

Natalie Olivo, DSI6

# SAT Value Proposition

#### Students

- Requirement for High School Graduation
- Requirement for College Admission

### Colleges

- Industry standard to evaluate "aptitude" of students
- Uniformity across all states is appealing

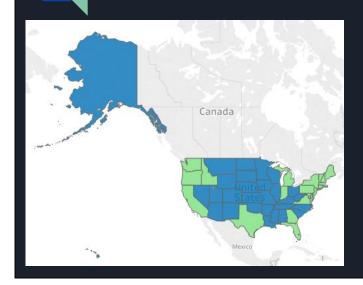
## **SAT Challenges**

- More expensive
- Does not mirror high school curriculum, as the ACT does.
- Just made changes as of March 2016 adopting many aspects of the ACT

"The content on the New SAT is very similar to that which is on the ACT. **The major difference** is in how the concepts are tested and the steps students will have to take to solve problems correctly."

https://www.princetonreview.com/college/sat-changes

### SAT v ACT participation rates

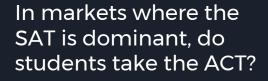


#### Colleges

- ACT has 100% participation in 17 states.
- SAT has 100% participation in 4 states.

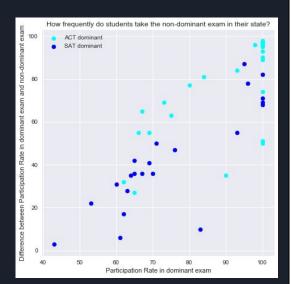
[assuming i do not go first] Here is the same map we've all presented: SAT v ACT dominant states. As my colleagues have mentioned, the higher the participation rate, the lower the overall score. This implies where the exams are not a HS diploma prerequisite, the best test takers will elect to take the exams, and likely take the one they perceive they will do better on.

Based on this inequity between ACT and SAT high school graduation requirements, it is difficult to derive actionable insights through a comparison of scores between the two.



YES

In markets where the ACT is dominant, do students take the SAT?



Not as much

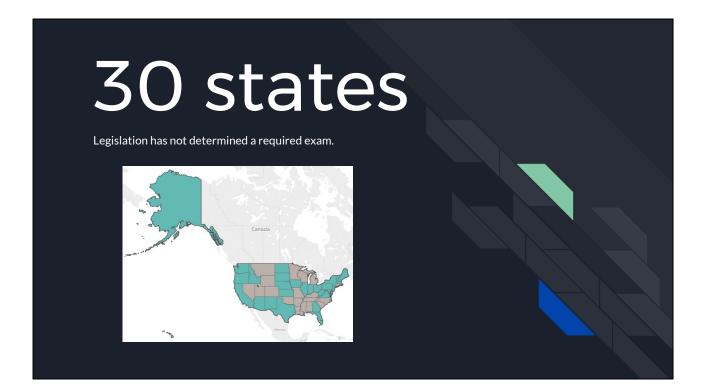
Explain the graph!

Y axis = Dominant Exam Participation Rate (minus) Non Dominant Exam Participation Rate

Important takeaway: the non distict clusters indicate a need for hypothesis test.

Explain hypoth test!

The positive correlation indicates that the higher the participation rate in the dominant exam, the lower the participation in the non-dominant exam. Florida, being a high test taker in both, is the outlier.



This reveals a two prong strategy:

- Legislative strategy. We must lobby the legislature to make the SAT a part of the mandatory requirements for HS graduation
- 2. There are a number of states where the market is open we need to make the SAT the exam of choice for these test takers

We performed a hypothesis test on the 30 open market states with null hypothesis that participation in both exams are the same. Based on our p value, we were able to fail to reject this claim, indicating that the SAT has statistically comparable participation rates to the ACT. This presents the most competitive opportunity to increase market share for the SAT. I recommend implementing a strategy that specifically targets the green states above because the most lucrative gains are to be made there. Further analysis and action should focus on these 30 states. Because if you can win those 30 states, you can win the market.