



DSI Project 1

Recommendations for College Board :

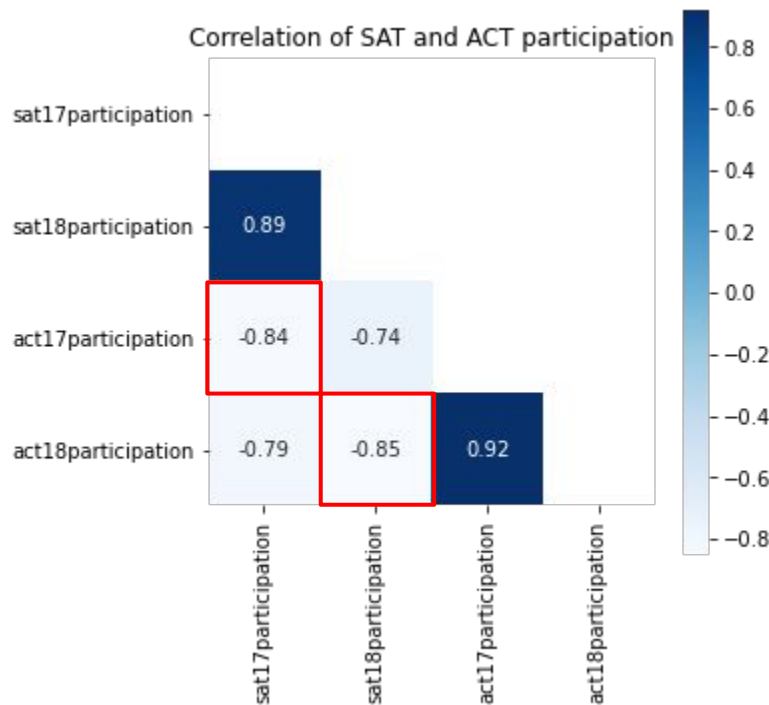
Which States should College Board invest in to boost SAT Participation Rates.

Dominic Ong, Dyan Lee, Anshu Dhingra, Mai Tze Woei - DSI 16

Problem Statement

- Based on 2017 and 2018 SAT data, there is a great disparity in 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.
 - Recommendations can be made to College Board on how to improve SAT participation rates.
-

Do students take the SAT or the ACT?



Source: SAT and ACT 2017 and 2018 Data

17 states

Have less than 8% of their student population taking the SAT

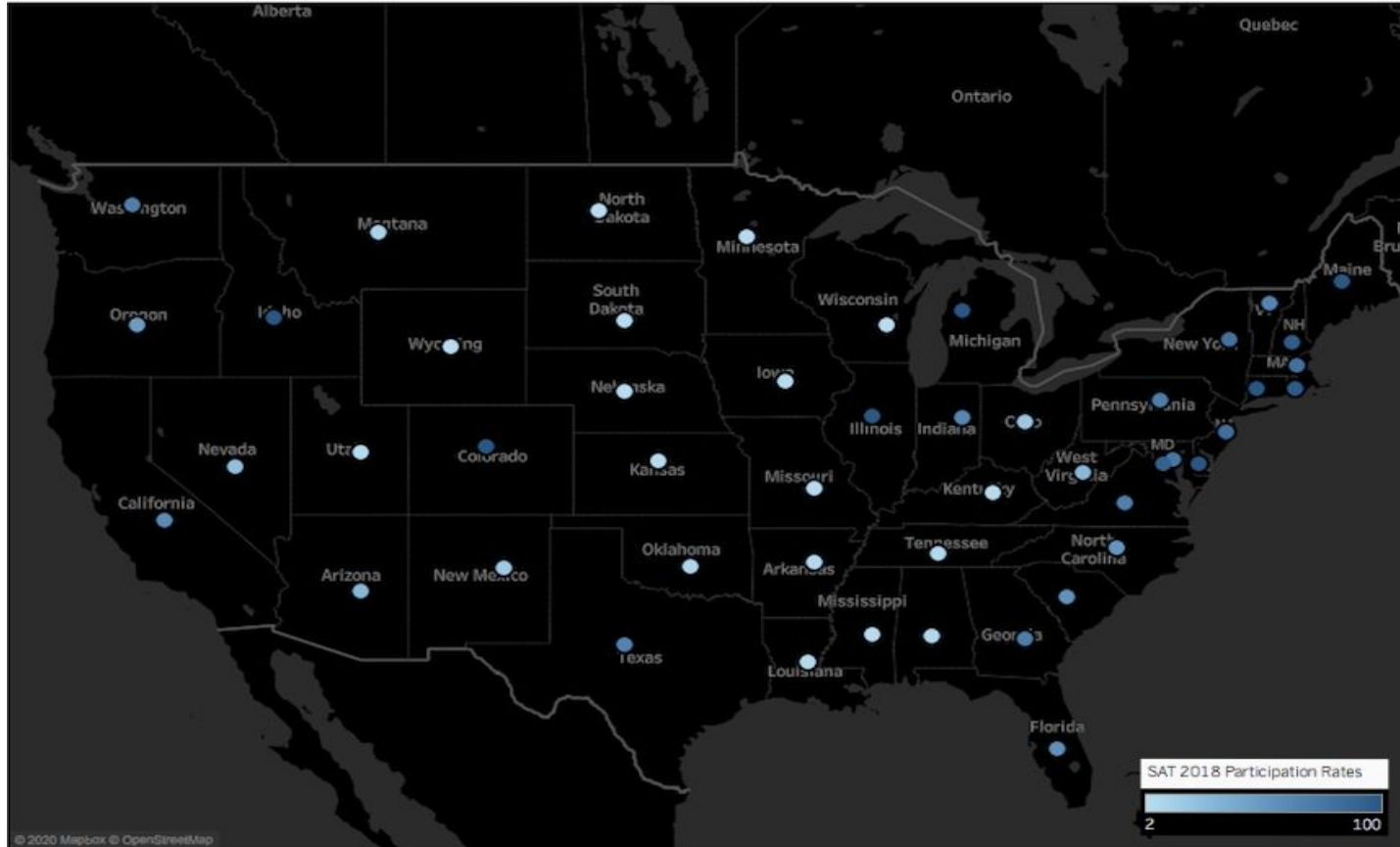


States with the lowest SAT participation

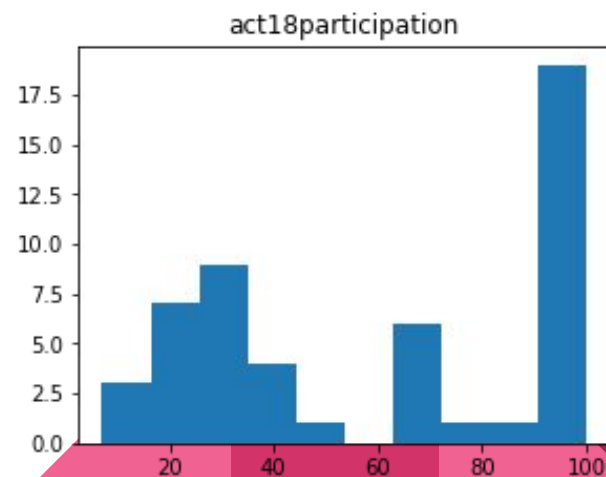
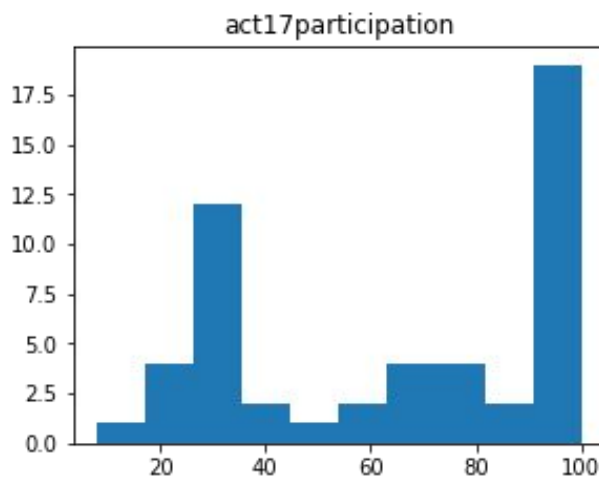
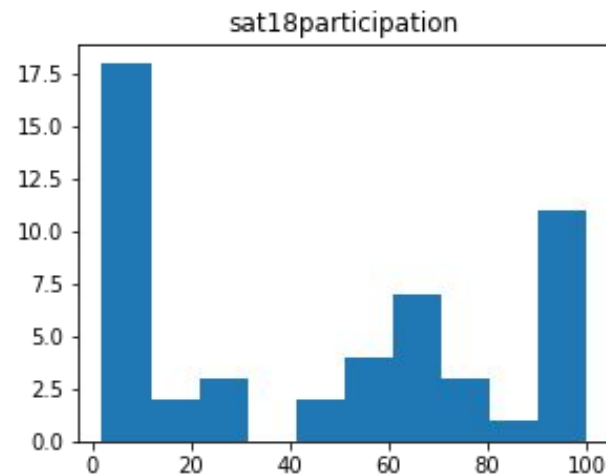
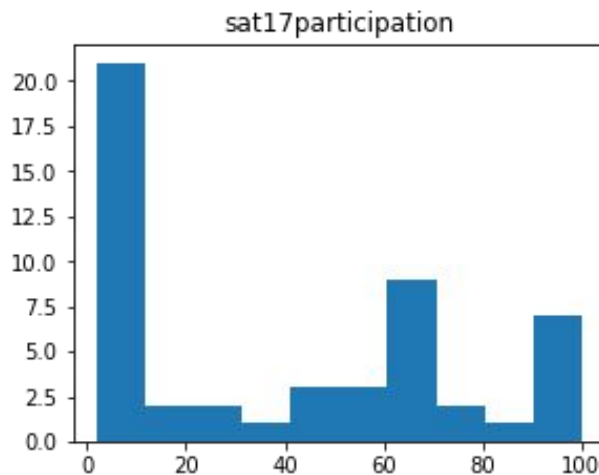
	sat17participation	sat18participation	satparticipationchange	act17participation	act18participation	actparticipationchange
Alabama	5	6	1	100	100	0
Arkansas	3	5	2	100	100	0
Iowa	2	3	1	67	68	1
Kansas	4	4	0	73	71	-2
Kentucky	4	4	0	100	100	0
Louisiana	4	4	0	100	100	0
Minnesota	3	4	1	100	99	-1
Mississippi	2	3	1	100	100	0
Missouri	3	4	1	100	100	0
Nebraska	3	3	0	84	100	16
North Dakota	2	2	0	98	98	0
Oklahoma	7	8	1	100	100	0
South Dakota	3	3	0	80	77	-3
Tennessee	5	6	1	100	100	0
Utah	3	4	1	100	100	0
Wisconsin	3	3	0	100	100	0
Wyoming	3	3	0	100	100	0

Choropleth Map

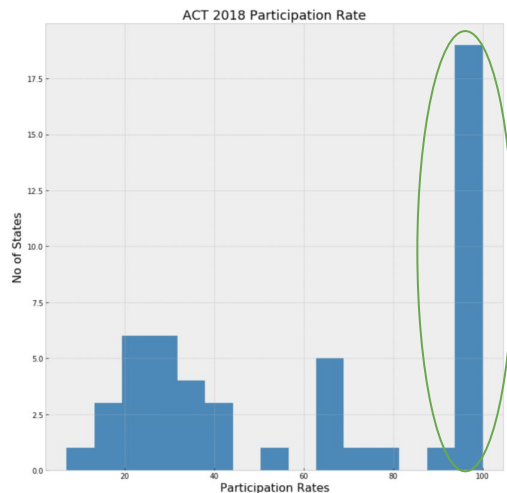
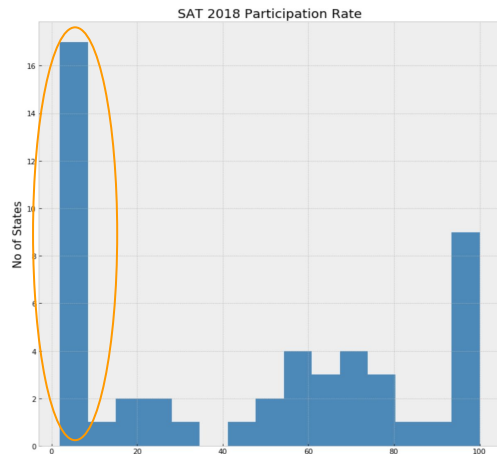
US States SAT 2018 Participation Rates



- Many states have little to no SAT participation
- The SAT has less monopolies on state participation than the ACT
- States where the SAT is mandatory still have a relatively high base level of ACT participation



Key Finding #1



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

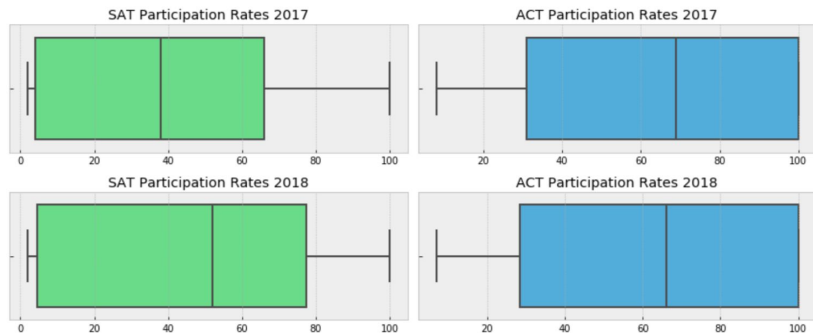
- North Dakota
- Wyoming
- South Dakota
- Iowa
- Utah
- Minnesota
- Nebraska
- Wisconsin
- Mississippi

These states have the highest participation rates in the ACT for 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 from 2017 to 2018.
- ACT Participation Rates have remained constant from 2017 to 2018.

Key Reasons:

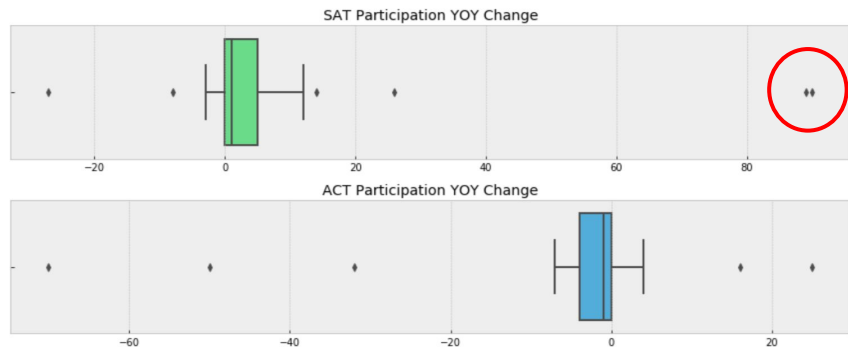
- Increased Participation in SAT School Day Program (27% in 2017 to 36% in 2018).
- Students in poorer states and public schools have higher access to SAT tests for free.

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	Illinois	90.0	93.0	43.0
5	Colorado	89.0	100.0	30.0

- 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

Improve Attractiveness

Make the SATs more attractive to students to take, and to States to administer

- Demonstrate the advantages of SAT testing
- Encourage universities to prefer accepting SAT results

Improve Accessibility

Improve access for US States to SAT School Day Programs

Improve access to free preparation material for students

- Cost-saving incentives for state boards, public schools, and public students.

Encourage Reforms

Promote Statewide SAT Testing to US States that predominantly administer the ACT Test

- Convince States about the potential benefits of SAT Testing over ACT Testing.
- Change State policy through bidding processes

Short to medium term options - Improving Attractiveness

College Board can improve the attractiveness of taking the SAT test and seek out marginal gains in SAT participation

Push factors: Cost of taking the test, inaccessibility of test facilities, negative perceptions of Standardised testing ^[1]

Pull factors: Accessibility of prep material, cost and availability of guidance, university validity of results

	sat17participation	sat18participation	satparticipationchange	act17participation	act18participation	actparticipationchange
Illinois	9	99	90	93	43	-50
Colorado	11	100	89	100	30	-70
Rhode Island	71	97	26	21	15	-6
Florida	83	98	15	73	66	-7
West Virginia	14	28	14	69	65	-4

[1] "More Students Are Taking the SAT Than Ever Before." www.usnews.com/news/education-news/articles/2019-09-24/more-students-are-taking-the-sat-than-ever-before.

Improving Accessibility

- Test preparation material should be made available online for free to encourage students to see SATs as a reasonable option.
- Reducing prices of taking or providing bundles to schools / students attracts more takers
- Make tests easy to attend, especially in sparsely populated states.
- Improve access to **SAT School Day Programs**.



College Board can lead the way in inclusiveness by pushing ahead with attaching socioeconomic data of test takers to test results

Students should not feel disadvantaged or discouraged in any way by standardised testing

Providing additional information gives universities context to make fair decisions



Long term option - Improve education policy reforms

Work together with education boards to ensure that SATs are the statewide mandatory test

Pros:

- Large scale, instantaneous change

Cons:

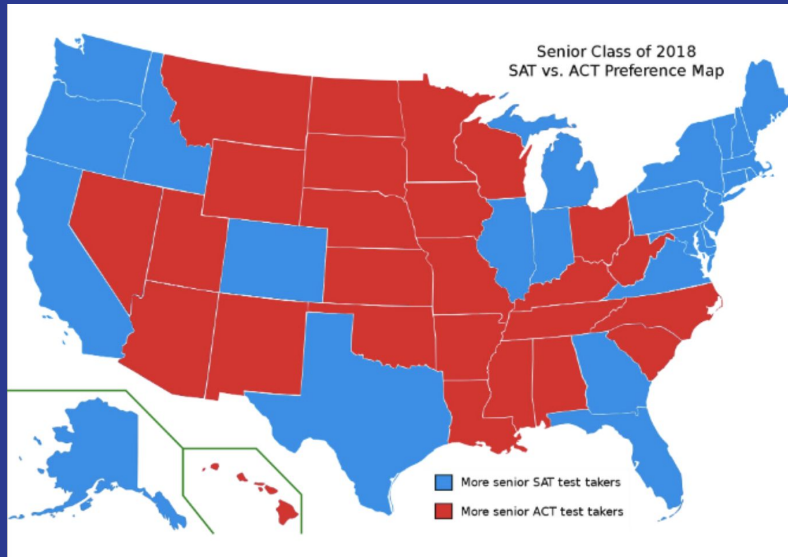
- May take a long time to institute depending on the state
- Dependent on bidding procedure to state education boards

	Colorado	Illinois
sat17participation	11	9
sat18participation	100	99
act17participation	100	93
act18participation	30	43

In spring 2017 Colorado and Illinois switched from the ACT to the SAT.



Concluding Remarks



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

- Wheeler, Danny. "Colorado Changed to the SAT in 2017: What You Need to Know." Testive, 10 July 2018, www.testive.com/colorado-sat-change-2017/
- Genota, Lauraine. "SAT Scores Rise as Number of Test-Takers Tops 2 Million." Education Week, 20 Feb. 2019, www.edweek.org/ew/articles/2018/10/31/sat-scores-rise-as-number-of-test-takers.html
- "More Than 2 Million Students in the Class of 2018 Took the SAT, Highest Ever." The College Board, 18 Mar. 2019, www.collegeboard.org/releases/2018/more-than-2-million-students-in-class-of-2018-took-sat-highest-ever
- "File:SAT-ACT-Preference-Map.svg." File:SAT-ACT-Preference-Map.svg - Wikimedia Commons, commons.wikimedia.org/wiki/File:SAT-ACT-Preference-Map.svg
- "SAT School Day." SAT Suite of Assessments, 11 May 2018, collegereadiness.collegeboard.org/sat/k12-educators/sat-school-day.
- Veiga, Christina. "New York City Offers SAT to All High School Juniors, Hoping to Clear a Path to College." Chalkbeat New York, Chalkbeat New York, 3 Apr. 2017, ny.chalkbeat.org/2017/4/3/21099704/new-york-city-offers-sat-to-all-high-school-juniors-hoping-to-clear-a-path-to-college.