



## Student Achievement with Study Island

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## Study at a Glance

- The study examines the effectiveness of Study Island on mathematics and reading achievement in 327 classrooms from 77 schools across 12 districts in eight states over a multiyear period.
- Results indicate that classrooms using Study Island experience growth in learning at a rate significantly higher than district and state averages.
- Overall, 77% of classes using Study Island exhibited achievement gains from the prior year in math; 70% of classes realized gains in reading.
- In classrooms that had previously not implemented Study Island, 87% experienced achievement gains in math the first year. In reading, 78% of first-time Study Island classes saw learning gains.
- Classrooms using Study Island experienced academic growth gains up to 5 times greater than the corresponding rate of district growth during the study period.

## Results at a Glance

*Changes in Proficiency Rates from 2010 to 2011 for Study Island Classrooms*

Implementation Description	Total State Gain (%)	Total District Gain (%)	Class Gain (%)	Class vs. District Avg. Growth
				Difference (%)
Math				
Classes using Study Island both years	2	2	6	4
Classes using Study Island for the first time in 2011	2	1	5	4
Classes not using Study Island in 2011	1	3	-5	-8
Reading				
Classes using Study Island both years	2	2	5	3
Classes using Study Island for the first time in 2011	1	2	5	3
Classes not using Study Island in 2011	2	4	-4	-8

## Overview

This study documents the effectiveness of Study Island, an award-winning instructional and curricular solution, specifically addressing the amount of growth over time in student achievement for schools using the solution. Analyses include comparisons of elementary (grades 2 through 6) achievement for classes using various implementation configurations of Study Island. The comparisons examine changes in the rate of student performance across multiple years against district and state averages and the impact of program usage in low-performing schools. Results show that schools implementing Study Island are making dramatic and significant progress in student learning and achievement. Overall, 75% of classes using Study Island during the study period exhibited gains in the percentage of students meeting respective state proficiency targets in math and reading. The average increase in proficiency for these classes was 9%. In math, 87% of classes in the study sample implementing Study Island for the first time in 2011 observed gains over their 2010 proficiency rates, with increases of 5% on average. In reading, 78% of first-time Study Island classrooms experienced proficiency gains of 5%, on average. This study details Study Island as a highly effective solution for increasing student learning.

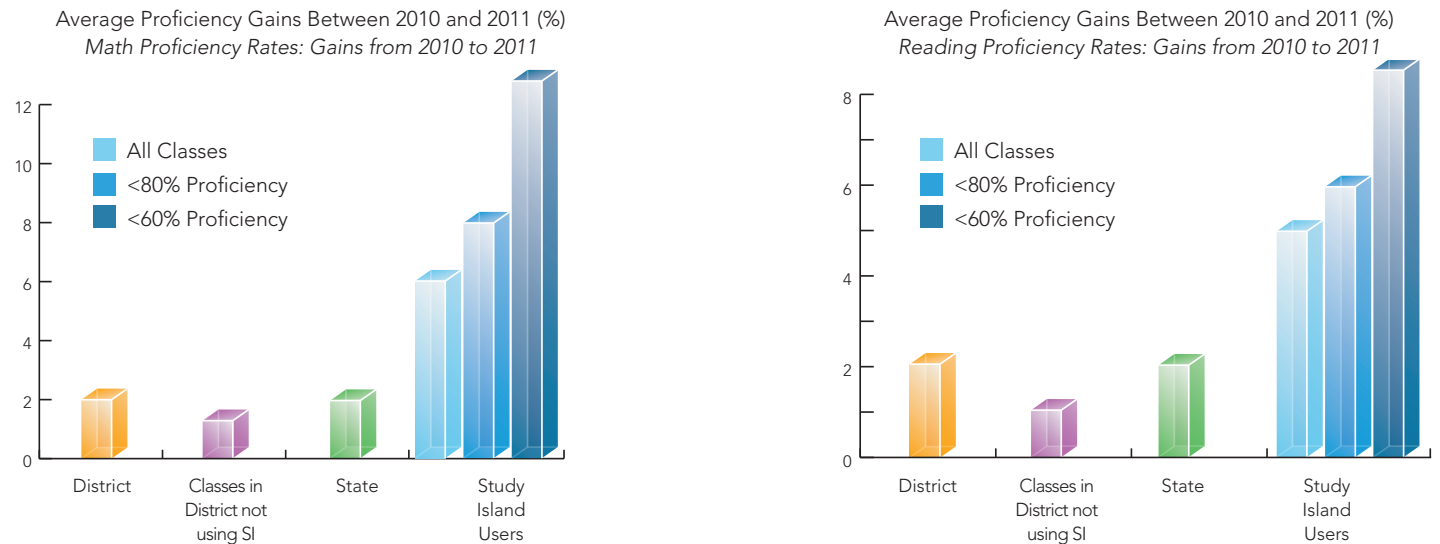
## Results

### Effect of Implementing Study Island on Student Achievement

This study evaluated the achievement gains on state assessments in mathematics and reading made by grade-level classrooms implementing Study Island during the 2009–10 and 2010–11 academic years. For all classes in the study sample using Study Island during both years, the average gain in the percentage of students meeting or exceeding respective state proficiency standards was 6% in math and 5% in reading (table 1). The gains realized by schools implementing Study Island were approximately triple the average district gain in math (6% versus 2%) and reading (5% versus 2%). Comparisons within districts between classes using Study Island and those not using this solution were also evaluated. Figure 1 illustrates the gains made by classes using Study Island relative to district and state gains over the two-year study period.

For lower-performing schools, the gains observed by Study Island classrooms were even more pronounced (table 1). For classes in grades 2 through 6 with less than 60% of students meeting state proficiency targets in 2010, the average gain in 2011 in math was 13% and the average gain in reading was 9% (figure 1). For classes with less than 80% of students meeting state proficiency levels in 2010, the average gain in math was 8%, while the average gain in reading was 6% (figure 1).

**Figure 1. 2011 Average Proficiency Gains for Classes in Study Sample**



Results from this analysis illustrate that classes in math and reading implementing Study Island experienced gains in proficiency rates that outpaced district and state averages substantially and that this increase was significantly larger for low-performing schools.

### Effect of Reducing Study Island Subscription on Student Achievement

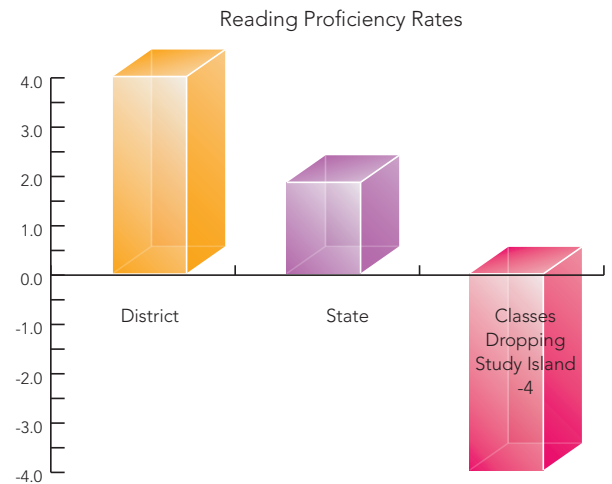
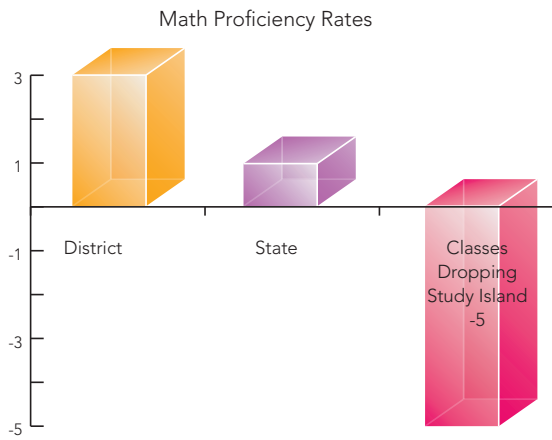
The current study focuses on the impact of implementing Study Island on classroom achievement. But what happens to student learning outcomes in classes when a school does not renew a solution subscription that was used the previous academic year? The table below details the change in average proficiency rates for classes in the study sample that did not renew their Study Island subscription in 2011. In math, classes that used Study Island in 2010 but did not implement the

solution in 2011 saw a decrease in proficiency rates of 5%, while overall district proficiency rates increased 3%. In reading, proficiency rates from 2010 plummeted 4% in classes that had previously implemented Study Island, with overall district proficiency rates increasing 4%. The figures below illustrate the negative impact observed in the study sample on student proficiency.

### Average Change in Proficiency Rates for Classes Reducing Solution Subscriptions in 2011

Content Area	Average Change in Proficiency Rates		
	District	State	Class
Math	3	1	-5
Reading	4	2	-4

### Effect of Reducing Study Island Subscription on Student Achievement



## Methodology

### Study Sample

To evaluate the impact of Study Island on student achievement, a sample of schools implementing these programs during the 2009–10 and 2010–11 academic years was randomly selected. The study used publicly available achievement data published on respective state department of education websites. Inclusion in the analysis sample was contingent on a complete record of grade-level results from state testing in the format of the percentage of students meeting proficiency levels from each school. A total of 327 grade-level classrooms (grades 2 through 6) from 77 schools across 12 districts from eight states composed the study sample.

## Study Sample

State	2011 District Demographic Profile				
	Schools (N)	Students (N)	Minority (%)	LEP (%)	Econ Dis (%)
California district	4	>20,000	66	13	51
California district	5	>9,000	81	36	74
Georgia district	17	>150,000	68	16	52
Illinois district	1	>6,000	31	6	53
Kansas district	4	>45,000	63	19	74
Kansas district	5	>10,000	28	7	33
New Jersey district	12	>16,000	20	1	10
New Jersey district	11	>10,000	9	0	10
New Jersey district	4	>8,000	98	12	65
Pennsylvania district	9	>75,000	86	8	84
Tennessee district	5	>7,000	8	1	68
Texas district	4	>14,000	54	6	59

The 327 classrooms included in the study sample all implemented Study Island at some point during the study period. This study focused on the effect of the Study Island on student achievement, examining the learning gains of students across a multi-year period.

### Analysis

This study quantified changes in achievement between groups based on implementation configurations of Study Island during the study period. Using publicly available results from state testing regarding the percentage of students meeting proficiency levels, the change in the percentage of students meeting standards in 2009–10 to 2010–11 was compared to the percentage meeting the standards in 2010–2011 to determine the amount of growth in the percentage of students meeting proficiency standards.

Due to the inherent nature of descriptive analysis using extant aggregate data, limitations exist with regard to the conclusions that one can draw from the study analyses. Without a true experimental design that controls for confounding factors and examines data at a student level, other variables may be interacting with those of interest to produce the observed results. To enhance the interpretation and generalizability of this study, schools in multiple states, grade levels, content areas, and learning environments were selected at random for inclusion in the analyses. The results of these analyses, therefore, can be evaluated descriptively to determine whether overarching patterns exist within the data that can support the overall effectiveness of the Study Island learning solution.

## Study Island Overview

Study Island is a Web-based standards-mastery program that combines highly specific and dynamic content with real-time reporting to create a customized assessment, diagnostic, and instructional program based on each state’s standards. The content of the Study Island program is unique to each state and provides assessment and skill practice in all major subject areas in both tested and untested grade levels.

During program implementation, students answer a customizable set of questions that correspond to a state's standards and learning objectives. If students answer a question incorrectly, the program provides immediate feedback and opportunities for remediation and further learning. The Study Island system also uses adaptive testing technology to create individualized learning paths for each student, cycling students down, as needed, to lower levels of practice in skill areas that are building blocks for more difficult skills. This allows students the opportunity to practice continually, build their skills until they reach mastery level for each standard, and demonstrate proficiency at state-required levels. The Study Island program also uses motivational tools such as gaming and student-controllable instructional sequences to engage students and provide students with autonomy over their learning environment.

Through a comprehensive system of assessment and instructional practice tools, Study Island functions as both an instructional program and a progress-monitoring tool, providing instructors with ongoing and in-depth feedback regarding student progress toward mastery of content standards. Educators can use the system as a stand-alone tutorial program or as a supplement to their classroom curriculum. The flexible nature of the program creates a personalized learning experience for each student, helping instructors to individualize and differentiate instruction to meet the needs of all students and target remediation to the areas that are most critical. The program's Web-based platform creates a learning environment that is accessible from any computer connected to the Internet, allowing students to practice skills at school and at home. Through its interactive and flexible instructional platform, Study Island provides engaging, ongoing practice and remediation to help students meet their required standards in all major content areas.

## Conclusion

The research evidence documented in this study regarding Study Island all points in the same direction: Students in classrooms using this solution exhibit significantly greater achievement gains compared with overall district and state growth rates. Using this powerful instructional tool in classrooms resulted in gains that were, on average, three times greater than corresponding district averages. For schools with the most acute instructional needs, the achievement gains were even more pronounced as Study Island users in low-performing schools achieved rates of growth that were substantially greater than nonusers within their district. Conversely, classes in schools that did not renew their Study Island subscription experienced deep declines in proficiency rates in both math and reading, while overall district and state proficiency rates increased during the same period.

