



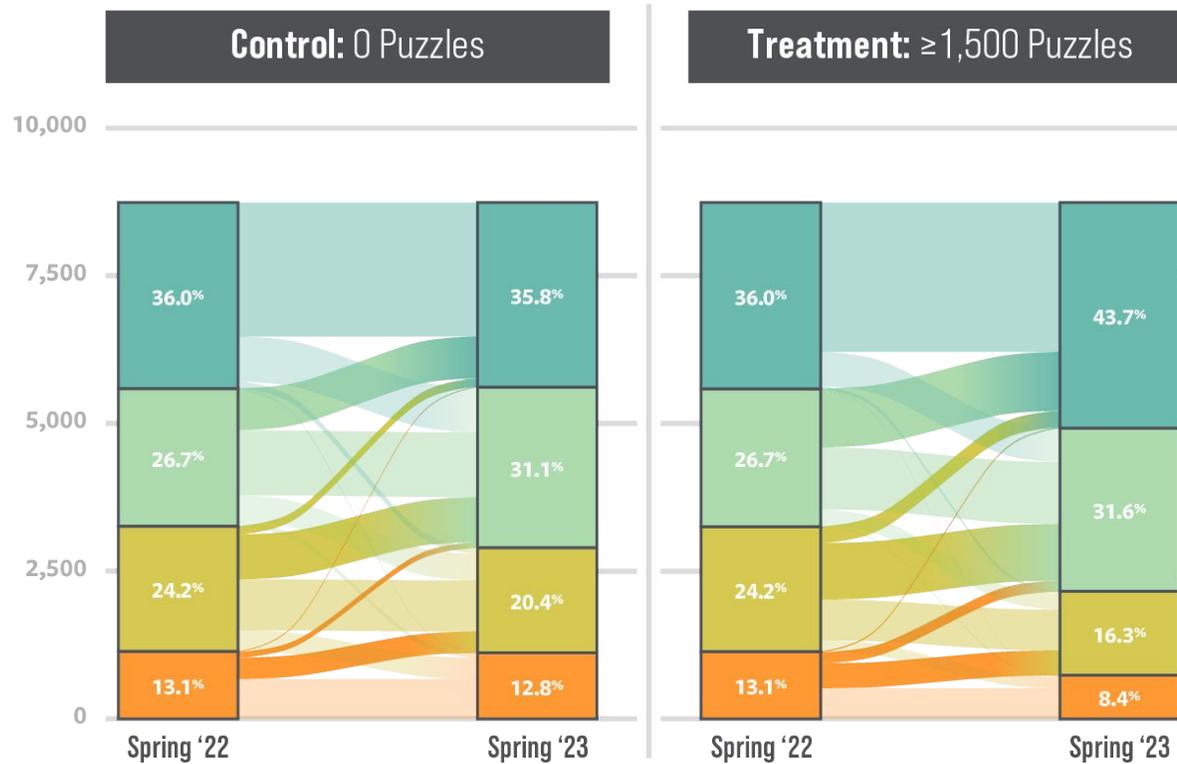
Texas ST Math Findings

Spring 2022 - Spring 2023



ST Math Usage Delivers STAAR Growth

Over 35% of Students Scoring “Did Not Meet” in 2022 Increased 1 or More Performance Levels on 2023 STAAR



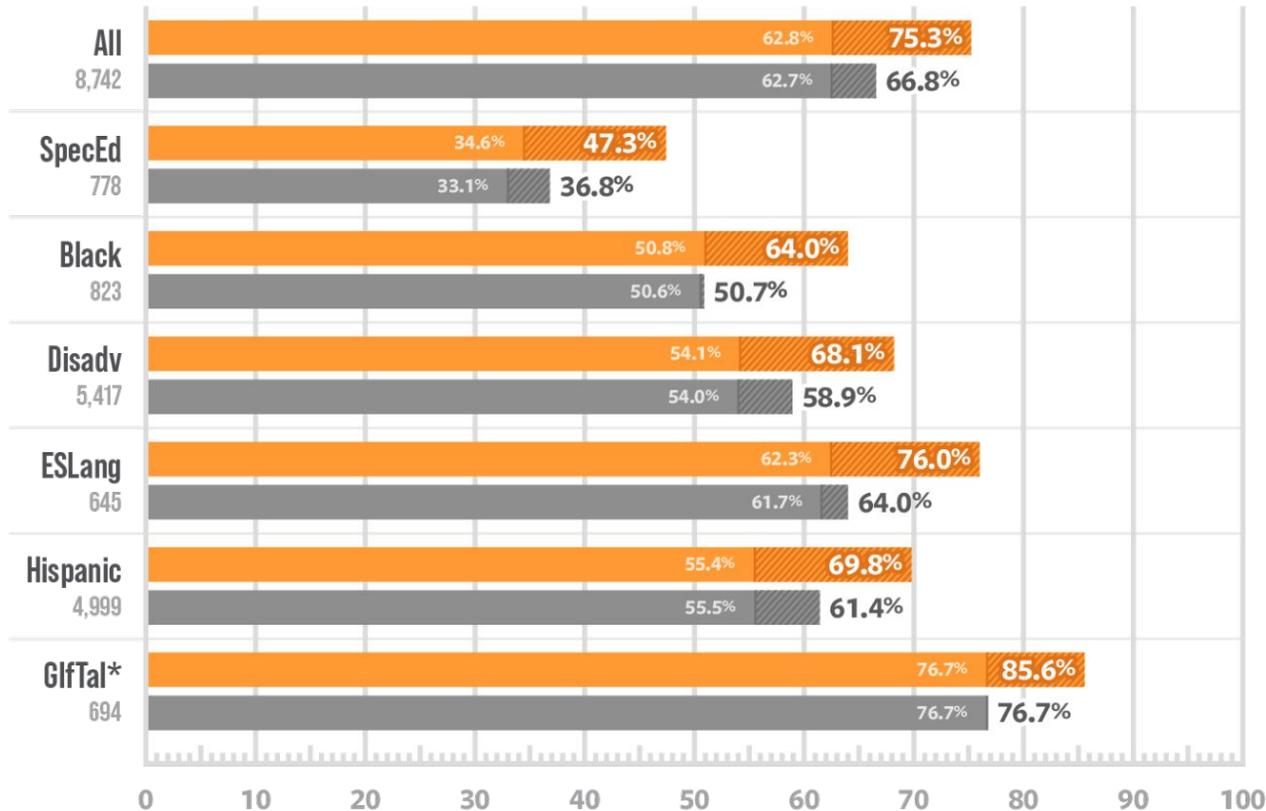
Change	Control	Treatment	Diff
Did Not Meet ↓	-0.3% (-24)	-4.6% (-404)	4.3%
Masters ↗	-0.3% (-23)	7.6% (665)	7.9%
Net Performance Level ↗	3.6% (312)	20.0% (1,747)	16.4%
Net Meets + *	4.1% (362)	12.5% (1,096)	8.4%

* Cohen's h = 0.314

- Masters
- Meets
- Approaches
- Did Not Meet

Equitable Growth Impact Across All Student Groups

Students Matched on Demographics & Spring 2022 STAAR Achievement



Impact Equity: Percent Meets/Masters Advantage at High Usage Level (1,500 puzzles)

- Comparing Spring 2023 percent of student group Meets or Masters
- Control group % Meets or Masters was matched to treatment group in Spring 2022

Students scoring Meets or Masters on 2023 STAAR

Students using ST Math completed >1,500 puzzles

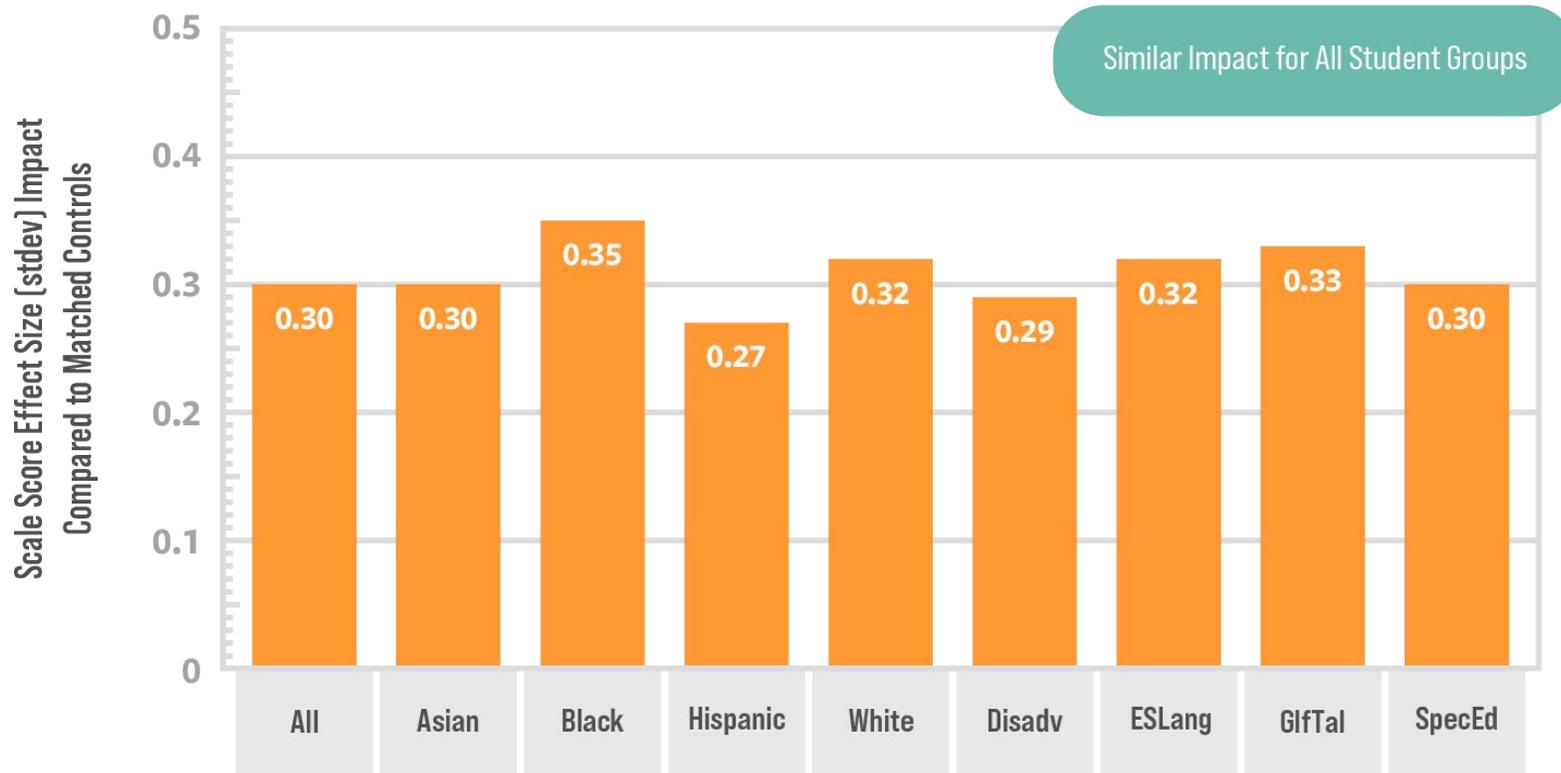
'22 Texas Students using ST Math Matched Comparison Group

'23 Texas Students using ST Math Matched Comparison Group

*Gifted % Masters @ 2,500 puzzles

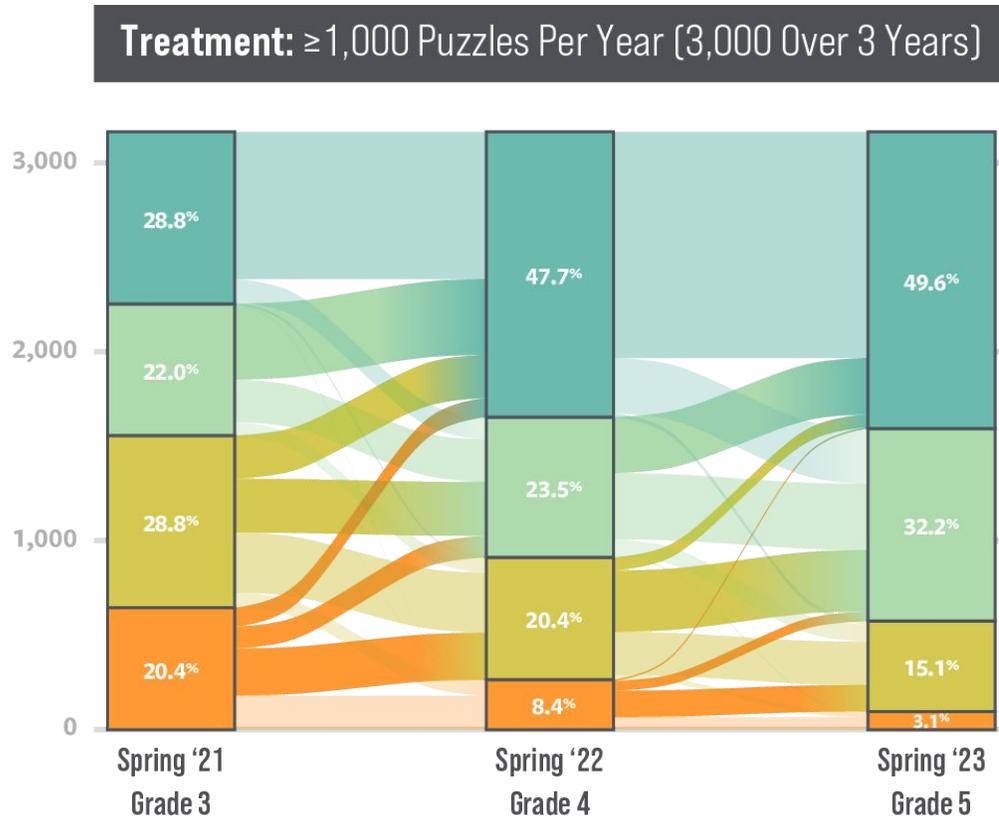
ST Math Impacts are Equitable Across Student Groups

Effect Size on Scale Score Growth at High Level Usage



High ST Math Usage Across 3 Years Nearly Eliminates “Did Not Meet”

Lowest Performance Level Decreased to only 3.1% of students



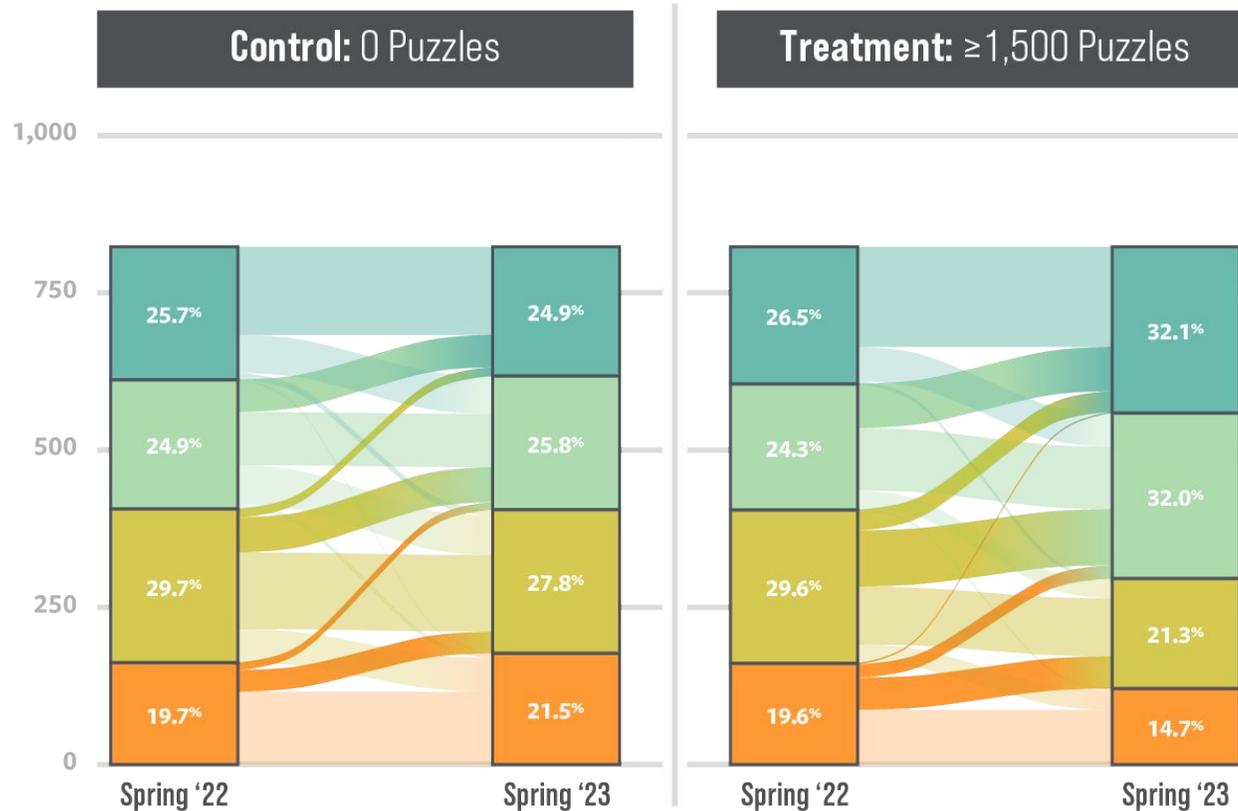
Change	Control	Treatment	Diff
Did Not Meet ↓	-12.0% (-380)	-17.3% (-548)	5.3%
Masters ↗	18.9% (598)	20.9% (659)	2.0%
Net Performance Level ↗	34.6% (1,092)	48.0% (1,516)	13.4%
Net Meets + *	20.4% (644)	31.0% (980)	10.6%

* Cohen's h = 0.674

- Masters
- Meets
- Approaches
- Did Not Meet

Black Students Experienced Greatest Impact

.67 Effect Size for Growth in Percent Scoring Meets or Masters



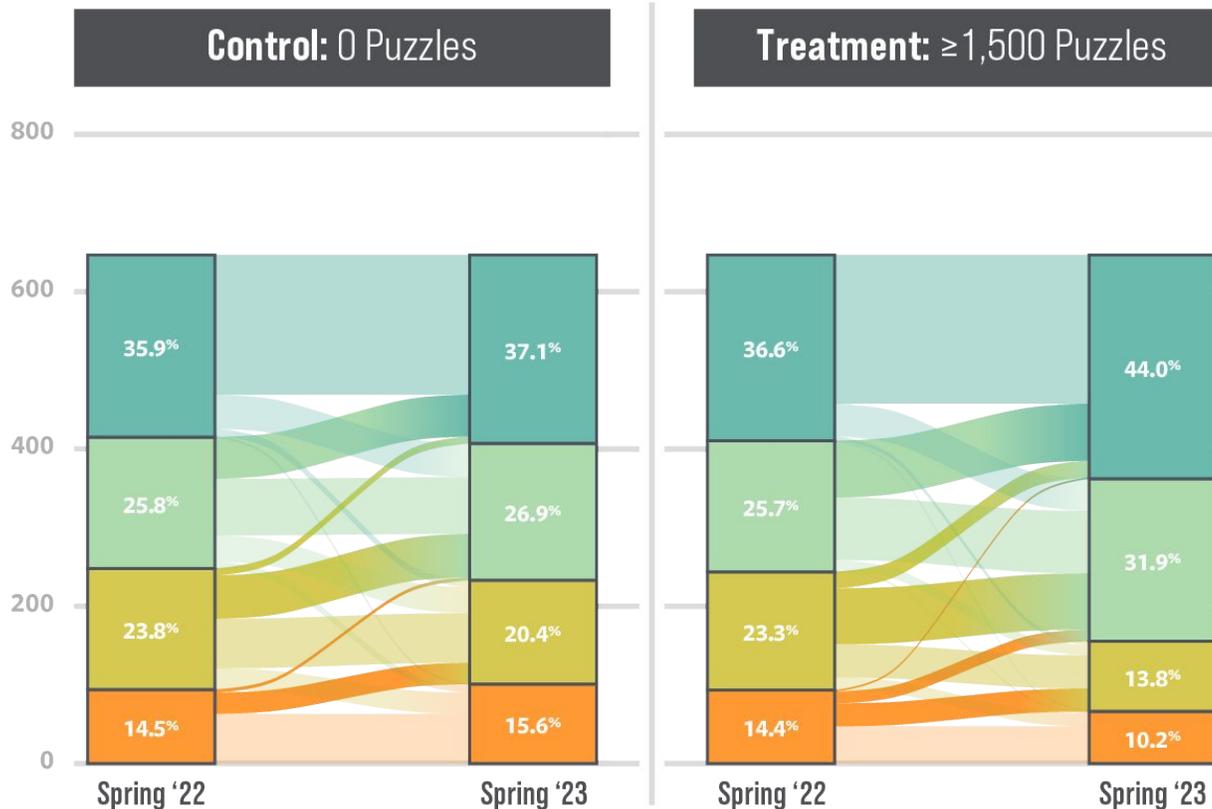
Change	Control	Treatment	Diff
Did Not Meet ↓	1.8% (15)	-4.9% (-40)	6.7%
Masters ↗	-0.7% (-6)	5.6% (46)	6.3%
Net Performance Level ↗	-3.3% (-27)	17.7% (146)	21.0%
Net Meets + *	0.1% (1)	13.2% (109)	13.1%

* Cohen's h = 0.67

- Masters
- Meets
- Approaches
- Did Not Meet

Significant Improvement in ESL Student Achievement

Treatment Group: 11.3% Difference in Meets & 6.2% Difference in Masters



Change	Control	Treatment	Diff
Did Not Meet ↓	1.1% (7)	-4.2% (-27)	5.3%
Masters ↗	1.2% (8)	7.4% (48)	6.2%
Net Performance Level ↗	3.9% (25)	20.5% (132)	16.6%
Net Meets + *	2.3% (15)	13.6% (88)	11.3%

* Cohen's h = 0.451

- Masters
- Meets
- Approaches
- Did Not Meet