

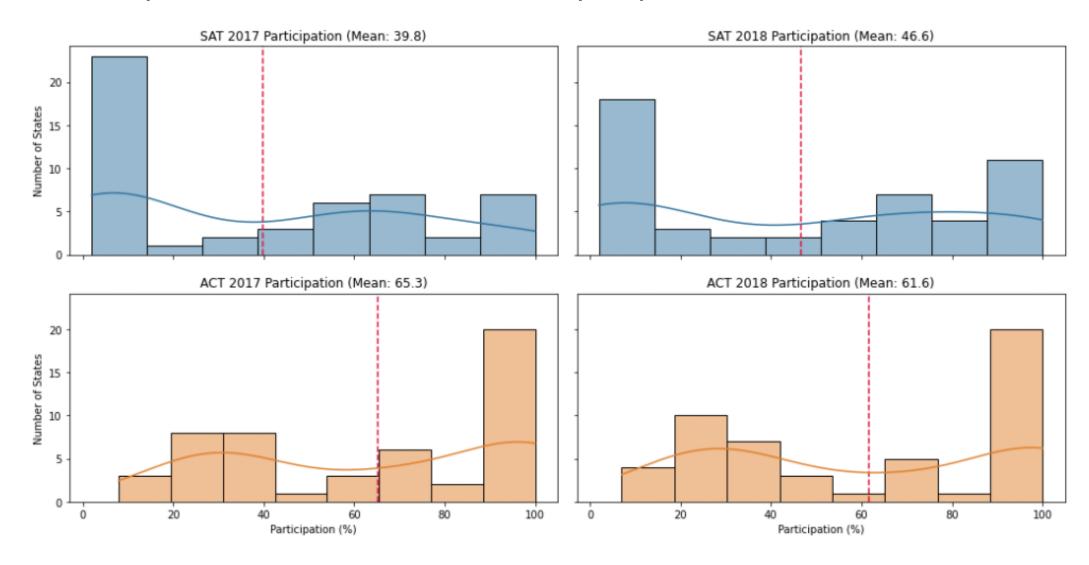
Analyzing SAT & ACT Test Results

Benjamin Dornel – DSI 18 November 2020

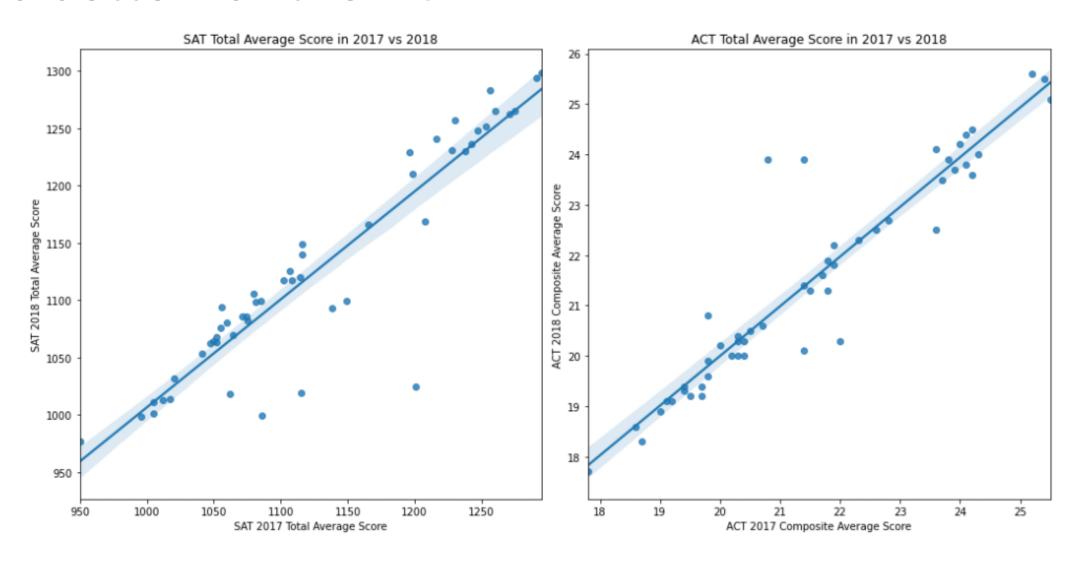


ACT vs SAT: Which test is more popular?

Clearly, the ACT is more popular than the SAT

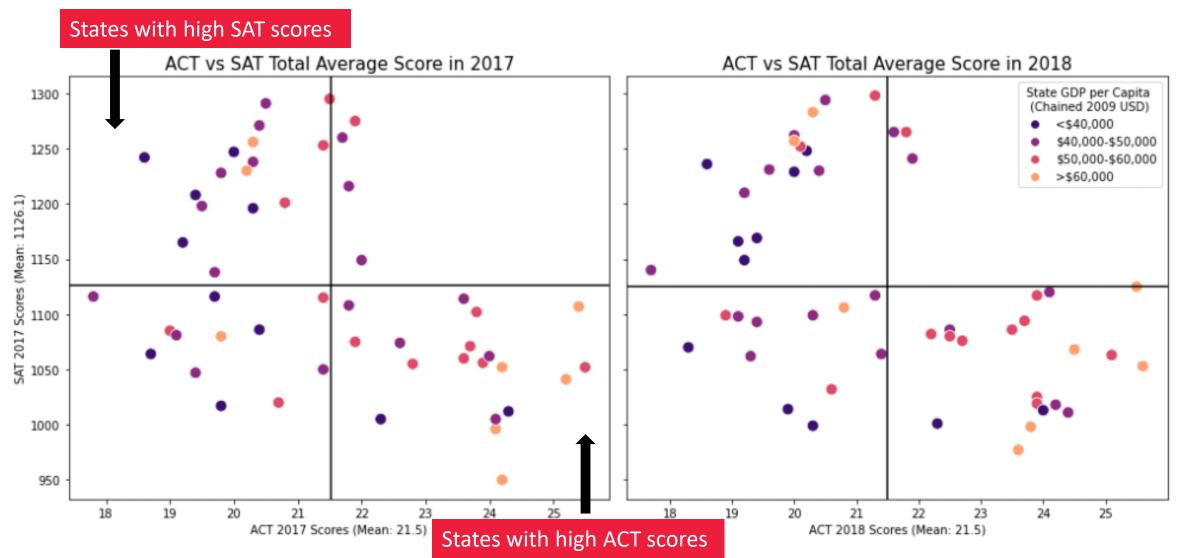


But why? Correlation of scores year-over-year is better for the ACT.

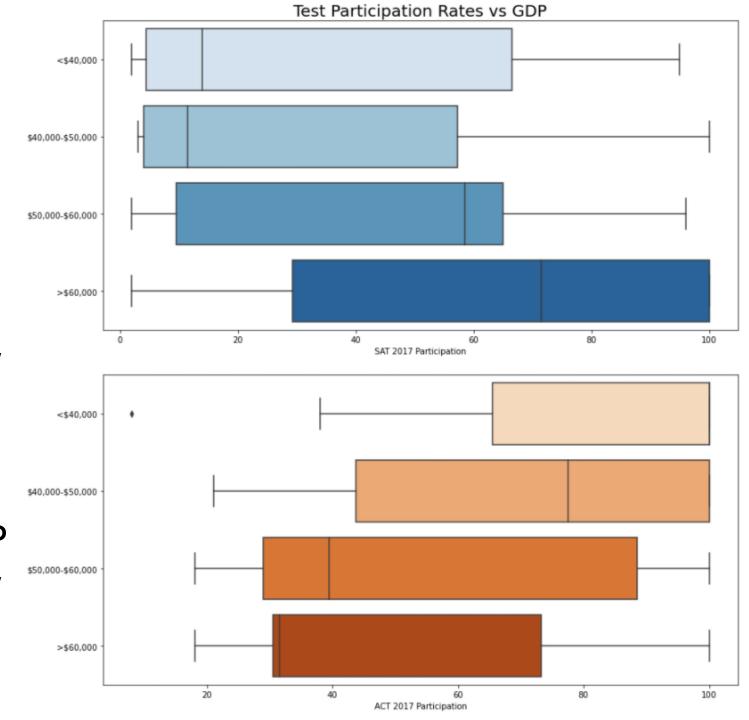


So how can we boost SAT participation rates?

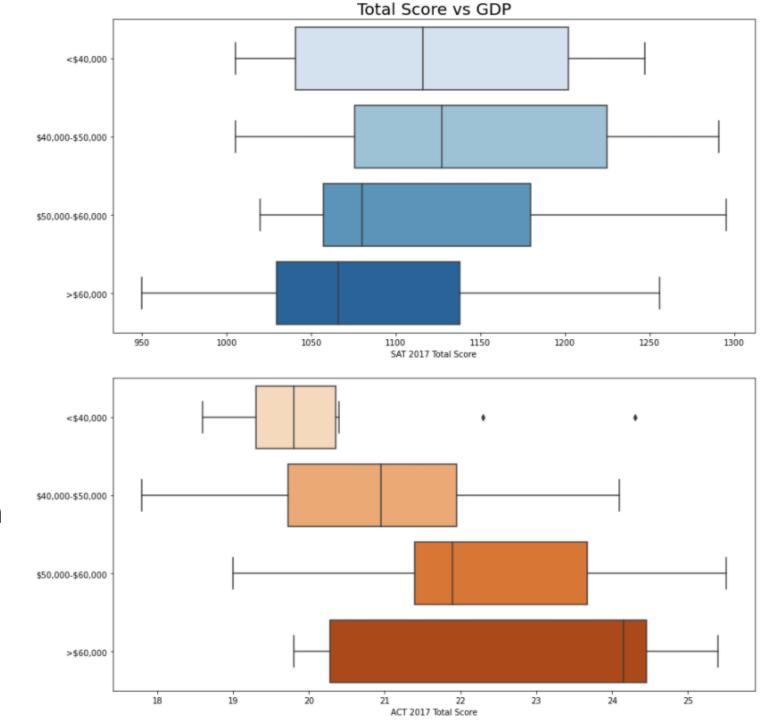
Looking at the data shows that poor states have relatively higher SAT scores and lower ACT scores.



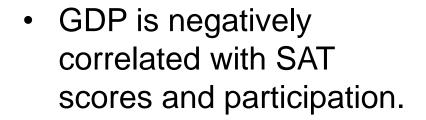
- States with a low GDP capita tend to go for the ACT instead of the SAT.
- 19 states with ACT rates above 50% and GDP below \$50,000, with below average total scores.
- Only 8 states with SAT rates above 50% and GDP below \$40,000, with below average total scores.



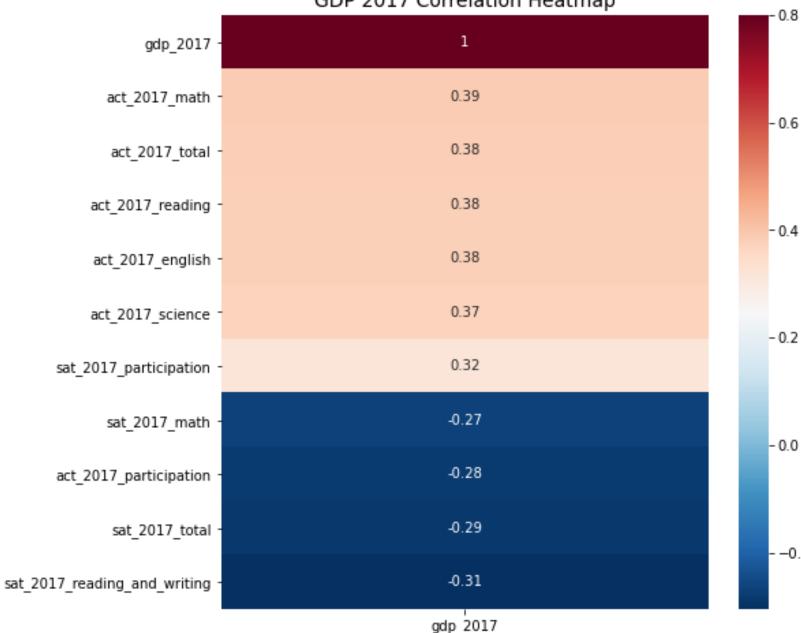
- ACT + Low GDP per Capita
 Low ACT Scores
- ACT + High GDP per Capita
 Higher ACT Scores
- SAT + Low GDP per Capita
 = Average SAT Scores
 (with high variance)
- This suggests that lower income states can perform well on the SAT despite lower levels of educational funding.



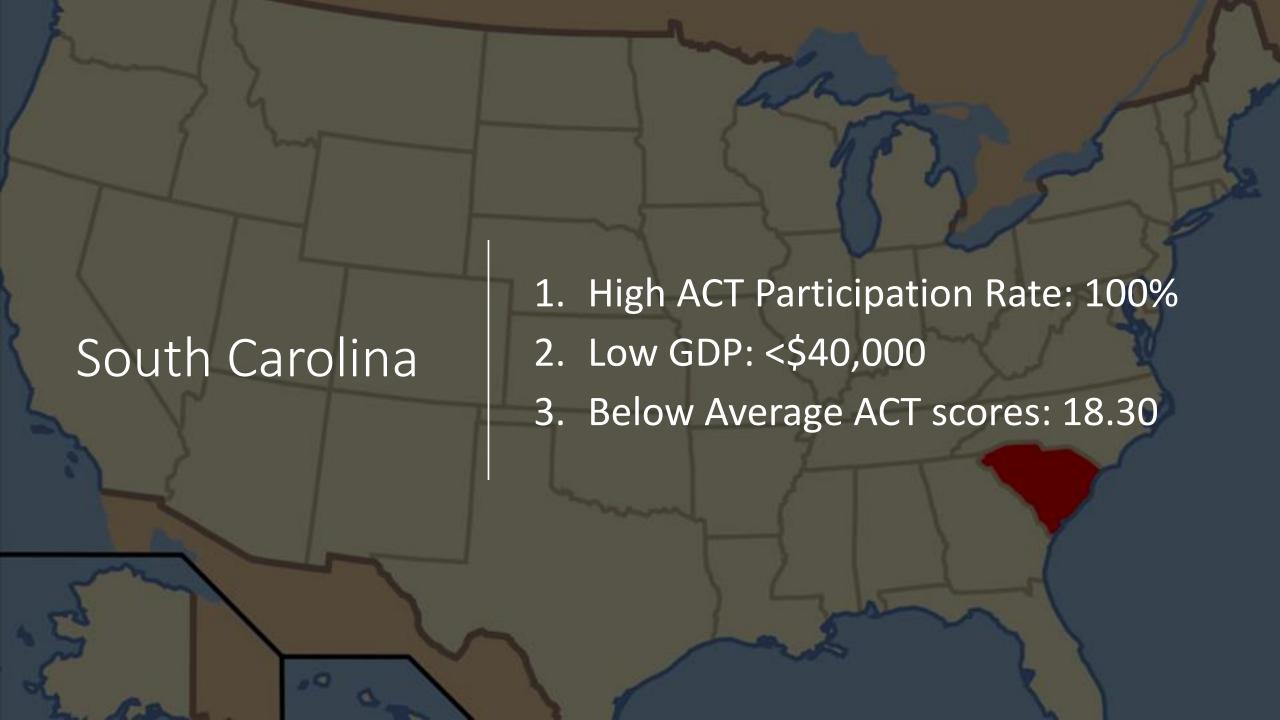




- GDP is positively correlated with ACT scores and participation.
- Hence, the higher a state's GDP, the higher their ACT test scores.
- The opposite is true for SAT test scores.



So, which state should the College Board target?



However, we need to keep in mind that correlation != causation.

- While the SAT may be more socially equitable than the ACT due to the policies like the fee waivers for low-income students, research shows that standardized test measures generally show a negative correlation between socioeconomic status and test results (NC Gov 2017).
- The College Board must continue to work with states to address this issue. This
 could mean incorporating other forms of testing such as portfolio-based
 assessment or adaptive testing.
- With COVID-19 changing the landscape of standardized testing, the College Board must continue to adapt the SAT to the times we are now in.

Appendix

