

# Florida Math Outcomes Analysis 2013/14

**Grade Levels: 3, 4, 5**  
**ST Math Program: Gen-4**  
**Analysis Type: One-Year**  
**Treatment-Year: 2013/14**  
**Baseline-Year: 2012/13**

**Sepehr Akhavan**  
**MIND** Research Institute  
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### **Abstract**

This analysis covers all grades using ST Math in Florida in 2013/14 for the first time. It identifies those grades with nominal of better implementation of the ST Math program, and matches them to randomly selected, similar math-performance, comparison grades. The nominal ST Math users are an aggregation of 39 grades 3, 4, and 5 at 26 schools. They were matched to 117 similar, randomly selected control grades at 115 schools never using ST Math. Grade-wise growth in math proficiency was evaluated (i.e. growth in same grade, same school, from 2012/13 to 2013/14) on the FCAT 2.0 proficiency levels and scale scores. Grades 3, 4, and 5 aggregated showed a marginally significant ( $p = 0.10$ ) 3.8 points of growth in FCAT 2.0 Level 3 or above for ST Math users, compared to 0.3 points for comparison grades.

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# 1 Introduction

## 1.1 Background

This is a quasi-experimental analysis at the grade-mean level. Entire grades represent the units of analysis, and outcome measures are the 1-year changes in grade-mean FCAT 2.0 Level 3 or above percentages. The treatment grades used the ST Math program for 1 year, beginning in the 2013/14 school year. The control grades were selected to have similar math attributes to the treatment grades during the baseline year (2012/13), and did not use ST Math in 2013/14. The treatment grades' selection pool was all schools using ST Math in grades 3, 4, and 5 in Florida. The control grades' pool was all schools not using ST Math in grades 3, 4, and 5 in Florida.

## 1.2 Program Description

The ST Math program is a supplemental math program covering grade-level Florida math standards. The ST Math content consists of visual representations of math standards, concepts, and procedures, presented to students as "Puzzles" of virtual manipulatives, with which they interact to pose solutions. Each time the student poses a solution, the computer visually animates the Puzzle, diagram, or symbols to show why the posed solution correctly solves, or why it does not solve, the math problem (puzzle). The Puzzles are arranged into sequential groups, called "Levels". To proceed to the next Level in sequence, the student needs to master his/her current Level. Mastering a Level requires solving 100% of the math problems, or Puzzles correctly. In this way, the program is self-paced. Students must correctly solve approximately 4-12 Puzzles, with only 1 failure and retry allowed, to proceed. Levels are sequenced together into Games and, again, the student must master each Game to get to the next Game in sequence. Games are sequenced into "Learning Objectives" (e.g. 'Fractions Concepts'). The ST Math curriculum of approximately 20-25 Learning Objectives can be rearranged in a year-long, grade-level syllabus to match district math pacing through the school year.

The Puzzles typically start with concrete representations of the math, without abstract symbols, math vocabulary, or even English words. Gradually, through subsequent Levels or Games, abstractions are introduced. For example, a Puzzle might start with "n" green blocks on the screen, and then at a subsequent Level may represent the quantity with the numeral for "n" (no green blocks anymore). In this way, three things are accomplished: i) language proficiency prerequisites to engage with the program are minimal, ii) non-mathematical distractions (e.g. back-stories for word problems) are minimized or eliminated – thereby reducing load on working memory, and iii) the actual math in the problem can be represented clearly, simply, and unambiguously.

Besides the self-paced progress made by students in their one-to-one environment, the program is designed to be referenced by teachers during their regular math instruction. It is supplemental to core or basal math instruction and instructional materials. As the great majority of grade-level math standards are covered in the ST Math digital curriculum, completion of 100% of the entire ST Math curriculum (i.e. completing every Game) is required to cover all grade-level math standards.

To achieve nominal progress through the program, there is a time-on-task requirement. MIND Research Institute has found that application of adequate time-on-task is generally sufficient to get virtually all students to make sufficient progress through the program. Students are recommended to use the program in school for at least two 45-minute sessions per week, or 90 minutes per week, over about 35 weeks. Analyses of ST Math usage have shown that consistently following this schedule throughout the school year is usually sufficient to achieve 50% or more Progress through

ST Math content. Progress is a percentage of ST Math content coverage, and is defined as Levels completed by the student, divided by the total number of Levels in the curriculum. In addition, MIND’s historical analyses have shown that it is necessary to complete at least 50% of the program in order to expect significantly higher performance compared to non-users.

## 2 Data Collection

Since this analysis uses grades as the unit of analysis, and states publish grade-mean state standardized test scores, the data for student math outcomes is collected from each state education agency’s research files (retrieved from state websites). When school-level demographic data is also readily available from the state website, it is also collected. The treatment students use ST Math student accounts served by MIND. Student ST Math usage data is aggregated to grade-level means by MIND.

### 2.1 Proficiency Levels Definition

The following (Table 1) are Florida’s proficiency level descriptions:

Proficiency Level	State Proficiency Level Name
L1	Level 1
L2	Level 2
L3	Level 3
L4	Level 4
L5	Level 5

Table 1: Proficiency Level Naming

### 2.2 Treatment Grades Pool and Selection

The Treatment grades pool originated with all schools and grades using ST Math in Florida. From these schools, every grade that had used the ST Math program only for the year 2013/14 was identified. They comprise the Treatment grades pool for this evaluation of 1 year usage.

Because the analysis uses grade-mean data, such as grade-mean scale scores or grade-mean proficiency level percentages, it is necessary that the program also be a grade-wide treatment, with the great majority of students in treatment. Otherwise, the grade-means reported by the state of 100% of *tested* students would not be valid measures of a smaller fraction of *treatment* students. MIND’s site implementation requirement is that an entire grade, including all teachers and all classes within that grade, use the ST Math program. We validate how closely this is the case for each individual treatment grade by comparing the number of ST Math student accounts at a grade level to the Florida’s reported enrollment at that grade level. We discard from the Treatment pool any grade with a ratio of ST Math student accounts to reported grade enrollment lower than 85%.

Furthermore, the outcomes measure is a summative year-end test, i.e. Florida’s standardized math assessment (FCAT 2.0). The math assessment thus covers all the math standards for that entire grade level. Meanwhile, the ST Math program curriculum (arranged into Learning Objectives) is also aligned to Florida math standards. To infer that the ST Math content is having a valid

effect on student outcomes on the summative assessment, we discard any grade with grade-mean of ST Math Progress for its students lower than 50% by year-end.

Progress is a percentage, and is defined as Levels completed by the student, divided by the total number of Levels in the grade-level curriculum. Note that student achievement of at least 50% progress in ST Math is accomplished primarily by teacher assignment of computer session time to students. With sufficient time on task, students make progress. The program helps them self-pace through providing real-time informative feedback for each puzzle.

### 2.3 Control Grades Pool and Selection

The control grades are randomly selected from a control pool of schools in Florida. Though they are randomly selected, they are also matched to be similar to the Treatment grades' math attributes during the baseline 2012/13 year. The matched math attributes include scale score and student percentages at each math proficiency level.

In order to mitigate the risk of randomly picking an outlier set of Control grades, a Monte Carlo approach is used to perform many random picks. The control pool's size is large enough that there are many possible "picks" of closely matched control grades.

Dozens, or up to hundreds, of randomly matched picks are made and sets of matched control grades are generated. For each set, the math growth of the potential control set is evaluated. Some picked sets have high average math growth, some have low average math growth. From the set of all picks, a median pick is chosen. This avoids either an unlikely overestimate, or underestimate, of the Control grades' growth.

## 3 Data Analysis

The set of all schools and grades using ST Math in Florida is evaluated for Enrollment percentage and Progress percentage parameters. A filtered Treatment set (TRT) of all ST Math grades with  $\geq 85\%$  Enrollment and  $\geq 50\%$  Progress is identified. State math assessment data is tabulated. A matching set of Control grades based on baseline year state math assessment is selected.

Changes in math performance, i.e. the difference in math performance of a grade from a baseline year to the final year, are evaluated and tabulated. Statistical tests of the significance of the difference in math performance changes between Treatment grades and Control grades are performed. Finally, after all this analysis has been performed on a grade-aggregated basis, a grade-by-grade disaggregation is performed.



### 3.1 Final Treatment and Control

#### 3.1.1 ST Math Grade-Aggregated Implementation ( $\geq 85\%$ Enrollment Grades Only)

**ST Math Percent Grade Mean Progress Distribution – 2013/14**

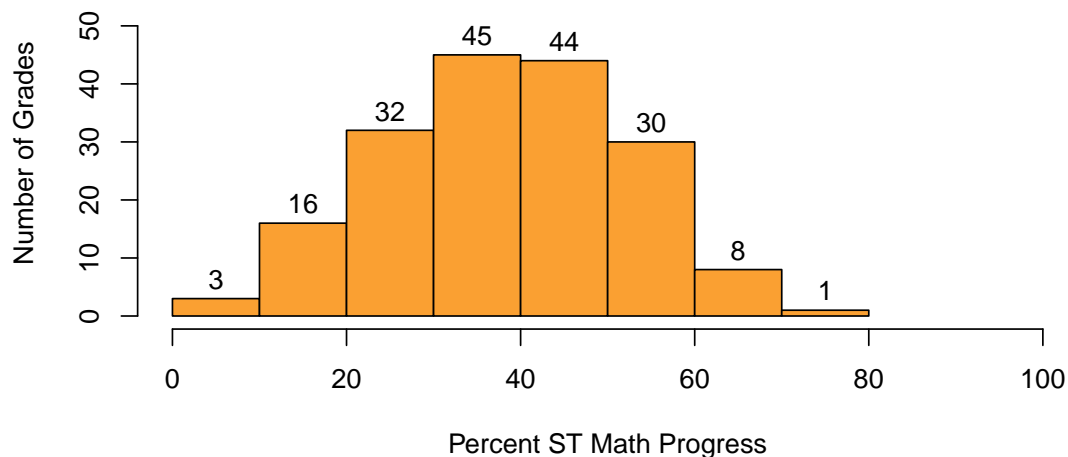


Figure 1: Histogram of ST Math Percent Progress for  $\geq 85\%$  Enrollment Grades 2013/14

For all ST Math grades with Enrollment  $\geq 85\%$ , Figure 1 shows the frequency distribution of grade-average Progress percentage through the program. Note that we will only be using grades with  $\geq 50\%$  Progress as the Treatment Group.

Table 2 provides some descriptive statistics of the Progress distribution. Table 3 shows the number of remaining treatment grades after applying enrollment and progress filters.

	Min.	Max.	Average	S.D.
ST Math % Progress	7.9	76.5	38.2	13.8

Table 2: Descriptive Statistics of ST Math Percent Progress for  $\geq 85\%$  Enrollment Grades

Grades with $\geq 85\%$ Enrollment:	178
Grades with in addition $\geq 50\%$ Progress:	39

Table 3: Number of ST Math Grades with  $\geq 85\%$  Enrollment and with  $\geq 50\%$  percent progress

### 3.1.2 Filtering Treatment and Controls

Table 4 shows the total number of grades in the Treatment pool, the number of grades that exceeded the 85% Enrollment figure, and also the 50% Progress filter. Other rows in the table indicate counts of numbers of students (2013/14 from state testing count) and counts of number of schools represented. The number of matched Control (CTRL) grades, students, and schools is also shown.

	Grade 3	Grade 4	Grade 5	Total
ST Math Using Grades	61	59	59	179
ST Math Using Schools	61	59	59	62
ST Math Students	5849	5680	5478	17007
ST Math Grades (Enroll $\geq$ 85%)	61	59	58	178
TRT Grades (Enroll $\geq$ 85% & Prog $\geq$ 50%)	13	10	16	39
TRT Schools (Enroll $\geq$ 85% & Prog $\geq$ 50%)	13	10	16	26
TRT Students (Enroll $\geq$ 85% & Prog $\geq$ 50%)	1218	923	1517	3658
CTRL Grades	39	30	48	117
CTRL Schools	39	30	47	115
CTRL Students	4031	3121	3967	11119

Table 4: Treatment Pool Filtering and Controls: Counts of Grades, Schools, and Students

### 3.1.3 Match of Controls to Treatment

Figure 2 shows the density plot of the baseline FCAT 2.0 Math scale scores (left plot) and baseline percent students at FCAT 2.0 Level 3 or above (right plot) for treatment grades overlaid on control grades, showing the closeness of the match obtained between Treatment and Control sets of grades in the baseline year, 2012/13.

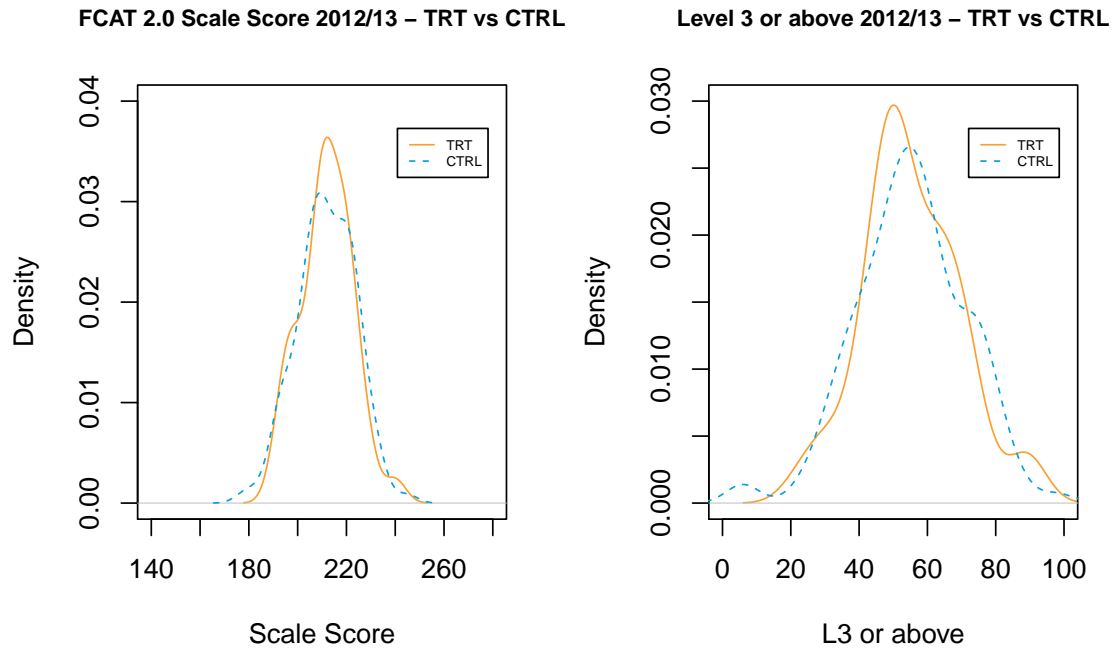


Figure 2: Baseline Year Density Plot Showing Match between TRT and CTRL - 2012/13

### 3.2 Grade-Aggregated Analysis

Table 5 below shows for both the Treatment (TRT) and Control (CTRL) sets of grades the aggregation across grades of proficiency level distributions. The far right column also shows the average ST Math Progress for the TRT set.

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3_or_above	ST Math Per Prog.
TRT.12.13	39	26	3745	211.9	19.13	25.59	29.41	16.62	9.26	55.28	-
TRT.13.14	-	-	3658	213.5	18.18	22.56	28.79	20.00	10.28	59.08	56.57
TRT.Delta	-	-	-	1.7	-0.95	-3.03	-0.62	3.38	1.03	3.79	-
CTRL.12.13	117	115	10847	211.7	19.44	25.51	29.19	16.79	9.08	55.06	-
CTRL.13.14	-	-	11119	211.8	19.78	24.85	28.75	17.50	9.12	55.37	-
CTRL.Delta	-	-	-	0.1	0.34	-0.66	-0.44	0.70	0.04	0.31	-

Table 5: Yearly Math Proficiency and Counts for TRT and CTRL Grade-Aggregated Datasets

The following chart (Figure 3) shows the changes in percentage of students at each math proficiency level for the grade-aggregated Treatment and Control sets (TRT.delta and CTRL.delta).

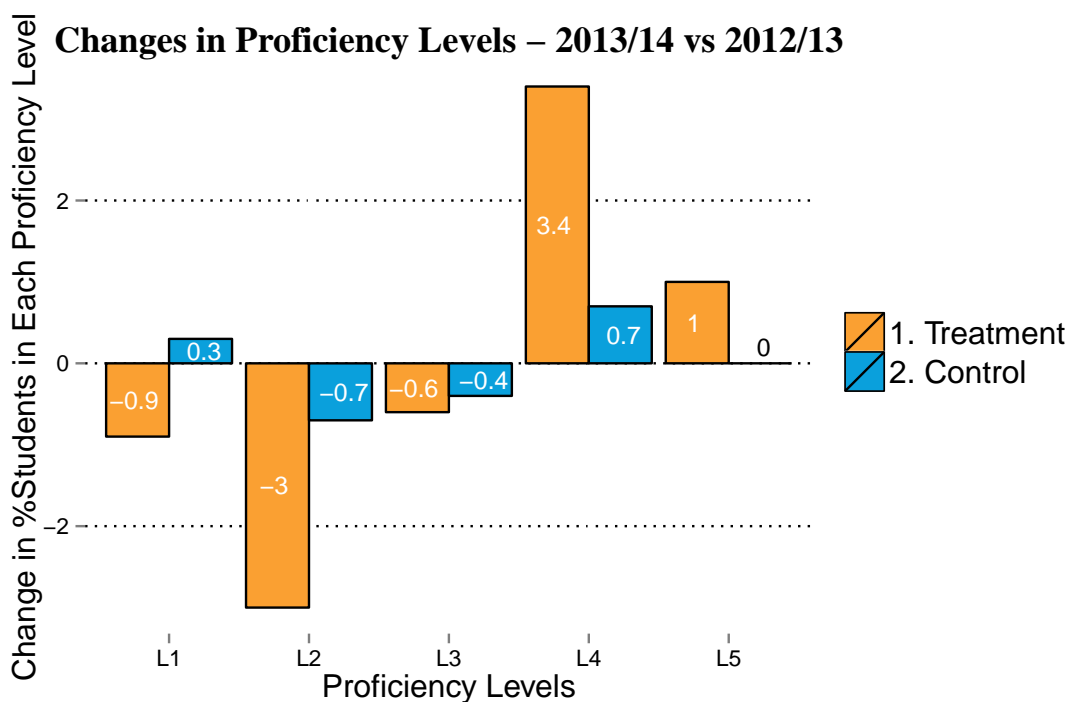


Figure 3: Change between 2012/13 and 2013/14 at each Proficiency Level for Grade-Aggregated TRT and CTRL Datasets

Similarly, Figure 4 shows the changes in FCAT 2.0 Math Scale Scores and changes in percent of students at FCAT 2.0 Level 3 or above for the grade-aggregated Treatment and Control sets.

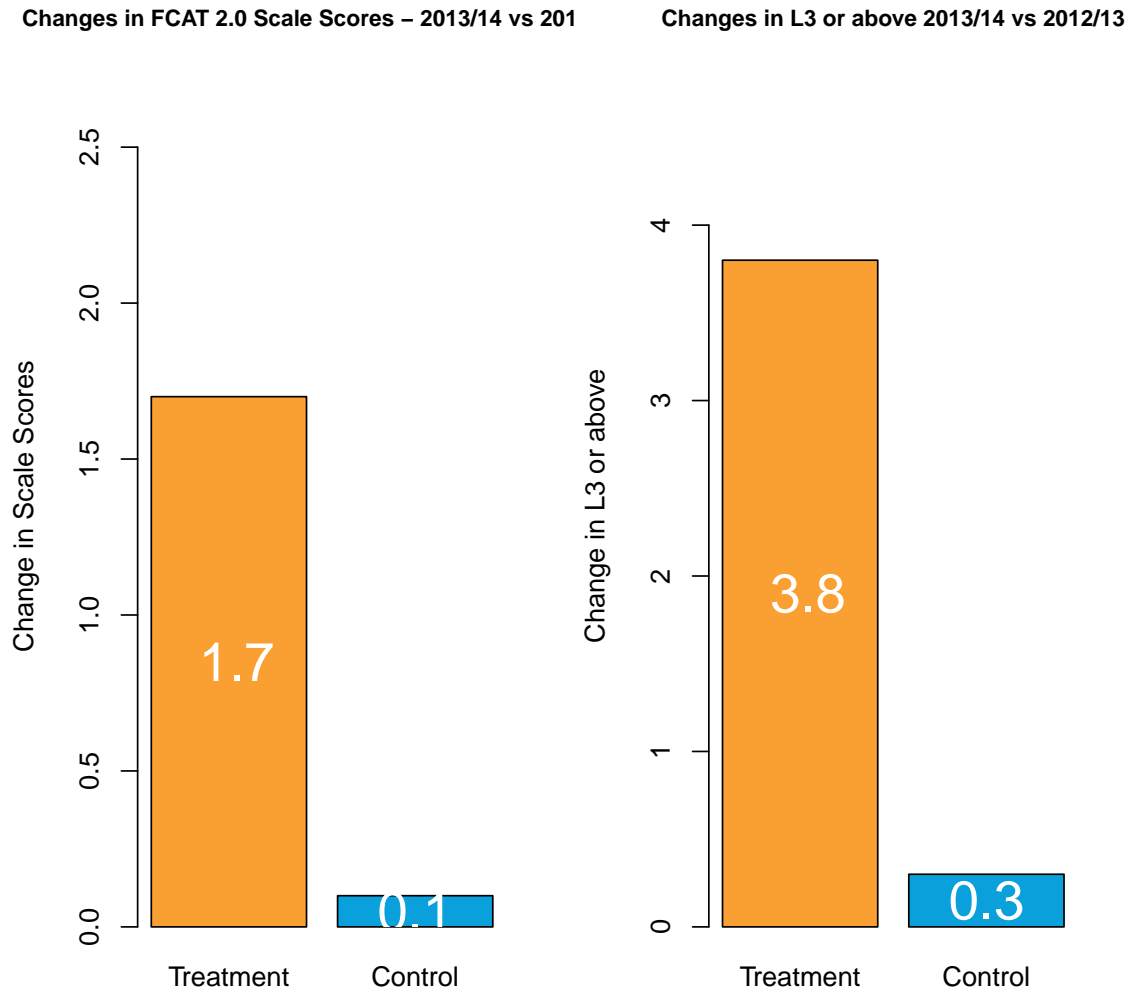


Figure 4: Changes in FCAT 2.0 Math Scale Scores and Level 3 or above for Grade-Aggregated TRT and CTRL datasets between 2012/13 and 2013/14

Finally, Table 6 shows the statistics for the *differences* in changes between TRT and CTRL (Treatment - Control) for these same FCAT 2.0 math proficiency and scale score changes as in the above figures.

	Estimate	P-Value	Int.Low	Int.High
L3_or_above	3.49	0.10	-0.63	7.60
Scale Score	1.60	0.09	-0.25	3.45
L1	-1.29	0.39	-4.23	1.65
L2	-2.37	0.08	-4.98	0.25
L3	-0.18	0.89	-2.70	2.34
L4	2.68	0.04	0.14	5.22
L5	0.98	0.32	-0.96	2.92

Table 6: Statistics for the Differential Changes in Math Scores Growth (TRT - CTRL)

### 3.3 Grade-Level Analysis

#### 3.3.1 Grade Level Result Tables

The following tables (Table 7, 8, and 9) present a disaggregation of results by grade level. The far right column in each table also shows the average ST Math Progress for the TRT set.

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3_or_above	ST Math Per Prog.
TRT.12.13	13	13	1235	201.5	16.46	25.38	32.85	15.15	10.31	58.31	-
TRT.13.14	-	-	1218	201.2	18.00	25.08	30.92	16.46	9.46	56.85	54.85
TRT.Delta	-	-	-	-0.2	1.54	-0.31	-1.92	1.31	-0.85	-1.46	-
CTRL.12.13	39	39	3923	199.8	19.51	25.54	30.85	15.59	8.49	54.92	-
CTRL.13.14	-	-	4031	200.8	16.51	25.92	33.36	16.41	7.79	57.56	-
CTRL.Delta	-	-	-	1.0	-3.00	0.38	2.51	0.82	-0.69	2.64	-

Table 7: Grade 3 - Yearly Math Performance and Counts for TRT and CTRL Datasets

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3_or_above	ST Math Per Prog.
TRT.12.13	10	10	949	212.7	18.50	25.40	28.10	19.50	8.40	56.00	-
TRT.13.14	-	-	923	219.0	14.20	16.40	27.30	27.80	14.00	69.10	56.43
TRT.Delta	-	-	-	6.3	-4.30	-9.00	-0.80	8.30	5.60	13.10	-
CTRL.12.13	30	30	3083	213.2	19.17	23.77	29.00	17.40	10.57	56.97	-
CTRL.13.14	-	-	3121	212.7	21.07	22.00	27.37	20.03	9.57	56.97	-
CTRL.Delta	-	-	-	-0.5	1.90	-1.77	-1.63	2.63	-1.00	0.00	-

Table 8: Grade 4 - Yearly Math Performance and Counts for TRT and CTRL Datasets

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3_or_above	ST Math Per Prog.
TRT.12.13	16	16	1561	219.8	21.69	25.88	27.44	16.00	8.94	52.38	-
TRT.13.14	-	-	1517	220.1	20.81	24.38	28.00	18.00	8.62	54.62	58.05
TRT.Delta	-	-	-	0.3	-0.88	-1.50	0.56	2.00	-0.31	2.25	-
CTRL.12.13	48	47	3841	220.4	19.54	26.58	27.96	17.40	8.62	53.98	-
CTRL.13.14	-	-	3967	220.1	21.62	25.77	25.88	16.79	9.92	52.58	-
CTRL.Delta	-	-	-	-0.3	2.08	-0.81	-2.08	-0.60	1.29	-1.40	-

Table 9: Grade 5 - Yearly Math Performance and Counts for TRT and CTRL Datasets

### 3.3.2 Grade-Level Analysis of Changes in FCAT 2.0 Math Level 3 or above

Figure 5 shows the difference in the growth of percentages of students at FCAT 2.0 math Level 3 or above, for the TRT and CTRL datasets, disaggregated by grade:

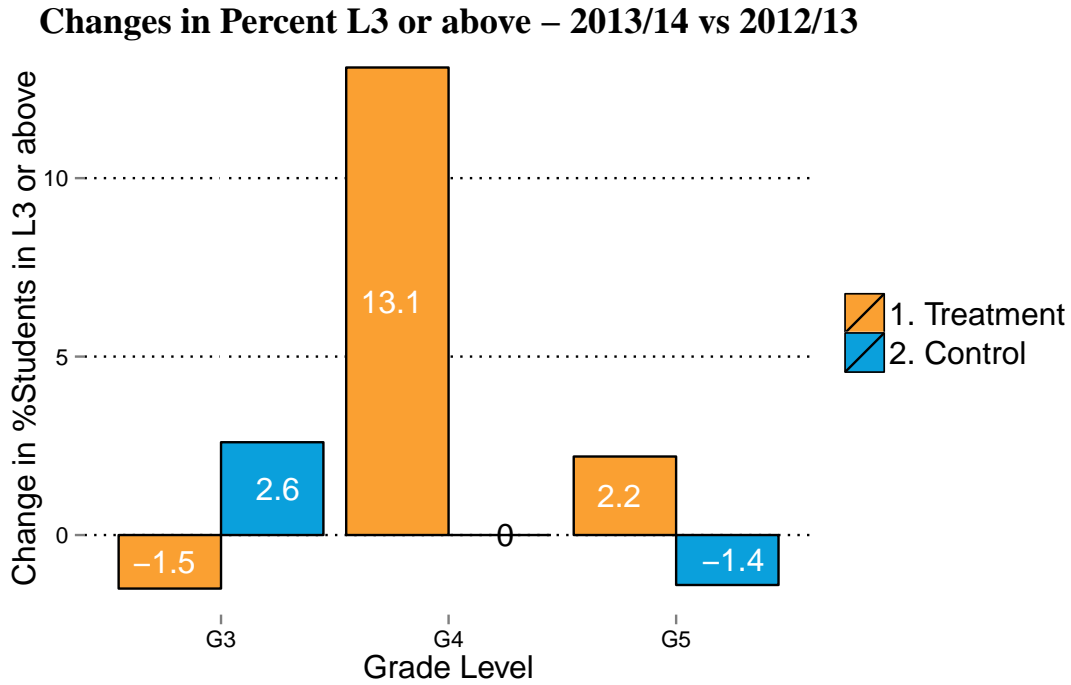


Figure 5: Changes in Percent of Students at FCAT 2.0 L3 or above for TRT and CTRL Datasets between 2012/13 and 2013/14



Table 10 shows the statistics for the *differences* in changes between TRT and CTRL (Treatment - Control) for these same FCAT 2.0 Level 3 or above math proficiency changes as shown in Figure 5.

	Estimate	P-Value	Int.Low	Int.High
Grade 3	-4.10	0.26	-11.29	3.08
Grade 4	13.10	0.00	6.91	19.29
Grade 5	3.65	0.24	-2.55	9.84

Table 10: Statistics for the Differential Changes in FCAT 2.0 L3 or above , TRT - CTRL

### 3.3.3 Grade-Level Analysis of Changes in FCAT 2.0 Math Scale Scores

Figure 6 shows the changes in the grade-mean math scale scores of students for the TRT and CTRL datasets, disaggregated by grade:

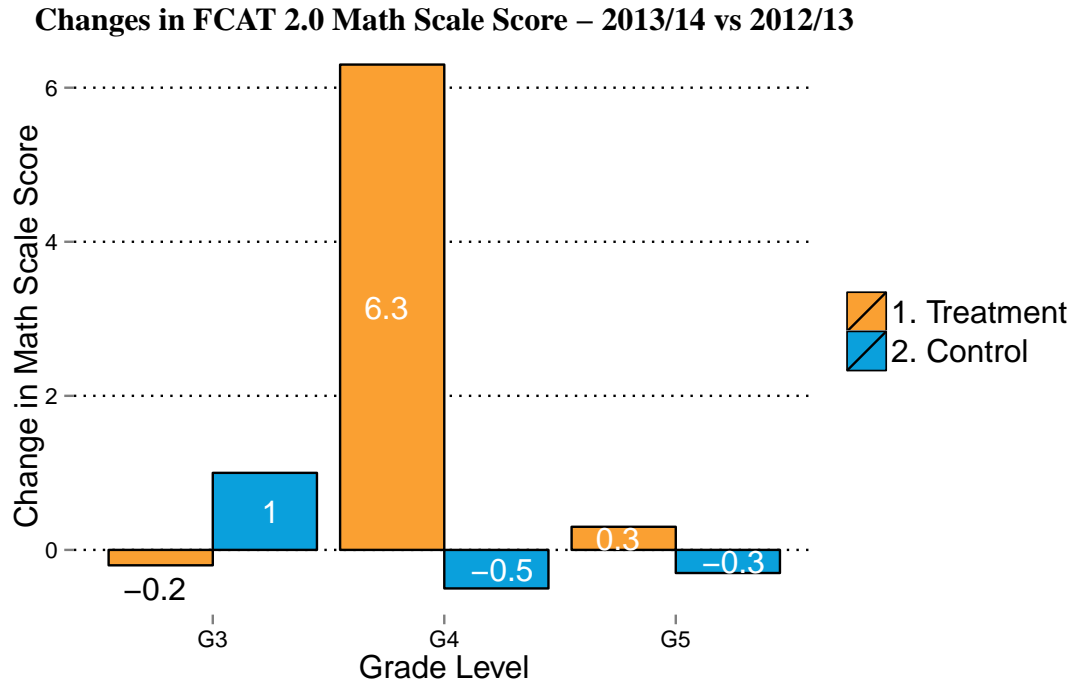


Figure 6: Changes in Grade-Mean FCAT 2.0 Math Scale Score for TRT and CTRL Datasets between 2012/13 and 2013/14

Table 11 shows the statistics for the differences between TRT and CTRL (Treatment - Control) for these same FCAT 2.0 math scale score changes as shown in Figure 6.

	Estimate	P-Value	Int.Low	Int.High
Grade 3	-1.23	0.45	-4.51	2.05
Grade 4	6.80	0.00	3.99	9.61
Grade 5	0.65	0.61	-1.94	3.23

Table 11: Statistics for the Differential Changes in FCAT 2.0 Math Scale Scores Growth, TRT - CTRL

## 4 Findings Summary

Florida grades 3, 4, and 5 using ST Math for the first year in 2013/14 averaged 38.2% ST Math Progress. 39/179 grades (22%) averaged covering more than 50% of ST Math content (see Table 4). These ST Math grades (aggregated) increased their math scores more than similar comparison grades did at FCAT 2.0 Level 3 and above by 3.5 points ( $p = 0.10$ ), and also at FCAT 2.0 Level 4 or above by 3.7 points (see Figures 3 & 4 and Tables 5 & 6). Evaluation of disaggregated, individual grade-levels, with “n” ranging from 10 to 16 (see Tables 7, 8 and 9) showed that only ST Math grade 4 showed statistically significant, higher growth than comparison grade 4’s (see Figures 5 & 6 and Tables 10 & 11).

## 5 Reference Tables Grouped By School Year

The following tables show grade-level details, grouped by school year and for treatment (Table 12) and controls (Table 13) separately.

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3 or above	ST Math Per Prog.
Grade 3 (12.13)	13	13	1235	201.5	16.46	25.38	32.85	15.15	10.31	58.31	-
Grade 4 (12.13)	10	10	949	212.7	18.50	25.40	28.10	19.50	8.40	56.00	-
Grade 5 (12.13)	16	16	1561	219.8	21.69	25.88	27.44	16.00	8.94	52.38	-
All Grades (12.13)	39	26	3745	211.9	19.13	25.59	29.41	16.62	9.26	55.28	-
Grade 3 (13.14)	13	13	1218	201.2	18.00	25.08	30.92	16.46	9.46	56.85	54.85
Grade 4 (13.14)	10	10	923	219.0	14.20	16.40	27.30	27.80	14.00	69.10	56.43
Grade 5 (13.14)	16	16	1517	220.1	20.81	24.38	28.00	18.00	8.62	54.62	58.05
All Grades (13.14)	39	26	3658	213.5	18.18	22.56	28.79	20.00	10.28	59.08	56.57

Table 12: TRT Grades Detail Sorted by Year

	# Grades	# Schools	# Students	Scale Score	L1	L2	L3	L4	L5	L3 or above	ST Math Per Prog.
Grade 3 (12.13)	39	39	3923	199.8	19.51	25.54	30.85	15.59	8.49	54.92	-
Grade 4 (12.13)	30	30	3083	213.2	19.17	23.77	29.00	17.40	10.57	56.97	-
Grade 5 (12.13)	48	47	3841	220.4	19.54	26.58	27.96	17.40	8.62	53.98	-
All Grades (12.13)	117	115	10847	211.7	19.44	25.51	29.19	16.79	9.08	55.06	-
Grade 3 (13.14)	39	39	4031	200.8	16.51	25.92	33.36	16.41	7.79	57.56	-
Grade 4 (13.14)	30	30	3121	212.7	21.07	22.00	27.37	20.03	9.57	56.97	-
Grade 5 (13.14)	48	47	3967	220.1	21.62	25.77	25.88	16.79	9.92	52.58	-
All Grades (13.14)	117	115	11119	211.8	19.78	24.85	28.75	17.50	9.12	55.37	-

Table 13: CTRL Grades Detail Sorted by Year

## 6 Lists of Schools

### 6.1 Treatment Schools

Table 14 shows the list of treatment schools and grades (after 85% enrollment and 50% progress filtering) used in the analysis.

	District	School Name	GRADE
1	PINELLAS	BAY VISTA FUNDAMENTAL ELEM.	3, 4, 5
2	PINELLAS	Belcher Elementary School	3, 4, 5
3	ORANGE	Cheney Elementary	4
4	PINELLAS	DOUGLAS L. JAMERSON JR ELEMENTARY	3
5	PINELLAS	Eisenhower Elementary School	4
6	PINELLAS	Forest Lakes Elementary School	4
7	PINELLAS	High Point Elementary School	3
8	PINELLAS	Highland Lakes Elementary School	5
9	PINELLAS	John M. Sexton Elementary School	3, 4, 5
10	PINELLAS	Lakeview Fundamental Elementary	3
11	PINELLAS	Lealman Avenue Elementary School	5
12	PINELLAS	Leila Davis Elementary School	3
13	PINELLAS	Lynch Elementary School	5
14	PINELLAS	Marjorie Kinnan Rawlings Elem	4, 5
15	PINELLAS	McMullen-Booth Elementary School	5
16	PINELLAS	Northwest Elementary School	5
17	PINELLAS	Oakhurst Elementary School	5
18	PINELLAS	PASADENA FUNDAMENTAL ELEM.	4
19	PINELLAS	PINELLAS CENTRAL ELEM. SCHOOL	3, 4, 5
20	PINELLAS	Ponce De Leon Elementary School	3
21	PINELLAS	San Jose Elementary School	3, 4
22	PINELLAS	Seminole Elementary School	3, 5
23	PINELLAS	Shore Acres Elementary School	5
24	PINELLAS	Southern Oak Elementary School	3, 5
25	PINELLAS	Tarpon Springs Fundamental Ele	3, 5
26	PINELLAS	Westgate Elementary School	5

Table 14: Treatment Schools (TRT Dataset)

## 6.2 Control Schools

Table 15 shows the control schools and grades (matched control grades to treatment grades) used in the analysis.

	District	School Name	GRADE
1	ESCAMBIA	A. K. SUTER ELEMENTARY SCHOOL	5
2	FAU LAB SCH	A.D. HENDERSON UNIVERSITY SCHOOL	5
3	HILLSBOROUGH	ALEXANDER ELEMENTARY SCHOOL	5
4	BREVARD	APOLLO ELEMENTARY SCHOOL	4
5	MANATEE	BALLARD ELEMENTARY SCHOOL	5
6	MANATEE	BAYSHORE ELEMENTARY SCHOOL	3
7	DUVAL	BAYVIEW ELEMENTARY SCHOOL	3
8	SEMINOLE	BENTLEY ELEMENTARY SCHOOL	4
9	HILLSBOROUGH	BING ELEMENTARY SCHOOL	5
10	CALHOUN	BLOUNTSTOWN ELEMENTARY SCHOOL	3
11	MIAMI DADE	BOB GRAHAM EDUCATION CENTER	3
12	OKALOOSA	BOB SIKES ELEMENTARY SCHOOL	5
13	HILLSBOROUGH	BOYETTE SPRINGS ELEMENTARY SCHOOL	5
14	ESCAMBIA	BRATT ELEMENTARY SCHOOL	3
15	PUTNAM	BROWNING-PEARCE ELEMENTARY SCHOOL	4
16	HILLSBOROUGH	BUCKHORN ELEMENTARY SCHOOL	5
17	LEE	CAPE CORAL CHARTER SCHOOL	4
18	OSCEOLA	CENTRAL AVENUE ELEMENTARY SCHOOL	4
19	SANTA ROSA	CENTRAL SCHOOL	3
20	LEON	CHAIRES ELEMENTARY SCHOOL	5
21	INDIAN RIVER	CITRUS ELEMENTARY SCHOOL	5
22	PASCO	CONNERTON ELEMENTARY SCHOOL	4
23	SARASOTA	CRANBERRY ELEMENTARY SCHOOL	3
24	FSDB	DEAF ELEMENTARY SCHOOL (FSDB)	4
25	ORANGE	DOMMERICH ELEMENTARY	5
26	MARION	DR N H JONES ELEMENTARY SCHOOL	5
27	MIAMI DADE	DR. CARLOS J. FINLAY ELEMENTARY	4
28	MIAMI DADE	DR. HENRY W. MACK/WEST LITTLE RIVER	4
29	MIAMI DADE	EARLINGTON HEIGHTS ELEM. SCHL	5
30	MARION	EAST MARION ELEMENTARY SCHOOL	4
31	ESCAMBIA	ENSLEY ELEMENTARY SCHOOL	3
32	CLAY	FLEMING ISLAND ELEMENTARY SCHOOL	4
33	COLUMBIA	FORT WHITE ELEMENTARY SCHOOL	5
34	MANATEE	FRANCES WAKELAND ELEMENTARY SCHOOL	5
35	POLK	GARDEN GROVE ELEMENTARY SCHOOL	3
36	GADSDEN	GEORGE W. MUNROE ELEM. SCHOOL	3
37	DUVAL	GLOBAL OUTREACH CHARTER ACADEMY	5
38	GADSDEN	GREENSBORO ELEMENTARY SCHOOL	4
39	CLAY, PALM BEACH	GROVE PARK ELEMENTARY SCHOOL	5, 5
40	SEMINOLE	HAMILTON ELEMENTARY SCHOOL	4

District	School Name	GRADE	
41	LEE	HANCOCK CREEK ELEMENTARY SCHOOL	3
42	ST JOHNS	HICKORY CREEK ELEMENTARY SCHOOL	5
43	COLLIER, SEMINOLE	HIGHLANDS ELEMENTARY SCHOOL	4, 5
44	BAY	HILAND PARK ELEMENTARY SCHOOL	3
45	DUVAL	HYDE GROVE ELEMENTARY SCHOOL	4
46	ALACHUA	IDYLWILD ELEMENTARY SCHOOL	5
47	FLAGLER	IMAGINE SCHOOL AT TOWN CENTER	5
48	CITRUS	INVERNESS PRIMARY SCHOOL	5
49	MIAMI DADE	JAMES H. BRIGHT ELEMENTARY	4
50	MARTIN	JENSEN BEACH ELEMENTARY SCHOOL	3
51	PALM BEACH	JOSEPH LITTLES-NGUZO SABA	5
52	HILLSBOROUGH	JUST ELEMENTARY	4
53	MONROE	KEY LARGO SCHOOL	3
54	HILLSBOROUGH	KINGSWOOD ELEMENTARY SCHOOL	5
55	PALM BEACH	LAKE PARK ELEMENTARY SCHOOL	3
56	ORANGE	LAKE SILVER ELEMENTARY	5
57	MIAMI DADE	LAKE STEVENS ELEMENTARY SCHOOL	5
58	MIAMI DADE	LAURA C. SAUNDERS ELEMENTARY SCHOOL	3
59	HILLSBOROUGH	LEWIS ELEMENTARY SCHOOL	4
60	PALM BEACH	LIBERTY PARK ELEMENTARY SCHOOL	3
61	MIAMI DADE	LILLIE C. EVANS K-8 CENTER	3
62	LAKE	LOST LAKE ELEMENTARY SCHOOL	4
63	BAKER	MACCLENNY ELEMENTARY SCHOOL	3
64	JACKSON	MALONE HIGH SCHOOL	5
65	BREVARD	MEADOWLANE INTERMEDIATE ELEMENTARY	4
66	BROWARD	MIRAMAR ELEMENTARY SCHOOL	3
67	HILLSBOROUGH	MORT ELEMENTARY SCHOOL	5
68	MIAMI DADE	MYRTLE GROVE K-8 CENTER	5
69	BROWARD	NORTH ANDREWS GARDENS ELEM.	4
70	LEON	OAK RIDGE ELEMENTARY SCHOOL	3
71	MARION	OAKCREST ELEMENTARY SCHOOL	5
72	PASCO	OAKSTEAD ELEMENTARY SCHOOL	3
73	DUVAL	OCEANWAY ELEMENTARY SCHOOL	4
74	MIAMI DADE	OLYMPIA HEIGHTS ELEMENTARY SCHOOL	5
75	VOLUSIA	ORMOND BEACH ELEMENTARY SCHOOL	5
76	POLK	OSCAR J. POPE ELEMENTARY SCHOOL	3
77	BREVARD	PALM BAY ACADEMY CHARTER SCHOOL	5
78	PALM BEACH	PALM BEACH PUBLIC SCHOOL	5
79	COLLIER	PALMETTO ELEMENTARY SCHOOL	5
80	SANTA ROSA	PEA RIDGE ELEMENTARY SCHOOL	3
81	BROWARD	PEMBROKE PINES ELEMENTARY SCHOOL	3
82	LEE	PINE ISLAND ELEMENTARY SCHOOL	5
83	COLLIER	PINECREST ELEMENTARY SCHOOL	3
84	PALM BEACH	PLUMOSA SCHOOL OF THE ARTS	5
85	HOLMES	POPLAR SPRINGS HIGH SCHOOL	5
86	MARTIN	PORT SALERNO ELEMENTARY SCHOOL	4
87	HILLSBOROUGH	RCMA WIMAUMA ACADEMY	3
88	OSCEOLA	REEDY CREEK ELEMENTARY SCHOOL	4
89	CLAY	RIDEOUT ELEMENTARY SCHOOL	5
90	ORANGE	RIVERSIDE ELEMENTARY	4

	District	School Name	GRADE
91	CHARLOTTE	SALLIE JONES ELEMENTARY SCHOOL	3
92	BROWARD	SANDERS PARK ELEMENTARY SCHOOL	5
93	HILLSBOROUGH	SCHWARZKOPF ELEMENTARY SCHOOL	3
94	PASCO	SEVEN SPRINGS ELEMENTARY SCHOOL	3
95	MIAMI DADE	SOMERSET ACADEMY ELEM SCHOOL S MIAM	5
96	LEON	SPRINGWOOD ELEMENTARY SCHOOL	3
97	HILLSBOROUGH	STOWERS ELEMENTARY SCHOOL	5
98	VOLUSIA	SUNRISE ELEMENTARY SCHOOL	3
99	HILLSBOROUGH	TAMPA PALMS ELEMENTARY SCHOOL	4
100	LAKE	TAVARES ELEMENTARY SCHOOL	3
101	MIAMI DADE	THEODORE R. & THELMA A. GIBSON CHAR	5
102	BAY	TOMMY SMITH ELEMENTARY SCHOOL	4
103	BREVARD	TROPICAL ELEMENTARY SCHOOL	3
104	CLAY	TYNES ELEMENTARY SCHOOL	5
105	POLK	VALLEYVIEW ELEMENTARY SCHOOL	3
106	MIAMI DADE	VILLAGE GREEN ELEMENTARY SCHOOL	4
107	ST LUCIE	WEATHERBEE ELEMENTARY SCHOOL	3
108	PASCO	WESLEY CHAPEL ELEMENTARY SCHOOL	4
109	PALM BEACH	WEST GATE ELEMENTARY SCHOOL	5
110	GLADES	WEST GLADES SCHOOL	3
111	PALM BEACH	WEST RIVIERA ELEMENTARY SCHOOL	5
112	DUVAL	WESTVIEW K-8	4
113	MIAMI DADE	WHISPERING PINES ELEM. SCHOOL	5
114	HILLSBOROUGH	WIMAUMA ELEMENTARY SCHOOL	3
115	HILLSBOROUGH	WITTER ELEMENTARY SCHOOL	3

Table 15: Control Schools (CTRL Dataset)