

# 8th Grade STEMscopes Students “Climb Higher” than Students Not Using STEMscopes by Significantly Outscoring Them on the Science State of Texas Assessment of Academic Readiness™

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## Design of the Study

A team of researchers from Rice University collected and analyzed data on the 2013-2014 8th grade science STAAR™ (State of Texas Assessment of Academic Readiness) passing rates from 346 districts that utilized STEMscopes and 794 districts that did not use STEMscopes. Data were collected from all students, including those who qualified for free or reduced lunch (economically disadvantaged students). The analysis controlled for important district demographic information (i.e. the number of 8th grade students in the district and the percentages of Hispanic, Black, White, economically disadvantaged, and LEP students). Analyses were conducted to examine the impact of STEMscopes including the differences in average STAAR™ passing rates, advanced rates, and differences in STAAR passing rates for economically disadvantaged students.



STEMscopes users climbed higher and did better than districts not using STEMscopes.

## Results of the Study

**A)** In the first set of analyses, the Rice research team analyzed 8th grade STAAR passing rates, comparing districts that used STEMscopes and districts that did not. After controlling for demographic information, STEMscopes districts had passing rates that were 2.9 points higher for the 8th grade science STAAR, on average, compared to non-STEMscopes districts.

**B)** The second analysis focused on the differences between STEMscopes and non-STEMscopes districts in terms of the rate of scoring “advanced” on the 8th grade STAAR. The team controlled for demographic differences and the results indicated that STEMscopes districts had an advanced rate that was 2.0 points higher than districts not implementing STEMscopes.

**C)** The third analysis only included economically disadvantaged students (as determined by qualification for free/reduced lunch). Results indicated that STEMscopes districts had a higher passing rate by 4.0 points for economically disadvantaged students, on average, when compared to non-STEMscopes districts.



**A** 2.9 Points Higher  
on STAAR™ Average Passing Rate



**B** 2.0 Points Higher  
on STAAR™ Advanced Rate



**C** 4.0 Points Higher  
for Economically Disadvantaged  
Students on STAAR™ Passing Rate



## Conclusion

The implications of this study are significant for schools and districts seeking to take their science scores to the next level. When used in the classroom, STEMscopes can help “average” students pass the 8th grade science State of Texas Assessment of Academic Readiness, achieve at higher levels, and reach an advanced score. Similarly, STEMscopes helps economically disadvantaged students, who often are at risk for lower academic achievement, achieve at higher levels.

**About Accelerate Learning, Inc.:** Accelerate Learning, in conjunction with Rice University, is focused on becoming the preeminent and most effective digital Pre-K—12 STEM resource used by teachers, students, and parents as measured by adoption and usage by schools, districts, and families. With over 1.5 million student users and growing, Accelerate Learning has grown from a single product, STEMscopes in 2007, to a brand that now offers a variety of curriculum and professional development solutions across the United States, which supports early learning, NGSS, and state-aligned curriculum. Previously, Accelerate Learning has earned recognition in District Administration’s Top 100 Products, SIIA Innovation Incubator, and EdTech’s Cool Tool Awards. Learn more at [acceleratelearning.com](http://acceleratelearning.com).