Smarter Balanced
Assessment Consortium

Answers to Questions About 2017 Test Results

March 2018

Introduction

The release of spring 2017 Smarter Balanced test scores showed that student gains plateaued from 2016. That led some to question the accuracy of the results and the test. In response, Smarter Balanced conducted a series of analyses to investigate the possibility of technical problems with the 2017 test. These analyses, led by member states and affirmed by the Smarter Balanced Technical Advisory Committee and an independent review, support the accuracy of the 2017 test results.

Research Questions and Findings

**? How did students perform in 2017 compared to 2016?**

On average across all grades, students performed **slightly worse in English language arts/literacy** and **slightly better in math**.

Student Proficiency (Level 3 or Level 4)
In terms of the percent of students achieving proficiency (Figure 1), we found:

- **The percent of proficient students decreased 1 percent in ELA/literacy in 2017.**
- **The percent of proficient students increased 1 percent in math in 2017.**

Percent of Proficient Students

PERCENT PROFICIENT

ELA/Literacy — 46%, 50%, 49%

Math — 38%, 40%, 41%

2015   2016   2017
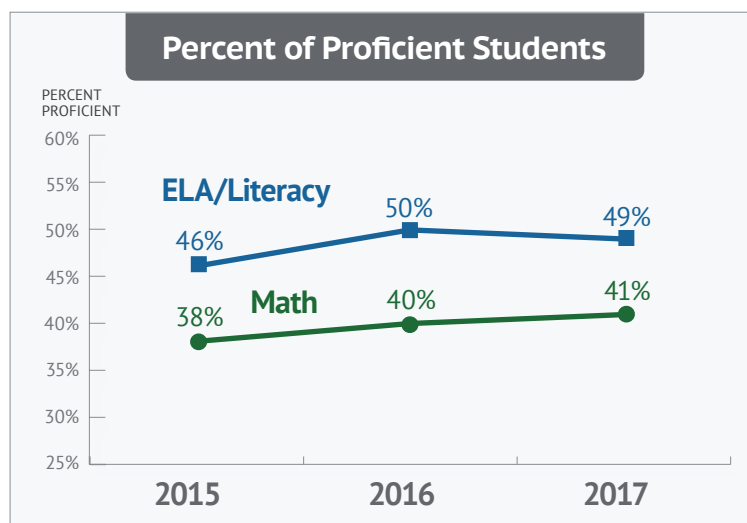
Overall Average Scale Scores

Regarding overall scale scores (Figure 2), we find a similar story:

FIGURE 2

- **The average scale score decreased by one point for ELA/literacy in 2017.**
- **The average scale score increased by one point for math in 2017.**

Three-Year Trends

Regarding the three-year trend for the assessment, **the percent proficient increased about 3 percent in both math and ELA/literacy from 2015 to 2017.** While there wasn't as much progress made in 2017 as in the previous year, it's not lost knowledge.
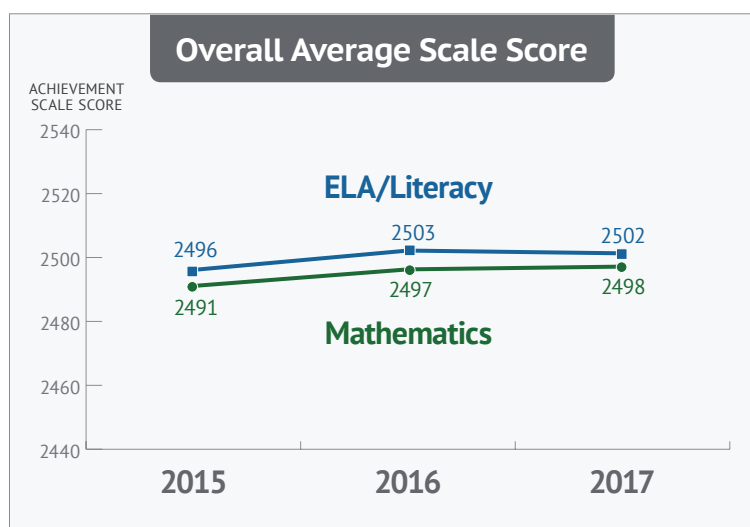
❓ Were there fewer test questions available?

No. In 2017, the test questions included virtually all of the items used in 2016, plus a large number of new computer adaptive items that were field-tested in 2015.

Overall, the 2017 item pool was:

- **50 percent larger for ELA/literacy (7,734 vs. 5,163) and**
- **33 percent larger in math (9,695 vs. 7,292 items).**

❓ Did students receive more difficult test questions in 2017 than in previous years?

No. On average, the new questions added in 2017 were slightly easier for all grades and subjects compared to questions already in the item pool.

Changes in the difficulty of the item pool do not impact student performance. The advanced statistics that the computer adaptive testing algorithm uses take into account differences in item difficulty. The advanced statistics also ensure students' scores are still comparable to one another.

❓ Did the newly added test questions impact test results?

No. Some evidence suggests that students performed better on items used in previous years and, in contrast, not as well on new items. However, this contrast between new items and old items is not unusual or unexpected. The contrast, at most, amounts to less than half a point in the total score and did not have a substantial effect on test results.

❓ Did students spend less time taking the test?

No. Students spent, on average, slightly more time on the test in 2017 than in 2016 (Figure 3).

❓ Did students take the test earlier in the school year?

No. Students started testing at the same time of year in 2017 as in 2016.

FIGURE 3

Changes in Testing Time

	ELA/Literacy		Math	
	2016	**2017**	**2016**	**2017**
Average Time	199.13	210.29	120.47	130.03
Change	**+11.16 minutes**		**+9.56 minutes**	

❓ Were the student demographics different?

No. Although there were slight changes in the reported student demographics, these changes likely have more to do with how students were classified rather than reflecting true changes in the student population. For example, in 2016, more students' races were listed as "Unknown" than in 2017, suggesting that more students were accurately classified in 2017. These demographic changes were small enough that they could not have had an appreciable impact on differences in test results between 2016 and 2017.

Conclusions

Based on this information, we have every reason to believe that the test scores accurately describe what students knew and were able to do in spring 2017 related to the learning standards. We did not find any technical issues with the 2017 assessment.

Between 2015 and 2016, we believe some of the growth in English language arts/literacy was due to students' becoming familiar with the format of the test, as well as with the type and rigor of the tasks included in the test. The new items in 2017 appear to have improved the capacity of the test to describe what students learned in the classroom. Future growth in student achievement will likely require additional instructional supports and strategies to ensure students learn the deeper ELA/literacy skills measured on the test as demanded by the content standards.

As we look at overall test score percentages from year to year, it's important to remember that averages don't tell the whole story. There's plenty of positive work happening in our schools, districts, and states. This year, as in other years, we will remain focused on our goal to support high-quality classroom instruction so students can reach their full potential.