

every child is capable of greatness

2024 Eureka Math TEKS Student Achievement Report

November 2024

Introduction

GREAT

MINDS

In 2020, the Texas Education Agency partnered with Great Minds® to develop the Eureka Math TEKS Edition, a high-quality curriculum designed to improve K–5 mathematics instruction across the state. Since its introduction, students in Texas have shown notable gains in achievement and engagement with the curriculum. This report is part of an ongoing effort to assess the impact of Eureka Math TEKS Edition on student outcomes in Texas.

To evaluate its effect on student learning, we analyzed changes in STAAR Math test scores from the 2022-2023 to the 2023-2024 school year. Specifically, we compared districts using Eureka Math TEKS Edition with those using other curricula. Our analysis focused on proficiency data for three student cohorts—3rd to 4th grade, 4th to 5th grade, and 5th to 6th grade—across 1,188 Texas school districts. Of these districts, 145 were using Eureka Math TEKS Edition and 1,043 were not. We examined by customer type (curriculum-only or curriculum with professional development and coaching), time since implementation, and student demographics.

Profile of Great Minds Customer Districts

On average, Great Minds district customers are larger, more racially diverse, and less proficient in math than other districts in the state.

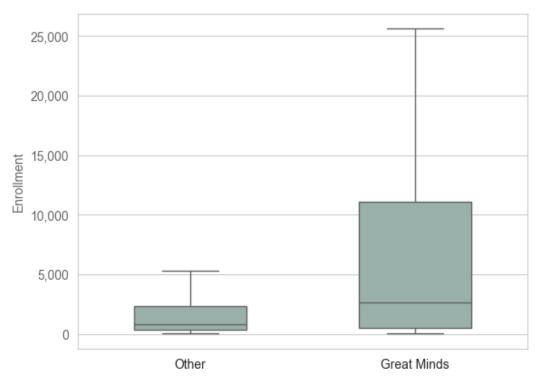


Figure 1: Distribution of Districts by Enrollment

Great Minds districts have an average enrollment of 11,299 compared to 3,735 among non-Great Minds districts in school year 2023-2024, and the median enrollment was 2,641 compared to 826 as shown in Figure 1. The distribution among Great Minds districts is much more right-skewed than among non-Great Minds districts, indicating that the larger the district, the more likely it is to be a Great Minds customer.

(Note that the largest districts such as HISD are not reflected in Figure 1 because they are outliers, but all analyses in this report are inclusive of all Texas school districts.)

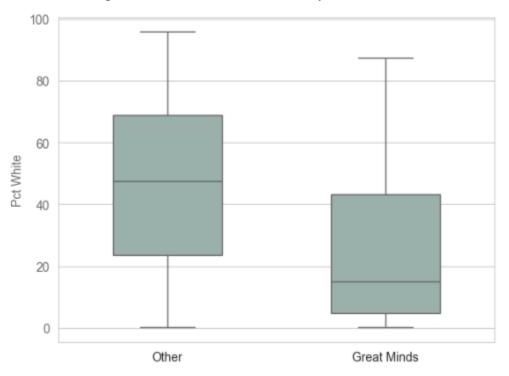


Figure 2: Distribution of Districts by Percent White

The average Great Minds district comprises 25% white students, compared to 46% among non-Great Minds districts, and the median is 15% vs. 47% as shown in Figure 2. This disparity is a function of greater racial/ethnic diversity in the larger urban/suburban districts that are more likely to be Great Minds customers. There is a commensurate disparity in home language diversity: the average Great Minds district comprises 19% ELL students, compared to 11% for the average non-Great Minds district.

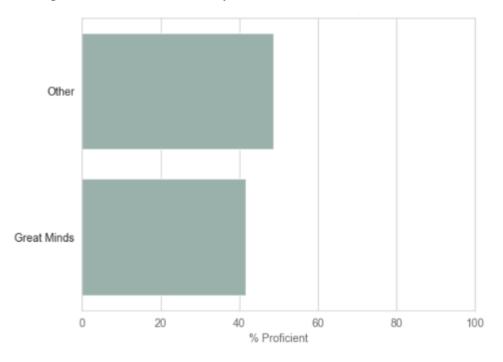


Figure 3: Baseline Proficiency in Math, Grades 3-5, SY 2022-2023

The analyses below should be considered in the context of baseline proficiency. On average, students in Great Minds districts start at a lower proficiency rating for math. In school year 2022-2023, 42% of 3rd through 5th grade students in Great Minds districts were rated as proficient (i.e. STAAR performance level Meets or Masters), compared to 49% among students in non-Great Minds districts.

Analysis

We analyzed changes in STAAR Math proficiency between the school year 2022-2023 and the school year 2023-2024 among Great Minds and non-Great Minds districts. Change in proficiency is operationalized as percent proficient (Meets or Masters) in 2023-2024 minus percent proficient in 2022-2023. The analyses below are for student cohorts (grade x this year compared to grade x-1 last year), not grade-to-grade analyses (grade x this year compared to grade x last year).

Outcomes by Customer Type and Implementation Time

We find that despite a statewide decline in math proficiency from 2023 to 2024, districts who have implemented Great Minds curricula for at least two years saw improvements in proficiency, particularly among districts who also implemented Great Minds coaching and professional development services.

	Non-GM Districts	All GM Districts	GM Products Only	GM Products + Services
All	-3.0	-3.4	-3.5	-3.3
implementation				
timelines				
1 year of	-3.0	+0.3	-0.1	+0.5
implementation				
2+ years of	-3.0	+2.8	+1.7	+3.4
implementation				

 Table 1: Weighted Average Change in Proficiency (Percentage Points) by Category of Great

 Minds Engagement

Schools with at least 2 years of implementation saw an average *increase* in proficiency rather than a decrease, and among those schools, those using products together with services saw the greatest increase at 3.4 percentage points—a 7.4-point difference relative to non-Great Minds schools. This lagged effect reflects the fact that it takes time for teachers to learn the new curriculum and grow comfortable teaching it¹; in particular, research finds the first year of

¹ Nichols-Barrer, I., and Haimson, J. Impacts of Five Expeditionary Learning Middle Schools on Academic Achievement. Mathematical Policy Research, 2013. https://www.mathematica.org/our-publications-and-findings/publications/impacts-of-five-expeditionary-learning-middle-schools-on-academic-achievement.

implementation may require significant classroom management to mitigate disruption of existing routines².

We also find that the effect of adding services grows larger over time: a 0.6-point difference with 1 year of implementation grows to a 1.7-point difference after 2 or more years of implementation. This effect indicates that Great Minds coaching and professional development does not just help teachers to adopt the new curriculum, it also equips them with skills and strategies to become more effective educators over time. This effect is consistent with research findings regarding effective curriculum implementation^{3,4}.

Outcomes by Student Demographic

In addition to differences by customer type and implementation time, we also found differences among student demographics, which were themselves affected by the choice of Great Minds products only or Great Minds products combined with services.

Student	Non-GM	All GM	GM Products	GM Products +
Category	Districts	Districts	Only	Services
American Indian	-2.61	-4.49	0.3	-5.9
or Alaska Native				
Asian	0.26	-0.46	0.4	-0.94
At-Risk	-3.85	-4.06	-4.6	-3.77
Bilingual	0.4	0.91	0.5	0.99
Black or African	-1.6	-1.07	-1.9	-0.73
American				
Economically	-3.17	-3.19	-3.3	-3.1
Disadvantaged				
Female	-2.15	-2.53	-2.6	-2.47
Gifted/Talented	-1.87	-4.02	-3.3	-4.26
Hispanic/Latino	-3.48	-3.75	-3.6	-3.83
Male	-3.72	-4.27	-4.3	-4.25
Migrant	-4.18	-3.18	-10.8	-1.21

Table 2: Weighted Average Change in Proficiency (Percentage Points) by Student Category

² Stein, M. K., & Coburn, C. E. (2008). Architectures for learning: A comparative analysis of two urban school districts. American Journal of Education, 114(4), 583-626.

³ Fullan, M. (2002). Principals as leaders in a culture of change. Educational leadership, 59(8), 16-21.

⁴ Stein & Coburn, 2008 (ibid)

Native Hawaiian or Other Pacific	-3.87	-4.16	-8.2	2.35
Islander				
Special	-2.91	-2.52	-2.2	-2.73
Education				
Two or More	-2.01	-2.82	-3.3	-2.52
Races				
White	-2.85	-3.47	-3.0	-3.97

Points of interest include:

- Students from migrant backgrounds, Black students, and bilingual students in Great Minds districts most significantly outperformed those in non-Great Minds districts.
- Gifted & talented students, American Indian or Alaska Native students, and students from two or more races in Great Minds districts most significantly underperformed those in non-Great Minds districts.
- Compared to GM products only, the most significant improvements for combining products and services were seen among Native Hawaiian/Pacific Islander students, students from migrant backgrounds, and Black students.
- American Indian students, gifted & talented students, and Asian students benefited the least from combining services with products.

Recommendations

These analyses surface several recommendations for Texas schools and districts using or considering Great Minds:

- 1. Combine Great Minds curriculum products with professional development and coaching services. Adding services improves student outcomes relative to products alone, and this effect is magnified over time.
- 2. Adopt messaging and collateral to set expectations for teachers and school and district administrators that Great Minds takes time to work. Teachers require an adjustment period to internalize the new curriculum and become comfortable teaching it, and the greatest positive impacts will be seen after two years of implementation. Combining Great Minds products and services can help to speed up this adjustment period.
- 3. When implementing Great Minds, care must be taken with gifted & talented students, American Indian or Alaska Native students, students from two or more races, and Asian students. These demographics were not observed to have benefited from implementing Great Minds or from adding services, so schools and districts should ensure teachers and

counselors are equipped to address the needs of diverse student segments when implementing a new curriculum.

Conclusion

Our analysis of STAAR Math scores for Texas students reveals that districts using the Eureka Math TEKS Edition experience significant improvements in student performance after two years of implementation. This positive impact is further enhanced when Eureka Math is paired with targeted professional development and coaching services. Additionally, we observed variations in outcomes based on student demographics, suggesting that certain student groups benefit more from the program.

Based on these findings, we recommend that Texas schools and districts adopt the Eureka Math TEKS Edition paired with services, particularly in schools serving student populations that have demonstrated the greatest improvement. Furthermore, we advise setting realistic expectations for educators and administrators, emphasizing that successful implementation of a new curriculum requires time and sustained effort. Multiple years of consistent implementation are likely necessary to fully realize the positive effects on student outcomes.

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