



BrainPOP®

ESSA QUALIFICATION:

**Moderate
Evidence**

EVALUATION PERIOD:

2015-2016 School Year

GRADES:

3–8

PRODUCTS:

BrainPOP

STATES & ASSESSMENTS:

CALIFORNIA | Smarter Balanced Assessment (*SBAC*)

COLORADO | Partnership for Assessment of Readiness for College and Careers (*PARCC*)

FLORIDA | Florida Standards Assessments (*FSA*)

NEW YORK | New York State Assessments

TEXAS | State of Texas Assessments of Academic Readiness (*STAAR*)

CONTENT AREAS STUDIED:

English Language Arts, Math, and Science

New York, NY

October 2018

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THE IMPACT OF BRAINPOP ON STATE ASSESSMENT RESULTS

A STUDY ON THE EFFECTIVENESS
OF BRAINPOP IN GRADES 3–8



Our study found that students in schools with a BrainPOP subscription showed a greater increase in standardized test scores than a matched control group.

The study assessed student performance by comparing BrainPOP® subscribers to non-subscribers using the results of statewide tests administered at the end of the 2015-2016 school year. BrainPOP's Data and Analytics team, led by Dr. Kevin Miklasz, looked at results across five states (California, Colorado, Florida, New York, and Texas) and three core subjects areas (ELA, Math, and Science) for students in grades 3–8. The results of the study show that BrainPOP meets the Moderate Evidence of Impact level for ESSA.

ABOUT THIS STUDY

In conducting this efficacy study, we sought to take a broad perspective on the use of BrainPOP in schools. To do that, we considered BrainPOP's wide-reaching presence in elementary and middle schools; the multitude of ways in which it is used; and the fact that it reaches students with a breadth of needs. We determined that subscribing schools — simply, schools with a BrainPOP subscription — constituted the most inclusive intervention category.

Many studies of efficacy or effectiveness focus on a single district or state. Given BrainPOP's prevalence, Dr. Kevin Miklasz and our Data and Analytics team were able to extend our methodology across five different states, each with a different achievement test, in a single analysis.

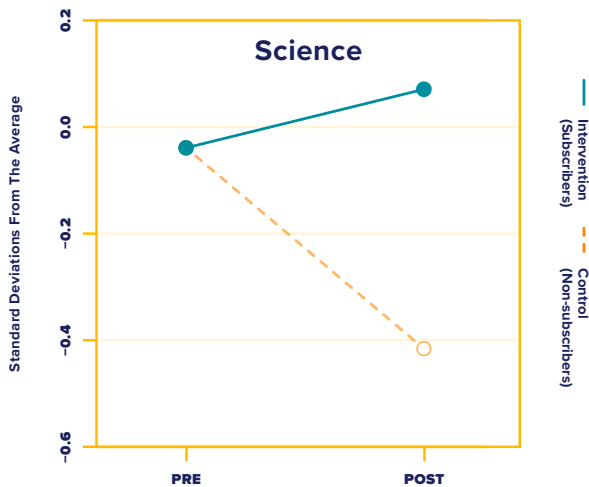
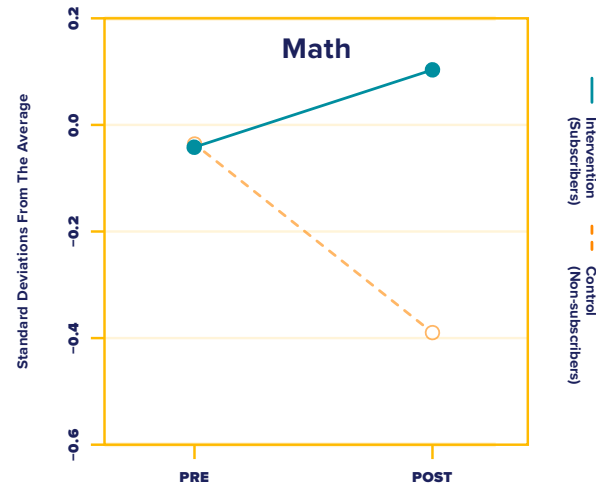
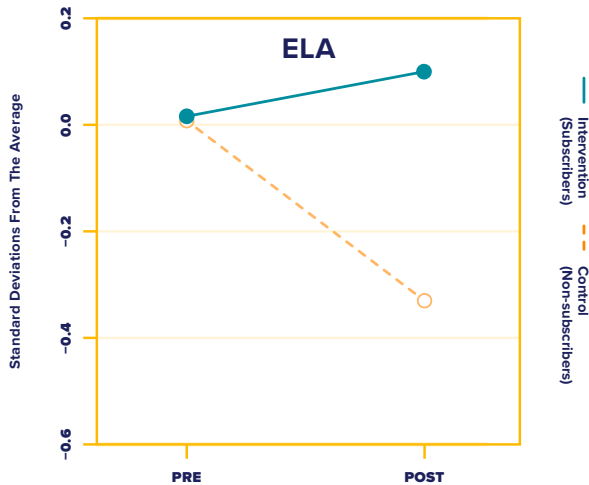
The goal of this study was to assess whether the use of BrainPOP in some form generally leads to higher student performance. Three different methods were used to test the effect of a BrainPOP subscription on standardized test scores.* All methods compared test scores of BrainPOP subscribers (the intervention group) with those of non-subscribers (the control group), looking at both school-wide and grade-specific test scores.

KEY FINDINGS

The results of this study show that **schools with a BrainPOP subscription had a greater increase in standardized state test scores than a matched control group in all three subject tests**, indicating that BrainPOP is effective and meets the ESSA evidence requirements.

- The effect was always positive, statistically significant at the $p < 0.10$ level, and verified in five different states.
- We saw an average effect size¹ of 38.4 in English Language Arts (ELA), 44.8 in Math, and 46.4 in Science across five states, indicating that BrainPOP subscribers perform better than a demographically similar set of non-subscribers.
- The results qualify for Moderate ESSA evidence.

The following graphs illustrate the change from prescores to postscores between BrainPOP subscribers and matched BrainPOP non-subscribers. The subscribers show a modest increase in performance, while the matched non-subscribers group shows a significant decrease in performance. Results are shown for a school's mean ELA, Math, and Science scores, averaged across the five states in the analysis.



¹Effect Size is a measurement of the difference between an intervention and control group. It's a standard measure that can be used to compare many different studies to each other. It involves taking the difference between the intervention and control, and dividing by the standard deviation. In education, an effect size of 0.4 is typically considered to be a large effect, Hattie, J. *Visible Learning for Literacy, Grades K-12: Implementing the Practices That Work Best to Accelerate Student Learning*. (2016). Corwin Press.

FINDINGS BY STATE

This study found a positive effect of a BrainPOP subscription in all five states. The effect was typically stronger in grades 3–6, and in Science and Math.

The following are highlights from the states included in this study; details can be found in the full report.

California



72% of the effect sizes were significant in California,

showing that having a BrainPOP subscription led to an overall positive and significant effect.

New York



New York results were definitely positive,

with 52% of tests resulting in statistical significance. This held true across grade and methodology, with the largest effect sizes in Math and Science.

Colorado



Colorado showed positive effect sizes for Math and ELA,

across all grades, but most notably in grades 3–5.

Texas



Texas showed an overall positive pattern,

across grades and subject tests, with 57% of the effect sizes significant.

Florida



Florida had positive results overall,

with all effect sizes positive and 55% of the tests showing statistical significance.

To download the full report visit:
about.brainpop.com/research

*This piece uses the results from method C of our research study. View the full report to see details on the other two methods used in the study or to view statistical technique.

ABOUT BRAINPOP

BrainPOP (www.brainpop.com) is an award-winning educational platform that offers cross-curricular animated movies, coding projects, student creation and reflection tools, learning games, interactive quizzes, customizable and playful assessments, lesson plans, professional development opportunities, and beyond. The individual account system My BrainPOP lets teachers assign work, provide feedback, and keep track of learning overall. Ideal for classrooms, home, and mobile devices and individual, team, or whole-class learning, our resources include BrainPOP Jr. (K-3), BrainPOP (available in English, Spanish, Mandarin, and French), and, for English language learners, BrainPOP ELL. We're used in 40 percent of U.S. elementary and middle schools and welcome millions of monthly site visitors; our award-winning apps regularly rank among the highest in the major app stores' education categories.

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