

# Jumpstart Test Prep ACT Review 2020-2021 Evidence Based Improvement Study

Produced by Jake D. Hoskins, PhD of h-squared Analytics, LLC  
Summary of Results and Conclusions

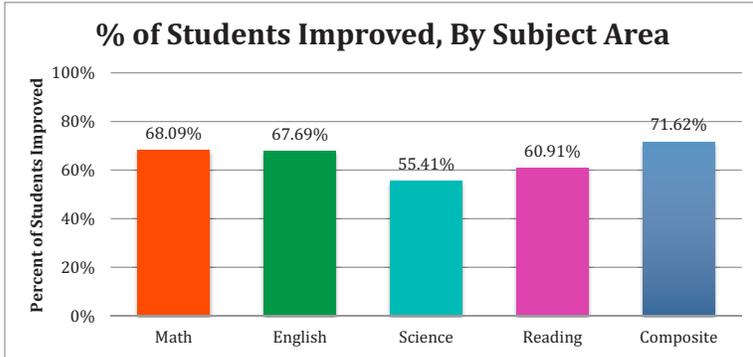


Figure 1. Percent of Students Improved, by Subject Area

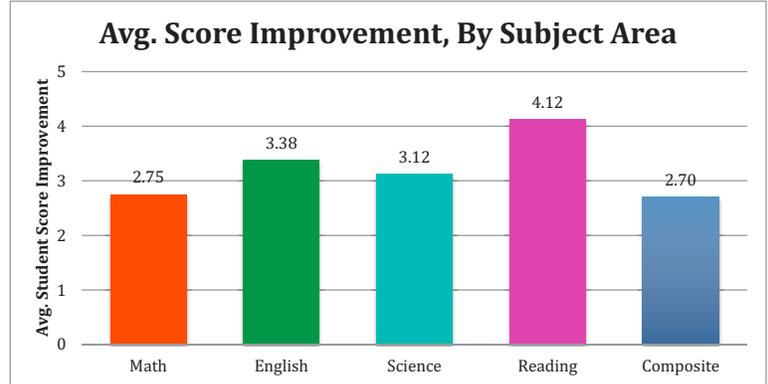


Figure 2. Average Rate of Improvement, Among Those Students Who Showed Improvement

This is calculated by including all students who had both an actual ACT pre-test score (before the use of the Jumpstart Test Prep Review Program) and an actual ACT post-test score (after utilizing Jumpstart Test Prep Review Program), from which potential improvements could be measured and attributed to the program.

**Complete ACT® Math Review**

STUDENTS IMPROVING AS MUCH AS **+9 POINTS**

AVERAGE IMPROVEMENT: **80%** **3.81**

**LOYD STAR ATTENDANCE CENTER**

SCHOOL MOST IMPROVED IN MATH

**Complete ACT® Reading Review**

STUDENTS IMPROVING AS MUCH AS **+12 POINTS**

AVERAGE IMPROVEMENT: **65%** **4.7**

**LOYD STAR ATTENDANCE CENTER**

SCHOOL MOST IMPROVED IN ENGLISH

**Complete ACT® English Review**

STUDENTS IMPROVING AS MUCH AS **+12 POINTS**

AVERAGE IMPROVEMENT: **88%** **4.92**

**MIZE ATTENDANCE CENTER**

SCHOOL MOST IMPROVED IN ENGLISH

**Composite ACT® Score Improvement**

STUDENTS IMPROVING AS MUCH AS **+9 POINTS**

AVERAGE IMPROVEMENT: **88%** **3.07**

**MIZE ATTENDANCE CENTER**

SCHOOL MOST IMPROVED IN COMPOSITE SCORES

**Complete ACT® Science Review**

STUDENTS IMPROVING AS MUCH AS **+12 POINTS**

AVERAGE IMPROVEMENT: **73%** **2.75**

**LELAND HIGH SCHOOL**

SCHOOL MOST IMPROVED IN ENGLISH

“It is clear that similar rates of improvement that may be attributed to Jumpstart Test Prep are shared among students from different genders, ethnicities and schools attended.” - Jake Hoskins, PhD, h-squared Analytics, LLC



**Improvements Observed by Gender - All results are significant.**

	Males	Females
Math	+2.74 (15.35%) ** [n=38]	+2.77 (16.41%) ** [n=56]
English	+3.25 (20.93%) ** [n=261]	+3.46 (23.30%) ** [n=317]
Science	+2.82 (15.78%) ** [n=17]	+3.35 (22.50%) ** [n=23]
Reading	+4.26 (24.82%) ** [n=31]	+3.94 (26.56%) ** [n=34]
Composite	+2.41 (13.57%) ** [n=22]	+2.87 (18.02%) ** [n=30]

Table 4. Gender Breakdown; One Tail T-Tests of Significance; \*\* p<.05; \* p<.10

**Improvements Observed by Ethnicity - Substantive gains are found for both groups.**

	Historically Disadvantaged	Whites / Asians
Math	+2.00 (12.16%) ** [n=29]	+2.84 (15.57%) ** [n=51]
English	+3.42 (26.53%) ** [n=197]	+3.32 (19.69%) ** [n=351]
Science	+3.00 (18.02%) ** [n=15]	+3.67 (24.07%) ** [n=15]
Reading	+3.19 (21.50%) ** [n=26]	+4.71 (26.69%) ** [n=28]
Composite	+2.00 (12.12%) ** [n=15]	+2.92 (16.66%) ** [n=24]

Table 5. Ethnicity Breakdown; One Tailed T-Tests of Significance; \*\* p<.05; \* p<.10

**Improvements Observed by School Quality - All gains are positive and significant.**

	High Quality Schools	Low/Mid Quality Schools
Math	+2.86 (16.61%) ** [n=22]	+2.72 (15.75%) ** [n=74]
English	+3.41 (22.08%) ** [n=346]	+3.36 (22.49%) ** [n=270]
Science	+3.76 (23.80%) ** [n=17]	+2.67 (16.71%) ** [n=24]
Reading	+5.05 (29.09%) ** [n=21]	+3.70 (24.30%) ** [n=46]
Composite	+2.92 (16.53%) ** [n=26]	+2.48 (16.03%) ** [n=27]

Table 6. School Quality Breakdown; One Tailed T-Tests of Significance; \*\* p<.05; \* p<.10

## Jumpstart Test Prep Impact on Graduation Rate For At-Risk Students

Percentages of at-risk students crossing from below to above the ACT® 17 score level with Jumpstart

Math 19.96%  
 English 27.55%  
 Science 42.28%  
 Reading 23.04%

# KEY CONCLUSIONS

- ▶ Nearly three-quarters of students with previous exam attempts experienced a Composite score increase, with an average Composite point of gain of 2.70 among those students who did improve. Observed average rates of improvement were even higher by subject area: Math (2.75), English (3.38), Science (3.12) and Reading (4.12).
- ▶ Gains were shared across gender, ethnicity and school quality factors.
- ▶ Implementation of the program reduced subject level end-of-course graduation requirement risks by 20% to 42%.
- ▶ Rigorous aggregate level t-tests in which pre- to post- score changes are assessed demonstrated that three of the four subject areas and the composite average saw statistically significant positive score changes at the critical p-value of .05 (see Column 1 of Table 3). The only non-significant result is for Science. This threshold effectively gives us **95% confidence that the results observed in this sample would generalize to the population of interest (i.e., all High School Juniors).** (i.e., all High School Juniors).

- Jake Hoskins, PhD, h-squared Analytics, LLC