GAD DSI Project 1

Recommendations for College Board:

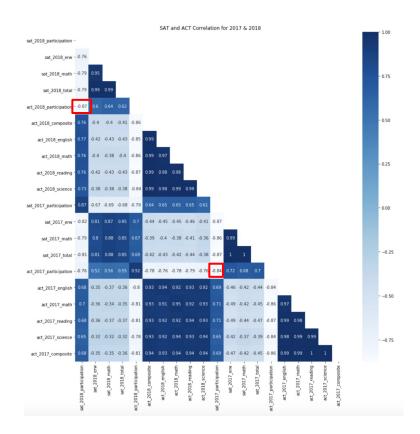
Which States should College Board invest in to boost SAT Participation Rates.

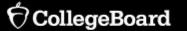
Dominic Ong - DSI 16

Problem Statement

- Based on 2017 and 2018 SAT data, there is a great disparity in SAT participation rates across states.
- College Board wants to improve SAT participation rates across US States.
- This project aims to investigate why certain states have low SAT participations rates and investigate whether there are any underlying trends or factors affecting a State's SAT Participation Rate.

Overview of Data







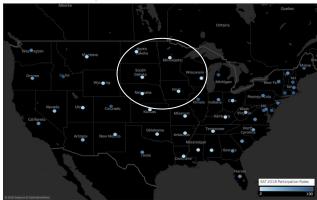
- SAT 2017 and 2018 Data
- 'State': 51 US States
- 'Participation': Test Participation Rates of Students in State
- 'ERW': Average Student Score on Evidence-based Reading and Writing section of SAT
- 'Math': Average Student Score on Math Section of SAT
- 'Total': Average Total Student Score on SAT
- ACT 2017 and 2018 Data

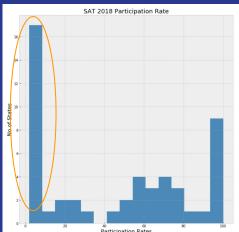
Key Finding #1

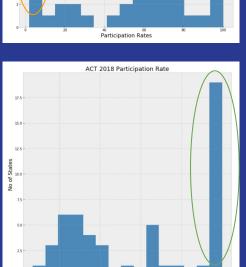
US States SAT 2017 Participation Rates



US States SAT 2018 Participation Rates







Participation Rates

9 States that are in the bottom 10 for participation rates for SAT 2017 and 2018:

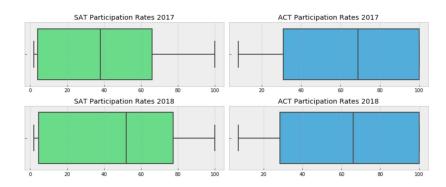
- North Dakota
- Wyoming
- South Dakota
- Nebraska
- Wisconsin
- Mississippi
- lowa
- Utah
- Minnesota

These states have the highest participation rates for ACT 2017 and 2018.

Students only need to complete either SAT or ACT Tests for US College Applications.

These states have very low SAT participation rates because they focus on getting their students to participate in ACT tests instead.

Key Finding #2



- SAT Participation Rates have improved YOY from 2017 to 2018.
- ACT Participation Rates have remained constant YOY from 2017 to 2018.

Key Reasons:

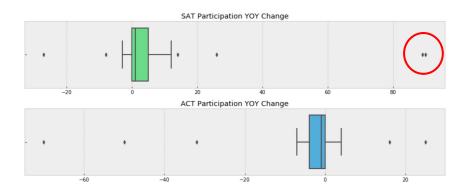
- Increased Participation in SAT School Day Program (27% in 2017 to 36% in 2018).
- Students in poorer states and public schools have higher access to SAT tests for free.

Research

- The SAT School Day Program, which allows students to take the SAT during regular school hours usually at no cost, continues to expand.
- More than 2.1 million students in the class of 2018 took the SAT, an increase of 25% over the class of 2017, according to the 2018 SAT Suite of Assessments Program Results.
- In 2014-15, only 4 states (Delaware, Idaho, Maine, District of Columbia) participated in SAT School Day.
- In 2017-18, 10 states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, Rhode Island, West Virginia, District of Columbia) administered the SAT to public school students for free.

Source: College Board Website

Key Finding #3



state sat_yoy_change

13	Illinois	90.0
5	Colorado	89.0
39	Rhode Island	26.0
48	West Virginia	14.0
30	New Jersey	12.0
32	New York	12.0
10	Georgia	9.0
12	Idaho	7.0

- Large changes in SAT participation rates YOY are rare.
- Illinois and Colorado are likely outliers.
- On average, most states have very little SAT participation rate changes YOY.

Case Study

- Colorado and Illinois switched from ACT Testing to mandatory SAT Testing in Spring 2017.
- This was due to statewide high school accountability and every student in those states is now required to participate in SAT Testing.

	state	sat_yoy_change	sat_2017_participation	sat_2018_participation
13	Illinois	90.0	9.0	99.0
5	Colorado	89.0	11.0	100.0
	state	sat_yoy_change	act_2017_participation	act_2018_participation
13	state	sat_yoy_change	act_2017_participation	act_2018_participation 43.0

 In 2017-18, 10 states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, Rhode Island, and West Virginia, District of Columbia) covered the cost of the SAT for all their public school students.

Source: College Board Website, Education Week News

Recommendations

Challenge #1

Promoting SAT Test to US States that predominantly administer ACT Test

 Convince such states about the potential benefits of SAT Testing over ACT Testing.

Challenge #2

Increasing access for US States to SAT School Day Programs

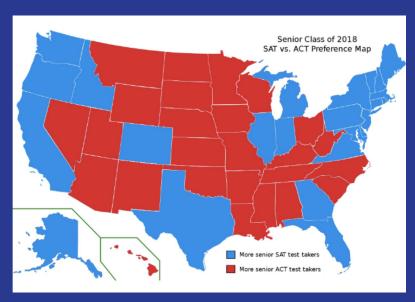
 Cost-saving Incentives for poorer States and public schools.

Challenge #3

Mandatory SAT Testing for US States over ACT Testing

 Enforce statewide high school accountability across US States.

Conclusion



Source: Wikipedia

- There are strong regional (and possibly political)
 affiliations associated with ACT versus SAT
 participation rates. Coastal progressive states
 tend to favor the SAT, while Midwestern and
 Mountain conservative states tend to favor the
 ACT.
- The Red Colored States are the main areas for College Board to focus its financial resources on in order to increase SAT Participation Rates in these States.

References

- https://www.testive.com/colorado-sat-change-2017/
- https://www.edweek.org/ew/articles/2018/10/31/sat-scores-rise-as-number-of-test-take rs.html
- https://www.collegeboard.org/releases/2018/more-than-2-million-students-in-class-of-2 018-took-sat-highest-ever#:~:text=New%20York%20%E2%80%94%20More%20than%202. 1,class%20to%20take%20the%20SAT.