

Standardized Test Analysis SAT Participation 2017–2019

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Problem Statement

This project aims to explore trends in SAT participation from 2017-2019 and seeks to identify how the College Board can increase participation rates



Background – SAT

- SAT: Standardized test utilized by colleges and universities for admission process
- 2 Sections: Evidence-Based Reading and Writing and Math
- Score Range:
 - Total Score: 400-1600

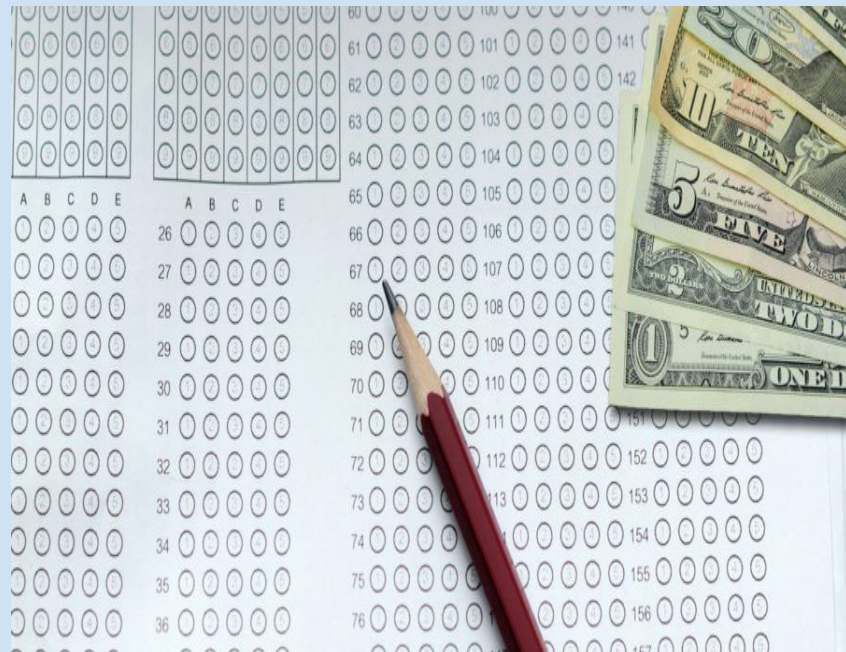
Background – Standardized Testing

Pros:

- Equal education
- Accountability for teachers

Cons:

- Limits what and how a teacher can teach
- May push schools back



South Carolina

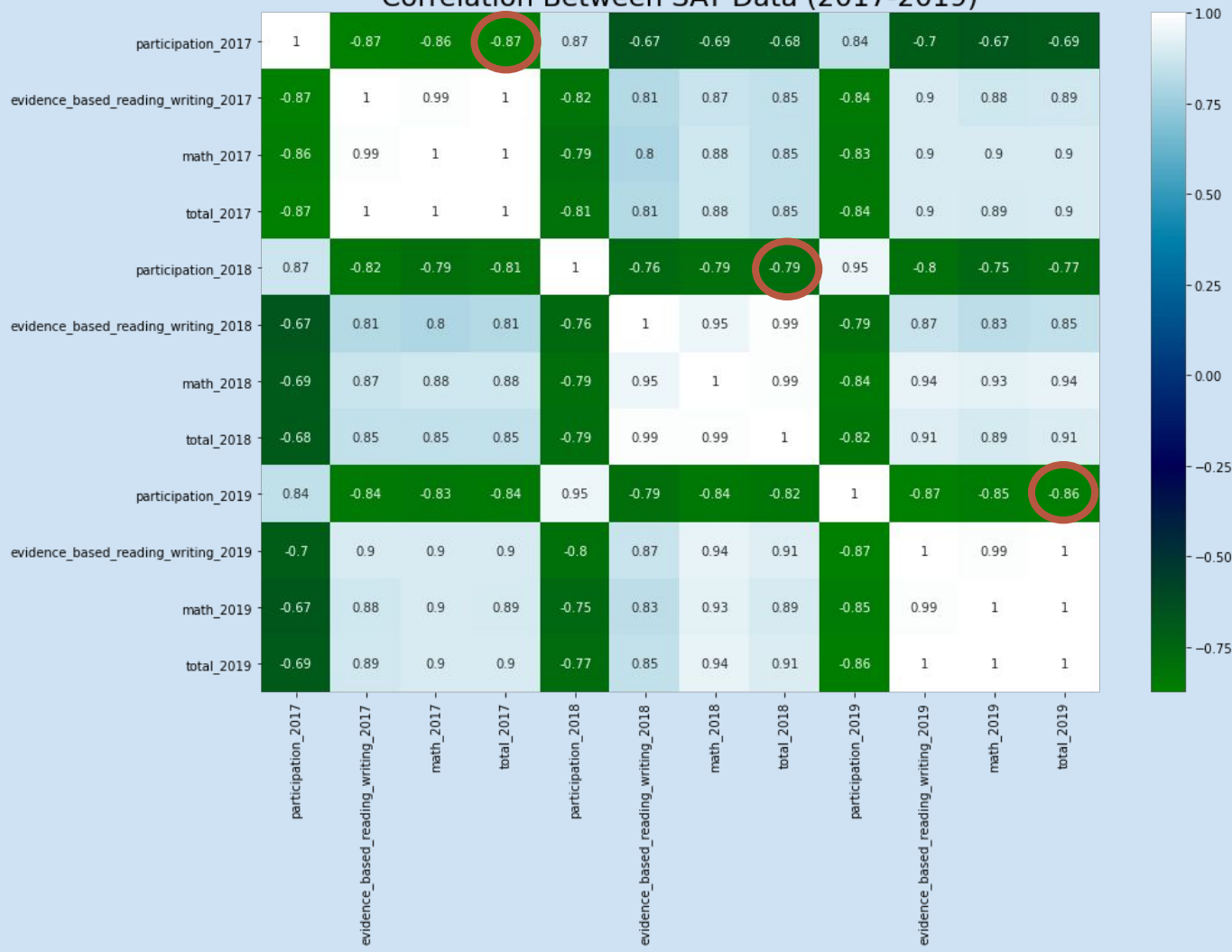
If the state were to implement a requirement for SAT participation, what effects would these requirements have on the school?

- Currently does not require the participation of the SAT or ACT
- Provides both tests for free
- Participation Rates:

State	2017 Participation	2018 Participation	2019 Participation
South Carolina	0.50	0.55	0.68

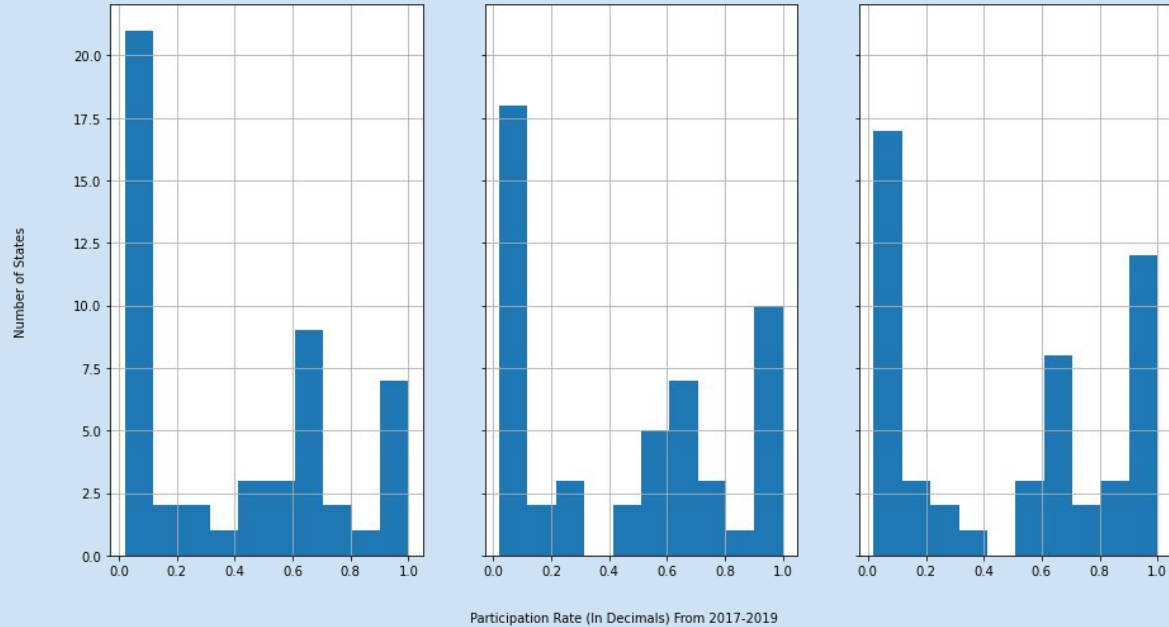
State	2017 Total Mean Score	2018 Total Mean Score	2019 Total Mean Score
South Carolina	1064	1070	1030

Correlation Between SAT Data (2017-2019)



Participation Rates

State Participation Rate



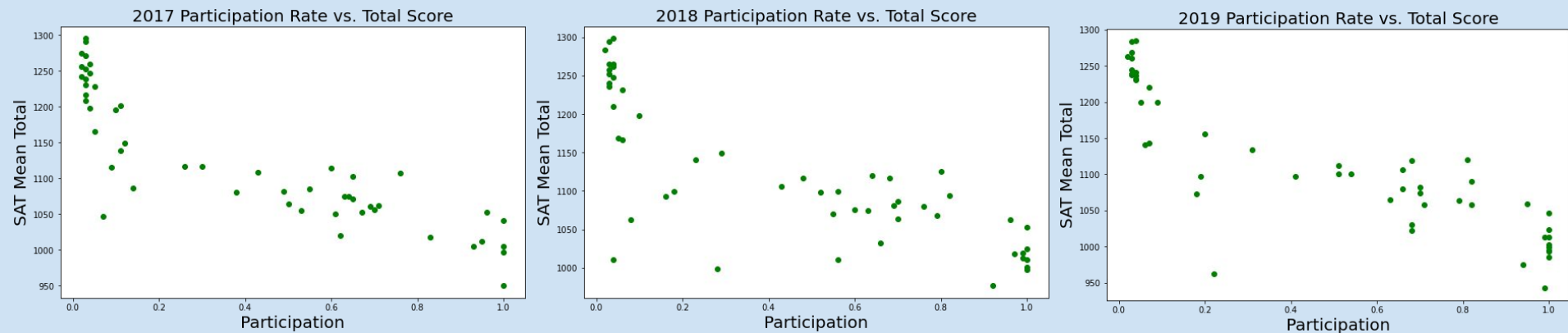
Strong participation rates on the lower and higher end of the percentage

States

- 2017: Connecticut, Delaware, District of Columbia, Michigan
- 2018: Idaho, Colorado
- 2019: Illinois, Florida, Rhode Island

- Connecticut, Delaware and Michigan had 100% SAT participation in 2017-2019
- District of Columbia declined to 92% (2018) and 94% (2019)
- Colorado participation went from 11% to 100%

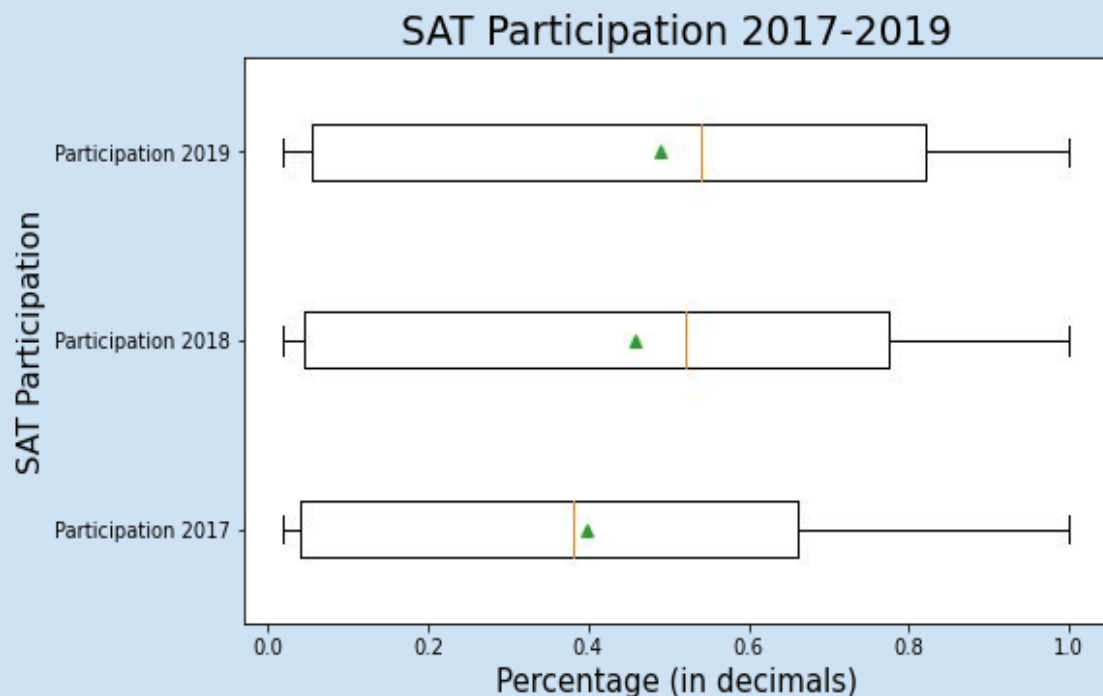
Participation Rate vs. Total Score



Negative relationship: the higher the participation, the lower the mean score

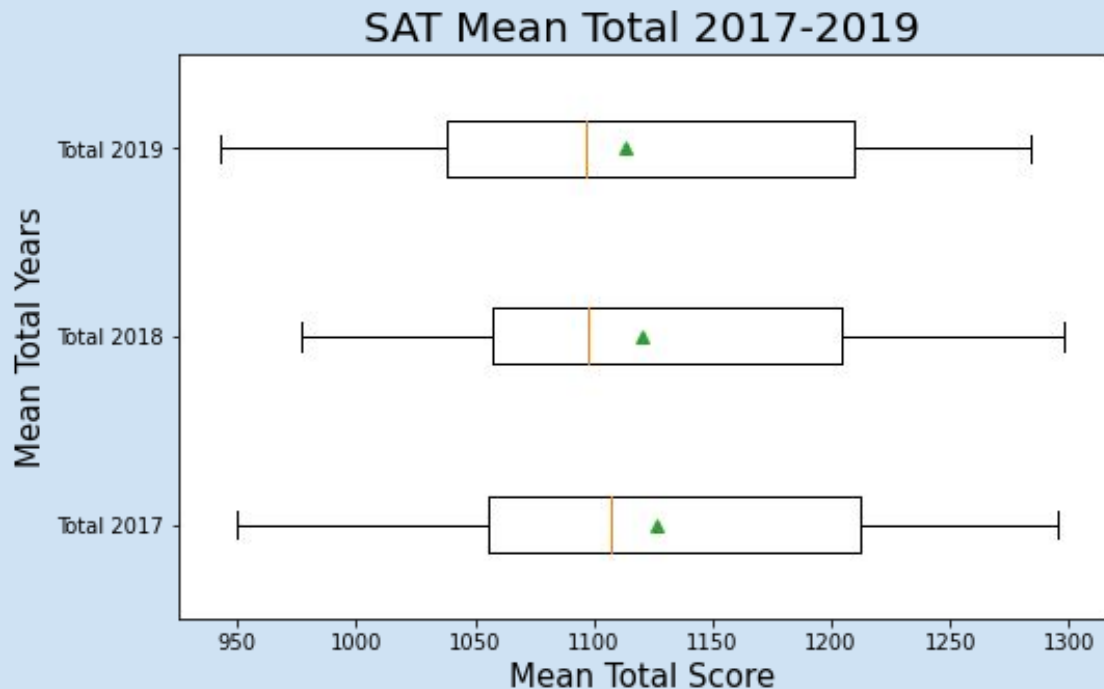
Changes in Participation

- Lower Whisker: 0.2
- Upper Whisker: 1.0
- Range: 0.8
- Median, Lower Quartile, and Upper Quartile Range all Increase



Changes in Total Score

- Upper and Lower Whiskers Change Yearly
- Average of Mean Total Score moves towards the left



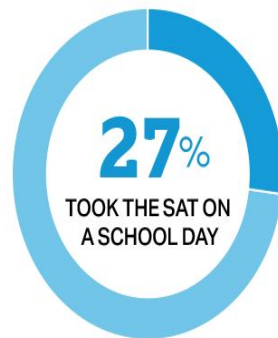
Conclusion

- Participation has a slight upward trend from 2017-2019
 - Heavily low or high
- Participation 2017: positively correlated to participation 2018, 2019
- Total SAT scores: positively correlated to total SAT scores 2018, 2019
- Participation and Total Mean: strongly negative in correlation

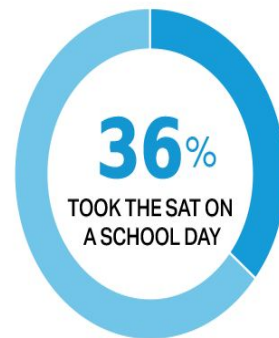
Recommendations

- Work with state boards to increase SAT School Day
- Make 1 test mandatory
 - Utilize the SAT as a replacement for any other state standardized testing
- Graduation requirement

Participation in SAT School Day



CLASS OF 2017

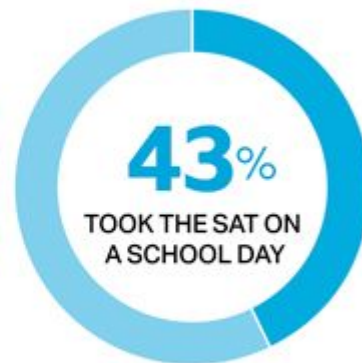


CLASS OF 2018

Participation in SAT School Day



CLASS OF 2018



CLASS OF 2019

Sources:

Image 1: <https://reports.collegeboard.org/archive/sat-suite-program-results/2016/new-sat-participation>

Image 2:
<https://www.nea.org/advocating-for-change/new-from-nea/if-rewards-improve-test-scores-whats-really-being-tested>

Image 3: <https://reports.collegeboard.org/archive/sat-suite-program-results/2018/class-2018-results>

Image 4: <https://reports.collegeboard.org/archive/sat-suite-program-results/2019/class-2019-results>

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<https://collegereadiness.collegeboard.org/sat>

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<https://blog.collegevine.com/states-that-require-sat/#curve>