CollegeBoard

2001 SAT Performance Overview

Presentation for The College Board

Andy Gonzalez
June 30, 2017

The Basics

<u>All</u> values are unweighted. They do not account for the varying populations of states

Participation Rate

- On average per state, 37% of students participated in the SAT test .
- Broad range of participation represented in the middle 50% of the data: From 9% to 64%

Average Math Score

- Average score among the states was 532, with a middle 50% range spanning from 503 to 558
- Math scores are the closest to normal distribution in this data set.
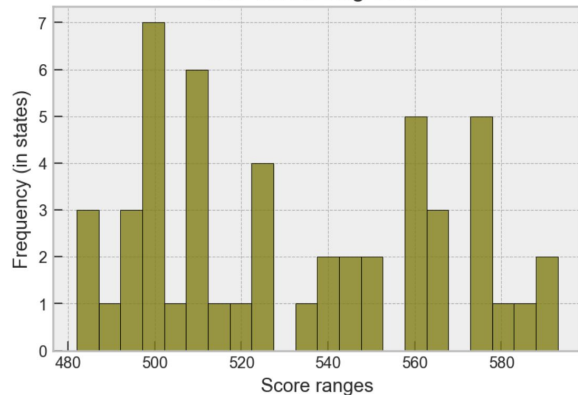
Average Verbal Score

- The unweighted average score was only 0.7 different from the average math score at 533
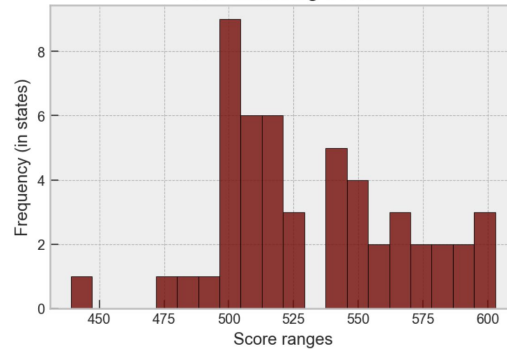- The range for the mid 50% is broader than the math results

Distributions


Student Participation in SATs
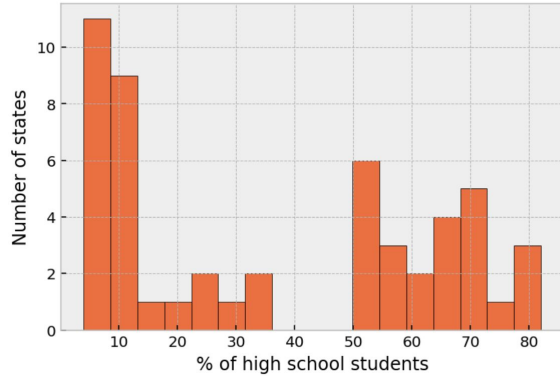
SAT Math Avg Score

SAT Verbal Avg Score

Why do I bother showing you?

- Understand the usefulness of the data collected

- Highlight SAT Math Average Scores as the closest variable to the coveted "normal distribution"

- Highlight the gaps in data, particularly in rates of participation from ~38% to 50%

Relationship in Performance

Avg SAT Scores
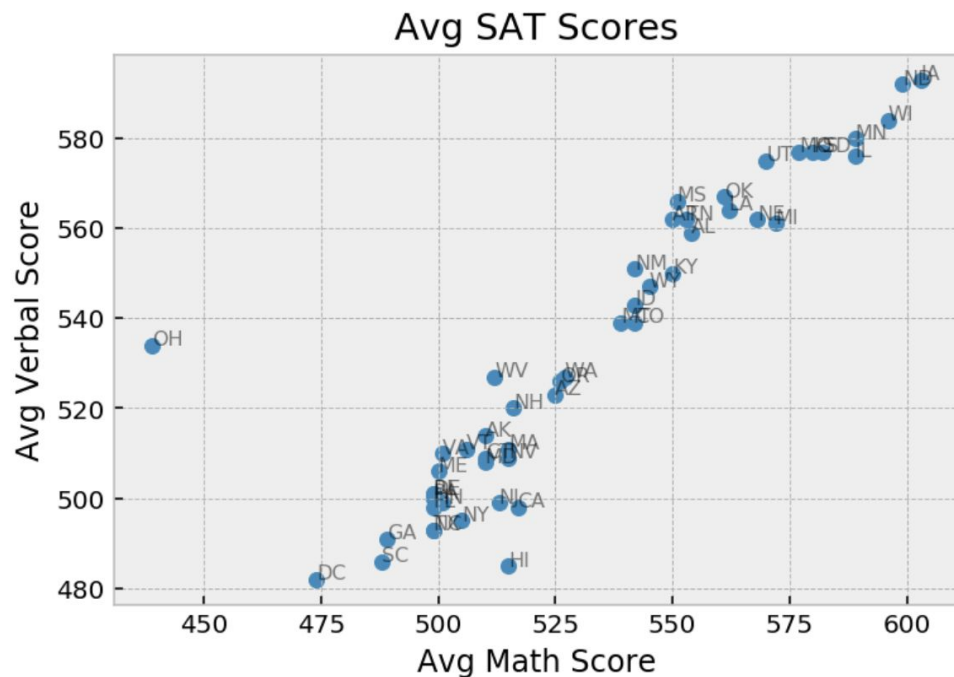
- When we plotted the variable as factors of each other, we can see a clear positive relationship of performance in both sections of the SAT Test

- As the average performance in one section improves, the same state will improve in the other section, and vice versa.
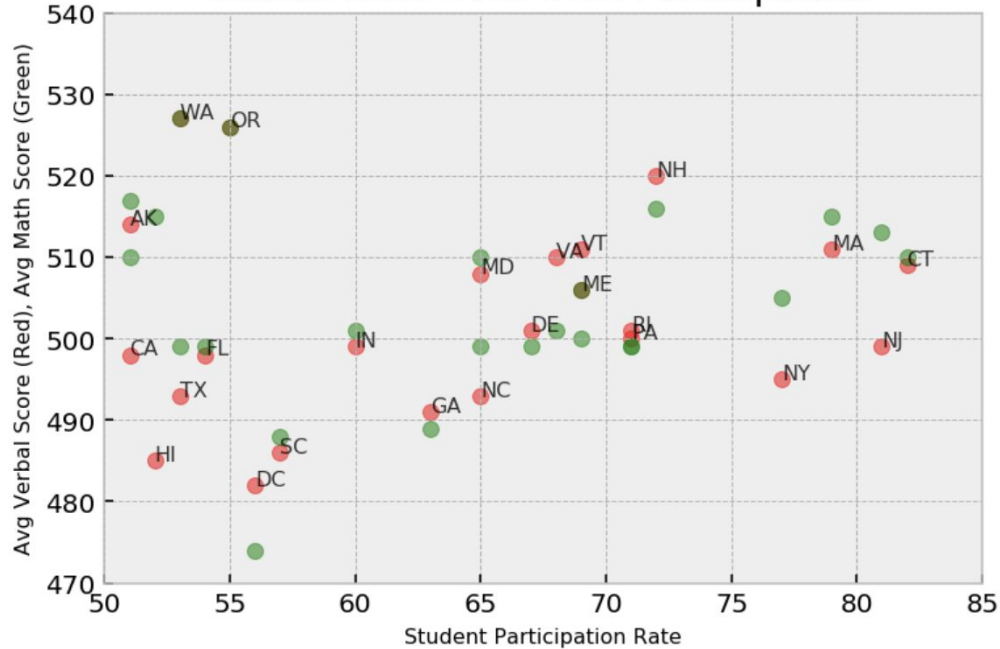
Participation and Performance

Scores as participation rate increases
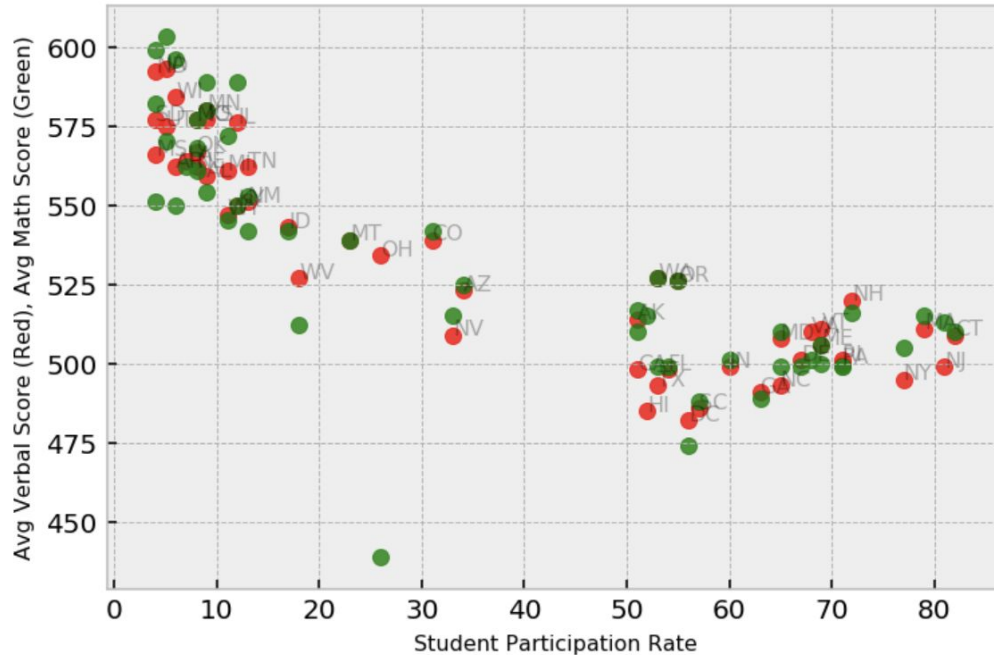
- Lower participation rates appears to correlate with better outcomes

- We see the opposite at the other end of the graph, where results are more scattered
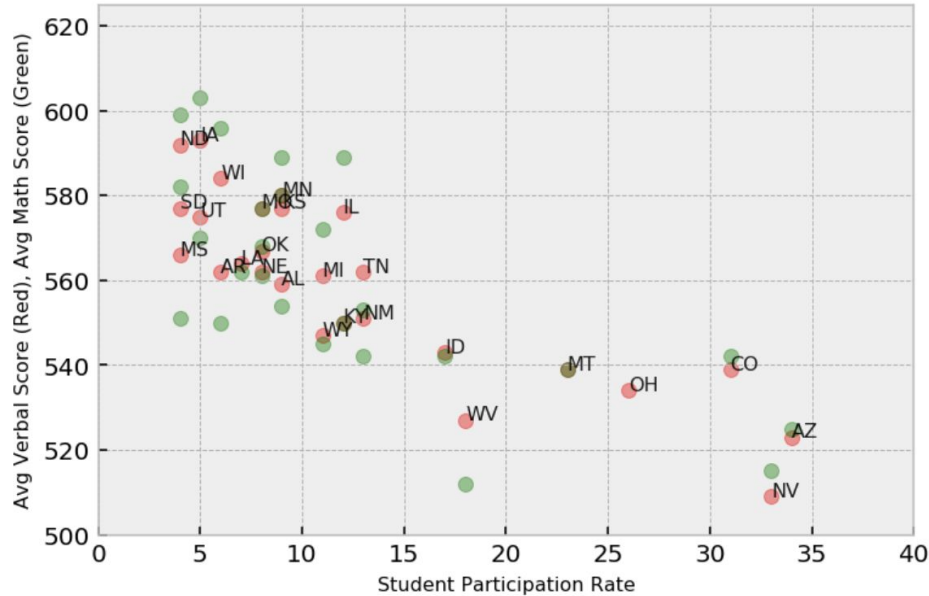
Over 50

States with Over 50% Participation

- Low correlation/relationship between the two factors

- Clustered composition: States registering in the plotted range account for both seaboards, New England, and Texas. They represent the bulk of the US' population

Under 50

States with Under 50% Participation

- Trend developing of diminishing scores as participation increases

- States in this range are the complement to our previous set: From midwest states, extending to border the states on the Pacific.

Key Takeaways

1) Data collection should include raw number of students taking the test to account for high population states.
2) There is a geographical divide and The College Board is not reaching middle America at the same rates they reach the rest of the country.
3) Students performed very similarly in both sections of the test.