

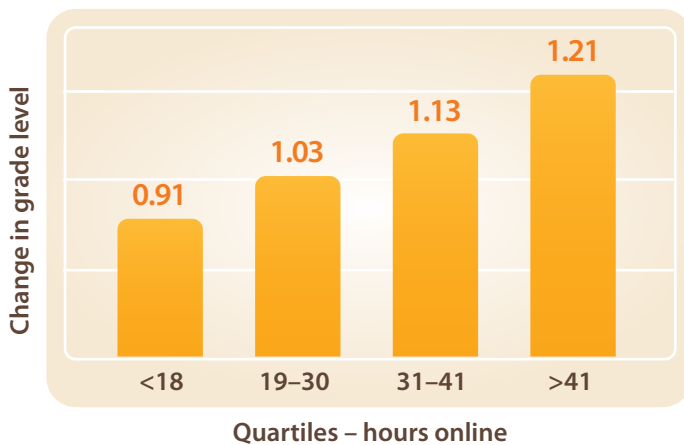


Dallas ISD 2nd Graders Post Significant Growth

In 2011–2012, Reasoning Mind teamed up with Dallas ISD to provide a coherent mathematics curriculum to all of the district’s 2nd graders. The more time students spent on Reasoning Mind, the more they grew on the Iowa Test of Basic Skills (ITBS), an annual assessment designed to measure the grade level at which students are able to perform certain skills.

Students in classes that spent less than 10 hours on Reasoning Mind grew less than one grade level, but students in classes with the required 70 hours on Reasoning Mind grew 1.6 grades, the equivalent of five extra months of instruction.

Analysis showed that every additional 10 hours online corresponds to growth of 0.12 grade level. The average difference between a student spending 20 hours and 50 hours is about one-third of a full grade.



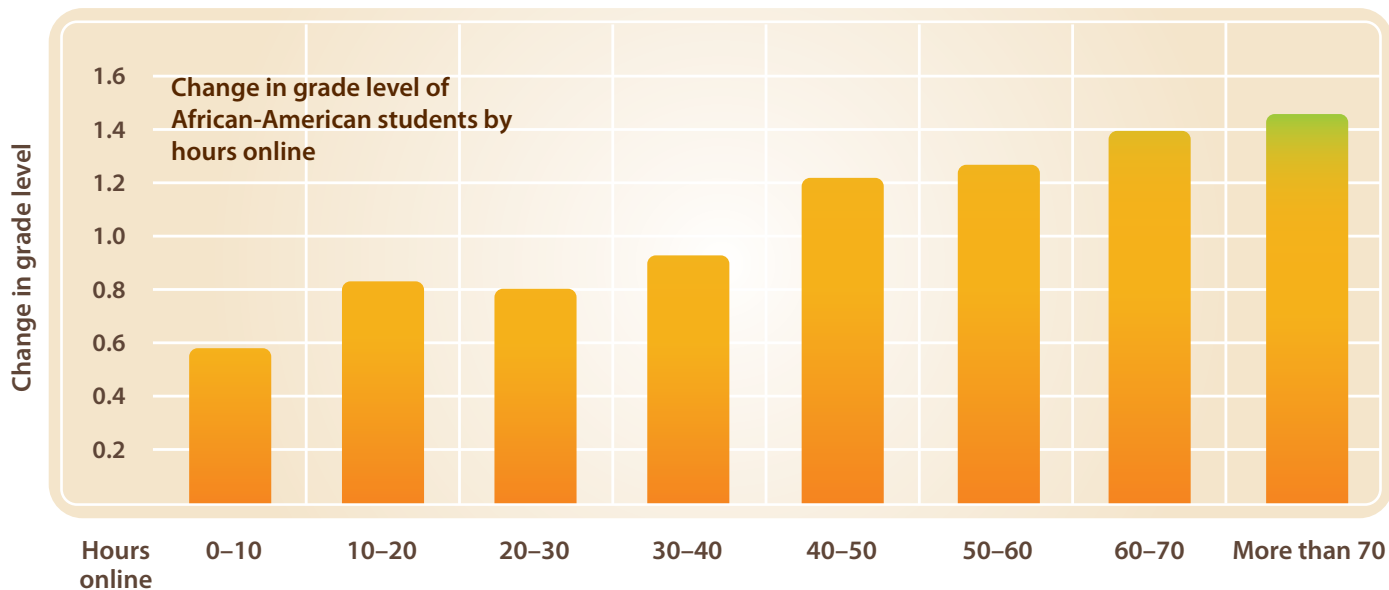
The chart on the left shows students grouped into quartiles by how many hours they spent online with Reasoning Mind. Students in the top quartile who spent the most hours online grew 0.3 grade level more, on average, than students in the bottom quartile who spent the least number of hours online.

This difference between the top and bottom quartiles is the equivalent of **2.5 months of instruction**. The p-value of the correlation is less than 0.001, indicating that these results are highly statistically significant.

Overall results indicate that by the end of 2nd grade, Dallas ISD had been successful in moving a large number of students from below grade level to on grade level and from on grade level to above it. As the table below shows, these results also largely hold for individual ethnic and socioeconomic categories. Reasoning Mind was especially effective in boosting the performance of Hispanic students who started out below grade level.

	Below Grade Level (%)		On Grade Level (%)		Above Grade Level (%)	
	1 st grade	2 nd grade	1 st grade	2 nd grade	1 st grade	2 nd grade
Hispanic (n=8114)	48.7	40.0	16.0	17.3	35.3	42.7
African American (n=2432)	45.0	48.6	15.7	16.0	39.3	35.4
White (n=442)	15.8	13.1	9.7	11.3	74.4	75.6
Non-disadvantaged (n=798)	23.1	19.3	13.3	14.2	63.7	66.5
Reduced lunch (n=427)	35.1	30.0	15.9	17.8	49.0	52.2
Free lunch by application (n=3922)	46.8	38.6	16.5	16.5	36.7	45.0
Free lunch by certification (n=5982)	49.9	45.5	15.5	17.2	34.6	37.3

* The four socioeconomic categories are, in order from least to most economically disadvantaged, (i) non-disadvantaged, (ii) reduced lunch, (iii) free lunch by application, and (iv) free lunch by direct certification.



The only category that showed a drop was African-American students. However, as the chart above shows, the more hours African-American students spent online using Reasoning Mind, the greater the change in their grade level on the ITBS. This trend is the same one we saw in the overall Dallas ISD student data.

Unfortunately, the average amount of time African-American students spent in the system was lower than the overall average. Only 40% used Reasoning Mind for more than 30 hours in 2nd grade, compared to almost half of overall students. If we ensure that African-American students spend at least 60 hours online, the correlation above indicates that we can expect to see 1.4 years of growth.

Take “Crystal,” an at-risk African-American girl. She ended the 1st grade with an ITBS score of 1.5, half a year below grade level. By the end of 2nd grade, Crystal had spent 72 hours in Reasoning Mind, mostly outside of class, and her ITBS grade level was 4.4. She grew almost three grade levels in one year!

The change that Reasoning Mind brings is not limited to test scores. One out of five students in the district voluntarily extended their school day by doing Reasoning Mind from home, just like Crystal. This means that thousands of 2nd grade students are *choosing* to learn math in their spare time.

One of the most enthusiastic Reasoning Mind students is “Max,” an at-risk English Language Learner. At the end of the 1st grade, Max’s score on the ITBS was 1.8, slightly behind grade level. He spent more than 160 hours online in Reasoning Mind that year, completing both the 2nd and 3rd grade curricula by choosing to use Reasoning Mind on evenings and weekends. By the end of 2nd grade, Max’s grade level on the ITBS was 4.3. He grew 2.5 grade levels that year.

Anonymous surveys showed an overwhelming approval for using Reasoning Mind among school staff. Of 60 Dallas ISD principals surveyed, 80% said they would like to have Reasoning Mind on their campus again, and 86% of 102 surveyed teachers felt the same way. Teachers and principals particularly appreciated Reasoning Mind’s strong implementation support, with teachers giving the support a rating of 4.4 out of 5.

The data from the 2011–2012 implementation of Reasoning Mind in Dallas ISD show that using the prescribed 70 hours of Reasoning Mind correlates with significant growth in student learning. This outcome is the culmination of the overall trend that we have seen in Reasoning Mind usage.