SAT/ACT National Test Preparation	89	1.5	Mathematics
Math Interactive	74	1.2	Mathematics
Carnegie Learning	73	1.2	Mathematics
Old Fashioned Spelling Bee	72	1.2	Language Arts/Reading
Arthur - Crank It Up!	67	1.1	Arts & Music

Table 10. Programs Accessed Most Often (n=6,208)

67

67

1.1

1.1

Language Arts/Reading

Science

- Power My Learning, with 19.3% of visits across subject areas, was by far the most popular application.
- The most visited applications were those that addressed content in Language Arts and Mathematics.

7. What are the principal conclusions of this report?

Overall, the results for the Summer Programs were mixed. The finding for the Literacy for Rising Third-Grade Students program is consistent with that one found for the *Third Grade Summer Reading Camps*¹; the most struggling rising third graders were helped the most from having attended the sessions. However, Algebra I remediation did not significantly improve the odds of passing the End of Course exam for summer participants. The paucity of usage and outcome data precluded any impact assessment of the out-of-class software component, but nearly 200 students per day made used of these resources in summer 2016.

Table A. iLearning on the Go - Applications Menu

Title	URL	Grades Accessed
	Arts & Music	
Arthur - Crank It Up!	http://pbskids.org/arthur/games/crankitup/index.html	0104
Arts and Music Games	http://www.playkidsgames.com/	0206
Create a Movie Step by Step: Screenwriting; Direct	http://www.learner.org/interactives/cinema/index.html	0709
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	0206
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	0712
Power My Learning	http://powermylearning.com/directory/art	0112
The Art of M.C. Escher: Math to Create Beautiful—a	http://www.mathacademy.com/pr/minitext/escher/	1012
	Computer Technology	
Computer Science Activities	http://www.csunplugged.org/activities	1212
Computer Science for Fun	http://www.cs4fn.org/magic/	1010
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0112
Free Microsoft Software for Students	https://www.dreamspark.com/#	1012
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	0710
Learning to Code	http://www.codecademy.com/#!/exercises/0	1012
Library of Congress Collections on Technology & Science	http://www.loc.gov/topics/science.php	1010
Robo Tech Ed	http://www.roboteched.net/	1012
TED Talks	http://www.ted.com/	1111
Using Technology to Solve World's Problems	http://www.imaginecup.us/Students/Index.aspx#fbid=_ryTM-6bSLN	1012
	Foreign Language	
Brain Training Games	http://www.travlang.com/languages/	0912
Destinos - Travel the World and Learn Spanish	http://www.learner.org/series/destinos/	1012
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0112
Languages for Travelers	http://www.travlang.com/languages/	0912
	Language Arts/Reading	
Academic English	http://www.voanews.com/learningenglish/theclassroom/activities/#	1012
Achieve 3000	http://www.kidbiz3000.com	0212
Create Your Own Puzzles	http://www.discoveryeducation.com/free-puzzlemaker/?CFID=40940&CFTOKEN=28857756	1010
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	0306
Elements of Literature Using Interactive Activities	http://www.learner.org/interactives/literature/index.html	1012
Essay Writing – Interactive	http://www.readwritethink.org/files/resources/interactives/essaymap/	1012
FCAT 2.0 Reading	http://student.education2020.com	0609

	Table A, continued	
Title	URL	Grades Accessed
	Language Arts/Reading, continued	
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0109
For telling a good story, explore narratives, then	http://www.learner.org/interactives/story/index.html	0207
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	0712
Grammar Lessons for Students; Idioms; Phrasal Verb	http://www.eslcafe.com/	0812
Interactive Dictionaries: Idioms; Health; Business	http://www.voanews.com/learningenglish/theclassroom/interactive/	0712
Language Arts Games	http://www.playkidsgames.com/	02—06
Language Arts Interactive	http://www.learner.org/interactives/	0111
Literature to Go ~ Online Stories & Poems	http://etc.usf.edu/lit2go/	1111
Magazine, Website, & Book by Teens	http://www.teenink.com/	1010
MyOn	http://www.myon.com	0109
Myths, Folktales, & Fairy Tales	http://teacher.scholastic.com/writewit/mff/index.htm	1010
Old Fashioned Spelling Bee	http://www.learner.org/interactives/spelling/index.html	0211
PBS Barney and Friends: Story time	http://pbskids.org/barney/children/games/index.html	0104
SAT/ACT National Test Preparation	http://student.education2020.com	1012
Stories read by actors	http://www.Storylineonline.net	0109
Texting101	http://www.voanews.com/learningenglish/theclassroom/activities/	1010
Topic-Based English Language Practice	http://www.eslpartyland.com/students/inter.htm	1012
Young Writers Program	http://ywp.nanowrimo.org/	1012
	Mathematics	
A Treasury of Modern and Classic Puzzles	http://www.puzzles.com/PuzzlePlayground/WelcomeToPuzzlePlayground.htm	1011
A+ Math Games	http://www.aplusmath.com/Games/index.html	1012
Absurd Math: An Interactive Mathematical Problem-S	http://www.learningwave.com/abmath/	1011
American Mathematical Society's News, Publications	http://www.ams.org/profession/student	1012
Area of a triangle	http://illuminations.nctm.org/ActivityDetail.aspx?id=48	0306
Carnegie Learning	https://mdcpsportalapps2.dadeschools.net/MDCPSMainSSO/Redirector.aspx?SSOID=Carnegie	0709
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	0206
Edgenuity	https://mdcpsportalapps2.dadeschools.net/MDCPSMainSSO/redirector.aspx?ssoid=Edgenuity	1012
Everyday Math	http://www.learner.org/interactives/dailymath/index.html	1012
Explore Mathematicians' Efforts to Crack Fermat's	http://www.pbs.org/wgbh/nova/proof/	1011
Facts, Formulas, and Articles about Pi	http://personal.bgsu.edu/~carother/pi/Pi1.html	1012
FCAT 2.0 Math	http://student.education2020.com	0709

Table A, continued				
Title	URL	Grades Accessed		
Mathematics, continued				
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0712		
Interactive Geometry 3D Shapes: Surface area; volume	http://www.learner.org/interactives/	0709		
Learn Metric Conversion	http://www.learner.org/interactives/	0609		
Math Games	http://www.playkidsgames.com/	0206		
Math Interactive	http://www.learner.org/interactives	0110		
Math is Fun! ~ Games	http://www.mathsisfun.com/games/index.html	1012		
Math Jeopardy, Millionaire, Money and Math Games	http://www.math-play.com	0112		
Math Khan Academy	http://www.khanacademy.org	0711		
Math Puzzles	http://www.mathpuzzle.com/	1011		
Multiplication.com Games	http://www.multiplication.com/games	1012		
Penda Learning	https://www.pendalearning.com/?c=MIAMI	0511		
Probability	http://illuminations.nctm.org/ActivityDetail.aspx?id=79	0509		
Puzzles, Quizzes, Cool Tools, & Wonders of Math	http://www.math.com/	0710		
Reflex	http://www.reflexmath.com	0309		
Reflex Math	http://www.reflexmath.com/trial	0309		
SAT/ACT National Test Preparation	http://student.education2020.com	1012		
The Math Forum - Ask Dr. Math & Puzzles	http://mathforum.org/students/	0110		
Time Tables Game	http://www.teachingtables.co.uk/timetable/tgame1.html	1112		
Trivia Quizzes	http://eveander.com/trivia/	1012		
Volume	http://illuminations.nctm.org/ActivityDetail.aspx?id=6	0409		
	Science			
Animals, Adaptations, & the Galapagos Islands	http://teacher.scholastic.com/activities/explorations/adaptation/backyardscience.htm	1212		
Brain Games	http://news.discovery.com/human/discovery-news-games-120120.html	1012		
Build Your Own Ecosystem	http://www.learner.org/courses/envsci/interactives/ecology/	1011		
Classify Insects	http://teacher.scholastic.com/activities/explorations/bug/index.htm	1111		
Coloring Book of emergency procedures from FEMA	http://www.ready.gov/kids	0307		
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	0305		
Discover's Interactive Games, Virtual Labs, Videos	http://www.discoveryeducation.com/students/index.cfm?campaign=flyout_students##	1212		
Discovery News	http://news.discovery.com/	1012		
Earth structures: Plate tectonics, boundaries, sl	http://www.learner.org/interactives/dynamicearth/index.html	0809		
Energy Lab - Lab from The Habitable Planet: Energy	http://www.learner.org/courses/envsci/	0707		

Table A, continued

Title	URL	Grades Accessed
	Science, continued	
Environmental Choices	http://sciencenetlinks.com/media/filer/2011/10/07/powerup.swf	04—07
FCAT 2.0 Science	http://student.education2020.com	0809
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0111
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	0709
Gizmos	http://www.explorelearning.com	0312
Global Climate Change Interactive	http://climate.nasa.gov	1011
Head Rush – Myth Busters Videos & Games	http://headrush.discovery.com/#	1212
How to Improve Next Year's Environmental Record	http://www.learner.org/interactives/garbage/intro.html	0912
Learn About DNA	http://www.learner.org/interactives/dna/index.html	1012
Multimedia Physics	http://www.physicsclassroom.com/mmedia/	1212
Physics for the 21st Century	http://www.learner.org/courses/physics/	1112
Rock Cycle with Visuals	http://www.learner.org/interactives/rockcycle/index.html	0809
Science Interactive	http://www.learner.org/interactives/	0112
Science Writing	http://teacher.scholastic.com/activities/sciencewriting/	1112
Smithsonian's Science Websites & Games	http://smithsonianeducation.org/students/explore_by_topic/science_nature.html	1012
Summer Science Fun – Collection of Interactive Gam	http://sciencenetlinks.com/collections/summer-learning/	1111
The Basics of the Periodic Table	http://www.learner.org/interactives/periodic/index.html	1010
The Weather	http://www.learner.org/interactives/weather/index.html	1012
	Social Studies	
7 Wonders of the World	http://www.panoramas.dk/7-wonders/index.html	1111
Ancient History Encyclopedia	http://www.ancient.eu.com/	1012
Black History in America	http://teacher.scholastic.com/activities/bhistory/index.htm	1112
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	0306
Explore a Topic in Smithsonian's Museum of Natural	http://www.mnh.si.edu/explore.html	1012
Fantasy Stock Market	http://www.fantasystockexchange.biz/	1212
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	0109
History Interactive	http://www.learner.org/interactives/	0112
History Timeline with Hands-On Activities	http://www.learner.org/interactives/historymap/index.html	1111
Native American Cultures	http://teacher.scholastic.com/activities/explorer/native_americans/index.asp	1010
Over 100 Online Encyclopedias and	http://www.encyclopedia.com/	1111
Price of Freedom – Americans at War	http://americanhistory.si.edu/militaryhistory/exhibition/flash.html	1111

Table A, continued

Title	URL	Grades Accessed		
Social Studies, continued				
Sleuthing to Figure out Historical Events	http://www.learner.org/interactives/historical/index.html	1010		
Smithsonian's History & Culture Games	http://smithsonianeducation.org/students/explore_by_topic/history_culture.html	1112		
The Collapse of 4 Ancient Civilizations	http://www.learner.org/interactives/collapse/index.html	1112		
Travel Through Space	http://www.timewarptrio.com/	0306		
Travel to past	http://americanhistory.si.edu/onthemove/games/game2/game2.html	0409		
USA 360 Degrees Virtual Tour	http://www.panoramas.dk/US/index.html	1111		
	http://education.nationalgeographic.com/education/multimedia/interactive/maps-tools-gis-	1212		
Use Maps to Solve Problems & Help Animals	action/?ar_a=1_			
White House Interactive Tour	http://www.whitehouse.gov/about/inside-white-house/interactive-tour	1111		
Note. Power My Learning offered to grades 1-12, the	most popular of the applications is not shown, as it may have been accessed through either a dedicated	link		
	ainsso/redirector.aspx?SSOID=Clever&app_shortname=powermylearning); or through one of the follow			
separate subject area links: http://powermylearning.	com/directory/computer-programming, http://powermylearning.com/directory/language-arts,			

http://powermylearning.com/directory/math, http://powermylearning.com/directory/science, and

http://powermylearning.com/directory/social-studies.