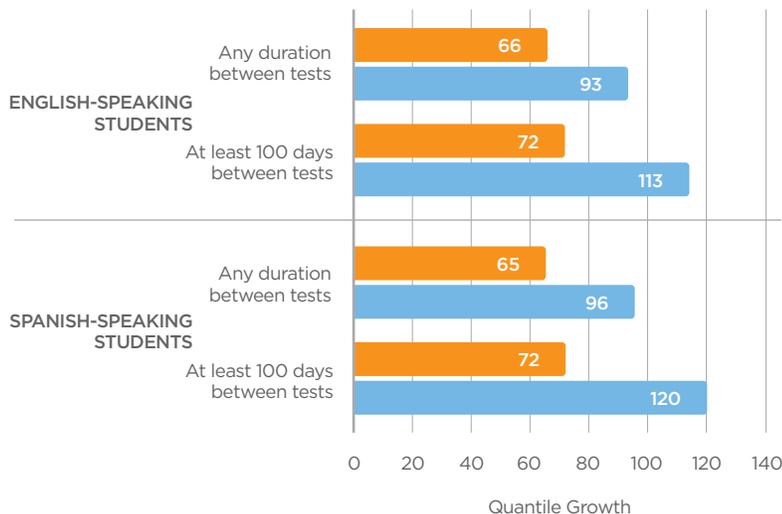


After the 2015–2016 school year, MetaMetrics® analyzed student growth for all users of Imagine Math, a digital learning tool designed to improve mathematics proficiency. After excluding students with extreme values, a total of 251,056 records were analyzed. Both English-speaking (88 percent) and Spanish-speaking (12 percent) students were examined.

Imagine Math administers three benchmark assessments throughout the school year to measure growth and provide educators with a snapshot of each student’s achievement level. The Imagine Math benchmark assessments are reported using The Quantile Framework® for Mathematics. As such, Quantile® measures were used to gauge student achievement and growth.

Figure 1 compares the average Quantile® measure growth of English- and Spanish-speaking students who passed, on average, less than one Imagine Math lesson per week against students who passed at least one lesson per week. The figure demonstrates that for both English- and Spanish-speaking students, greater growth in Quantile measures was observed for students who passed at least one Imagine Math lesson per week compared to students who passed less than one lesson per week. This effect was further emphasized when the duration between benchmark assessment administrations was at least 100 days.

### Quantile Growth by Lessons Passed and Language Spoken

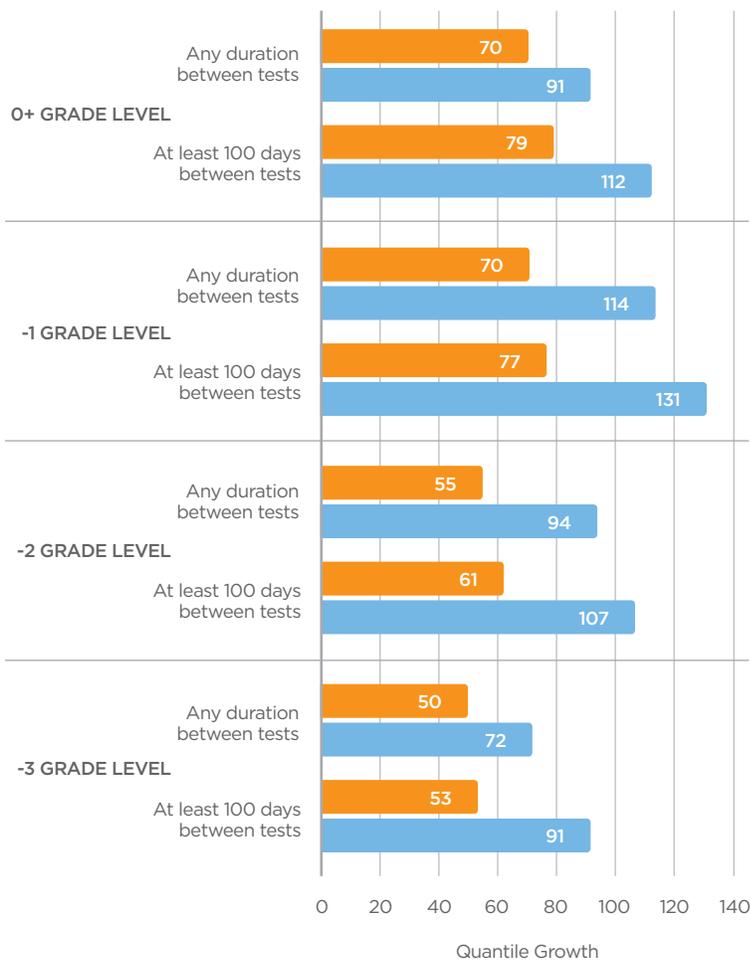


**Figure 1**  
Mean growth in Quantile measures by lessons passed per week and language spoken

● < 1 lesson/week    ● 1+ lesson/week

Figure 2 depicts the average student growth in Quantile® measures by grade-level standing; the figure compares students who passed, on average, less than one Imagine Math lesson per week against students who passed at least one lesson per week. For students of all grade-level standings, passing at least one lesson per week resulted in greater growth than students who passed less than one lesson per week. However, this effect was more pronounced for students who were performing one or two levels below their grade level. The effect was further emphasized when benchmark assessment administrations were at least 100 days apart.

Quantile Growth by Lessons Passed and Grade-Level



**Figure 2**  
Mean quantile growth by lessons passed per week and grade-level standing



In conclusion, regular use of the Imagine Math program appears to be associated with substantial increases in math proficiency as measured by increases in Quantile® measures between Imagine Math benchmark administrations. Imagine Math is useful for improving math proficiency in both English- and Spanish-speaking students. The benefits of the Imagine Math program appear to be particularly relevant for students who are performing one or two levels below grade level.