Evaluation Matters

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Summer Programs:
An Analysis of Participation and Impact, 2015

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[i], Rising Literacy for 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. The six applications that comprise the Links to Learning suite (Reading Plus, Discovery Mathematics/Science, Gizmos Mathematics/Science, MyOn Reader, NBC Learn, and Reflex Mathematics) were 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 prior to the second day 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: Algebra 1 EOC remediation - all such students; and Literacy for Rising Third Grade Students – students who scored in the second quartile (26^{th}- 49^{th} percentile) on the Reading Comprehension Subtest of Stanford Achievement Test, Tenth Edition (SAT-10) administered in spring 2015 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 component**

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 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, first-time 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, offered to retained students (a full evaluation of this state-mandated component is available under separate cover).[i] 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 (i.e., entered within the first two days of summer school and did not withdraw prior to the end of summer school), participated and withdrew prior to completion, and registered but did not participate.

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

	Participation					
	Full[a]		Partial[b]		None[c]	
Total	n	%	n	%	n	%
2,578	1,649	64.0	108	4.2	821	31.8

[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).

- Over 2,500 students registered for the component.
- Nearly 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 2015 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' scaled scores on the iReady Diagnostic Test administered during the fall of 2015.
  - Participating students did not score significantly higher than non-participants on the iReady test.
  - Participating students were significantly (i.e., 1.25 times) less likely than non-participants to attain the minimum iReady score designated as on grade level.
  - While differences in the date that students were given the iReady test did not influence the program's impact, the later that all students took the iReady diagnostic, the more likely they were to attain the minimum score designated as on grade level.

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 earn high school credit. 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 those locations. It should be noted that beginning in 2015, both the NGSSS and FSA versions of the EOC will be made available to students and separate analysis conducted for each assessment.

- **Participation**. Table 2 lists the number and percentage of registered students who completed the Algebra I remediation component (i.e., entered within the first two days of summer school and did not withdraw prior to the end of summer school), participated and withdrew prior to completion, or registered but did not participate in the program, listed separately by their spring 2015 grade level.

Table 2. Participation in the Algebra I EOC Remediation Component

Spring Grade	Total	Participation					
		Full[a]		Partial[b]		None[d]	
		n	%	n	%	n	%
8	38	24	63.2	8	21.1	6	15.8
9	1,984	1,489	75.1	133	6.7	362	18.2
10	299	211	70.6	11	3.7	77	25.8
11	146	105	71.9	5	3.4	36	24.7
12	35	27	77.1	2	5.7	6	17.1
Total	2,502	1,856	74.2	159	6.4	487	19.5

[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).

  - Over 2,500 students enrolled in the component
  - More than 60% of the participants in Grade 8 and more than 70% of the participants in Grades 9-12 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 opportunity 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 take that test. The passing score, 489, for the spring and summer 2015 tests was established by the FLDOE by equating the preliminary scale score of that test to the NGSSS version of the test via the equipercentile linking method.

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 spring grade.

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

				Participation					
	Total			Participants			Non-Participants		
Spring		Pass			Pass			Pass	
Grade	Total	n	%	Total	n	%	Total	n	%
7	24	22	91.7	--	--	--	24	22	91.7
8	73	53	72.6	--	--	--	73	53	72.6
9	1,496	452	30.2	784	227	29.0	712	225	31.6
10	12	2	16.7	4	1	25.0	8	1	12.5
11	10	2	20.0	--	--	--	10	2	20.0
12	--	--	--	--	--	--	--	--	--
Total	1,615	531	32.9	788	228	28.9	827	303	36.6

    - Nearly one-third of the students who completed the course, passed the end of summer FSA Algebra I EOC exam.
    - Pass rates were much higher in Grades 7 and 8.
  - **Effect:** Ninth grade students were significantly (1.87 times) more likely to pass the summer FSA Algebra 1 EOC posttest than students who did not take the course.
    - The effect varied with students' gender such that females were nearly twice as likely as males to pass the test.
    - There were insufficient data to analyze the effect of the summer Algebra course for any grades other than Grade 9.

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 spring grade.

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

	Total[a]			Participation					
				Participants			Non-Participants		
Spring		Pass			Pass			Pass	
Grade	Total	n	%	Total	n	%	Total	n	%
8	9	4	44.4	--	--	--	9	4	44.4
9	78	17	21.8	33	7	21.2	45	10	22.2
10	374	55	14.7	80	16	20.0	281	39	13.9
11	178	34	19.1	25	7	28.0	153	27	17.6
12	41	3	7.3	2	0	0.0	39	3	7.7
Total[b]	695	117	16.8	140	30	21.4	552	87	15.8

[a]Includes three tenth grade partial participants who did not pass the test. [b]Includes 19 students who were not enrolled during the 2014-15 school year.

- Around one-fifth of the students who completed the course, passed the end of summer NGSSS Algebra I EOC exam.
- Pass rates were highest in Grade 8.

- **Effect:** Grade 10 and 11 students who completed the program were more likely to pass the summer NGSSS Algebra 1 EOC posttest than students who did not take the course, with significant benefits seen for tenth graders.
  - Tenth graders who completed the program were 2.36 times more likely to pass the test than students who did not take the course.
  - There were insufficient data to analyze the effect of the summer Algebra course in Grades 8, 9, and 12.

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.

Table 5. Participation in the Credit Recovery Component

Summer Grade	Courses Enrolled	Completion					
		Full[b]		Partial[c]		None[d]	
		n	%	n	%	n	%
7	1,611	1,120	69.5	116	7.2	375	23.3
8	1,940	1,540	79.4	122	6.3	278	14.3
Total[a]	3,578	2,670	74.6	243	6.8	665	18.6

Note. Counts are duplicated as students could have attempted multiple courses. [a]Includes a small number of sixth and ninth graders. [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 duplicated count of nearly 3,600 students attempted coursework. Over 2,600 of those students completed courses and were awarded credit.
- Of the students enrolled, nearly 70% of seventh graders and nearly 80% of eighth graders completed the coursework.

- **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.

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

	Number Completed	Percent Graded	Final Grade							
			A		B		C		D	
			n	%	n	%	n	%	n	%
Language Arts	516	98.4	69	13.6	258	50.8	151	29.7	23	4.5
Mathematics	1,196	99.2	101	8.5	365	30.7	533	44.9	161	13.6
Science	472	99.2	54	11.5	187	40.0	181	38.7	39	8.3
Social Studies	486	99.2	35	7.3	177	36.7	209	43.4	52	10.8
Total	2,670	99.1	259	9.8	987	37.3	1074	40.6	275	10.4

- Nearly all of the students who completed the courses earned grades.
- Students who took language arts and science courses earned the highest grades.
- Over 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) the six applications that comprise the Links to Learning suite and (b) a variety of Internet based software applications accessed through a dedicated Web page on the Student Portal.

- **Links to Learning applications:** Of the six applications (i.e., Reading Plus, Discovery Mathematics/Science, Gizmos Mathematics/Science, MyOn Reader, NBC Learn, and Reflex Mathematics), detailed usage data were available for only one, 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. Reading Plus Summer Usage

		Percentiles	
Grade	n	50	95
01	3	0.14	--
02	108	2.10	7.97
03	240	1.62	7.68
04	221	1.28	6.85
05	68	0.69	6.34
06	37	0.68	5.36
07	13	0.87	--
08	7	1.36	--
09	61	0.98	4.91
10	54	0.66	7.39
11	22	0.50	3.45
12	4	2.93	--
Total	838	1.25	6.93

        - **Reading Plus** was used by over 200 students per grade in Grades 3-4 and over 100 students in grade 2. Half of the students used the software for 1.25 hours or less all summer, and 95% used it for fewer than 7 hours all summer.
    - **Impact**: The iReady diagnostic assessment, administered to all students in grades K-8 in fall 2015 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.

- **Non-Links-to-Learning 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. Visits to the page to access one of the nine Links to Learning applications are 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 6-30, includes weekends.

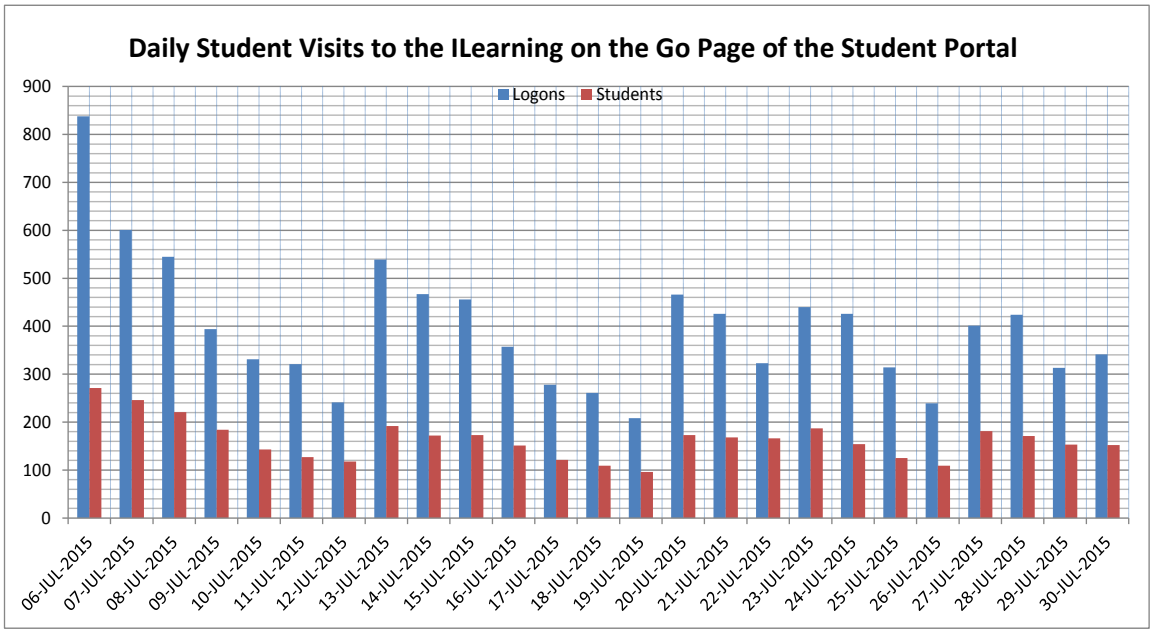

***Figure 1*. Daily web site visits.**

- 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.

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

Subject	Number	Percent
Mathematics	35	25.0
Science	35	25.0
Language Arts	26	18.6
Social Studies	22	15.7
Computer Technology	11	7.9
Art and Music	7	5.0
Foreign Language	4	2.9
Total	140	100.0

- A total of 140 applications were offered to students.
- Mathematics and Science each accounted for 25% the total.
- Language Arts, 18.6%, and Social Studies, 15.7%, were featured less often.
- 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.

Table 9. Users' Access by Grade Level and Subject (n=9,950)

Spring Grade	n	%	Subject	n	%
K	133	1.3	Mathematics	4,252	42.7
1	552	5.5	Language Arts	2,790	28.0
2	954	9.6	Science	975	9.8
3	1,213	12.2	Art and Music	812	8.2
4	958	9.6	Computer Technology	465	4.7
5	1,133	11.4	Social Studies	393	3.9
6	1,350	13.6	Foreign Language	263	2.6
7	1,474	14.8			
8	654	6.6			
9	643	6.5			
10	475	4.8			
11	410	4.1			
12	1	0.0			

- The page was most often accessed by students who were in grades 3, 5, 6, and 7 in spring 2015.
- Mathematics and Language Arts were the subjects accessed the most often.

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

Table 10. Programs Accessed Most Often (n=9,950)

Title	n	%	Content
Power My learning	1,972	19.8	Multiple
Achieve 3000	795	8.0	Reading
Reflex Math	614	6.2	Math
MyOn Reader	522	5.2	Reading
Penda Learning	435	4.4	Math
Carnegie Learning	399	4.0	Math
Gizmos	398	4.0	Science
Math Jeopardy, Millionaire, Money, etc.	388	3.9	Math
Math Games	252	2.5	Math
FCAT 2.0 Reading	219	2.2	Reading
Reflex Math	210	2.1	Math
Language Arts Games	207	2.1	Reading
For telling a good story, explore narratives, then	189	1.9	Reading
Florida Virtual Curriculum Marketplace	161	1.6	Foreign Language
Old Fashioned Spelling Bee	152	1.5	Reading
Math Interactive	140	1.4	Math
Florida Virtual Curriculum Marketplace	135	1.4	Math
Science Interactive	134	1.3	Science

- Power My Learning, with 19.8% of visits across subject areas, was by far the most popular application.
- The most visited applications addressed content in Language Arts and Mathematics.

7. What are the principal conclusions of this report?

The results for the Summer Programs indicate that the in-class reading components did not have a beneficial impact on the achievement of the students who used them. The finding for the Literacy for Rising Third Grade Students program is consistent with that found for the Third Grade Summer Reading Camps.[1] Algebra I remediation significantly improved the odds of passing the End of Course exam for participants. The paucity of usage and outcome data precluded any impact assessment of the out-of-class software programs, but nearly 200 students per day made used of these resources in summer 2015.

[i] Urdegar, S.M. (2015). *Third Grade Summer Reading Camps, 2015 evaluation*. Miami, FL: Miami-Dade County Public Schools.

Table A. ILearning on the Go - Applications Menu

Title	URL	Grades Accessed
Arts and Music		
Arthur - Crank It Up!	http://pbskids.org/arthur/games/crankitup/index.html	K - 3
Arts and Music Games	http://www.playkidsgames.com/	1 - 5
Create a Movie Step by Step: Screenwriting; Direct	http://www.learner.org/interactives/cinema/index.html	6 - 8
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	2 - 5
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	6 - 11
Power My Learning	http://powermylearning.com/directory/art	K - 11
The Art of M.C. Escher: Math to Create Beautiful	http://www.mathacademy.com/pr/minitext/escher/	9 - 11
Computers and Technology		
Computer Science Activities	http://www.csunplugged.org/activities	9 - 11
Computer Science for Fun	http://www.cs4fn.org/magic/	9 - 11
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	1 - 11
Free Microsoft Software for Students	https://www.dreamspark.com/#	9 - 11
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	6 - 10
Learning to Code	http://www.codecademy.com/#!/exercises/0	9 - 11
Library of Congress Collections on Technology	http://www.loc.gov/topics/science.php	9 - 11
Power My Learning	http://powermylearning.com/directory/computer-programming	1 - 11
Robo Tech Ed	http://www.roboteched.net/	9 - 11
TED Talks	http://www.ted.com/	9 - 11
Using Technology to Solve World's Problems	http://www.imaginecup.us/Students/Index.aspx#fbid=_ryTM-6bSLN	9 - 11
Foreign Language		
Brain Training Games	http://www.travlang.com/languages/	9 - 11
Destinos - Travel the World and Learn Spanish	http://www.learner.org/series/destinos/	9 - 11
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	K - 11
Languages for Travelers	http://www.travlang.com/languages/	9 - 11

(***table continues***)

Table A, continued

Title	URL	Grades Accessed
Language Arts		
Academic English	http://www.voanews.com/learningenglish/theclassroom/activities/#	9 - 11
Achieve 3000	http://www.kidbiz3000.com	2 - 11
Create Your Own Puzzles	http://www.discoveryeducation.com/free-puzzlemaker/?CFID=40940&CFTOKEN=28857756	9 - 10
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	2 - 5
Elements of Literature Using Interactive Activities	http://www.learner.org/interactives/literature/index.html	9 - 11
Essay Writing – Interactive	http://www.readwritethink.org/files/resources/interactives/essaymap/	9 - 11
FCAT 2.0 Reading	http://student.education2020.com	6 - 8
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	K - 11
For telling a good story, explore narratives	http://www.learner.org/interactives/story/index.html	2 - 6
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	6 - 11
Grammar Lessons for Students; Idioms; Phrasal Verb	http://www.eslcafe.com/	7 - 11
Interactive Dictionaries: Idioms; Health; Business	http://www.voanews.com/learningenglish/theclassroom/interactive/	6 - 11
Language Arts Games	http://www.playkidsgames.com/	1 - 5
Language Arts Interactive	http://www.learner.org/interactives/	K - 11
Literature to Go ~ Online Stories & Poems	http://etc.usf.edu/lit2go/	9 - 11
Magazine, Website, & Book by Teens	http://www.teenink.com/	9 - 11
MyOn	http://www.myon.com	1 - 9
Myths, Folktales, & Fairy Tales	http://teacher.scholastic.com/writewit/mff/index.htm	9 - 11
NBC Learn	http://www.nbclearn.com/portal/site/learn	K - 12
Old Fashioned Spelling Bee	http://www.learner.org/interactives/spelling/index.html	1 - 10
PBS Barney and Friends: Story time	http://pbskids.org/barney/children/games/index.html	K - 3
Power My Learning	http://powermylearning.com/directory/language-arts	K - 10
Reading Plus	https://mdcpsportalapps2.dadeschools.net/readingplusredirect/	K - 12
SAT/ACT National Test Preparation	http://student.education2020.com	9 - 11
Stories read by actors	http://www.Storylineonline.net	K - 8
Texting101	http://www.voanews.com/learningenglish/theclassroom/activities/	9 - 11
Topic-Based English Language Practice	http://www.eslpartyland.com/students/inter.htm	9 - 10
Young Writers Program	http://ywp.nanowrimo.org/	9 - 11

(***table continues***)

Table A, continued

Title	URL	Grades Accessed
Mathematics		
A Treasury of Modern and Classic Puzzles	http://www.puzzles.com/PuzzlePlayground/WelcomeToPuzzlePlayground.htm	9 - 11
A+ Math Games	http://www.aplusmath.com/Games/index.html	9 - 11
Absurd Math: An Interactive Mathematical Problem-S	http://www.learningwave.com/abmath/	9 - 11
American Mathematical Society's News, Publications	http://www.ams.org/profession/student	9 - 11
Area of a triangle	http://illuminations.nctm.org/ActivityDetail.aspx?id=48	2 - 5
Browsable Math Encyclopedia	http://www.mathacademy.com/pr/prime/index.asp	9 - 11
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	2 - 5
Everyday Math	http://www.learner.org/interactives/dailymath/index.html	9 - 11
Explore Mathematicians' Efforts to Crack Fermat's	http://www.pbs.org/wgbh/nova/proof/	9 - 11
Facts, Formulas, and Articles about Pi	http://personal.bgsu.edu/~carother/pi/Pi1.html	9 - 11
FCAT 2.0 Math	http://student.education2020.com	6 - 8
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	6 - 11
Interactive Geometry 3D Shapes: Surface area, etc.	http://www.learner.org/interactives/	6 - 8
Learn Metric Conversion	http://www.learner.org/interactives/	6 - 8
Math Games	http://www.playkidsgames.com/	1 - 5
Math Interactive	http://www.learner.org/interactives	K - 11
Math is Fun! ~ Games	http://www.mathsisfun.com/games/index.html	9 - 11
Math Jeopardy, Millionaire, Money and Math Games	http://www.math-play.com	K - 11
Math Khan Academy	http://www.khanacademy.org	6 - 11
Math Puzzles	http://www.mathpuzzle.com/	9 - 11
Multiplication.com Games	http://www.multiplication.com/games	9 - 11
Penda Learning	https://www.pendalearning.com/?c=MIAMI	4 - 10
Power My Learning	http://powermylearning.com/directory/math	K - 11
Probability	http://illuminations.nctm.org/ActivityDetail.aspx?id=79	3 - 8
Puzzles, Quizzes, Cool Tools, & Wonders of Math	http://www.math.com/	6 - 11
Reflex	http://www.reflexmath.com	3 - 8

(***table continues***)

Table A, continued

Title	URL	Grades Accessed
Mathematics, continued		
Reflex Math	http://www.reflexmath.com/trial	3 - 8
SAT/ACT National Test Preparation	http://student.education2020.com	9 - 11
The Math Forum - Ask Dr. Math & Puzzles	http://mathforum.org/students/	1 - 11
Time Tables Game	http://www.teachingtables.co.uk/timetable/tgame1.html	9 - 11
Trivia Quizzes	http://eveander.com/trivia/	9 - 11
Use of Math behind Polls and in the News	http://www.learner.org/interactives/statistics/index.html	11 - 11
Volume	http://illuminations.nctm.org/ActivityDetail.aspx?id=6	3 - 8
Science		
Journey Into Space: Gravity, Orbits, & Collision	http://teacher.scholastic.com/activities/explorations/space/	9 - 11
Amusement Park physics: Design Your Own Coaster	http://www.learner.org/interactives/parkphysics/index.html	9 - 10
Animals, Adaptations, & the Galapagos Islands	http://teacher.scholastic.com/activities/explorations/adaptation/backyardscience.htm	10 - 11
Brain Games	http://news.discovery.com/human/discovery-news-games-120120.html	9 - 11
Build Your Own Ecosystem	http://www.learner.org/courses/envsci/interactives/ecology/	9 - 11
Coloring Book of emergency procedures from FEMA	http://www.ready.gov/kids	2 - 6
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	2 - 5
Discover's Interactive Games, Virtual Labs, Videos	http://www.discoveryeducation.com/students/index.cfm?campaign=flyout_students##	9 - 11
Earth structures: Plate tectonics, boundaries	http://www.learner.org/interactives/dynamicearth/index.html	7 - 9
Energy Lab - Lab from The Habitable Planet: Energy	http://www.learner.org/courses/envsci/	6 - 11
Environmental Choices	http://sciencenetlinks.com/media/filer/2011/10/07/powerup.swf	3 - 8
Eyes on Earth – Travel in Time, Explore Satellite	http://climate.nasa.gov/Eyes/	9 - 11
Family Guide to Mars	http://www.marsquestonline.org/resources/familyguide/index.html	9 - 10
FCAT 2.0 Science	http://student.education2020.com	6 - 8
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	1 - 10
Fun and Educational Website for Teens	http://www.ipl.org/div/teen/	6 - 11
Gizmos	http://www.explorelearning.com	3 - 11
Global Climate Change Interactive	http://climate.nasa.gov	11 - 11
Head Rush – Myth Busters Videos & Games	http://headrush.discovery.com/#	9 - 10

(***table continues***)

Table A, continued

Title	URL	Grades Accessed
Science, continued		
How to Improve Next Year's Environmental Record	http://www.learner.org/interactives/garbage/intro.html	9 - 11
Interactive Physics Simulations	http://lectureonline.cl.msu.edu/~mmp/applist/applets.htm	9 - 10
Learn About DNA	http://www.learner.org/interactives/dna/index.html	9 - 11
Multimedia Physics	http://www.physicsclassroom.com/mmedia/	10 - 10
Physics for the 21st Century	http://www.learner.org/courses/physics/	10 - 11
Power My Learning	http://powermylearning.com/directory/science	K - 9
Predicting Volcanoes and Earthquakes	http://www.learner.org/interactives/volcanoes/index.html	9 - 11
Rock Cycle with Visuals	http://www.learner.org/interactives/rockcycle/index.html	7 - 8
Science in Latin America	http://lanic.utexas.edu/subject/science/	9 - 10
Science Interactive	http://www.learner.org/interactives/	K - 11
Science Writing	http://teacher.scholastic.com/activities/sciencewriting/	11 - 11
SciMorph & SciWorld	http://6007.stem.org.uk/index.html#/home	9 - 10
Smithsonian's Science Websites & Games	http://smithsonianeducation.org/students/explore_by_topic/science_nature.html	9 - 11
Summer Science Fun – Collection of Interactive Gam	http://sciencenetlinks.com/collections/summer-learning/	11 - 11
The Basics of the Periodic Table	http://www.learner.org/interactives/periodic/index.html	9 - 11
Virtual Lab on Chemical Bonds	http://www.glencoe.com/sites/common_assets/science/virtual_labs/E20/E20.html	9 - 10
Social Studies		
7 Wonders of the World	http://www.panoramas.dk/7-wonders/index.html	10 - 11
Ancient History Encyclopedia	http://www.ancient.eu.com/	9 - 11
Black History in America	http://teacher.scholastic.com/activities/bhistory/index.htm	10 - 11
Curious George Games, Printables, Video Clips	http://pbskids.org/curiousgeorge/games/#1	2 - 5
Explore a Topic in Smithsonian's Museum of Natural	http://www.mnh.si.edu/explore.html	9 - 10
Fantasy Stock Market	http://www.fantasystockexchange.biz/	9 - 11
Florida Virtual Curriculum Marketplace	http://www.learning.com/floridavcm/	2 - 9
History Interactive	http://www.learner.org/interactives/	K - 10
History of the Renaissance	http://www.learner.org/interactives/renaissance/index.html	10 - 10
History Timeline with Hands-On Activities	http://www.learner.org/interactives/historymap/index.html	9 - 11

(***table continues***)

Table A, continued

Title	URL	Grades Accessed
Social Studies, continued		
Map Maker Interactive	http://education.nationalgeographic.com/education/mapping/interactive-map/?ar_a=1	9 - 9
Native American Cultures	http://teacher.scholastic.com/activities/explorer/native_americans/index.asp	10 - 10
Over 100 Online Encyclopedias and	http://www.encyclopedia.com/	10 - 11
Power My Learning	http://powermylearning.com/directory/social-studies	K - 10
Price of Freedom – Americans at War	http://americanhistory.si.edu/militaryhistory/exhibition/flash.html	9 - 10
Sleuthing to Figure out Historical Events	http://www.learner.org/interactives/historical/index.html	8 - 11
Smithsonian's History & Culture Games	http://smithsonianeducation.org/students/explore_by_topic/history_culture.html	9 - 11
Smithsonian's History Explorer	(see footnote [a] at bottom of table)	11 - 11
The Collapse of 4 Ancient Civilizations	http://www.learner.org/interactives/collapse/index.html	9 - 10
Travel Through Space	http://www.timewarptrio.com/	2 - 5
Travel to past	http://americanhistory.si.edu/onthemove/games/game2/game2.html	3 - 8
USA 360 Degrees Virtual Tour	http://www.panoramas.dk/US/index.html	10 - 10
Carnegie Learning	https://mdcpsportalapps2.dadeschools.net/MDCPSMainSSO/Redirector.aspx?SSOID=Carnegie	6 - 8
Edgenuity	https://mdcpsportalapps2.dadeschools.net/MDCPSMainSSO/redirector.aspx?ssoid=Edgenuity	9 - 12
Power My learning	(see footnote [b] at bottom of table)	K - 11

Note. Links to Learning applications are shaded.

[a]http://historyexplorer.americanhistory.si.edu/search/?query=&search_origin=search&grade=9-12%253b&resource=2%253b&subjects=246%253b247%253b&session=801ba4ba41344f78b3a6fd26d86508e0
[b]https://mdcpsportalapps2.dadeschools.net/mdcpsmainsso/redirector.aspx?SSOID=Clever&app_shortname=powermylearning