




# Suggestions for Improving SAT Participation Rate

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# Problem & Methodology

## Need to Improve SAT Participation Rates

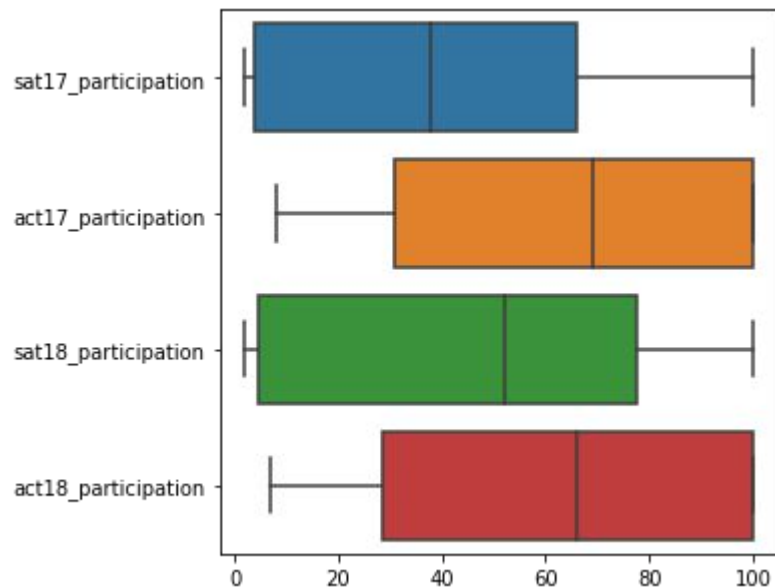
- 2017/2018 SAT and ACT Data was provided by GA DSI Instructors
- Python language on Jupyter Notebooks
- Cleaned, transformed, combined data.
- Analyzed data through graphs/charts
- Outside Research

# Trends in Participation Rates

## Spread of '17-'18 SAT and ACT

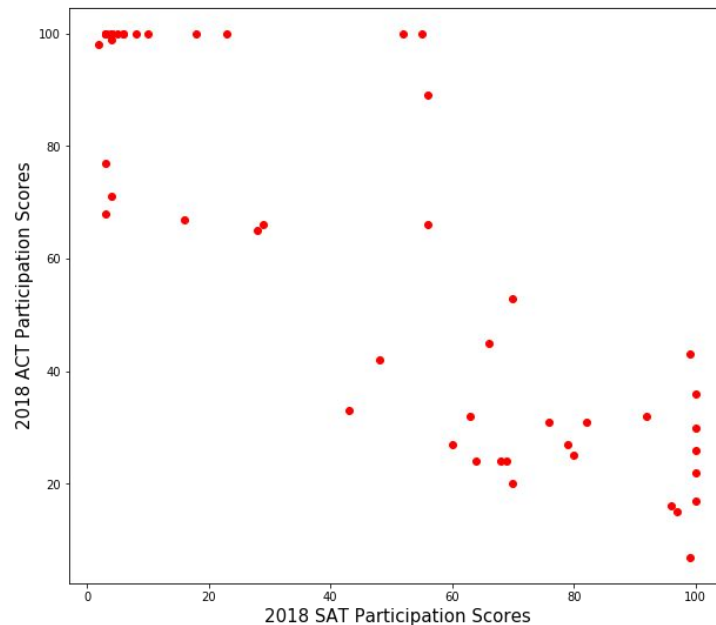
Avg 2017: SAT 40%, ACT 65%

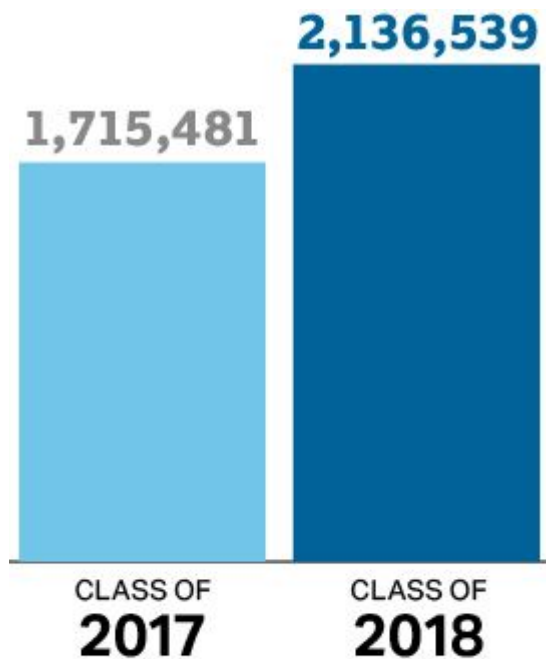
Avg 2018: SAT 46%, ACT 62%



## Correlation of SAT '18 & ACT '18 Participation

Correlation (-0.87)





**Participation  
in the New SAT**

## Participation Rates Cont'd

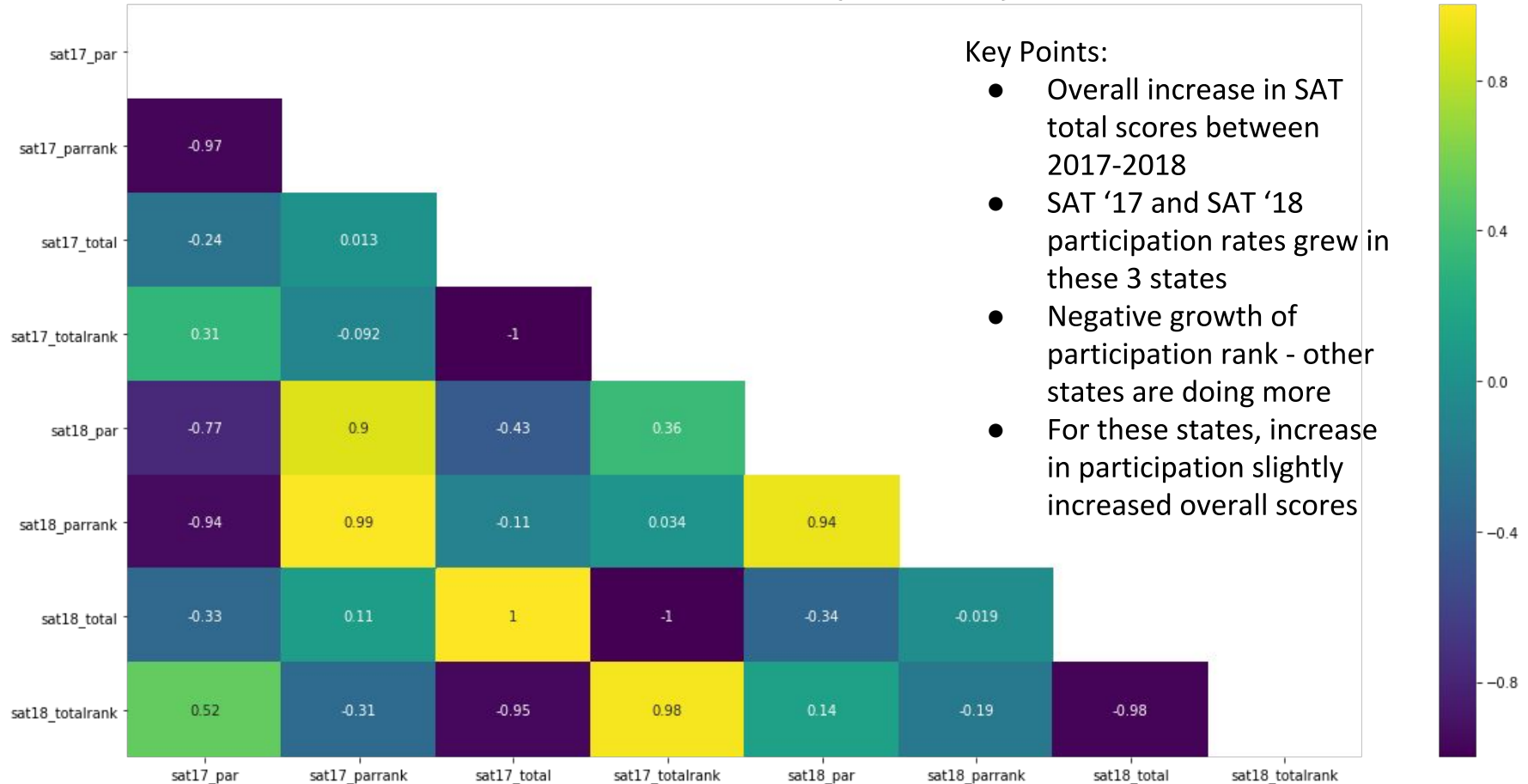
- ACT has a stronger average participation (2017: 65%, 2018: 61%)
- SAT has a lower average participation (2017: 40%, 2018: 46%)
- Strong negative correlation between 2018 ACT and SAT scores
- 25% overall increase in SAT participation between 2017 and 2018
- SAT has above 90% Participation - 2017: 7 states; 2018: 10 states
- States with highest participation rates had the lowest average overall score

# Proposal: Focus on States with More Colleges

Rank	State	Public Universities	Private Universities	Total
1	Texas	45	254	299
2	California	53	172	225
3	New York	45	180	225

- SAT'17 Participation: Texas (62%), California (53%), New York (67%)
- SAT '18 Participation: Texas (66%), California (60%), New York (79%)
- ACT '17 Participation: Texas (45%), California (31%), New York (21%)
- Act '18 Participation: Texas (45%), California (27%), New York (31%)

## Correlation of Data: California, New York, Texas



# Recap & Conclusion:

- California, New York, and Texas have the largest state population and 200+ colleges in each states
- Increase in SAT Participation leads to increase in overall test scores and overall ranking
- California, New York, and Texas are not states that require ACT exams - Overall participation for the ACT is in the bottom half of states
- Funding can be allocated to PSAT Participation, more access to SAT exams (weekends/locations available), and access to SAT study materials

# Sources:

- Provided Datasets
- Manipulated Datasets
- <https://www.worldatlas.com/articles/which-state-has-the-most-colleges.html>
- <https://reports.collegeboard.org/sat-suite-program-results/class-2018-results>
- <https://www.compassprep.com/great-to-good-the-diluted-value-of-high-test-scores/>