

California Math Outcomes Analysis 2018/19

Grade Levels: 3, 4, 5

ST Math Program: Gen-4

Analysis Type: Standard Met or Exceeded by Progress Bin

Treatment-Years: 2018/19

Baseline-Year: 2014/15, 2015/16, 2016/17 or 2017/18

Subgroup: All



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Abstract

This analysis evaluates grades using ST Math in California in 2018/19. 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 803 grades, consisting of grades 3, 4, and 5 at schools. Separating ST Math grades, along with their matched controls, into five groups based on percentage progress of the program completed by April 15, math outcomes on California's CAASPP exam is evaluated. Increasing grade-mean average progress in ST Math results in an increase of ST Math benefit on math performance.

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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 multi-year changes in grade-mean CAASPP Standard Met or Exceeded percentages. 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 (2014/15, 2015/16, 2016/17, or 2017/18), and never used ST Math. The treatment grades’ selection pool was all schools using ST Math in grades 3, 4, and 5 in California. The control grades’ pool was all schools not using ST Math in grades 3, 4, and 5 in California. This study method measures effectiveness of the ST Math program across varying levels of grade-mean progress.

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. In order to find sufficient grades in California using ST Math at each progress bin from the available data, testing years were aggregated to include any grade using ST Math in 2018/19 and starting after 2014/15, when CAASPP testing began, along with the appropriate baseline year of 2014/15-2017/18.

2.1 Proficiency Levels Definition

The following (Table 1) is California's proficiency level descriptions:

Proficiency Level	State Proficiency Level Name
L1	Standard Not Met
L2	Standard Nearly Met
L3	Standard Met
L4	Standard Exceeded

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 California. From these schools, every grade that had used the ST Math program only for the year 2018/19 was identified. They comprise the Treatment grades pool for this evaluation of multi-year usage.

2.2.1 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%.

2.2.2 Content Coverage Filter

Furthermore, the outcomes measure is a summative year-end test, i.e. California's standardized math assessment (CAASPP). 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 California math standards. To infer that the ST Math content is having a valid effect on student outcomes on the summative assessment, we analyze the grade-mean of ST Math Progress for its students 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 students achieve 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 California. Though they are randomly selected, they are also matched to be similar to the Treatment grades' math attributes and demographics during the baseline Baseline year. The matched attributes include:

- scale score
- student percentages at each math proficiency level
- percentage of students receiving free or reduced lunch (using the demographic data from MDR).

To mitigate the risk of randomly picking a set of Control grades that generates an outlier for effect, 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.

One hundred randomly matched picks are made and sets of matched control grades are generated. For each set, the quality of the match as well as 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. When multiple median picks exist, the control set with the minimal math score differences in the baseline year is chosen.

3 Data Analysis

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

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

ST Math Percent Grade Mean Progress Distribution – 2018/19

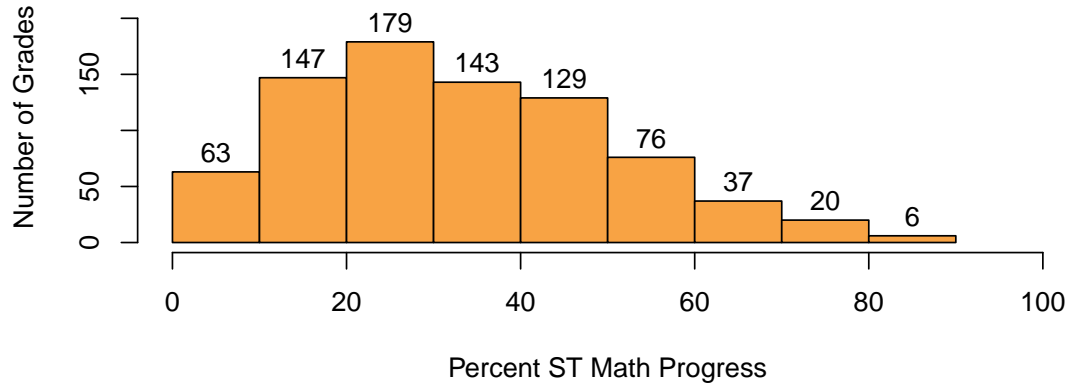


Figure 1: Histogram of ST Math Percent Progress for $\geq 85\%$ Enrollment Grades 2018/19

For all ST Math grades with Enrollment $\geq 85\%$, Figure 1 shows the frequency distribution of grade-average Progress percentage through the program. Table 2 provides descriptive statistics of the Progress distribution.

	Min.	Max.	Average	S.D.
ST Math % Progress	1.7	88.4	33.1	17.5

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

Table 3 shows the number of remaining treatment grades (equal to the number of matched control grades) in each quintile progress bin after applying the enrollment filter.

	Progress <20%	Progress $\geq 20\%$ & <40%	Progress $\geq 40\%$ & <60%	Progress $\geq 60\%$ & <80%	Progress $\geq 80\%$
ST Math Grades (Enroll $\geq 85\%$)	210	325	205	57	6
ST Math Schools (Enroll $\geq 85\%$)	146	207	137	41	5
ST Math Students (Enroll $\geq 85\%$)	13989	24409	15581	4142	479
CTRL Schools	210	325	205	57	6
CTRL Grades	208	312	202	57	6
CTRL Students	16841	25939	16278	4641	373

Table 3: Filtering Treatment and Controls

3.1.2 Match of Controls to Treatment

Figure 2 shows the density plot of the baseline CAASPP Math scale scores (left plot) and baseline percent students at CAASPP Standard Met or Exceeded (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, Baseline.

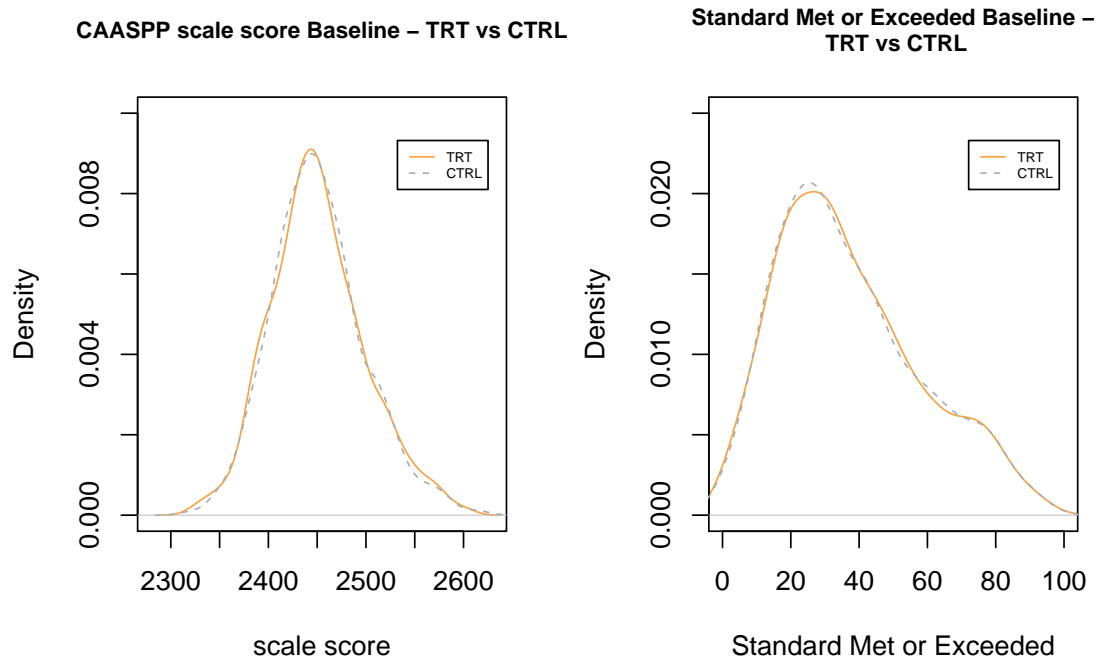


Figure 2: Baseline Year Density Plots Showing Math Scores Match between TRT and CTRL - Baseline

Similarly, Figure 3 shows the density plot of the percentage of students needing free or reduced lunch for treatment grades overlaid on control grades, showing the closeness of the match obtained between Treatment and Control sets of grades.

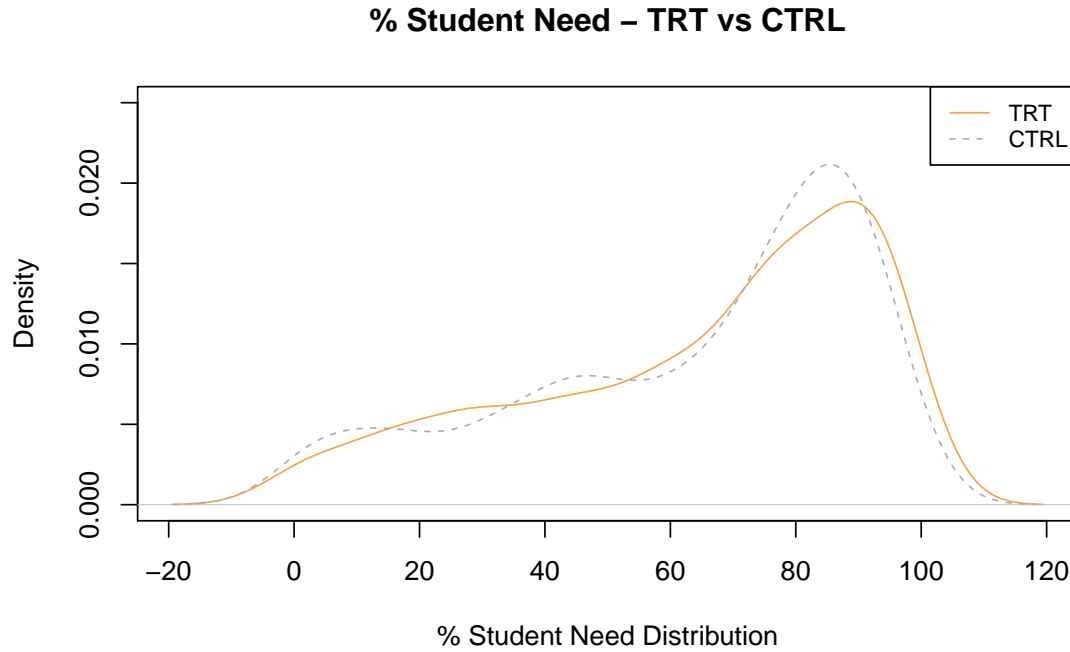


Figure 3: Baseline Year Density Plot Showing Student Need Match between TRT and CTRL

Table 4 shows the difference of the means of Treatment versus Control in the baseline year, with accompanying p-values, for percent Standard Met or Exceeded, for mean scale score, 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
Standard Met or Exceeded - Baseline	37.15	21.03	37.14	21.02	0.01	0.99	0.00
Scale score - Baseline	2451.05	48.73	2451.33	47.56	-0.29	0.90	-0.01
Percent Free or Reduced Lunch	64.81	27.38	63.73	27.25	1.08	0.43	0.04

Table 4: Matching TRT and CTRL

3.2 Grade-Aggregated Quintile Progress Bins Analysis

Tables 5, 6, 7, 8, and 9 shows for both Treatment (TRT) and Control (CTRL) 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	Standard Met or Exceeded	ST Math Per Comp.
TRT.Baseline	210	146	14794	33.02	-
TRT.18.19	210	146	13989	38.40	13.01
TRT.Delta	-	-	-	5.38	-
CTRL.Baseline	210	208	17488	32.94	-
CTRL.18.19	210	208	16841	38.46	-
CTRL.Delta	-	-	-	5.52	-

Table 5: Progress < 20 percent Grades Together Growth

	# Grades	# Schools	# Students	Standard Met or Exceeded	ST Math Per Comp.
TRT.Baseline	325	207	25873	36.25	-
TRT.18.19	325	207	24409	44.10	29.24
TRT.Delta	-	-	-	7.85	-
CTRL.Baseline	325	312	26816	36.23	-
CTRL.18.19	325	312	25939	41.29	-
CTRL.Delta	-	-	-	5.06	-

Table 6: Progress >= 20 percent and < 40 percent Grades Together Growth

	# Grades	# Schools	# Students	Standard Met or Exceeded	ST Math Per Comp.
TRT.Baseline	205	137	16589	39.79	-
TRT.18.19	205	137	15581	48.31	48.42
TRT.Delta	-	-	-	8.52	-
CTRL.Baseline	205	202	17037	39.91	-
CTRL.18.19	205	202	16278	43.98	-
CTRL.Delta	-	-	-	4.07	-

Table 7: Progress >= 40 percent and < 60 percent Grades Together Growth

	# Grades	# Schools	# Students	Standard Met or Exceeded	ST Math Per Comp.
TRT.Baseline	57	41	4357	44.31	-
TRT.18.19	57	41	4142	56.89	67.69
TRT.Delta	-	-	-	12.58	-
CTRL.Baseline	57	57	4864	44.28	-
CTRL.18.19	57	57	4641	49.16	-
CTRL.Delta	-	-	-	4.88	-

Table 8: Progress \geq 60 percent and $<$ 80 percent Grades Together Growth

	# Grades	# Schools	# Students	Standard Met or Exceeded	ST Math Per Comp.
TRT.Baseline	6	5	478	72.02	-
TRT.18.19	6	5	479	78.41	83.47
TRT.Delta	-	-	-	6.39	-
CTRL.Baseline	6	6	407	70.53	-
CTRL.18.19	6	6	373	66.40	-
CTRL.Delta	-	-	-	-4.13	-

Table 9: Progress \geq 80 percent Grades Together Growth

Figure 4 shows the differences in changes of percentage of students at CAASPP Standard Met or Exceeded for the grade-aggregated Treatment and Control sets.

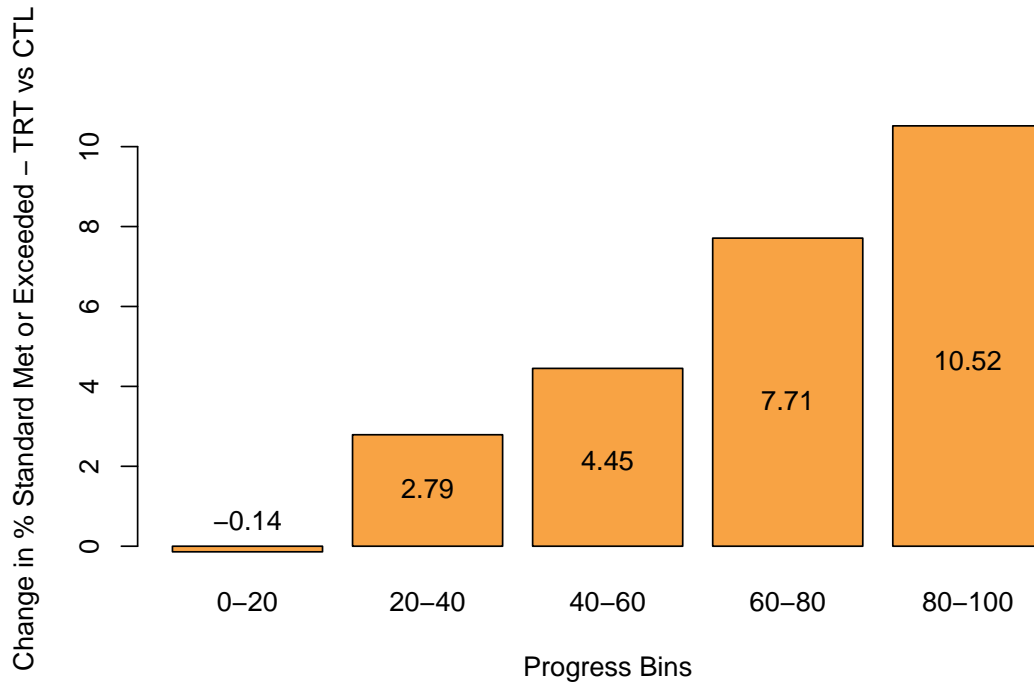


Figure 4: Changes in Standard Met or Exceeded for Grade-Aggregated TRT and CTRL datasets between Baseline and 2018/19

Further, Table 10 shows the statistics for the *differences* in changes between TRT and CTRL (Treatment - Control) for these same Standard Met or Exceeded changes as in the above figures. ¹

	Estimate	P-Value	Int.Low	Int.High
Progress <20%	-0.14	0.9	-2.30	2.02
Progress >=20% & <40%	2.79	0.00*	0.90	4.68
Progress >=40% & <60%	4.45	0.00*	2.24	6.66
Progress >=60% & <80%	7.71	0.00*	3.71	11.70
Progress >= 80%	10.52	0.13	-3.65	24.70

Table 10: Statistics for the Differential Changes in Math Scores Growth (TRT - CTRL)

¹* statistically significant p<0.05

4 Effect Size

The following table shows the effect sizes for z-score of Standard Met or Exceeded.

	% Meeting or Exceeding Standards Effect Size
Progress <20%	-0.01
Progress >=20% & <40%	0.13
Progress >=40% & <60%	0.21
Progress >=60% & <80%	0.40
Progress >= 80%	0.58

Table 11: Cohen's d Effect Size by Quintiles

5 Findings Summary

As grade-mean progress increases, so does the benefit of the ST Math program. These results align with MIND's progress filter of at least 40% grade-mean progress to count a grade as having used ST Math with fidelity and thus, would see a benefit in standardized test scores from year to year. Statistically significant differences were found for three of the five progress bins. Looking at table 10, a statistically significant difference was found for grade-aggregated Standard Met or Exceeded proficiency levels, with an estimate of 2.79 points favorable for the ST Math set with grade-mean progress falling between 20% and 40%. Further in table 10, a statistically significant difference was found for grade-aggregated Standard Met or Exceeded proficiency levels, with an estimate of 4.45 points favorable for the ST Math set with grade-mean progress falling between 40% and 60%. Finally in table 10, a statistically significant difference was found for grade-aggregated Standard Met or Exceeded proficiency levels, with an estimate of 7.71 points favorable for the ST Math set with grade-mean progress falling between 60% and 80%.

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 random assignment 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 an enrollment filter of at least 85% of students in each grade using the program to be considered for the Treatment set. This filter 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. The Monte Carlo Method is used to mitigate the possibility of control picks being favorable or unfavorable (see Section 2.3).

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	IID	District	School Name	GRADE
11454264	ACA6YP	Academia Moderna	Academia Moderna	4
10028850	ACH7AS	Achieve Academy	Achieve Academy	4, 3
10016651	ACH7EK	Achieve Charter School of Paradise Inc.	Achieve Charter School of Paradise Inc.	3, 4, 5
130045	ARO7BW	Aromas - San Juan Unified	Aromas	4, 5
10018166	ASP78B	Aspen Valley Prep Academy	Aspen Valley Prep Academy	3
99958	ROC7DK	Auburn Union Elementary	Rock Creek Elementary	3
100973	PAL746	Beaumont Unified	Palm Innovation Academy	3, 4
5341718	BRO746	Beaumont Unified	Brookside Elementary	3, 4, 5
5341732	SUN746	Beaumont Unified	Sundance Elementary	3, 4
66614	ERN0RS	Bellflower Unified	Ernie Pyle Elementary	3, 4, 5
55952	BUC0RU	Buckeye Union Elementary	Buckeye Elementary	3, 4, 5
3046819	BLU0RS	Buckeye Union Elementary	Blue Oak Elementary	3, 4, 5
5278848	OAK0RX	Buckeye Union Elementary	Oak Meadow Elementary	3, 4, 5
137639	BUR771	Burton Elementary	Burton Elementary	3, 4, 5
2852378	OAK0RU	Burton Elementary	Oak Grove Elementary	3, 4, 5
131740	BUT7EX	Butteville Union Elementary	Butteville Elementary	3, 5
52998	WES7CL	Calaveras Unified	West Point Elementary	3, 4
1169465	JEF747	Calexico Unified	Jefferson Elementary	4
1169477	MAI747	Calexico Unified	Mains Elementary	5, 4, 3
95160	LAS0RS	Capistrano Unified	Las Palmas Elementary	3, 4, 5
120741	CAY77J	Cayucos Elementary	Cayucos Elementary	3, 5, 4
95263	BUE6ZT	Centralia Elementary	Buena Terra Elementary	3, 4, 5
95299	GEO6ZQ	Centralia Elementary	George B. Miller Elementary	3, 4, 5
95304	GHD6ZQ	Centralia Elementary	Glen H. Dysinger Sr. Elementary	3, 4, 5
95316	LOS6ZQ	Centralia Elementary	Los Coyotes Elementary	3, 4, 5
95342	RAY6ZQ	Centralia Elementary	Raymond Temple Elementary	3, 4, 5
95354	SAN6ZQ	Centralia Elementary	San Marino Elementary	3, 4, 5
110540	GRE0RS	Chula Vista Elementary	Rogers (Greg) Elementary	5, 3, 4
110679	MYR0RS	Chula Vista Elementary	Finney (Myrtle S.) Elementary	3, 5, 4
3399551	CLE73B	Chula Vista Elementary	Clear View	3, 4
10774073	COM0RT	Community Collaborative Charter	Community Collaborative Charter	3
11562639	CRO0RU	Crown Preparatory Academy	Crown Preparatory Academy	5
101496	HER0RU	Desert Sands Unified	Herbert Hoover Elementary	5, 3
68806	CHE72T	El Monte City	Cherrylee Elementary	3, 4, 5
68818	CLE72Y	El Monte City	Cleminson Elementary	3, 4, 5
68832	COR72T	El Monte City	Cortada Elementary	3, 4, 5
68844	DUR72T	El Monte City	Durfee Elementary	3, 4, 5
68856	GID72T	El Monte City	Gidley Elementary	3, 4, 5
68868	ANN72T	El Monte City	Legore Elementary	3, 5
68894	NEW72T	El Monte City	New Lexington Elementary	3, 4, 5
68911	POT72T	El Monte City	Potrero Elementary	3, 4, 5
68923	RIO70S	El Monte City	Rio Hondo Elementary	3, 4, 5
68935	RIO72T	El Monte City	Rio Vista Elementary	3, 4, 5
68947	SHI72T	El Monte City	Shirpser Elementary	3, 4, 5
68961	WIL72T	El Monte City	Wilkerson Elementary	3, 4
68973	WRI72T	El Monte City	Wright Elementary	3, 4, 5
135227	CAP0RT	Empire Union Elementary	Capistrano Elementary	3, 4, 5
4287975	ALI7CV	Empire Union Elementary	Alice N. Stroud Elementary	3, 4, 5
119027	FAR7CJ	Escalon Unified	Farmington Elementary	4
126367	SAN7C8	Franklin-McKinley Elementary	Santee Elementary	3, 4, 5
3334355	JEA0RS	Franklin-McKinley Elementary	Jeanne R. Meadows Elementary	3, 4, 5
3400019	BAL0RS	Fresno Unified	Ezekiel Balderas Elementary	5
4925153	GRE0RX	Fresno Unified	David L. Greenberg Elementary	3, 4, 5
96073	BRY75W	Garden Grove Unified	Bryant Elementary	3, 4, 5
96097	CLI75W	Garden Grove Unified	Clinton Elementary	3, 4, 5

Table 12: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
96334	JOH0RW	Garden Grove Unified	John Marshall Elementary	3
70419	EUC0RS	Hawthorne	Eucalyptus	3
70433	JEF0RS	Hawthorne	Jefferson	3
70445	RAM0RS	Hawthorne	Ramona	3, 4, 5
70457	WAS0RS	Hawthorne	Washington	3
70471	YOR0RS	Hawthorne	York	3
70495	ZEL6YP	Hawthorne	Zela Davis	3, 4, 5
4922383	KOR0RS	Hawthorne	Kornblum	3, 5
133657	HEA0RS	Healdsburg Unified	Healdsburg Elementary	3, 4, 5
11708716	HEA0RU	Healdsburg Unified	Healdsburg Charter	5, 4, 3
12109400	HIG73V	High Tech Elementary	High Tech Elementary	3, 4, 5
4919738	HIG73W	High Tech Elementary Explorer	High Tech Elementary Explorer	4
53540	ROD7AP	John Swett Unified	Rodeo Hills Elementary	3, 4
11934458	KEP0RS	Kepler Neighborhood	Kepler Neighborhood	3, 4, 5
4926030	KEY0RS	Keyes Union	Keyes to Learning Charter	4, 5
96932	ELM0RS	Laguna Beach Unified	El Morro Elementary	5, 3
96968	TOP0RS	Laguna Beach Unified	Top of the World Elementary	3, 4
119106	LAM0RT	Lammersville Joint Unified	Lammersville Elementary	5, 4, 3
5363716	WIC0RT	Lammersville Joint Unified	Wicklund Elementary	3, 4, 5
10901927	BET0RU	Lammersville Joint Unified	Bethany Elementary	3, 5, 4
11552725	QUE0RS	Lammersville Joint Unified	Sebastian Questa Elementary	4, 5, 3
12035471	ALT0RS	Lammersville Joint Unified	Altamont Elementary	5, 4
111790	SAN73E	Lemon Grove	San Altos Elementary	3, 4
5110246	LIG7AU	Lighthouse Community Charter	Lighthouse Community Charter	5
71437	AVA6ZY	Long Beach Unified	Avalon K-12	3, 4
71475	ALI708	Long Beach Unified	Birney Elementary	3, 4, 5
71504	BUR70A	Long Beach Unified	Burbank Elementary	3, 4, 5
71554	GRO6ZZ	Long Beach Unified	Cleveland Elementary	3, 4, 5
71592	EDI708	Long Beach Unified	Edison Elementary	3, 4, 5
71669	ULY708	Long Beach Unified	Grant Elementary	3, 4, 5
71712	HOL6ZZ	Long Beach Unified	Holmes Elementary	3
71736	HUD709	Long Beach Unified	Hudson K-8	3, 4, 5
71841	ABR709	Long Beach Unified	Lincoln Elementary	3, 5
71877	HEN709	Long Beach Unified	Longfellow Elementary	3, 4, 5
71918	JAM75S	Long Beach Unified	Madison Elementary	4
72041	ROO709	Long Beach Unified	Roosevelt Elementary	3, 4, 5
72089	STE708	Long Beach Unified	Stevenson Elementary	3, 4, 5
72120	MAR70A	Long Beach Unified	Twain Elementary	3, 4, 5
72144	DAN709	Long Beach Unified	Webster Elementary	3, 4, 5
72170	FRA709	Long Beach Unified	Willard Elementary	3, 4, 5
3248342	INT709	Long Beach Unified	Jenny Oropeza Elementary	5, 3, 4
3336511	ALV703	Long Beach Unified	Alvarado Elementary	4, 5
4286309	JAC708	Long Beach Unified	Robinson Academy	3, 4, 5
5345776	CES708	Long Beach Unified	Chavez Elementary	5, 3, 4
72534	CAB701	Los Angeles Unified	Cabrillo Avenue Elementary	3, 4
72780	HAR6Z0	Los Angeles Unified	Harbor City Elementary	5
72807	LEA0RY	Los Angeles Unified	Leapwood Avenue Elementary	4, 5
73019	TOW702	Los Angeles Unified	Towne Avenue Elementary	3
73526	STA6YS	Los Angeles Unified	Stanford Avenue Elementary	3, 4, 5
73538	STA0RS	Los Angeles Unified	State Street Elementary	3, 5
73629	WEI6Y0	Los Angeles Unified	Weigand Avenue Elementary	4, 5
75691	FIR0RS	Los Angeles Unified	First Street Elementary	3, 4, 5
76035	ANN6Y1	Los Angeles Unified	Ann Street Elementary	3, 5
76126	BUS6Y4	Los Angeles Unified	Bushnell Way Elementary	3, 5
76176	DOR0RS	Los Angeles Unified	Dorris Place Elementary	3, 4, 5

Table 13: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
76231	GAR0RT	Los Angeles Unified	Garvanza Elementary	3, 4, 5
76308	HIL6Y3	Los Angeles Unified	Hillside Elementary	4
76396	LOS6Y5	Los Angeles Unified	Los Feliz Science/Tech/Engineer/Math/Medicine Magn	3, 4, 5
76891	STO0RS	Los Angeles Unified	Stonehurst Avenue Elementary	4, 5
77041	BER71P	Los Angeles Unified	Bertrand Avenue Elementary	3, 4, 5
77302	PLU71Q	Los Angeles Unified	Plummer Elementary	3, 4, 5
77338	RES71P	Los Angeles Unified	Reseda Elementary	3, 4, 5
77730	HER71Q	Los Angeles Unified	Herrick Avenue Elementary	3, 4, 5
77998	TUL71Q	Los Angeles Unified	Tulsa Street Elementary	3, 4, 5
78033	VIN0RS	Los Angeles Unified	Vintage Math/Science/Technology Magnet	4, 5
4876318	NEW0S4	Los Angeles Unified	Newcastle Elementary	4
10009830	MAD6Y5	Los Angeles Unified	Madison Elementary	5
10013702	PAN0RS	Los Angeles Unified	Panorama City Elementary	5, 3, 4
11562419	JAI0RS	Los Angeles Unified	Jaime Escalante Elementary	3
11562665	ALT71W	Los Angeles Unified	Alta California Elementary	4
11823079	SAL0RS	Los Angeles Unified	Sally Ride Elementary: A SMARt Academy	3, 4, 5
88648	SIE783	Madera Unified	Sierra Vista Elementary	3, 5
4287444	LIN783	Madera Unified	Lincoln Elementary	4, 5
91281	MAR7CW	Merced City Elementary	Margaret Sheehy Elementary	3
2890502	LEO7CU	Merced City Elementary	Leontine Gracey Elementary	4, 3
3242726	ALI7CU	Merced City Elementary	Alicia Reyes Elementary	4, 3
4811796	DON7CU	Merced City Elementary	Don Stowell Elementary	4
79350	MON6Y2	Montebello Unified	Montebello Park Elementary	3, 5
79506	MAX0RT	Mountain View Elementary	Maxson Elementary	4, 5
111960	KIM0RS	National Elementary	Kimball	4, 3
4368440	NEV7EJ	Nevada City School of the Arts	Nevada City School of the Arts	4, 5
4875895	REA75A	Newport-Mesa Unified	Everett A. Rea Elementary	3, 5
3048013	MAG7CW	Oakdale Joint Unified	Magnolia Elementary	3, 4, 5
49551	ALL7AT	Oakland Unified	Allendale Elementary	4, 5
49563	ANT0RS	Oakland Unified	Chabot Elementary	3, 5
49604	EME7AS	Oakland Unified	Emerson Elementary	3, 5
49678	HIL0RW	Oakland Unified	Hillcrest Elementary	3, 4
49721	LIN0RZ	Oakland Unified	Lincoln Elementary	3, 4, 5
49757	BRI7AS	Oakland Unified	Bridges Academy	3, 5
49862	BEL7AT	Oakland Unified	Bella Vista Elementary	3, 4, 5
49898	CLE7AS	Oakland Unified	Cleveland Elementary	3, 5
49953	FRU7AS	Oakland Unified	Fruitvale Elementary	3, 4, 5
49977	GLE7AS	Oakland Unified	Glenview Elementary	4
50017	LAU0RS	Oakland Unified	Laurel Elementary	3, 5
50160	BUR7AS	Oakland Unified	Burckhalter Elementary	3, 4, 5
50196	CHA7AS	Oakland Unified	Howard Elementary	3, 4, 5
50237	GRA7AS	Oakland Unified	Grass Valley Elementary	3, 4, 5
4949381	INT7AS	Oakland Unified	International Community	4, 5
4949496	ACO7AU	Oakland Unified	ACORN Woodland Elementary	3, 4, 5
10009995	MAN7AT	Oakland Unified	Manzanita SEED Elementary	5, 3, 4
10016998	SAN7AS	Oakland Unified	Sankofa Academy	4, 3
10017007	RIS0RS	Oakland Unified	Rise Community	3, 4, 5
10028824	ESP0RS	Oakland Unified	Esperanza Elementary	5
10911207	FUT0RS	Oakland Unified	Futures Elementary	3, 5, 4
97663	CIR0RS	Ocean View	Circle View Elementary	3, 4, 5
97716	HAR0S2	Ocean View	Harbour View Elementary	3
97730	HOP75C	Ocean View	Hope View Elementary	3
97869	STA75D	Ocean View	Star View Elementary	3, 4, 5
97883	VIL0RT	Ocean View	Village View Elementary	3, 4, 5
4919180	RAM0RT	Oxnard	Ramona Elementary	3, 4, 5

Table 14: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
130019	AME7C3	Pajaro Valley Unified	Amesti Elementary	3, 4, 5
130198	MAC7C3	Pajaro Valley Unified	T. S. MacQuiddy Elementary	3, 4, 5
3250955	STA0S9	Pajaro Valley Unified	Starlight Elementary	4, 5
4901286	ANN7C3	Pajaro Valley Unified	Ann Soldo Elementary	3, 4, 5
4949848	WAT7C3	Pajaro Valley Unified	Watsonville Charter School of the Arts	3, 4, 5
5349904	RAD7C3	Pajaro Valley Unified	Radcliff Elementary	5, 4
102103	CIE0RS	Palm Springs Unified	Cielo Vista Charter	3
5102093	PAR6Y2	Para Los Niños Charter	Para Los Niños Charter	3
80323	HOL6YS	Paramount Unified	Hollydale	5
80347	LOS701	Paramount Unified	Los Cerritos	5
80359	MAJ700	Paramount Unified	Major Lynn Mokler	5
80361	MAR700	Paramount Unified	Mark Keppel	5
80385	THE700	Paramount Unified	Theodore Roosevelt	5
3317620	HAR700	Paramount Unified	Harry Wirtz Elementary	5
4918825	JEF700	Paramount Unified	Jefferson Elementary	5
120997	GEO77K	Paso Robles Joint Unified	Georgia Brown Dual Immersion Magnet Elementary	4, 5, 3
121006	BAU77K	Paso Robles Joint Unified	Arts Academy at Bauer Speck Elementary	5, 3, 4
121020	WIN77K	Paso Robles Joint Unified	Winifred Pifer Elementary	5, 3, 4
3249449	VIR77K	Paso Robles Joint Unified	Virginia Peterson Elementary	3, 4, 5
3326865	PAT77K	Paso Robles Joint Unified	Pat Butler Elementary	3, 4, 5
4941054	KER77K	Paso Robles Joint Unified	Kermit King Elementary	3, 4, 5
98435	GLE75S	Placentia-Yorba Linda Unified	Glenview Elementary	3, 4, 5
140296	LAS0RV	Pleasant Valley	Las Posas Elementary	3, 4
138279	BEL0RS	Porterville Unified	Bellevue Elementary	3, 4, 5
138358	ROC0RS	Porterville Unified	Roche Elementary	3, 4, 5
138384	WES771	Porterville Unified	Westfield Elementary	3, 4, 5
1169922	KIN0RT	Redlands Unified	Kingsbury Elementary	3, 4, 5
140404	RIO76G	Rio Elementary	Rio Real Elementary	3
4941822	RIO76J	Rio Elementary	Rio del Norte	4, 3
102414	EME74Y	Riverside Unified	Emerson Elementary	5, 4
102426	FRE74Y	Riverside Unified	Fremont Elementary	3
102476	HIG74Y	Riverside Unified	Highgrove Elementary	5, 3, 4
102488	HIG74Z	Riverside Unified	Highland Elementary	3, 4, 5
102555	LON74Y	Riverside Unified	Longfellow Elementary	3, 4, 5
102593	MOU0RT	Riverside Unified	Mountain View Elementary	4, 5, 3
10912603	PAT74Y	Riverside Unified	Patricia Beatty Elementary	3
81353	HUR72U	Rowland Unified	Hurley Elementary	3, 4, 5
12163602	ONE0RV	SBE - OnePurpose	OnePurpose	3
94180	MON0S2	Saddleback Valley Unified	Montevideo Elementary	5
94245	GLE75H	Saddleback Valley Unified	Glen Yermo Elementary	3
94269	LIN75H	Saddleback Valley Unified	Linda Vista Elementary	3, 4, 5
94312	OLI75B	Saddleback Valley Unified	Olivewood Elementary	3, 4, 5
94324	RAL75B	Saddleback Valley Unified	Ralph A. Gates Elementary	3, 4, 5
94336	SAN75D	Saddleback Valley Unified	San Joaquin Elementary	3, 4, 5
94348	SAN75B	Saddleback Valley Unified	Santiago STEAM Magnet Elementary	3, 4
92974	SAN0RX	San Ardo Union Elementary	San Ardo Elementary	5
109319	DRH0RT	San Bernardino City Unified	Howard Inghram Elementary	4, 5, 3
4199407	MON0RU	San Diego County Office of Education	Monarch	4, 5, 3
112548	ADA73V	San Diego Unified	Adams Elementary	4, 5, 3
112550	ALC73V	San Diego Unified	Alcott Elementary	4, 3
112574	ANG73W	San Diego Unified	Angier Elementary	4, 5, 3
112586	AUD73V	San Diego Unified	Audubon K-8	5, 4
112598	BAK73V	San Diego Unified	Baker Elementary	4, 5
112603	BAL73V	San Diego Unified	Balboa Elementary	3
112627	BAR73U	San Diego Unified	Barnard Elementary	3

Table 15: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
112641	BAY73V	San Diego Unified	Bay Park Elementary	5, 4, 3
112718	BOO73V	San Diego Unified	Boone Elementary	3
112720	GOL73U	San Diego Unified	Golden Hill K-8	3, 4
112732	BUR73V	San Diego Unified	Burbank Elementary	3, 4, 5
112756	CAD73V	San Diego Unified	Cadman Elementary	5, 3
112770	CAR73U	San Diego Unified	Carver Elementary	3
112782	CEN73U	San Diego Unified	Central Elementary	3
112823	CLA73V	San Diego Unified	Clay Elementary	4, 5, 3
112873	CRO73U	San Diego Unified	Crown Point Elementary	3, 4
112885	CUB73W	San Diego Unified	Cubberley Elementary	5
112897	CUR73W	San Diego Unified	Curie Elementary	4
112952	EDI73U	San Diego Unified	Edison Elementary	3, 4
112976	EME73V	San Diego Unified	Emerson/Bandini Elementary	3, 5, 4
112988	ENC73V	San Diego Unified	Encanto Elementary	4, 5, 3
113009	EUC73U	San Diego Unified	Euclid Elementary	3
113035	FIE73V	San Diego Unified	Field Elementary	4, 5, 3
113073	FOS73W	San Diego Unified	Foster Elementary	4, 5, 3
113085	FRA73V	San Diego Unified	Franklin Elementary	3, 4
113097	FRE73V	San Diego Unified	Freese Elementary	3, 4, 5
113114	FUL73V	San Diego Unified	Fulton K-8	3
113126	GAG73V	San Diego Unified	Gage Elementary	3
113140	GRA73U	San Diego Unified	Grant K-8	3, 4, 5
113188	HAM73U	San Diego Unified	Hamilton Elementary	4, 5, 3
113190	HAR73V	San Diego Unified	Hardy Elementary	5, 3, 4
113205	HAW73V	San Diego Unified	Hawthorne Elementary	5, 4
113217	HEA73W	San Diego Unified	Hearst Elementary	5, 4, 3
113231	HIC73W	San Diego Unified	Hickman Elementary	5
113243	HOL73V	San Diego Unified	Holmes Elementary	4, 5
113267	HOR73U	San Diego Unified	Horton Elementary	4
113279	FAY73U	San Diego Unified	Fay Elementary	3, 5
113281	JEF73U	San Diego Unified	Jefferson Elementary	4
113396	LAF73V	San Diego Unified	Lafayette Elementary	5, 3
113401	PAC73X	San Diego Unified	Pacific View Leadership Elementary	3, 5, 4
113437	LIN73V	San Diego Unified	Linda Vista Elementary	3
113463	LOM73U	San Diego Unified	Loma Portal Elementary	3, 4
113475	LON73V	San Diego Unified	Longfellow K-8	3
113487	PER73V	San Diego Unified	Perkins K-8	4, 5
113554	MAR73W	San Diego Unified	Marvin Elementary	3, 4
113578	MCK73U	San Diego Unified	McKinley Elementary	4, 5
113700	OCE73U	San Diego Unified	Ocean Beach Elementary	4, 3
113724	PAC73U	San Diego Unified	Pacific Beach Elementary	3
113748	PAR73X	San Diego Unified	Paradise Hills Elementary	4
113750	PEN73X	San Diego Unified	Penn Elementary	5, 4
113815	ROL73V	San Diego Unified	Rolando Park Elementary	3, 5, 4
113839	ROS73V	San Diego Unified	Ross Elementary	4, 5, 3
113841	ROW73U	San Diego Unified	Rowan Elementary	5, 3, 4
113865	SAN73Y	San Diego Unified	Sandburg Elementary	3
113891	SEQ73V	San Diego Unified	Sequoia Elementary	3, 4
113906	SES73U	San Diego Unified	Sessions Elementary	4, 3
113918	SHE73U	San Diego Unified	Sherman Elementary	3
113920	SIL73U	San Diego Unified	Silver Gate Elementary	4, 3
113944	SPR73W	San Diego Unified	Spreckels Elementary	3, 4
113970	SUN73U	San Diego Unified	Sunset View Elementary	3, 4
114015	TOL73V	San Diego Unified	Toler Elementary	5, 3, 4
114041	VAL73V	San Diego Unified	Valencia Park Elementary	5

Table 16: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
114053	WAL73W	San Diego Unified	Walker Elementary	3, 4
114065	WAS73U	San Diego Unified	Washington Elementary	3, 4
114077	WEB73U	San Diego Unified	Webster Elementary	4
114089	WEG73W	San Diego Unified	Wegeforth Elementary	4
114106	WHI73V	San Diego Unified	Whitman Elementary	5, 3, 4
1530747	DAI73W	San Diego Unified	Dailard Elementary	3, 5
1824988	DOY73W	San Diego Unified	Doyle Elementary	3
1824990	JER73X	San Diego Unified	Jerabek Elementary	3, 4, 5
2897031	BET73V	San Diego Unified	Bethune K-8	3
2897043	ZAM73X	San Diego Unified	Zamorano Elementary	3, 4, 5
3327869	HAG73W	San Diego Unified	Hage Elementary	3, 4
4290049	NYE73V	San Diego Unified	Nye Elementary	3, 4, 5
4428844	DIN73X	San Diego Unified	Dingeman Elementary	3, 4, 5
4428856	LAN73V	San Diego Unified	Language Academy	4, 5
4753780	ROS73U	San Diego Unified	Rosa Parks Elementary	4
4753807	KIM73U	San Diego Unified	Kimbrough Elementary	4, 5
5102536	SCR73X	San Diego Unified	Scripps Elementary	3, 4, 5
10010255	HER73V	San Diego Unified	Ibarra Elementary	3
10010267	CHE73U	San Diego Unified	Cherokee Point Elementary	3
10016807	POR73V	San Diego Unified	Porter Elementary	3, 4, 5
12109424	SAL73W	San Diego Unified	Jonas Salk Elementary	4, 5, 3
1170309	CON0RT	San Luis Coastal Unified	C. L. Smith Elementary	3, 4, 5
1170335	HAW0RS	San Luis Coastal Unified	Hawthorne Elementary	4, 5, 3
1170347	LOS0RS	San Luis Coastal Unified	Los Ranchos Elementary	5, 3, 4
1170359	SIN0RS	San Luis Coastal Unified	Sinsheimer Elementary	3, 4, 5
1170373	BIS0RS	San Luis Coastal Unified	Bishop's Peak Elementary	4, 5, 3
1524047	BAY77G	San Luis Coastal Unified	Baywood Elementary	4
2890813	PAC0RT	San Luis Coastal Unified	Pacheco Elementary	3, 4, 5
3329647	DEL0RT	San Luis Coastal Unified	Del Mar Elementary	3, 4, 5
4013853	MON77G	San Luis Coastal Unified	Monarch Grove Elementary	3, 4, 5
5346471	TEA0RS	San Luis Coastal Unified	Teach Elementary	4, 5
121252	LIL77L	San Miguel Joint Union	Lillian Larsen Elementary	3, 4, 5
10001137	CAP77K	San Miguel Joint Union	Cappy Culver Elementary	5, 3, 4
99001	HAN0RU	Savanna Elementary	Hansen Elementary	3, 5
114431	BAY73D	South Bay Union	Bayside STEAM Academy	3, 5, 4
114443	CEN73D	South Bay Union	Central Elementary	5, 4, 3
114455	EMO73Z	South Bay Union	Emory Elementary	3, 4, 5
114467	GOD73Z	South Bay Union	Godfrey G. Berry Elementary	4, 5, 3
114481	IMP73D	South Bay Union	Imperial Beach Charter	5, 3, 4
114493	NES73Z	South Bay Union	Nestor Language Academy Charter	3, 5, 4
114508	ONE73D	South Bay Union	Oneonta Elementary	4, 5, 3
114510	SUN73Z	South Bay Union	Sunnyslope Elementary	5, 3, 4
1414727	HOW73Z	South Bay Union	Howard Pence Elementary	3, 4
1821340	GEO741	South Bay Union	George Nicoloff Elementary	3, 4, 5
4876887	MEN73Z	South Bay Union	Teofilo Mendoza	3, 4, 5
82345	ANZ6ZE	Torrance Unified	Anza Elementary	3, 4, 5
82357	ARL6ZE	Torrance Unified	Arlington Elementary	3, 4, 5
82369	ARN6ZE	Torrance Unified	Joseph Arnold Elementary	3, 4, 5
82395	EVE6ZE	Torrance Unified	Evelyn Carr Elementary	3, 4, 5
82424	EDI6ZE	Torrance Unified	Edison Elementary	5, 3, 4
82436	FER6ZE	Torrance Unified	Fern Elementary	4
82503	LIN6ZE	Torrance Unified	Lincoln Elementary	5, 3, 4
82577	RIV6ZE	Torrance Unified	Riviera Elementary	4
82589	SEA6ZE	Torrance Unified	Seaside Elementary	3, 4, 5
82644	TOR6ZF	Torrance Unified	Torrance Elementary	3, 4

Table 17: Treatment Schools (TRT Dataset)

PID	IID	District	School Name	GRADE
82682	WAL6ZE	Torrance Unified	Walteria Elementary	3, 4, 5
82723	YUK6ZE	Torrance Unified	Yukon Elementary	3, 4, 5
10004438	SAN0RW	Turlock Unified	Sandra Tovar Medeiros Elementary	3, 4, 5
4014572	BAR0RS	Tustin Unified	Barbara Benson Elementary	3, 4, 5
103846	WOO7E5	Twin Rivers Unified	Woodlake Elementary	3
103987	PIO7E8	Twin Rivers Unified	Pioneer Elementary	3, 4
65000	UPP7D8	Upper Lake Unified	Upper Lake Elementary	3, 4, 5
11720051	WEB78A	W.E.B. DuBois Public Charter	W.E.B. DuBois Public Charter	4, 5, 3
55122	NYS7BC	West Contra Costa Unified	Nystrom Elementary	3, 4
83131	CHR6ZO	Whittier City Elementary	Christian Sorensen Elementary	3, 4, 5
83179	LON6ZO	Whittier City Elementary	Longfellow Elementary	3, 4, 5
83181	LOU0RT	Whittier City Elementary	Lou Henry Hoover Elementary	3, 4, 5
83193	LYD6ZO	Whittier City Elementary	Lydia Jackson Elementary	3, 4, 5
83222	ORA6ZO	Whittier City Elementary	Orange Grove Elementary	3, 4, 5
83234	WES0RU	Whittier City Elementary	West Whittier Elementary	3, 4
3046431	BRO7D9	Windsor Unified	Brooks Elementary	4
83466	ANZ6YP	Wiseburn Unified	Juan De Anza Elementary	3, 4, 5
4745575	PET6YP	Wiseburn Unified	Peter Burnett Elementary	3, 4, 5
88492	COA0RS	Yosemite Unified	Coarsegold Elementary	4, 5
3390828	RIV0RX	Yosemite Unified	Rivergold Elementary	4

Table 18: 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	District	School Name	GRADE
65426	ABC Unified	Stowers(Cecil B.) Elementary	5
65476	ABC Unified	Melbourne (Ella P.) Elementary	3
65517	ABC Unified	Hawaiian Elementary	4
65567	ABC Unified	Burbank (Luther) Elementary	4
65634	ABC Unified	Furgeson (Venn W.) Elementary	4
65646	ABC Unified	Elliott (William F) Elementary	4
4750269	Academy for Academic Excellence	Academy for Academic Excellence	3, 3
11911925	Accelerated	Accelerated	4
4747937	Adelanto Elementary	George Visual and Performing Arts Magnet and Middl	4
11934068	Adelanto Elementary	Gus Franklin Jr. School	4
47216	Alameda Unified	Henry Haight Elementary	3
2130780	Alisal Union	Frank Paul Elementary	3
4921597	Alisal Union	Oscar F. Loya Elementary	3
5324899	Alisal Union	Dr. Martin Luther King, Jr. Academy	3, 5
11830606	Almond Acres Charter Academy	Almond Acres Charter Academy	5
137598	Alta Vista Elementary	Alta Vista Elementary	5
129656	Alum Rock Union Elementary	Donald J. Meyer Elementary	4
129711	Alum Rock Union Elementary	Russo/McEntee Academy	4
129723	Alum Rock Union Elementary	Linda Vista Elementary	5
129761	Alum Rock Union Elementary	Millard McCollam Elementary	4
129785	Alum Rock Union Elementary	O. S. Hubbard Elementary	4
129838	Alum Rock Union Elementary	Sylvia Cassell Elementary	3, 5
129840	Alum Rock Union Elementary	Thomas P. Ryan Elementary	4
100844	Alvord Unified	Terrace Elementary	4
3009639	Alvord Unified	S. Christa McAuliffe Elementary	5
10907464	Alvord Unified	Phillip M. Stokoe Elementary	5
10907476	Alvord Unified	Lake Hills Elementary	5
52077	Amador County Unified	Pine Grove Elementary STEM Magnet	3
52106	Amador County Unified	Sutter Creek Elementary	3
10981202	Antioch Charter Academy	Antioch Charter Academy	3
5275212	Antioch Unified	Lone Tree Elementary	5
65933	Arcadia Unified	Baldwin Stocker Elementary	5
64288	Armona Union Elementary	Armona Elementary	3
10010035	Aspire Berkley Maynard Academy	Aspire Berkley Maynard Academy	3
11562354	Aspire Firestone Academy Charter	Aspire Firestone Academy Charter	5
5102938	Aspire River Oaks Charter	Aspire River Oaks Charter	5
10010047	Aspire Triumph Technology Academy	Aspire Triumph Technology Academy	5
120662	Atascadero Unified	Monterey Road Elementary	4
90756	Atwater Elementary	Mitchell Elementary	4
90770	Atwater Elementary	Shaffer Elementary	5, 3
4363634	Atwater Elementary	Peggy Heller Elementary	5
62046	Bakersfield City	Frank West Elementary	3
62113	Bakersfield City	Hort Elementary	4
62278	Bakersfield City	Voorhies Elementary	5
66432	Baldwin Park Unified	Walnut Elementary	4
106886	Barstow Unified	Cameron Elementary	4
106941	Barstow Unified	Henderson Elementary	3
88703	Bass Lake Joint Union Elementary	Oakhurst Elementary	4
88765	Bass Lake Joint Union Elementary	Wasuma Elementary	3
107103	Bear Valley Unified	North Shore Elementary	3
133310	Bellevue Union	Kawana Springs Elementary	4
1170294	Bellevue-Santa Fe Charter	Bellevue-Santa Fe Charter	3
66626	Bellflower Unified	Esther Lindstrom Elementary	4
66638	Bellflower Unified	Frank E. Woodruff Elementary	5
3009938	Bellflower Unified	Craig Williams Elementary	5

Table 19: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
121458	Belmont-Redwood Shores Elementary	Fox Elementary	4
11719363	Belmont-Redwood Shores Elementary	Redwood Shores Elementary	4
66808	Beverly Hills Unified	El Rodeo Elementary	3
61717	Bishop Unified	Pine Street Elementary	3
123731	Blochman Union Elementary	Benjamin Foxen Elementary	4
67060	Bonita Unified	Allen Avenue Elementary	3
67101	Bonita Unified	Fred Ekstrand Elementary	5
67149	Bonita Unified	La Verne Heights Elementary	5
1169374	Brawley Elementary	Myron D. Witter Elementary	3
121525	Brisbane Elementary	Panorama Elementary	5
136336	Brittan Elementary	Brittan Elementary	4
137615	Buena Vista Elementary	Buena Vista Elementary	3
66860	Burbank Unified	Walt Disney Elementary	4
66963	Burbank Unified	William McKinley Elementary	4
67010	Burbank Unified	Providencia Elementary	5
121551	Burlingame Elementary	Franklin Elementary	5
121630	Cabrillo Unified	El Granada Elementary	3
1878680	Calexico Unified	Kennedy Gardens Elementary	4, 3
10028903	California Montessori Project - Elk Grov	California Montessori Project - Elk Grove Campus	4
61183	Calipatria Unified	Grace Smith Elementary	3
55988	Camino Union Elementary	Camino Elementary	3
95122	Capistrano Unified	Castille Elementary	3
95249	Capistrano Unified	Viejo Elementary	4
5097400	Capistrano Unified	Laguna Niguel Elementary	4
123808	Carpinteria Unified	Canalino Elementary	3
130760	Cascade Union Elementary	Anderson Middle	5
5276694	Castaic Union	Northlake Hills Elementary	4
4285886	Ceres Unified	Samuel Vaughn Elementary	3
1169520	Charter Oak Unified	Cedargrove Elementary	4
88741	Chawanakee Unified	Spring Valley Elementary	5
52340	Chico Unified	Parkview Elementary	4
52376	Chico Unified	Shasta Elementary	4
3399678	Chico Unified	Little Chico Creek Elementary	4
107323	Chino Valley Unified	Glenmeade Elementary	3
3052753	Chino Valley Unified	Oak Ridge Elementary	3
4365981	Chino Valley Unified	Hidden Trails Elementary	3
11102071	Chowchilla Elementary	Ronald Reagan Elementary	4
110526	Chula Vista Elementary	Allen (Ella B.) Elementary	5
110681	Chula Vista Elementary	Palomar Elementary	4
110758	Chula Vista Elementary	Valley Vista Elementary	4
10002569	Chula Vista Elementary	Veterans Elementary	4
133360	Cinnabar Elementary	Cinnabar Charter	3
67539	Claremont Unified	Sycamore Elementary	4
56762	Clovis Unified	Weldon Elementary	5
56774	Clovis Unified	Nelson Elementary	3
56803	Clovis Unified	Tarpey Elementary	3
2131057	Clovis Unified	Mickey Cox Elementary	3
3250450	Clovis Unified	Valley Oak Elementary	3
3250462	Clovis Unified	Fancher Creek Elementary	5, 3
3326619	Clovis Unified	Pinedale Elementary	4
4033920	Clovis Unified	Garfield Elementary	4
3317515	Coachella Valley Unified	Cesar Chavez Elementary	4
10021266	Coachella Valley Unified	Coral Mountain Academy	5
56877	Coalinga-Huron Unified	Huron Elementary	4
107452	Colton Joint Unified	Gerald A. Smith Elementary	3
107581	Colton Joint Unified	Woodrow Wilson Elementary	5
53095	Colusa Unified	George T. Egling Middle	4, 4
12101355	Community Collaborative Charter	Community Collaborative Charter	5
67656	Compton Unified	Dickison Elementary	5
67864	Compton Unified	Rosecrans Elementary	5

Table 20: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
141006	Conejo Valley Unified	Conejo Elementary	4
136831	Corning Union Elementary	West Street Elementary	3
101264	Corona-Norco Unified	Jefferson Elementary	4
101331	Corona-Norco Unified	Parkridge Elementary	5
4743981	Corona-Norco Unified	Cesar Chavez Academy	3
1876840	Cotati-Rohnert Park Unified	Marguerite Hahn Elementary	5
68026	Covina-Valley Unified	Cypress Elementary	3
68076	Covina-Valley Unified	Manzanita Elementary	3
68181	Covina-Valley Unified	Workman Avenue Elementary	3, 4
4339334	Creative Arts Charter	Creative Arts Charter	5
68260	Culver City Unified	Linwood E. Howe Elementary	4
125882	Cupertino Union	John Muir Elementary	5
125935	Cupertino Union	Louis E. Stockmeir Elementary	4
125961	Cupertino Union	William Regnart Elementary	3
139390	Curtis Creek Elementary	Curtis Creek Elementary	3
137691	Cutler-Orosi Joint Unified	Cutler Elementary	4, 3
123949	Cuyama Joint Unified	Cuyama Elementary	4
55835	Del Norte County Unified	Bess Maxwell Elementary	3
4914776	Delano Union Elementary	Morningside	5
101525	Desert Sands Unified	Martin Van Buren Elementary	5
3009641	Desert Sands Unified	Harry S. Truman Elementary	5, 5
10007416	Desert Sands Unified	Carrillo Ranch Elementary	3
4035100	Discovery Charter	Discovery Charter	5
12261929	Discovery Charter II	Discovery Charter II	4
4456425	Dos Palos Oro Loma Joint Unified	Bernhard Marks Elementary	4
137328	Douglas City Elementary	Douglas City Elementary	4
68404	Downey Unified	Imperial Elementary	3
4286127	Downey Unified	Unsworth (Edith) Elementary	4
5278757	Downtown Value	Downtown Value	3
3391418	Dry Creek Joint Elementary	Antelope Meadows Elementary	4, 5
11127916	Dry Creek Joint Elementary	Creekview Ranch	3
133487	Dunham Elementary	Dunham Charter	4
68777	East Whittier City Elementary	Orchard Dale Elementary	3
68789	East Whittier City Elementary	Scott Avenue Elementary	4
69056	Eastside Union Elementary	Eastside Elementary	5
3004201	Eastside Union Elementary	Tierra Bonita Elementary	4, 5
12101745	Eastside Union Elementary	Enterprise Elementary	4
61286	El Centro Elementary	Margaret Hedrick Elementary	3
69123	El Rancho Unified	Magee Academy of Arts & Sciences	4
5243116	Eleanor Roosevelt Community Learning Cen	Eleanor Roosevelt Community Learning Center	5
103107	Elk Grove Unified	Herman Leimbach Elementary	4
103121	Elk Grove Unified	James A. McKee Elementary	4
4017720	Elk Grove Unified	Mary Tsukamoto Elementary	4
4919477	Elk Grove Unified	Raymond Case Elementary	3
10006735	Elk Grove Unified	Arnold Adreani Elementary	4
10006759	Elk Grove Unified	Helen Carr Castello Elementary	5, 5
10028915	Elk Grove Unified	Carroll Elementary	3
130966	Enterprise Elementary	Shasta Meadows Elementary	4
118994	Escalon Unified	Dent Elementary	3
4290348	Escondido Union	Rock Springs Elementary	5
3251313	Etiwanda Elementary	Caryn Elementary	3
4867771	Etiwanda Elementary	David W. Long Elementary	3
60139	Eureka City Schools	Grant Elementary	3
3316561	Eureka Union	Oakhills Elementary	3
126202	Evergreen Elementary	Evergreen Elementary	3
126264	Evergreen Elementary	O. B. Whaley Elementary	4
2857172	Evergreen Elementary	Millbrook Elementary	4, 3
3049938	Evergreen Elementary	Dove Hill Elementary	3
136908	Evergreen Union	Evergreen Elementary	4
62852	Fairfax Elementary	Virginia Avenue Elementary	5

Table 21: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
12030952	Fairfax Elementary	Zephyr Lane Elementary	3
132732	Fairfield-Suisun Unified	Tolenas Elementary	3
3006522	Fairfield-Suisun Unified	Oakbrook Elementary	4
3329386	Fairfield-Suisun Unified	Dan O. Root Elementary	4
4035588	Fairfield-Suisun Unified	Laurel Creek Elementary	5
4871954	Fallbrook Union Elementary	William H. Frazier Elementary	3
110667	Feaster (Mae L.) Charter	Feaster (Mae L.) Charter	3
77625	Fenton Avenue Charter	Fenton Avenue Charter	3
60256	Ferndale Unified	Ferndale Elementary	4
139651	Fillmore Unified	Piru Elementary	4
107816	Fontana Unified	Redwood Elementary	3
3007796	Fontana Unified	Canyon Crest Elementary	3
5274206	Fontana Unified	Almond Elementary	5
126290	Franklin-McKinley Elementary	Franklin Elementary	3
4872178	Franklin-McKinley Elementary	Shirakawa (George, Sr.) Elementary	3
2226901	Fremont Unified	Ardenwood Elementary	4
3011424	Fremont Unified	Fred E. Weibel Elementary	3
57211	Fresno Unified	Eaton Elementary	4
57261	Fresno Unified	Fremont Elementary	3
57340	Fresno Unified	Holland Elementary	5
57417	Fresno Unified	Kratt Elementary	3
57467	Fresno Unified	Lowell Elementary	3
57508	Fresno Unified	Mayfair Elementary	4, 4
57534	Fresno Unified	Muir Elementary	5, 3
57584	Fresno Unified	Roeding Elementary	3
57651	Fresno Unified	Starr Elementary	5
57663	Fresno Unified	Sunset Elementary	5
57716	Fresno Unified	Thomas Elementary	3
2105814	Fresno Unified	Ayer Elementary	5
2105826	Fresno Unified	Forkner Elementary	3
2848951	Fresno Unified	Miguel Hidalgo Elementary	5
4287597	Fresno Unified	Edith B. Storey Elementary	3
5101001	Fresno Unified	Hamilton Elementary	5
2179243	Fruitvale Elementary	Quailwood Elementary	5
95706	Fullerton Elementary	Acacia Elementary	4
95770	Fullerton Elementary	Hermosa Drive Elementary	5
95794	Fullerton Elementary	Laguna Road Elementary	5
96138	Garden Grove Unified	Earl Warren Elementary	3
96176	Garden Grove Unified	Ernest O. Lawrence Elementary	4, 3
96346	Garden Grove Unified	John Murdy Elementary	5
96645	Garden Grove Unified	Stanford Elementary	5
96683	Garden Grove Unified	Thomas Paine Elementary	5
96700	Garden Grove Unified	Woodbury Elementary	4
69393	Garvey Elementary	Willard (Frances E.) Elementary	3
126501	Gilroy Unified	El Roble Elementary	5
126549	Gilroy Unified	Las Animas Elementary	4
69501	Glendale Unified	Cerritos Elementary	5
69680	Glendale Unified	John Marshall Elementary	5
69862	Glendora Unified	La Fetra Elementary	3
69898	Glendora Unified	Sellers Elementary	3
4950251	Gold Rush Charter	Gold Rush Charter	3
59013	Golden Plains Unified	Tranquillity Elementary	3
2106521	Golden Valley Unified	Webster Elementary	4
2205268	Golden Valley Unified	Sierra View Elementary	3
124008	Goleta Union Elementary	Ellwood Elementary	5, 3
4030772	Greenfield Union	Raffaello Palla Elementary	3, 4
5276682	Greenfield Union	Valle Verde Elementary	4, 4
11436298	Greenfield Union	Horizon Elementary	3
92118	Greenfield Union Elementary	Mary Chapa Academy	3
133607	Guerneville Elementary	Guerneville Elementary	4

Table 22: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
91542	Gustine Unified	Gustine Elementary	4
69991	Hacienda la Puente Unified	Bixby Elementary	3, 4, 3
70005	Hacienda la Puente Unified	California Elementary	3
70017	Hacienda la Puente Unified	Cedarlane Academy	3
70225	Hacienda la Puente Unified	Nelson Elementary	3, 5
70366	Hacienda la Puente Unified	Workman Elementary	3
64472	Hanford Elementary	Joseph M. Simas	5
3331688	Hanford Elementary	George Washington Elementary	4
11927857	Hanford Elementary	Jefferson Charter Academy	3
131099	Happy Valley Union Elementary	Happy Valley Elementary	5
135289	Hart-Ransom Union Elementary	Hart-Ransom Elementary	3
1168916	Hayward Unified	Glassbrook Elementary	3, 3
1169075	Hayward Unified	Palma Ceia Elementary	5
1169099	Hayward Unified	Park Elementary	3
1169142	Hayward Unified	Schafer Park Elementary	5
107919	Hesperia Unified	Joshua Circle Elementary	3
4285111	Hesperia Unified	Topaz Preparatory Academy	3
11449427	Hesperia Unified	Cypress School of the Arts	5
121733	Hillsborough City Elementary	West Hillsborough	5
3048142	Hollister	Cerra Vista Elementary	4
139699	Hueneme Elementary	Ansgar Larsen Elementary	4
139754	Hueneme Elementary	Hueneme Elementary	5
139778	Hueneme Elementary	Parkview Elementary	4
139792	Hueneme Elementary	Sunkist Elementary	3
11457785	ICEF Inglewood Elementary Charter Academ	ICEF Inglewood Elementary Charter Academy	3
61418	Imperial Unified	Ben Hulse Elementary	5
12043923	Inspire Charter	Inspire Charter	5
139302	Jamestown Elementary	Jamestown Elementary	4
65127	Janesville Union Elementary	Janesville Elementary	5
121836	Jefferson Elementary	Franklin Delano Roosevelt Elementary	4
121862	Jefferson Elementary	George Washington Elementary	5
121939	Jefferson Elementary	Marjorie H. Tobias Elementary	4
4803359	Jefferson Elementary	Susan B. Anthony Elementary	4
101769	Jurupa Unified	Glen Avon Elementary	4
101886	Jurupa Unified	West Riverside Elementary	3
4016568	Jurupa Unified	Granite Hill Elementary	4
4353976	Kelseyville Unified	Riviera Elementary	5
70794	Keppel Union Elementary	Keppel Academy	5
70811	Keppel Union Elementary	Antelope Elementary	4
2884101	Keppel Union Elementary	Lake Los Angeles Elementary	4
3400356	Keppel Union Elementary	Daisy Gibson Elementary	5
58978	Kerman Unified	Sun Empire Elementary	3
5102720	Kerman Unified	Liberty Elementary	4
63155	Kernville Union Elementary	Woodrow W. Wallace Elementary	4
3005968	King City Union	Del Rey Elementary	3
58136	Kings Canyon Joint Unified	Jefferson Elementary	4
58203	Kings Canyon Joint Unified	Sheridan Elementary	3
5356074	Kings Canyon Joint Unified	Thomas Law Reed Elementary	4
10901812	Kingsburg Elementary Charter	Ronald W. Reagan Elementary	5, 5
11934551	Knowledge Enlightens You (KEY) Academy	Knowledge Enlightens You (KEY) Academy	4
64850	Konocti Unified	Burns Valley	5
3399886	Konocti Unified	Pomo	4
111582	La Mesa-Spring Valley	Highlands Elementary	5
111702	La Mesa-Spring Valley	Rolando Elementary	5
101628	Lake Elsinore Unified	Wildomar Elementary	4
10021723	Lake Elsinore Unified	Lakeland Village	4
111489	Lakeside Union Elementary	Riverview Elementary	4
70940	Lancaster Elementary	Joshua Elementary	5
70952	Lancaster Elementary	Linda Verde Elementary	5, 3
89109	Larkspur-Corte Madera	Neil Cummins Elementary	3

Table 23: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
71229	Lawndale Elementary	William Green Elementary	3, 5
91011	Le Grand Union Elementary	Le Grand Elementary	3
111740	Lemon Grove	Lemon Grove Academy for the Sciences and Humanitie	3
4283034	Lemoore Union Elementary	P. W. Engvall Elementary	3, 4
138061	Liberty Elementary	Liberty Elementary	5
119182	Lincoln Unified	Tully C. Knoles	3
119235	Linden Unified	Linden Elementary	3
119261	Linden Unified	Waverly Elementary	3, 4
138126	Lindsay Unified	Washington Elementary	3, 4
11717652	Lindsay Unified	Roosevelt Elementary	5
5027027	Literacy First Charter	Literacy First Charter	3
129955	Live Oak Elementary	Live Oak Elementary	4
4751304	Live Oak Elementary	Del Mar Elementary	5
5221170	Live Oak Elementary	Tierra Pacifica Charter	5
48985	Livermore Valley Joint Unified	Jackson Avenue Elementary	4
1170139	Lodi Unified	Leroy Nichols Elementary	5
1880671	Lodi Unified	Oakwood Elementary	5
3334525	Lodi Unified	Wagner-Holt Elementary	4
5346067	Lodi Unified	Lois E. Borchart Elementary	4
10010346	Lodi Unified	Ellerth E. Larson Elementary	4
124280	Lompoc Unified	Leonora Fillmore Elementary	3
72455	Los Angeles Unified	Annalee Avenue Elementary	4
72704	Los Angeles Unified	Fifteenth Street Elementary	4
72778	Los Angeles Unified	Halldale Elementary	5
73021	Los Angeles Unified	Two Hundred Thirty-Second Place	4
73071	Los Angeles Unified	Wilmington Park Elementary	3
73186	Los Angeles Unified	Florence Avenue Elementary	5
73318	Los Angeles Unified	Liberty Boulevard Elementary	4
73320	Los Angeles Unified	Lillian Street Elementary	4
73552	Los Angeles Unified	Tweedy Elementary	5, 4
73590	Los Angeles Unified	Victoria Avenue Elementary	5
73631	Los Angeles Unified	Woodlawn Avenue Elementary	5
73904	Los Angeles Unified	Ninety-Fifth Street Elementary	3
74233	Los Angeles Unified	Broadway Elementary	5
74271	Los Angeles Unified	Castle Heights Elementary	3
74295	Los Angeles Unified	Clover Avenue Elementary	5
74348	Los Angeles Unified	Grand View Boulevard Elementary	3
74439	Los Angeles Unified	Marvin Elementary	3
74441	Los Angeles Unified	Overland Avenue Elementary	4
74453	Los Angeles Unified	Palisades Charter Elementary	5
74544	Los Angeles Unified	Short Avenue Elementary	5
74611	Los Angeles Unified	Walgrove Avenue Elementary	4, 5
74984	Los Angeles Unified	Melrose Avenue Elementary	4
75512	Los Angeles Unified	Van Ness Avenue Elementary	5
75598	Los Angeles Unified	Bridge Street Elementary	3
75665	Los Angeles Unified	Euclid Avenue Elementary	3, 4
75885	Los Angeles Unified	Morris K. Hamasaki Elementary	4
75914	Los Angeles Unified	Second Street Elementary	4
76061	Los Angeles Unified	Arroyo Seco Museum Science	3
76102	Los Angeles Unified	Buchanan Street Elementary	5
76217	Los Angeles Unified	Fletcher Drive Elementary	5
76413	Los Angeles Unified	Mayberry Street Elementary	4
76762	Los Angeles Unified	Mountain View Elementary	3
77182	Los Angeles Unified	Kester Avenue Elementary	3
77211	Los Angeles Unified	Lassen Elementary	5
77455	Los Angeles Unified	Van Nuys Elementary	3
77508	Los Angeles Unified	Andasol Avenue Elementary	4
77613	Los Angeles Unified	El Oro Way Charter For Enriched Studies	3
77845	Los Angeles Unified	O'Melveny Elementary	4
77857	Los Angeles Unified	Osceola Street Elementary	3

Table 24: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
78124	Los Angeles Unified	Cantara Street Elementary	4
78162	Los Angeles Unified	Chatsworth Park Elementary	3
78291	Los Angeles Unified	Fullbright Avenue Elementary	5
78552	Los Angeles Unified	Welby Way Charter Elementary School And Gifted-Hig	3
78590	Los Angeles Unified	Woodland Hills Elementary Charter For Enriched Stu	4
1832595	Los Angeles Unified	Alta Loma Elementary	3
3055250	Los Angeles Unified	Montara Avenue Elementary	3
3251557	Los Angeles Unified	Parthenia Academy of Arts and Technology	4
3401245	Los Angeles Unified	Leo Politi Elementary	4
4017897	Los Angeles Unified	Esperanza Elementary	3
10025597	Los Angeles Unified	Charles H. Kim Elementary	5
11454733	Los Angeles Unified	UCLA Community K-12	4
11562823	Los Angeles Unified	Julie Korenstein Elementary	4
11822532	Los Angeles Unified	Porter Ranch Community	5
11823055	Los Angeles Unified	Willow Elementary	5
11823213	Los Angeles Unified	Academy for Enriched Sciences	4
11926645	Los Angeles Unified	Dr. Sammy Lee Medical and Health Science Magnet El	5
91102	Los Banos Unified	Henry Miller Elementary	3
91114	Los Banos Unified	Los Banos Elementary	3
126850	Los Gatos Union Elementary	Louise Van Meter Elementary	4, 3
78655	Los Nietos	Rancho Santa Gertrudes Elementary	5
107969	Lucerne Valley Unified	Lucerne Valley Elementary	4
120844	Lucia Mar Unified	Grover Beach Elementary	5
120856	Lucia Mar Unified	Grover Heights Elementary	5
120870	Lucia Mar Unified	Harloe Elementary	3
120947	Lucia Mar Unified	Dana Elementary	3, 5
78801	Lynwood Unified	Janie P. Abbott Elementary	5
78863	Lynwood Unified	Mark Twain Elementary	5
88571	Madera Unified	Alpha Elementary	4
78930	Manhattan Beach Unified	Aurelia Pennekamp Elementary	4
3007502	Manteca Unified	George McFarland Elementary	4
5118638	Manteca Unified	George Y. Komure Elementary	4
142244	Marysville Joint Unified	Covillaud Elementary	3
142282	Marysville Joint Unified	Kynoch Elementary	3
63351	McFarland Unified	Kern Avenue Elementary	3, 5
10001723	Menifee Union Elementary	Oak Meadows Elementary	4
10020224	Menifee Union Elementary	Evans Ranch Elementary	5
10023329	Merced City Elementary	Joe Stefani	4
4912297	Mill Valley Elementary	Strawberry Point Elementary	4
126927	Milpitas Unified	Alexander Rose Elementary	3
127074	Milpitas Unified	William Burnett Elementary	4
79099	Monrovia Unified	Monroe Elementary	3
79128	Monrovia Unified	Plymouth Elementary	3
138140	Monson-Sultana Joint Union Elementary	Monson-Sultana Elementary	3
79415	Montebello Unified	Washington Elementary	3
92285	Monterey Peninsula Unified	Foothill Elementary	4
92326	Monterey Peninsula Unified	Highland Elementary	3
92352	Monterey Peninsula Unified	J. C. Crumpton Elementary	5
3004550	Moorpark Unified	Campus Canyon Elementary	3
101989	Moreno Valley Unified	Moreno Elementary	3
3018769	Moreno Valley Unified	Creekside Elementary	5
3402392	Moreno Valley Unified	Ridge Crest Elementary	3
4020064	Moreno Valley Unified	Seneca Elementary	3
5348015	Moreno Valley Unified	TownGate Elementary	4
127347	Morgan Hill Unified	P. A. Walsh STEAM Academy	5
127555	Mount Pleasant Elementary	Robert Sanders Elementary	5
127567	Mount Pleasant Elementary	Valle Vista Elementary	3
111843	Mountain Empire Unified	Clover Flat Elementary	5, 3
1549750	Mountain Empire Unified	Potrero Elementary	4
79453	Mountain View Elementary	Baker Elementary	4

Table 25: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
108092	Mountain View Elementary	Mountain View Elementary	4
2848652	Mountain View Elementary	Twin Lakes Elementary	5
54269	Mt. Diablo Unified	Pleasant Hill Elementary	5
102036	Murrieta Valley Unified	Murrieta Elementary	5
5325178	N.E.W. Academy of Science and Arts	N.E.W. Academy of Science and Arts	5
93617	Napa Valley Unified	Phillips Elementary	5
111958	National Elementary	John A. Otis Elementary	5
3253127	Natomas Unified	Bannon Creek	5
4913186	Natomas Unified	Natomas Park Elementary	5
108183	Needles Unified	Vista Colorado Elementary	5
119754	New Jerusalem Elementary	New Jerusalem	3
12106367	New Jerusalem Elementary	Delta Bridges Charter	4, 5
49238	Newark Unified	E. L. Musick Elementary	4
4364303	Newhall	Stevenson Ranch Elementary	3
5278214	Newhall	Dr. J. Michael McGrath Elementary	3
10001333	Newhall	Oak Hills Elementary	5, 3
97340	Newport-Mesa Unified	California Elementary	5, 3
97584	Newport-Mesa Unified	Paularino Elementary	4, 5
10017057	Nord Country	Nord Country	4
79623	Norwalk-La Mirada Unified	Anna M. Glazier Elementary	3
79697	Norwalk-La Mirada Unified	Earl E. Edmondson Elementary	4
79702	Norwalk-La Mirada Unified	Eastwood Elementary	5
79740	Norwalk-La Mirada Unified	Foster Road Elementary	5
79805	Norwalk-La Mirada Unified	John H. Nuffer Elementary	3
79817	Norwalk-La Mirada Unified	Julia B. Morrison Elementary	5
79922	Norwalk-La Mirada Unified	Arturo Sanchez Elementary	5
89264	Novato Unified	Hamilton Meadow Park	3
1881388	Oak Grove Elementary	Hayes Elementary	3
4871966	Oak Grove Elementary	Ledesma (Rita) Elementary	4
133853	Oak Grove Union Elementary	Oak Grove Elementary/Willowside Middle	5
119778	Oak View Union Elementary	Oak View Elementary	4
49783	Oakland Unified	Peralta Elementary	5
50366	Oakland Unified	Madison Park Academy TK-5	4
54506	Oakley Union Elementary	Oakley Elementary	3
5351323	Ocean Charter	Ocean Charter	3
139974	Ojai Unified	Mira Monte Elementary	3
4745214	Old Adobe Union	Sonoma Mountain Elementary	4
108200	Ontario-Montclair	Arroyo Elementary	3
108303	Ontario-Montclair	Edison Elementary	4
108444	Ontario-Montclair	Monte Vista Elementary	3
108456	Ontario-Montclair	Moreno Elementary	4
2176887	Ontario-Montclair	Howard Elementary	5
98227	Orange Unified	Serrano Elementary	3
1530618	Orange Unified	Imperial Elementary	3
124462	Orcutt Union Elementary	Ralph Dunlap Elementary	5
124527	Orcutt Union Elementary	Pine Grove Elementary	5
59685	Orland Joint Unified	Fairview Elementary	4
140167	Oxnard	Sierra Linda Elementary	3
5273173	Oxnard	Thurgood Marshall Elementary	4
92704	Pacific Grove Unified	Robert Down Elementary	4
4906614	Pacific View Charter 2.0	Pacific View Charter 2.0	3
130112	Pajaro Valley Unified	Linscott Charter	4
52699	Palermo Union Elementary	Helen M. Wilcox Elementary	3
102074	Palm Springs Unified	Agua Caliente Elementary	5
102086	Palm Springs Unified	Cahuilla Elementary	3
102165	Palm Springs Unified	Rancho Mirage Elementary	3
3253153	Palm Springs Unified	Sunny Sands Elementary	4
11448459	Palm Springs Unified	Cabot Yerxa Elementary	4
3012351	Palmdale Elementary	Chaparral Elementary	3
3051321	Palmdale Elementary	Palm Tree Elementary	3

Table 26: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
3051486	Palmdale Elementary	Joshua Hills Elementary	4
3249645	Palmdale Elementary	Mesquite Elementary	5
3253476	Palmdale Elementary	Buena Vista Elementary	3
4744167	Palmdale Elementary	Cimarron Elementary	5
127880	Palo Alto Unified	Escondido Elementary	4
102220	Palo Verde Unified	Margaret White Elementary	3
80127	Palos Verdes Peninsula Unified	Mira Catalina Elementary	3
80191	Palos Verdes Peninsula Unified	Rancho Vista Elementary	5
3388978	Panama-Buena Vista Union	Christa McAuliffe Elementary	4
4880515	Parlier Unified	John C Martinez Elementary	4
80426	Pasadena Unified	Altadena Elementary	5
80476	Pasadena Unified	Franklin Elementary	4
80529	Pasadena Unified	Field (Eugene) Elementary	3
80581	Pasadena Unified	Longfellow (Henry W.) Elementary	4
80713	Pasadena Unified	Jefferson Elementary	5
5101910	Pasadena Unified	McKinley	5
5279945	Pasadena Unified	Washington Elementary	5
5119008	Pathways Charter	Pathways Charter	4
135825	Patterson Joint Unified	Grayson Elementary	3
135851	Patterson Joint Unified	Northmead Elementary	4
124682	Peabody Charter	Peabody Charter	5
102282	Perris Elementary	Perris Elementary	3
2879168	Perris Elementary	Innovative Horizons Charter	5
5026891	Perris Elementary	Enchanted Hills Elementary	3
133970	Petaluma City Elementary	McKinley Elementary	4
54635	Pittsburg Unified	Highlands Elementary	4
98356	Placentia-Yorba Linda Unified	Brookhaven Elementary	5
98368	Placentia-Yorba Linda Unified	Charles Wagner Elementary	4
98514	Placentia-Yorba Linda Unified	Sierra Vista Elementary	4
56310	Placerville Union Elementary	Louisiana Schnell Elementary	5
56322	Placerville Union Elementary	Sierra Elementary	5
2106909	Pleasant Ridge Union Elementary	Cottage Hill Elementary	5
2846056	Pleasant Ridge Union Elementary	Alta Sierra Elementary	4
49161	Pleasanton Unified	Lydiksen Elementary	5
50536	Pleasanton Unified	Fairlands Elementary	5
5100394	Pomona Unified	Pantera Elementary	5
138372	Porterville Unified	West Putnam Elementary	4
112330	Poway Unified	Pomerado Elementary	4
3328772	Poway Unified	Turtleback Elementary	4
58564	Raisin City Elementary	Raisin City Elementary	3
122490	Ravenswood City Elementary	Brentwood Academy	5
122505	Ravenswood City Elementary	Costano Elementary	4
108731	Redlands Unified	Smiley Elementary	4
1169893	Redlands Unified	Franklin Elementary	3
1169910	Redlands Unified	Kimberly Elementary	3
1169946	Redlands Unified	Mariposa Elementary	3
1169958	Redlands Unified	McKinley Elementary	5
1169960	Redlands Unified	Mentone Elementary	5
4037110	Redlands Unified	Bryn Mawr Elementary	4
4754253	Redlands Unified	Cram Elementary	5, 4
122658	Redwood City Elementary	John Gill Elementary	3, 5
122701	Redwood City Elementary	Selby Lane Elementary	4
56384	Rescue Union Elementary	Rescue Elementary	5
108846	Rialto Unified	Bemis Elementary	3, 5
1169996	Rialto Unified	Trapp Elementary	4
4288046	Rialto Unified	Edward Fitzgerald Elementary	3
137196	Richfield Elementary	Richfield Elementary	4
134156	Rincon Valley Union Elementary	Whited Elementary Charter	3
10020236	Rio Elementary	Rio Del Mar	5
102452	Riverside Unified	Harrison Elementary	3

Table 27: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
102505	Riverside Unified	Jackson Elementary	4
102579	Riverside Unified	Magnolia Elementary	3
102684	Riverside Unified	Washington Elementary	4
4369652	Riverside Unified	Tomas Rivera Elementary	4, 5
2846020	Robla Elementary	Taylor Street Elementary	3
11925859	Romoland Elementary	Boulder Ridge Elementary	5
1520053	Rosedale Union Elementary	Rosedale-North Elementary	5
5103451	Rosedale Union Elementary	Patriot Elementary	4
11830577	Roseland	Roseland Creek Elementary	5
10018465	Roseland Charter	Roseland Charter	5
100313	Roseville City Elementary	William Kaseberg Elementary	3
4948167	Roseville City Elementary	Diamond Creek Elementary	5
4948179	Roseville City Elementary	Stoneridge Elementary	3
5347281	Roseville City Elementary	Thomas Jefferson Elementary	5
89537	Ross Valley Elementary	Brookside Elementary	3
89587	Ross Valley Elementary	Wade Thomas Elementary	4
11558092	SD Global Vision Academy	SD Global Vision Academy	5
104450	Sacramento City Unified	Elder Creek Elementary	3
104761	Sacramento City Unified	Mark Twain Elementary	4
104797	Sacramento City Unified	Nicholas Elementary	3
104840	Sacramento City Unified	Peter Burnett Elementary	3
104888	Sacramento City Unified	Crocker/Riverside Elementary	4
93813	Saint Helena Unified	Saint Helena Elementary	4
4488624	Salida Union Elementary	Dena Boer	4
92730	Salinas City Elementary	Boronda Meadows	4
92780	Salinas City Elementary	Los Padres Elementary	5
3050834	Salinas City Elementary	Laurel Wood Elementary	3, 5
11070715	Salinas City Elementary	Lincoln Elementary	3
108999	San Bernardino City Unified	Ramona-Alessandro Elementary	3
109137	San Bernardino City Unified	Cypress Elementary	3
109228	San Bernardino City Unified	Kendall Elementary	3
109242	San Bernardino City Unified	Lankershim Elementary	5
109292	San Bernardino City Unified	Monterey Elementary	5
109395	San Bernardino City Unified	Riley Elementary	5
109498	San Bernardino City Unified	Urbita Elementary	4
11130705	San Bernardino City Unified	Colonel Joseph C. Rodriguez PREP Academy	4
109931	San Bernardino County Office of Educatio	San Bernardino County Special Education	3
122139	San Bruno Park Elementary	Portola Elementary	3
116099	San Francisco Unified	Alvarado Elementary	3, 3
116752	San Francisco Unified	Muir (John) Elementary	4
116958	San Francisco Unified	Marshall Elementary	3
116984	San Francisco Unified	Moscone (George R.) Elementary	4
117196	San Francisco Unified	Sanchez Elementary	5
117275	San Francisco Unified	Sunnyside Elementary	5
117380	San Francisco Unified	West Portal Elementary	4
4371277	San Francisco Unified	Mission Education Center	4
11557294	San Francisco Unified	Chinese Immersion School at DeAvila	4
81559	San Gabriel Unified	Roosevelt Elementary	3
11556848	San Jacinto Unified	Megan Cope Elementary	4
128133	San Jose Unified	Booksin Elementary	4
128236	San Jose Unified	Graystone Elementary	5
139003	San Jose Unified	River Glen	4
105129	San Juan Unified	Carmichael Elementary	4, 3
105155	San Juan Unified	Charles Peck Elementary	3, 3
105210	San Juan Unified	Del Dayo Elementary	3
105234	San Juan Unified	Dyer-Kelly Elementary	5
105416	San Juan Unified	Kingswood K-8	4, 5
105521	San Juan Unified	Mary Deterding Elementary	5
105624	San Juan Unified	Pasadena Avenue Elementary	5
105636	San Juan Unified	Pershing Elementary	3

Table 28: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
1541693	San Juan Unified	Woodside K-8	4
2893293	San Juan Unified	Carriage Drive Elementary	5
50768	San Leandro Unified	Wilson Elementary	4
4803464	San Leandro Unified	Madison Elementary	5
50873	San Lorenzo Unified	Del Rey Elementary	4
50938	San Lorenzo Unified	Hesperian Elementary	4
50976	San Lorenzo Unified	Lorenzo Manor Elementary	5
4870247	San Marcos Unified	Carrillo Elementary	4
122945	San Mateo-Foster City	LEAD Elementary	5
4369858	San Mateo-Foster City	Brewer Island Elementary	3
1169788	San Rafael City Elementary	Sun Valley Elementary	5
3250905	San Ramon Valley Unified	Golden View Elementary	3
114340	San Ysidro Elementary	La Mirada Elementary	5
58631	Sanger Unified	Centerville Elementary	4, 3
58667	Sanger Unified	Jackson Elementary	3, 4
58681	Sanger Unified	John S. Wash Elementary	4
58722	Sanger Unified	Madison Elementary	4
4921729	Sanger Unified	Sanger Academy Charter	5
128858	Santa Clara Unified	Scott Lane Elementary	3
128860	Santa Clara Unified	Sutter Elementary	3
11136694	Santa Clarita Valley International	Santa Clarita Valley International	4
130344	Santa Cruz City Elementary	Gault Elementary	5
124852	Santa Maria-Bonita	Oakley (Calvin C.) Elementary	4
5347657	Santa Maria-Bonita	Sanchez (David J.) Elementary	4
75445	Santa Monica Boulevard Community Charter	Santa Monica Boulevard Community Charter	5
140466	Santa Paula Unified	Glen City Elementary	4
140519	Santa Paula Unified	Thelma Bedell Elementary	4
93021	Santa Rita Union Elementary	Santa Rita Elementary	3
134235	Santa Rosa Elementary	Brook Hill Elementary	4
134326	Santa Rosa Elementary	Abraham Lincoln Elementary	4
10914027	Santa Rosa Elementary	Santa Rosa Charter School for the Arts	5, 3
114259	Santee	Chet F. Harritt Elementary	3, 3
114261	Santee	Hill Creek Elementary	5
114285	Santee	PRIDE Academy at Prospect Avenue	5
81913	Saugus Union	Skyblue Mesa Elementary	5, 4
12027369	Saugus Union	Emblem Academy	3
131908	Scott Valley Unified	Fort Jones Elementary	4
58849	Selma Unified	Andrew Jackson Elementary	3, 4
58904	Selma Unified	Woodrow Wilson Elementary	3, 4
4029515	Selma Unified	Theodore Roosevelt Elementary	3, 5
62498	Sierra Sands Unified	Pierce Elementary	5
4145420	Sierra Unified	Foothill Elementary	3, 5
10758914	Silver Valley Unified	Tiefert View Intermediate	3
140612	Simi Valley Unified	Berylwood Elementary	5
140741	Simi Valley Unified	Park View Elementary	5
93057	Soledad Unified	San Vicente Elementary	3
4339384	Sonoma Charter	Sonoma Charter	5
134522	Sonoma Valley Unified	Flowery Elementary	5
134546	Sonoma Valley Unified	Sassarini Elementary	5, 4, 3
139417	Sonoma Elementary	Sonoma Elementary	3, 3
123420	South San Francisco Unified	Junipero Serra Elementary	4
82149	South Whittier Elementary	Lake Marie Elementary	4
82151	South Whittier Elementary	Loma Vista Elementary	5
2198964	South Whittier Elementary	Monte Vista Middle	4
1830171	Stanislaus Union Elementary	George Eisenhut Elementary	4
81925	Sulphur Springs Union	Valley View Community Elementary	3
11466669	Sycamore Academy of Science and Cultural	Sycamore Academy of Science and Cultural Arts	4
136116	Sylvan Union Elementary	Standiford Elementary	3
136128	Sylvan Union Elementary	Sylvan Elementary	3
4021800	Sylvan Union Elementary	Orchard Elementary	5, 4

Table 29: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
63947	Taft City	Roosevelt Elementary	5
100430	Tahoe-Truckee Unified	North Tahoe	5
3317682	Temecula Valley Unified	Nicolas Valley Elementary	4
5347231	Thermalito Union Elementary	Plumas Avenue Elementary	3
11465732	Today's Fresh Start Charter School Ingle	Today's Fresh Start Charter School Inglewood	5, 3
2200397	Travis Unified	Cambridge Elementary	3
1170440	Turlock Unified	Julien Elementary	5
1170452	Turlock Unified	Osborn Two-Way Immersion Academy	5
99283	Tustin Unified	Marjorie Veeh Elementary	4
4748802	Tustin Unified	Guin Foss Elementary	5, 3
10004531	Twin Rivers Unified	Creative Connections Arts Academy	3
94116	Union Hill Elementary	Union Hill Elementary	3
132847	Vacaville Unified	Edwin Markham Elementary	3
132897	Vacaville Unified	Hemlock Elementary	3
1876838	Vacaville Unified	Orchard Elementary	3, 4
102828	Val Verde Unified	Val Verde Elementary	5, 3
3250785	Val Verde Unified	Rainbow Ridge Elementary	4, 4
10021319	Val Verde Unified	Triple Crown Elementary	5
133009	Vallejo City Unified	Cave Language Academy	5
133023	Vallejo City Unified	Mare Island Health and Fitness Academy	4
133061	Vallejo City Unified	Highland Elementary	5
133097	Vallejo City Unified	Lincoln Elementary	4
3393325	Vallejo City Unified	Joseph H. Wardlaw Elementary	3, 5
5278056	Valley Center-Pauma Unified	Lilac	4
141238	Ventura Unified	Blanche Reynolds Elementary	4
141355	Ventura Unified	Montalvo Elementary	3
141460	Ventura Unified	Will Rogers Elementary	3
3006297	Victor Elementary	Mojave Vista Elementary	4
3327015	Victor Elementary	Puesta del Sol Elementary	4
4467838	Victor Elementary	Galileo Academy 101	3
64070	Vineland Elementary	Vineland Elementary	3
138839	Visalia Unified	Crowley Elementary	5
138853	Visalia Unified	Elbow Creek Elementary	5, 5
138889	Visalia Unified	Goshen Elementary	3
3055183	Visalia Unified	Pinkham Elementary	4
5347944	Visalia Unified	Four Creeks Elementary	3
11129574	Visalia Unified	Annie R. Mitchell	3
55536	Walnut Creek Elementary	Buena Vista Elementary	3
55603	Walnut Creek Elementary	Walnut Heights Elementary	4, 3
114948	Warner Unified	Warner Elementary	3
3410569	Wasco Union Elementary	John L. Prueitt Elementary	3
11133991	Wasco Union Elementary	Teresa Burke Elementary	3
4801480	Washington Unified	Southport Elementary	3
10902103	Weaver Union	Farmdale Elementary	3
54960	West Contra Costa Unified	Grant Elementary	4
54996	West Contra Costa Unified	Ford Elementary	5
55249	West Contra Costa Unified	Sheldon Elementary	5
55251	West Contra Costa Unified	Stege Elementary	5
55263	West Contra Costa Unified	Tara Hills Elementary	4, 4
55275	West Contra Costa Unified	Valley View Elementary	3
55328	West Contra Costa Unified	Wilson Elementary	5
11823914	West Contra Costa Unified	Martin Luther King, Jr. Elementary	3
82967	West Covina Unified	Monte Vista Elementary	5
83002	West Covina Unified	Vine Elementary	3
59099	West Park Elementary	West Park Elementary	5
100519	Western Placer Unified	Creekside Oaks Elementary	4
10905167	Western Placer Unified	Lincoln Crossing Elementary	4
61602	Westmorland Union Elementary	Westmorland Elementary	3
59116	Westside Elementary	Westside Elementary	5
4030203	Westside Union Elementary	Sundown Elementary	5, 4, 3

Table 30: Matched Control Schools (CTRL Dataset)

PID	District	School Name	GRADE
5219866	Wilder's Preparatory Academy Charter	Wilder's Preparatory Academy Charter	4
3246526	Willits Unified	Blosser Lane Elementary	5
91475	Winton	Frank Sparkes Elementary	3
1530840	Woodland Joint Unified	Zamora Elementary	4, 5, 5
3050092	Woodland Joint Unified	Woodland Prairie Elementary	5
11553080	Woodland Joint Unified	Science & Technology Academy at Knights Landing	5
11708572	Yav Pem Suab Academy - Preparing for the	Yav Pem Suab Academy - Preparing for the Future Ch	4
136635	Yuba City Unified	King Avenue Elementary	5
136647	Yuba City Unified	Lincoln Elementary	4
136685	Yuba City Unified	Tierra Buena Elementary	4
4755219	Yucaipa-Calimesa Joint Unified	Wildwood Elementary	4, 3

Table 31: Matched Control Schools (CTRL Dataset)