USA Math Outcomes Analysis 2021/22

Grade Levels: 3, 4, 5
ST Math Program: Gen-6
Analysis Type: Z-score of Math Proficiency
Treatment-Years: 2020/21 and 2021/22
Baseline-Year: 2018/19
Subgroup: All

MIND
RESEARCH INSTITUTE

Jessica Guise
© 2024-02-05

Abstract

    This analysis evaluates grades using ST Math in the USA in 2021/22. It identifies those grades with nominal or 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 320 grades, consisting of grades 3, 4, and 5 at 173 schools, with an average baseline z-score of -0.23. Refer to Figures 2 and 3 for the math performance and demographic distributions. They were matched to 320 similar, randomly selected control grades at 280 schools that never used ST Math. Grade-wise growth in math proficiency was evaluated (i.e. growth in same grade, same school, from 2018/19 to 2021/22) on the mean z-scores of percent Proficient or Advanced (see Section 3.1). Grades 3, 4, and 5 aggregated showed an ST Math effect of 0.22 z-score points.

Contents

List of Figures

List of Tables

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 2-year changes in grade-mean z-score of Proficient or Advanced. The treatment grades used the ST Math program for 2 years, beginning in the 2020/21 school year. The study hypothesis is treatment grades using ST Math will outperform similar matched control grades, using their "business as usual" conditions of instructional content and professional development. The control grades were selected to have similar demographic and math attributes (See Figures 2 and 3) to the treatment grades during the baseline year (2018/19), and did not use ST Math in any subsequent year. The treatment grades' selection pool was all schools using ST Math in grades 3, 4, and 5 in the USA. The control grades' pool was all schools not using ST Math in grades 3, 4, and 5 in the USA. This study method measures effectiveness of the ST Math program when nominally implemented.

1.2 Program Description

Spatial-Temporal Math (ST Math) is game-based, instructional software for K–12 students, created by the MIND Research Institute (MIND). The purpose of the program is to boost math comprehension through visual learning. The ST Math software games begin without language or symbol abstractions by posing math problems as purely visual puzzles. In this way, three objectives 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. Interactive, animated visual manipulatives provide informative feedback on student solutions. A score of 100 percent on a game level comprised of 4-12 puzzles is required for progression through the levels. Failure requires a re-play of the level, via a new quasi-random set of puzzles. In this way, progression is self-paced.

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. Teachers receive initial training, either face to face or through self-guided online instruction. The training covers account startup, as well as math learning and growth mindset goals, the pedagogical approach to learning in a visual experiential game, monitoring and intervention of the student 1:1 game play, and connecting of ST Math content to classroom content and pacing.

For students to achieve nominal progress through the program, there is a recommended time-on-task requirement of 90 minutes per week over about 30 weeks. Consistent application of 90 minutes per week throughout the school year is normally sufficient to result in a grade's average ST Math content coverage exceeding 50% by year-end. In this study, we include grades that have achieved 40% or more content coverage (Progress) by April 15th.

This is a passive study with no experimental setup or extraordinary communications to any schools. All schools in this study therefore received normal program implementation support through the year from MIND support managers. This support includes bundled startup services of approximately 2-4 hours of training either in-person or online, access to live webinars, regular online and push reports on usage and progress, email/phone helpdesk, and proactive monitoring for gaps or issues by MIND support representatives.

MIND Research Institute initiated, funded, and exercised editorial control over this study.

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). 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 Treatment Grades Pool and Selection

The Treatment grades pool originated with all schools and grades using ST Math in the USA. From these schools, every grade that had used the ST Math program in 2020/21 and 2021/22 was identified. They comprise the Treatment grades pool for this evaluation of 2-year usage.

2.1.1 Enrollment Filter

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 each grade receiving 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 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%.

2.1.2 Content Coverage Filter

Furthermore, the outcomes measure is a summative year-end test, i.e. the standardized math assessment of that state. 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 each state's 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 40% by April.

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 40% 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.

2.2 Control Grades Pool and Selection

The control grades are randomly selected from a control pool of schools in the USA. Though they are randomly selected, they are also matched to be similar to the Treatment grades' math attributes and demographics during the baseline 2018/19 year. The matched attributes include:

- grade-mean z-score of percent Proficient or Advanced

- percentage of students receiving free or reduced lunch at the school-level (using the demographic data from MDR).

The method of matching used is propensity score matching, via the "matchit" program in R, with "mahalanobis" as the distance measure.

3 Data Analysis

The set of all schools and grades using ST Math in the USA is evaluated for Enrollment percentage and Progress percentage parameters. A filtered Treatment set (TRT) of all ST Math grades with $\geq 85\%$ Enrollment and $\geq 40\%$ 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, a grade-by-grade disaggregation is performed.

3.1 Z-scores

In order to analyze across all states with different math assessments, a new z-score of that test's math proficiency is calculated. For each year being analyzed, by grade, a z-score takes the difference of the grade mean percent proficient and the mean of all percent proficient statewide for that year, and then divides it by the standard deviation of all percent proficient statewide for that year. Here is a fictional example to illustrate the calculation of a z-score for the 2015/16 exam:

School A, Grade 3, Percent Proficient: 70
Average across all schools statewide, Grade 3: 50
Standard deviation across all schools statewide, Grade 3: 20
Z-score=((School A, Grade 3, Percent Proficient)-(Average across all schools, Grade 3))/(Standard deviation across all schools, Grade 3)

$$\text{Z-score}=\frac{70-50}{20}=1$$

The z-score is calculated for every grade across all years being analyzed, using the full state data set of schools for the averages and standard deviations. The use of z-scores is a valid statistical method to normalize any dataset and to enable analysis across otherwise uncomparable exams. In this report, we only analyze z-scores.

3.2 Percentile Ranking

These newly calculated z-scores can then be converted into a percentile ranking. Each percentile ranking shows the grade's performance relative to the others in that year and grade. For example, for a specific grade 3, a percentile ranking of 50 shows that this grade 3 performed at the average of all third grades in the state for that testing year.

3.3 Final Treatment and Control

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

ST Math Percent Grade Mean Progress Distribution – 2021/22
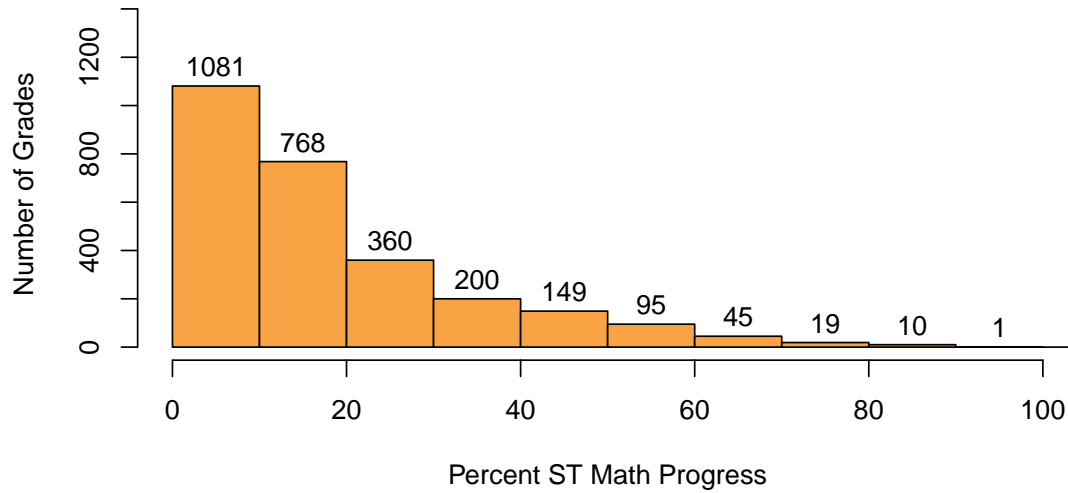
Figure 1: Histogram of ST Math Percent Progress for $\geq$ 85% Enrollment Grades 2021/22

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 $\geq$ 40% Progress as the Treatment Group.

Table 1 provides descriptive statistics of the Progress distribution. Table 2 shows the number of remaining treatment grades after applying enrollment and progress filters.

	Min.	Max.	Average	S.D.
ST Math % Progress	0.4	126.3	18.4	16.2

Table 1: Descriptive Statistics of ST Math Percent Progress for >= 85 percent Enrollment Grades

Grades with >= 85% Enrollment:	2729
Grades with in addition >= 40% Progress:	320

Table 2: Number of ST Math Grades with >= 85 percent Enrollment and with >= 40 percent progress

8

3.3.2 Filtering Treatment and Controls

Table 3 shows the total number of grades in the Treatment pool, the number of grades that exceeded the 85% Enrollment figure, and also the 40% Progress filter. Other rows in the table indicate counts of numbers of students (2021/22 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	1574	1549	1486	4609
ST Math Using Schools	1526	1506	1448	1806
ST Math Students	114539	117931	119452	351922
ST Math Grades (Enroll >= 85%)	994	923	812	2729
TRT Grades (Enroll >= 85% & Prog >= 40%)	115	116	89	320
TRT Schools (Enroll >= 85% & Prog >= 40%)	115	116	89	173
TRT Students (Enroll >= 85% & Prog >= 40%)	7834	8712	6535	23081
CTRL Grades	115	116	89	320
CTRL Schools	115	115	89	280
CTRL Students	7916	7440	6359	21715

Table 3: Treatment Pool Filtering and Controls: Counts of Grades, Schools, and Students

3.3.3 Match of Controls to Treatment

Figure 2 shows the density plots of the baseline z-score of percent students at state assessment Proficient or Advanced (left plot) and the percentage of students needing free or reduced lunch (right plot) for treatment grades overlayed on control grades, showing the closeness of the match obtained between Treatment and Control sets of grades in the baseline year, 2018/19.
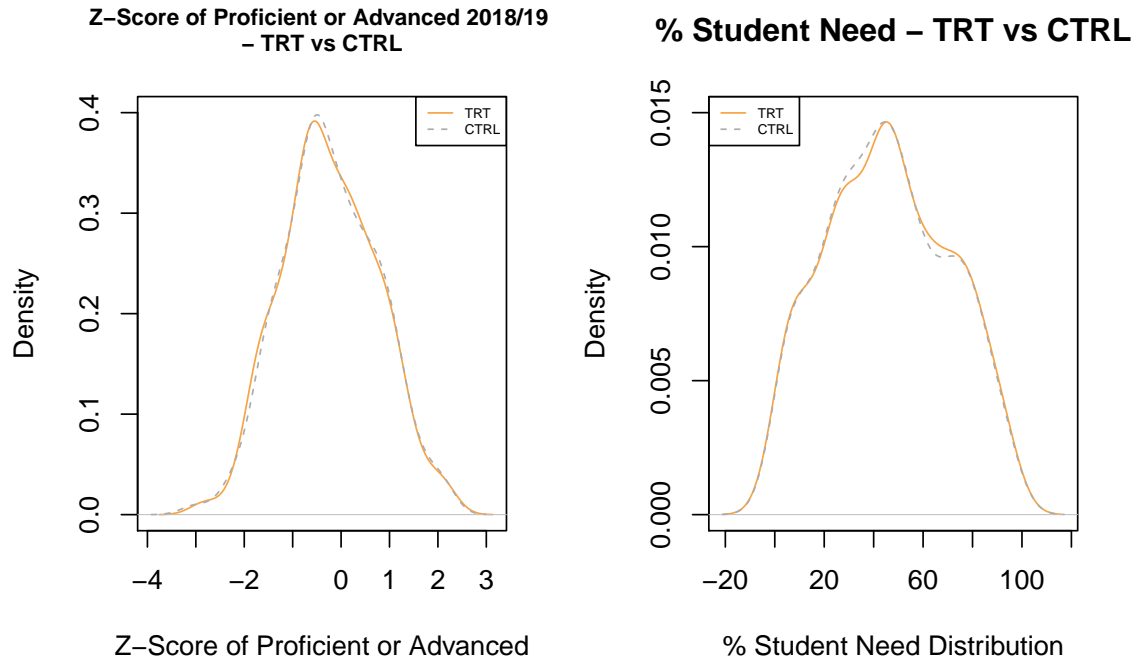
Figure 2: Baseline Year Density Plots Showing Math Scores and Percent Student Need Match between TRT and CTRL - 2018/19

Table 4 shows the difference of the means of Treatment versus Control in the baseline year, with accompanying p-values, for mean z-score of percent Proficient or Advanced and for percent of students receiving free or reduced lunch. The large p-values show the differences between the Treatment and Control grades are not statistically significant.

	Mean(TRT)	SD(TRT)	Mean(CTRL)	SD(CTRL)	Estimate	P-Value	Effect Size
Z-Score of Proficient or Advanced - 2018/19	-0.23	0.99	-0.22	0.99	-0.01	0.90	-0.01
Percent Free or Reduced Lunch	45.78	24.83	45.52	24.67	0.26	0.89	0.01

Table 4: Matching TRT and CTRL

3.4 Grade-Aggregated Analysis

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

	# Grades	# Schools	# Students	Z-Score	Percentile	ST Math Per Comp.
TRT.18.19	320	173	23453	-0.23	43.22	–
TRT.21.22	320	173	21224	0.04	50.06	53.83
TRT.Delta	–	–	–	0.27	6.84	–
CTRL.18.19	320	280	23467	-0.22	43.56	–
CTRL.21.22	320	280	21715	-0.18	43.91	–
CTRL.Delta	–	–	–	0.04	0.35	–

Table 5: All Grades Together Growth

Figure 3 shows the changes in mean z-scores of percent Proficient or Advanced for the grade-aggregated Treatment and Control sets.
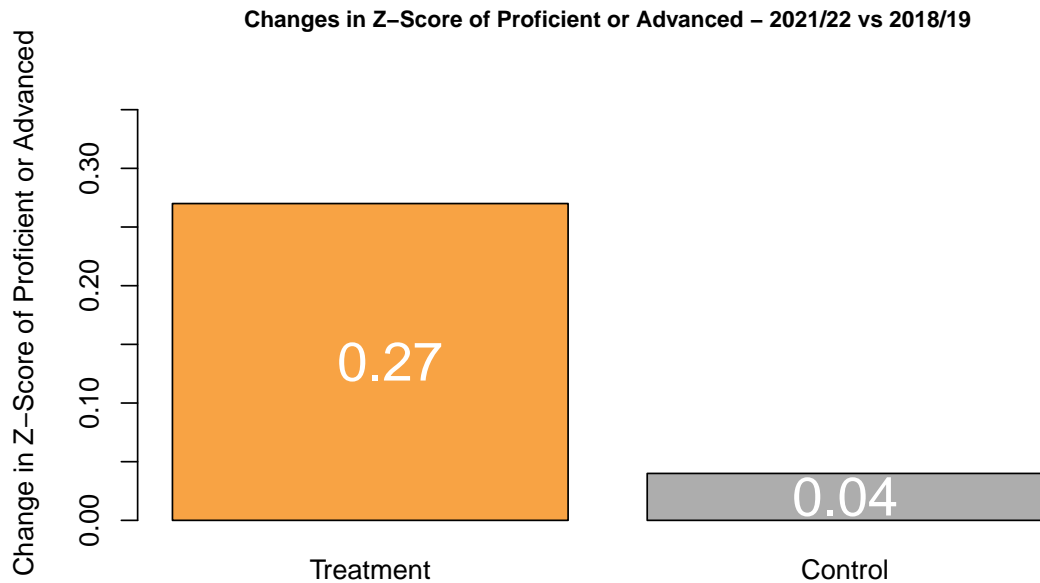
Figure 3: Changes in Z-Score of Proficient or Advanced (See Section 3.1) for Grade-Aggregated TRT and CTRL datasets between 2018/19 and 2021/22

Further, Table 6 shows the statistics for the *differences* in changes between TRT and CTRL (Treatment - Control) for these same z-score changes as in the above figure. [1]

	Estimate	P-Value	Int.Low	Int.High
Z-Score	0.22	0.00*	0.12	0.33

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

Finally, Figure 4 shows the changes in mean percentile ranking between TRT and CTRL.

Mean Percentile Plot – TRT vs CTRL
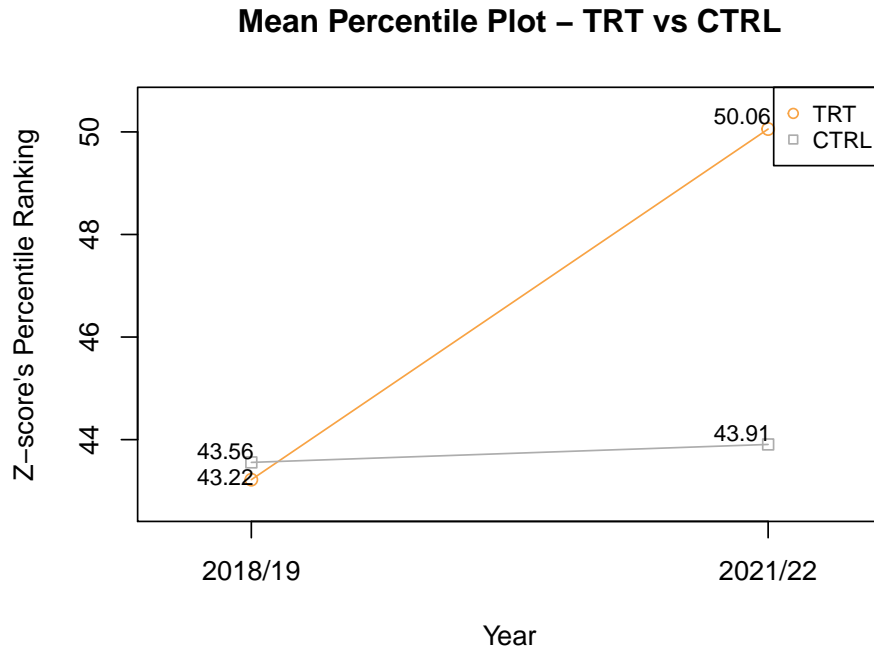
Figure 4: Changes in Percentile Ranking for TRT and CTRL Datasets between 2018/19 and 2021/22

---

[1]* statistically significant p<0.05

3.5   Grade-Level Analysis

3.5.1   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	Z-Score	Percentile	ST Math Per Prog.
TRT.18.19	115	115	7855	-0.26	42.60	–
TRT.21.22	115	115	7130	0.01	49.01	52.75
TRT.Delta	–	–	–	0.27	6.41	–
CTRL.18.19	115	115	8510	-0.25	42.98	–
CTRL.21.22	115	115	7916	-0.14	45.80	–
CTRL.Delta	–	–	–	0.11	2.82	–

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

	# Grades	# Schools	# Students	Z-Score	Percentile	ST Math Per Prog.
TRT.18.19	116	116	8967	-0.17	44.95	–
TRT.21.22	116	116	8050	0.11	52.77	54.87
TRT.Delta	–	–	–	0.28	7.82	–
CTRL.18.19	116	115	7970	-0.17	45.15	–
CTRL.21.22	116	115	7440	-0.14	44.95	–
CTRL.Delta	–	–	–	0.03	-0.20	–

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

	# Grades	# Schools	# Students	Z-Score	Percentile	ST Math Per Prog.
TRT.18.19	89	89	6631	-0.26	41.76	–
TRT.21.22	89	89	6044	-0.02	47.88	53.87
TRT.Delta	–	–	–	0.24	6.11	–
CTRL.18.19	89	89	6987	-0.25	42.22	–
CTRL.21.22	89	89	6359	-0.27	40.10	–
CTRL.Delta	–	–	–	-0.02	-2.12	–

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

3.5.2 Grade-Level Analysis of Changes in Z-Score of Proficient or Advanced

Figure 5 shows the changes in the grade-mean z-scores of students for the TRT and CTRL datasets, disaggregated by grade:

**Changes in Z–Score of Proficient or Advanced – 2021/22 vs 2018/19**
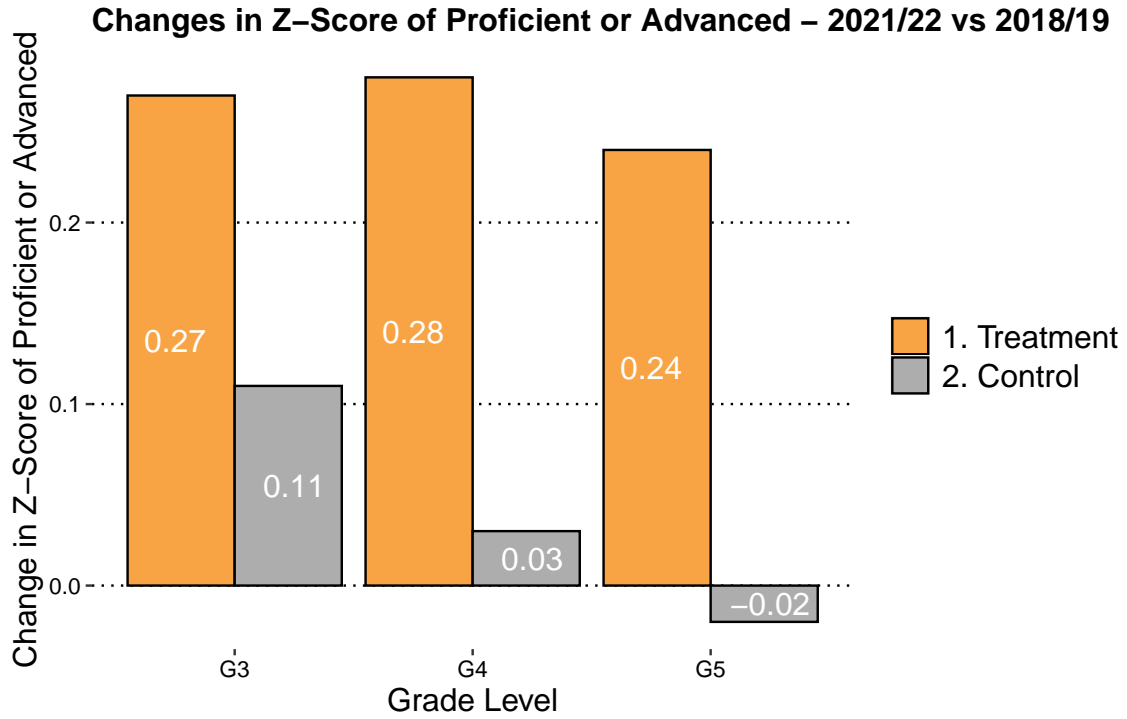
Figure 5: Changes in Grade-Mean Z-Score of Proficient or Advanced (See Section 3.1) for TRT and CTRL Datasets between 2018/19 and 2021/22

Table 10 shows the statistics for the differences between TRT and CTRL (Treatment - Control) for these same z-score changes as shown in Figure 5.

	Estimate	P-Value	Int.Low	Int.High
Grade 3	0.16	0.08	-0.02	0.35
Grade 4	0.25	0.01*	0.08	0.43
Grade 5	0.26	0.01*	0.07	0.45

Table 10: Statistics for the Differential Changes in Z-scores (See Section 3.1) Growth, (TRT - CTRL)

4 Effect Size

The following table shows the effect sizes for z-score of Proficient or Advanced.

	Z-Score of Proficient or Advanced Effect Size
Grade 3	0.17
Grade 4	0.25
Grade 5	0.26
All Grades	0.23

Table 11: Cohen's d Effect Size

5 Findings Summary

USA grades 3, 4, and 5 using ST Math for the year 2021/22 averaged 12.2% ST Math Progress. 324/4609 grades (7%) averaged covering more than 40% of ST Math content. Statistically significant differences were found in this analysis for both grade-aggregated and individual grade-level results. Looking at Table 6, a statistically significant difference was found for grade-aggregated z-score, with an estimate of 0.22 points favorable for the ST Math treatment set. Further, referring to table 10, grades 4 and 5 ST Math treatment sets outpeformed their matched controls for z-score of Proficient or Advanced with statistically significant differences of 0.25 and 0.26, respectively.

6 Confounders

Despite best efforts in minimizing confounders to the results of this analysis, there still remain a few input variables that could be significant in affecting differences of state test score outcomes between the Treatment and Control sets. One issue is the lack of randomization of grades chosen to receive the ST Math treatment. Instead of randomized selection, Treatment grades are self-selected. Self-selection can be an indication of districts or schools with a focus on math, an appetite for change, and with a spotlight on math training. Furthermore, not all grades using the ST Math program are chosen for analysis. Each grade must pass two specific filters to be considered for the Treatment set: the first being an enrollment filter of at least 85% of students in each grade using the program, and the second being a progress filter of at least 40% of the program completed on average by students in that grade. These filters might indicate relatively high-functioning schools with a team of relatively effective teachers in that grade, thus resulting in better instruction overall. A mitigation of this possible confounder is our selection of treatment groups on the grade level, rather than the teacher level, so there is no cherry picking of teachers: the full range of teachers in each grade is included. Moreover, the specific teachers may often be the same in the baseline year as in the current year, so the Treatment growth is not due to teacher differences. Finally, a possible confounder lies in the "business as usual" conditions at the matched control grades chosen for each analysis. It's unknown whether these control grades used other programs that could affect the comparison of the two sets of grades.

7 Lists of Schools

7.1 Treatment Schools

The following tables list the treatment schools and grades (after 85% enrollment and 40% progress filtering) used in the analysis.

PID	State	District	School Name	GRADE
39415	AZ	Glendale Elementary District	Bicentennial North School	5, 4
45646	AZ	J O Combs Unified School District	Kathryn Sue Simonton Elementary	3
66717	CA	Bellflower Unified	Stephen Foster Elementary	4
3009938	CA	Bellflower Unified	Craig Williams Elementary	3
4455342	CA	Bellflower Unified	Albert Baxter Elementary	3, 4, 5
137990	CA	Hope Elementary	Hope Elementary	5, 3, 4
91011	CA	Le Grand Union Elementary	Le Grand Elementary	5
75952	CA	Los Angeles Unified	Soto Street Elementary	3
11829889	CA	Los Angeles Unified	Sylmar Leadership Academy	5
140040	CA	Oxnard	Curren Elementary	3, 4
140052	CA	Oxnard	Driffill Elementary	5, 3
140076	CA	Oxnard	Harrington Elementary	5
140117	CA	Oxnard	Kamala Elementary	3, 4, 5
140129	CA	Oxnard	Marina West Elementary	5
140131	CA	Oxnard	McKinna Elementary	4
140167	CA	Oxnard	Sierra Linda Elementary	3, 5
1876864	CA	Oxnard	Lemonwood Elementary	3
3054830	CA	Oxnard	Christa McAuliffe Elementary	3
4017110	CA	Oxnard	Emilie Ritchen Elementary	5, 3
4748682	CA	Oxnard	Norman R. Brekke Elementary	4, 5, 3
5273173	CA	Oxnard	Thurgood Marshall Elementary	4
2104119	CA	Rocklin Unified	Rocklin Elementary	3, 4, 5
4032495	CA	San Mateo-Foster City	Fiesta Gardens International Elementary	5
11829920	CA	Sierra Foothill Charter	Sierra Foothill Charter	3, 4, 5
99271	CA	Tustin Unified	Robert Heideman Elementary	4
143030	CO	Adams 12 Five Star Schools	Westview Elementary School	3
146599	CO	Denver County 1	Doull Elementary School	5
5099367	CO	Denver County 1	Lena Archuleta Elementary School	3
162696	CT	Bristol School District	Edgewood School	5
162701	CT	Bristol School District	Ellen P. Hubbell School	3
162725	CT	Bristol School District	Ivy Drive School	3, 4, 5
162799	CT	Bristol School District	South Side School	5, 3, 4
162804	CT	Bristol School District	Stafford School	4
159170	CT	Brookfield School District	Huckleberry Hill Elementary School	3, 4
160648	CT	Stamford School District	Davenport Ridge School	5
243056	IA	Cedar Rapids Comm School District	Cleveland Elementary School	3
243317	IA	Cedar Rapids Comm School District	Nixon Elementary School	5, 4
3323617	IA	Cedar Rapids Comm School District	Truman Elementary School	3, 4
4034687	IA	Cedar Rapids Comm School District	Jackson Elementary School	5
5101207	IA	Cedar Rapids Comm School District	Viola Gibson Elementary School	5
231039	IA	Waterloo Comm School District	Fred Becker Elementary School	4
231053	IA	Waterloo Comm School District	Poyner Elementary	3
231077	IA	Waterloo Comm School District	Cunningham School	5, 3
231120	IA	Waterloo Comm School District	Irving Elementary School	4, 5
231156	IA	Waterloo Comm School District	Lou Henry Elementary School	4, 3, 5
231168	IA	Waterloo Comm School District	Kittrell Elementary School	5, 3, 4
231170	IA	Waterloo Comm School District	Lincoln Elementary School	5, 3, 4
231194	IA	Waterloo Comm School District	Lowell Elementary School	4, 5, 3
231209	IA	Waterloo Comm School District	Highland Elementary School	3, 4, 5
231223	IA	Waterloo Comm School District	Orange Elementary School	3, 4, 5
10021503	IA	Waterloo Comm School District	Kingsley Elementary School	5, 3, 4
10010413	IA	Western Dubuque Comm School District	Peosta Elementary School	5, 3, 4
420838	MA	Amesbury	Amesbury Elementary	4, 3
420852	MA	Amesbury	Amesbury Middle	5
1398496	MA	Amesbury	Charles C Cashman Elementary	4, 3

Table 12: Treatment Schools (TRT Dataset)

PID	State	District	School Name	GRADE
440979	MA	Boston	Mozart Elementary School	4, 5, 3
437984	MA	Brockton	Brookfield	4, 3, 5
438005	MA	Brockton	Downey	5
438079	MA	Brockton	Hancock	3, 5
438122	MA	Brockton	John F Kennedy	5, 3, 4
438237	MA	Brockton	Manthala George Jr. School	3, 4, 5
4838110	MA	Brockton	Louis F Angelo Elementary	5, 4
428880	MA	Cambridge	Kennedy-Longfellow	3
428971	MA	Cambridge	Graham and Parks	4, 3
4037017	MA	Cambridge	Cambridgeport	3
5009245	MA	Cambridge	Amigos School	3, 5
421193	MA	Danvers	Great Oak	5, 3, 4
421222	MA	Danvers	Ivan G Smith	3
421246	MA	Danvers	Riverside	3
421272	MA	Danvers	Willis E Thorpe	5, 4
418316	MA	Dartmouth	George H Potter	4, 5
418330	MA	Dartmouth	Joseph Demello	4, 5, 3
418641	MA	Fall River	Carlton M. Viveiros Elementary School	3, 4
416502	MA	Falmouth	East Falmouth Elementary	4, 3
416540	MA	Falmouth	Mullen-Hall	3, 4
416552	MA	Falmouth	North Falmouth Elementary	3, 4
416564	MA	Falmouth	Teaticket	3, 4
445955	MA	Leicester	Leicester Elementary	4, 3
430895	MA	Lowell	John J Shaughnessy	4, 3
430924	MA	Lowell	S Christa McAuliffe Elementary	4
430936	MA	Lowell	Washington	4, 3
4015368	MA	Lowell	Dr Gertrude Bailey	4
4348971	MA	Lowell	Joseph McAvinnue	4, 3
416071	MA	Mashpee	Quashnet School	4, 3
446325	MA	Mendon-Upton	Memorial School	3, 4
4868701	MA	Mendon-Upton	Henry P Clough	4, 3
436019	MA	Needham	William Mitchell	4, 5
419138	MA	New Bedford	Charles S Ashley	3, 5
431863	MA	Newton	C C Burr	5
432001	MA	Newton	Mason-Rice	5, 4, 3
446674	MA	Northbridge	Northbridge Elementary School	3, 4
419554	MA	Norton	L G Nourse Elementary	3
4802472	MA	Norton	Henri A. Yelle	4, 5
3381683	MA	Palmer	Old Mill Pond	3
423373	MA	Peabody	John E. McCarthy	4
446818	MA	Shrewsbury	Calvin Coolidge School	4
446868	MA	Shrewsbury	Spring Street School	4
432702	MA	Stoneham	South	3, 4
446284	MA	Wachusett	Thomas Prince	5, 4, 3
433005	MA	Wakefield	Woodville School	4
433017	MA	Wakefield	Greenwood	4, 3
433055	MA	Wakefield	Walton	3, 4
436916	MA	Walpole	Old Post Road	3, 5
3333351	MA	Walpole	Boyden	4
439463	MA	Wareham	Wareham Middle	5
433524	MA	Wayland	Happy Hollow School	5, 3, 4
437192	MA	Weymouth	Academy Avenue	3, 4
437348	MA	Weymouth	Lawrence W Pingree	4, 3
437362	MA	Weymouth	Ralph Talbot	3
437398	MA	Weymouth	Thomas W. Hamilton Primary School	4
437415	MA	Weymouth	Wessagusset	4, 3
3250345	MA	Weymouth	Frederick C Murphy	4, 3
4348983	MA	Weymouth	Thomas V Nash	4, 3
447551	MA	Worcester	Belmont Street Community	3, 5

Table 13: Treatment Schools (TRT Dataset)

PID	State	District	School Name	GRADE
447599	MA	Worcester	Burncoat Street	3, 4, 5
447628	MA	Worcester	Canterbury	4, 3, 5
447630	MA	Worcester	Chandler Magnet	5, 3, 4
447719	MA	Worcester	Elm Park Community	3, 4, 5
447721	MA	Worcester	Flagg Street	4, 3, 5
447745	MA	Worcester	Goddard School/Science Technical	3
447769	MA	Worcester	Gates Lane	4, 3
447771	MA	Worcester	Grafton Street	4, 5
447824	MA	Worcester	Heard Street	4, 5
447848	MA	Worcester	Lake View	5, 3, 4
447874	MA	Worcester	Lincoln Street	5, 4
447898	MA	Worcester	May Street	4, 3, 5
447915	MA	Worcester	Midland Street	5, 3, 4
447939	MA	Worcester	Quinsigamond	3, 4
447941	MA	Worcester	Nelson Place	3, 4, 5
447965	MA	Worcester	Norrback Avenue	4, 5, 3
448024	MA	Worcester	Rice Square	3, 4, 5
448036	MA	Worcester	Roosevelt	3, 4, 5
448050	MA	Worcester	Worcester Arts Magnet School	4, 3, 5
448062	MA	Worcester	Tatnuck	3, 5
448074	MA	Worcester	Thorndyke Road	5, 3, 4
448098	MA	Worcester	Vernon Hill School	3, 5
448115	MA	Worcester	West Tatnuck	3, 4
448127	MA	Worcester	Wawecus Road School	4, 5
448141	MA	Worcester	Woodland Academy	3, 4, 5
1540766	MA	Worcester	Francis J McGrath Elementary	5, 3, 4
3333466	MA	Worcester	Jacob Hiatt Magnet	4, 3, 5
505476	MI	Holly Area School District	Davisburg Elementary School	5
4750764	MI	Holly Area School District	Rose Pioneer Elementary School	3, 4, 5
544721	MN	Saint Paul Public Schools	Como Park Elementary	3, 5, 4
693889	NJ	Madison Public School District	Kings Road School	3
693920	NJ	Madison Public School District	Torey J. Sabatini School	3
713221	NV	Carson City	Fremont Elementary	4
12238491	NV	Esmeralda	Doral Academy West Pebble	4, 3
5070622	OH	Granville Exempted Village	Granville Intermediate School	5
872059	OR	Eagle Point SD 9	Eagle Rock Elementary School	5, 4
911447	PA	CHAMBERSBURG AREA SD	GRANDVIEW EL SCH	3, 5
5265011	PA	WEST ALLEGHENY SD	DONALDSON ELEM SCH	5
1034822	TX	BURLESON ISD	FRAZIER EL	4
1034860	TX	BURLESON ISD	WILLIAM STRIBLI	4, 5
5091169	TX	BURLESON ISD	RICHARD BRANSOM	4
4916358	TX	CYPRESS-FAIRBAN	GLEASON EL	4
5096743	TX	CYPRESS-FAIRBAN	SAMPSON EL	4
11451494	TX	CYPRESS-FAIRBAN	SWENKE EL	4
11919379	TX	CYPRESS-FAIRBAN	POPE EL	5, 3, 4
10023109	TX	DALLAS ISD	ARTURO SALAZAR	4
1052513	TX	EVERMAN ISD	SOUDER EL	3
11563372	TX	GALVESTON ISD	BURNET EL	3
4853586	TX	KLEIN ISD	HASSLER EL	3
11713931	TX	KLEIN ISD	BLACKSHEAR EL	3
4949123	TX	MANSFIELD ISD	IMOGENE GIDEON	4
1028639	TX	MARSHALL ISD	CROCKETT EL	4
1041485	TX	MIDLAND ISD	DE ZAVALA EL	3
1006978	TX	NEW BRAUNFELS I	CARL SCHURZ EL	4
997685	TX	NORTH EAST ISD	CASTLE HILLS EL	3
1061356	TX	POTH ISD	POTH EL	4
10006931	TX	SPRING ISD	MILTON COOPER E	4
1040986	TX	TIDEHAVEN ISD	MARKHAM EL	3
1068641	UT	Weber District	West Weber School	5

Table 14: Treatment Schools (TRT Dataset)

7.2 Control Schools

The following tables list the control schools and grades (matched control grades to treatment grades) used in the analysis.

PID	State	District	School Name	GRADE
38916	AZ	Cartwright Elementary District	John F. Long	4
11555193	AZ	Math and Science Success Academy, Inc.	Math and Science Success Academy	3
5012553	AZ	Pathfinder Charter School Foundation	Imagine Cortez Park Elementary	5
118944	CA	Banta Unified	Banta Elementary	4
106989	CA	Barstow Unified	Lenwood Elementary	5
11129691	CA	Bellevue Union	Taylor Mountain Elementary	4
66884	CA	Burbank Unified	Ralph Emerson Elementary	5
110526	CA	Chula Vista Elementary	Allen (Ella B.) Elementary	4
110643	CA	Chula Vista Elementary	Loma Verde Elementary	3
55914	CA	Del Norte County Unified	Pine Grove Elementary	5
137823	CA	Dinuba Unified	Wilson Elementary	3
4456425	CA	Dos Palos Oro Loma Joint Unified	Bernhard Marks Elementary	3
107804	CA	Fontana Unified	Randall Pepper Elementary	3
3253103	CA	Gustine Unified	Romero Elementary	5
69991	CA	Hacienda la Puente Unified	Bixby Elementary	5
2223650	CA	Hollister	Calaveras Elementary	5
4914881	CA	Imperial Unified	T. L. Waggoner Elementary	4
111398	CA	Julian Union Elementary	Julian Elementary	4
2897653	CA	Jurupa Unified	Indian Hills Elementary	5
58150	CA	Kings Canyon Joint Unified	McCord Elementary	3
64939	CA	Lakeport Unified	Terrace Middle	4
111477	CA	Lakeside Union Elementary	Lindo Park Elementary	3
3242520	CA	Lancaster Elementary	Nancy Cory Elementary	5
78916	CA	Lynwood Unified	Wilson Elementary	4
79740	CA	Norwalk-La Mirada Unified	Foster Road Elementary	5
12103133	CA	PUC Community Charter Elementary	PUC Community Charter Elementary	4
4803414	CA	Palo Alto Unified	Barron Park Elementary	3
102244	CA	Palo Verde Unified	Ruth Brown Elementary	3
3473432	CA	Plumas Unified	C. Roy Carmichael Elementary	3
108860	CA	Rialto Unified	Merle S. Casey Elementary	4
10915746	CA	Rocky Point Charter	Rocky Point Charter	5
105179	CA	San Juan Unified	Cottage Elementary	4
124773	CA	Santa Maria-Bonita	Alvin Elementary	5
5048710	CA	Santa Rita Union Elementary	McKinnon	3
131415	CA	Shasta Union Elementary	Shasta Elementary	3
139417	CA	Sonora Elementary	Sonora Elementary	4
136049	CA	Stanislaus Union Elementary	Josephine Chrysler Elementary	5
120337	CA	Tracy Joint Unified	North Elementary	5
5341536	CA	Victor Elementary	Challenger School of Sports and Fitness	3
3004366	CA	Wilsona Elementary	Vista San Gabriel Elementary	3
11708572	CA	Yav Pem Suab Academy - Preparing for the	Yav Pem Suab Academy - Preparing for the Future Ch	5
109864	CA	Yucaipa-Calimesa Joint Unified	Calimesa Elementary	3
145014	CO	Boulder Valley Re 2	Columbine Elementary School	3
12108767	CO	Denver County 1	KIPP Northeast Elementary	3
11452357	CO	Harrison 2	Atlas Preparatory Middle School	5
162610	CT	Bloomfield School District	Metacomet School	4
174429	CT	Canterbury School District	Dr. Helen Baldwin Middle School	5
173839	CT	Ellington School District	Center School	3
163250	CT	Enfield School District	Eli Whitney School	3
174534	CT	Killingly School District	Killingly Intermediate School	5
160208	CT	Norwalk School District	Naramake Elementary School	4
160301	CT	Norwalk School District	Wolfpit Integrated Arts Elementary School	5
167543	CT	Regional School District 14	Mitchell Elementary School	4
3316341	CT	Shelton School District	Sunnyside School	4
167749	CT	Torrington School District	Torringford School	3

Table 15: Matched Control Schools (CTRL Dataset)

ST Math is created by
MIND Research Institute
www.mindresearch.org

PID	State	District	School Name	GRADE
174211	CT	Vernon School District	Center Road School	3
171350	CT	Waterbury School District	Rotella Interdistrict Magnet School	5
235346	IA	Boyer Valley Comm School District	Boyer Valley Elementary School	4
249892	IA	Brooklyn-Guernsey-Malcom Comm School District	Brooklyn-Guernsey-Malcom Elementary School	5
238312	IA	CAL Comm School District	CAL Elementary School	4
253051	IA	Cardinal Comm School District	Cardinal Junior High	5
4843660	IA	Carroll Comm School District	Adams Elementary School	4
230724	IA	Cedar Falls Comm School District	Helen A Hansen Elementary School	3
230176	IA	Centerville Comm School District	Lakeview Elementary	4, 5
238130	IA	Charles City Comm School District	Charles City MS	5
238166	IA	Charles City Comm School District	Lincoln Elementary School	4
234122	IA	Clarke Comm School District	Clarke Community Elementary School	5
243903	IA	Columbus Comm School District	Roundy Elementary School	3
249440	IA	Council Bluffs Comm School District	Hoover Elementary School	3
248446	IA	Des Moines Independent Comm School District	Windsor Elementary	4
255994	IA	Eagle Grove Comm School District	Robert Blue School	5
245200	IA	East Marshall Comm School District	East Marshall Middle School	5
1808465	IA	Eddyville-Blakesburg- Fremont CSD	Fremont Elementary	4
239720	IA	Eldora-New Providence Comm School District	Eldora-New Providence Elementary School	3
241759	IA	Iowa City Comm School District	Grant Wood Elementary School	3
241826	IA	Iowa City Comm School District	Kirkwood Elementary School	3
241838	IA	Iowa City Comm School District	Lincoln Elementary School	4
12106953	IA	Iowa City Comm School District	Alexander Elementary	4, 5
235865	IA	Lamoni Comm School District	Lamoni Elementary School	3
252643	IA	Lenox Comm School District	Lenox Elementary School	5
233623	IA	Mason City Comm School District	Roosevelt Elementary School	4
240054	IA	Missouri Valley Comm School District	Missouri Valley Elementary	3
235891	IA	Mormon Trail Comm School District	Mormon Trail Elementary School	4
240250	IA	Mount Pleasant Comm School District	Van Allen Elementary School	3
232394	IA	North Butler Comm School District	North Butler Elementary	4
250841	IA	North Scott Comm School District	Alan Shepard Elementary School	5
238726	IA	Paton-Churdan Comm School District	Paton-Churdan Elementary	3
246747	IA	Shenandoah Comm School District	Shenandoah Middle School	5
254744	IA	Sioux City Comm School District	Perry Creek Elementary School	3
235695	IA	Waukee Comm School District	Waukee Elementary School	5
2129420	IA	West Central Comm School District	West Central PK - 8 School	5
240121	IA	West Harrison Comm School District	West Harrison Elementary	3
4801193	MA	Abby Kelley Foster Charter Public (District)	Abby Kelley Foster Charter Public School	4
428127	MA	Acton-Boxborough	McCarthy-Towne School	4, 5
2044466	MA	Acton-Boxborough	Blanchard Memorial School	4, 5
417946	MA	Acushnet	Acushnet Elementary School	3, 4
424810	MA	Agawam	James Clark School	4
427367	MA	Amherst	Wildwood Elementary	3
428206	MA	Arlington	Brackett	4
428323	MA	Arlington	Thompson	3
2044636	MA	Ashburnham-Westminster	Briggs Elementary	4
2044741	MA	Ashburnham-Westminster	Westminster Elementary	5
434669	MA	Avon	Ralph D Butler	3
416239	MA	Barnstable	Centerville Elementary	3
416241	MA	Barnstable	West Villages Elementary School	3
417013	MA	Berkshire Hills	Muddy Brook Regional Elementary School	4
434786	MA	Braintree	Archie T Morrison	3
434803	MA	Braintree	Donald Ross	4
3397917	MA	Braintree	Hollis	3
425242	MA	Brookfield	Brookfield Elementary	5
2044545	MA	Carver	Carver Elementary School	4
441753	MA	Chelsea	Frank M Sokolowski Elementary	3
2044375	MA	Chesterfield-Goshen	New Hingham Regional Elementary	5
424949	MA	Chicopee	Bowie	5
425022	MA	Chicopee	Lambert-Lavoie	4
425058	MA	Chicopee	Streiber Memorial School	4, 5
3251820	MA	Chicopee	Fairview Elementary	3, 4, 5
2044143	MA	Clarksburg	Clarksburg Elementary	5
5009350	MA	Codman Academy Charter Public (District)	Codman Academy Charter Public School	4
435209	MA	Dedham	Avery	4, 5
416320	MA	Dennis-Yarmouth	Ezra H Baker Innovation School	3
429406	MA	Dracut	Greenmont Avenue	3
11821215	MA	Dudley Street Neighborhood Charter School (District)	Dudley Street Neighborhood Charter School	5
3045970	MA	Easthampton	Neil A Pepin	4
429470	MA	Everett	Sumner G. Whittier School	3, 5
429482	MA	Everett	Madeline English School	3, 4, 5
429559	MA	Everett	George Keverian School	4
5325025	MA	Everett	Lafayette School	4, 5
418550	MA	Fall River	Letourneau Elementary School	5

Table 16: Matched Control Schools (CTRL Dataset)

PID	State	District	School Name	GRADE
418603	MA	Fall River	Mary Fonseca Elementary School	3, 4, 5
418756	MA	Fall River	James Tansey	5
418782	MA	Fall River	John J Doran	3, 4, 5
418952	MA	Fall River	William S Greene	3
416538	MA	Falmouth	Morse Pond School	5
445474	MA	Fitchburg	Reingold Elementary	4
4913904	MA	Fitchburg	Arthur M Longsjo Middle School	5
11435517	MA	Fitchburg	McKay Elementary School	3, 4, 5
429640	MA	Framingham	Brophy	5
429652	MA	Framingham	Charlotte A Dunning	3
429767	MA	Framingham	Miriam F McCarthy School	3
429779	MA	Framingham	Barbieri Elementary	3
429793	MA	Framingham	Potter Road	3, 5
429810	MA	Framingham	Mary E Stapleton Elementary	5
429858	MA	Framingham	Harmony Grove Elementary	4
12101898	MA	Framingham	King Elementary School	3
445541	MA	Gardner	Gardner Elementary School	3
427501	MA	Gateway	Littleville Elementary School	5
424535	MA	Gill-Montague	Sheffield Elementary School	5
2044301	MA	Gill-Montague	Gill Elementary	4
421624	MA	Gloucester	Veterans Memorial	3, 5
424327	MA	Greenfield	Federal Street School	3, 4
427587	MA	Hadley	Hadley Elementary	5
1834505	MA	Hamilton-Wenham	Cutler School	3
4865400	MA	Hamilton-Wenham	Bessie Buker Elementary	4
427642	MA	Hatfield	Hatfield Elementary	4
424640	MA	Hawlemont	Hawlemont Regional	3, 4
11456573	MA	Hingham	East Elementary School	3, 5
4867977	MA	Holliston	Miller School	3
430182	MA	Hudson	Mulready Elementary	4
1398501	MA	Hudson	Forest Avenue Elementary	3
438768	MA	Hull	Lillian M Jacobs	3
11453686	MA	Lawrence	Frost Middle School	5
4367197	MA	Lawrence Family Development Charter (District)	Lawrence Family Development Charter School	4
4465153	MA	Learning First Charter Public School (District)	Learning First Charter Public School	4
417233	MA	Lenox	Morris	4
445993	MA	Leominster	Fall Brook	3, 4
446076	MA	Leominster	Johnny Appleseed	3
430352	MA	Lexington	Harrington	4
430388	MA	Lexington	Joseph Estabrook	4
430704	MA	Lowell	Greenhalge	3, 4
422654	MA	Lynnfield	Huckleberry Hill	4
430962	MA	Malden	Ferryway	4
431021	MA	Malden	Salemwood	3, 5
431186	MA	Marlborough	Richer	4
438823	MA	Marshfield	Gov Edward Winslow	3
438861	MA	Marshfield	South River	5
4458825	MA	Martha's Vineyard Charter Public School (District)	Martha's Vineyard Charter Public School	3
10752996	MA	Martin Luther King, Jr. Charter School of Excellence (District)	Martin Luther King, Jr. Charter School of Excellence	3
431215	MA	Maynard	Fowler School	4
431459	MA	Medford	John J McGlynn Elementary School	5
3336224	MA	Methuen	Comprehensive Grammar School	3
416461	MA	Monomoy Regional School District	Chatham Elementary School	4
417776	MA	Mount Greylock	Williamstown Elementary	3
2044090	MA	Mount Greylock	Lanesborough Elementary	3, 4
423048	MA	Nahant	Johnson	4
419102	MA	New Bedford	Abraham Lincoln	4
419126	MA	New Bedford	Betsey B Winslow	3
419176	MA	New Bedford	Ellen R Hathaway	5
419188	MA	New Bedford	Elwyn G Campbell	4
1413515	MA	New Bedford	Casimir Pulaski	3, 4
1413527	MA	New Bedford	Hayden/McFadden	3, 5
1540704	MA	New Bedford	Alfred J Gomes	3, 4, 5
12037625	MA	New Bedford	Renaissance Community Innovation School	4, 5
419449	MA	North Attleborough	Amvet Boulevard	3
419451	MA	North Attleborough	Falls	3
432142	MA	North Middlesex	Ashby Elementary	4
1828099	MA	North Middlesex	Varnum Brook	4
1171200	MA	Northampton	Leeds	3, 5
2044674	MA	Northborough	Fannie E Proctor	5
2044026	MA	Orleans	Orleans Elementary	4
427355	MA	Pelham	Pelham Elementary	5
1168344	MA	Pittsfield	Egremont	4
1168497	MA	Pittsfield	Stearns	3, 5
2044698	MA	Quaboag Regional	Warren Elementary	4

Table 17: Matched Control Schools (CTRL Dataset)

PID	State	District	School Name	GRADE
436227	MA	Quincy	Atherton Hough	3
436289	MA	Quincy	Clifford H Marshall Elementary	3
436461	MA	Quincy	Squantum	4
436538	MA	Randolph	Elizabeth G Lyons Elementary	4
436540	MA	Randolph	J F Kennedy Elementary	3
436552	MA	Randolph	Margaret L Donovan	3
10001773	MA	Reading	Wood End Elementary School	3
4887771	MA	River Valley Charter (District)	River Valley Charter School	4
424573	MA	Rowe	Rowe Elementary	4
419736	MA	Somerset	Chace Street	3
419748	MA	Somerset	North Elementary	4
419774	MA	Somerset	South	4
432427	MA	Somerville	Arthur D Healey	5
432477	MA	Somerville	E Somerville Community	5
1415525	MA	Somerville	Winter Hill Community	3
446894	MA	Southbridge	Charlton Street	4
446959	MA	Southbridge	West Street	3
424834	MA	Southwick-Tolland-Granville Regional School District	Powder Mill School	3
446973	MA	Spencer-E Brookfield	Wire Village School	3
4367202	MA	Springfield International Charter (District)	Springfield International Charter School	4
436758	MA	Stoughton	Helen Hansen Elementary	3
432805	MA	Sudbury	Peter Noyes	3, 5
423907	MA	Swampscott	Clarke	4
423919	MA	Swampscott	Hadley	4
420797	MA	Up-Island Regional	West Tisbury Elementary	4
425280	MA	Wales	Wales Elementary	4
433201	MA	Waltham	James Fitzgerald Elementary School	3
433263	MA	Waltham	Northeast Elementary School	3
433421	MA	Watertown	Hosmer	4
433433	MA	Watertown	James Russell Lowell	3
5100150	MA	Wellesley	Sprague Elementary School	4
426507	MA	West Springfield	Memorial	3, 4
433586	MA	Westford	Day Elementary	3
433897	MA	Winchester	Lynch Elementary	5
5342475	MA	Winthrop	Arthur T. Cummings Elementary School	4
434009	MA	Woburn	Mary D Altavesta	4
434059	MA	Woburn	Goodyear Elementary School	5
489652	MI	Columbia School District	Columbia Upper Elementary School	4
509551	MI	Grand Haven Area Public Schools	White Pines Intermediate School	5
490780	MI	Kalamazoo Public Schools	Indian Prairie Elementary School	3
475807	MI	Wayland Union Schools	Pine Street Elementary	5
3248835	MN	Burnsville-Eagan-Savage School District	Hidden Valley Elementary	5
527759	MN	Columbia Heights Public School District	North Park School for Innovation	3
544434	MN	North St. Paul-Maplewood Oakdale Public School District	Webster Elementary	4
690930	NJ	Colts Neck Township School District	Conover Road Elementary School	3
1523342	NJ	Medford Township School District	Taunton Forge Elementary School	3
12309636	NV	Clark	Kenneth Divich Elementary	4
12260169	NV	Esmeralda	Pinecrest Academy of Nevada Cadence	3
2126832	NV	Washoe	KATHERINE DUNN ELEMENTARY	4
825575	OH	Oakwood City	Smith Elementary School	5
11135119	OR	Bend-LaPine Administrative SD 1	Ponderosa Elementary	4
10774061	OR	Sweet Home SD 55	Sweet Home Charter School	5
2111617	PA	JEFFERSON-MORGAN SD	JEFFERSON-MORGAN EL SCH	5
912051	PA	SOUTHERN FULTON SD	SOUTHERN FULTON EL SCH	3
925840	PA	WISSAHICKON SD	STONY CREEK EL SCH	5
1018878	TX	CLEAR CREEK ISD	G H WHITCOMB EL	4
1057903	TX	COMSTOCK ISD	COMSTOCK SCHOOL	4
4454178	TX	COPPELL ISD	VALLEY RANCH EL	3
3009744	TX	DENTON ISD	MCNAIR EL	3
1052757	TX	FORT WORTH ISD	DAVID K SELLARS	4
1053191	TX	FORT WORTH ISD	NATHA HOWELL EL	3
1053464	TX	FORT WORTH ISD	TANGLEWOOD EL	5
11445768	TX	HARPER ISD	HARPER MIDDLE	5
5341421	TX	HIDALGO ISD	HIDALGO PARK EL	4
1017484	TX	HONEY GROVE ISD	HONEY GROVE EL	3
4033621	TX	LAMAR CISD	SUSANNA DICKINS	4
1006265	TX	MCKINNEY ISD	GLEN OAKS EL	4
1006277	TX	MCKINNEY ISD	WEBB EL	4
1011454	TX	MESQUITE ISD	SHANDS EL	3
1041540	TX	MIDLAND ISD	JAMES BOWIE FIN	4
12104369	TX	MIDLAND ISD	BARBARA FASKEN	3
10008343	TX	PLANO ISD	MARTHA HUNT EL	4
11555076	TX	PLEASANT GROVE	PLEASANT GROVE	4
1033969	TX	PORT NECHES-GRO	GROVES EL	4
1039121	TX	ROOSEVELT ISD	ROOSEVELT EL	3

Table 18: Matched Control Schools (CTRL Dataset)

PID	State	District	School Name	GRADE
1055785	TX	SAN ANGELO ISD	SANTA RITA EL	4
1004657	TX	WHITE DEER ISD	WHITE DEER EL	4
11434795	TX	WYLIE ISD	DON WHITT EL	3
1068380	UT	Weber District	Bates School	5

Table 19: Matched Control Schools (CTRL Dataset)