

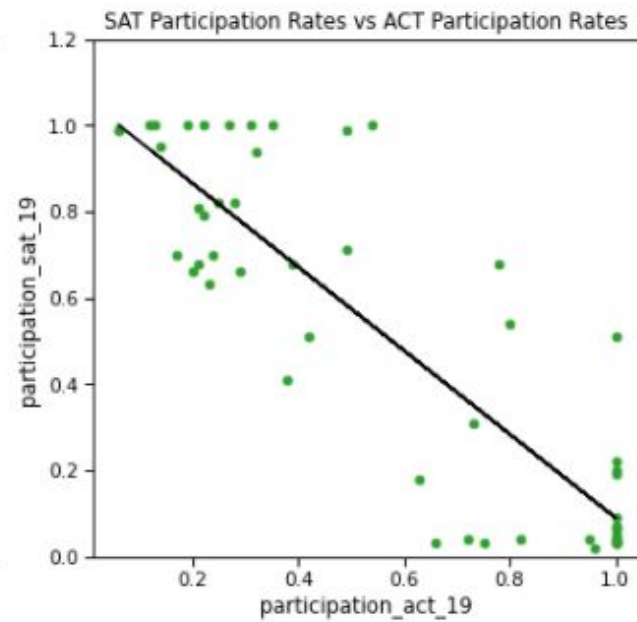
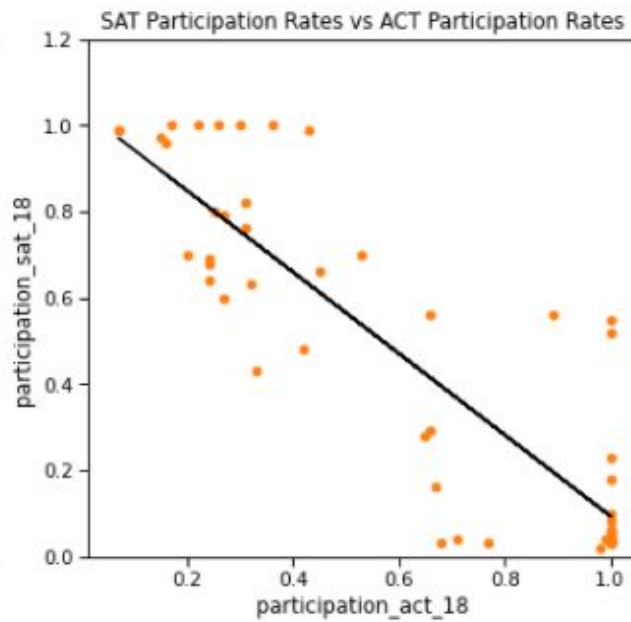
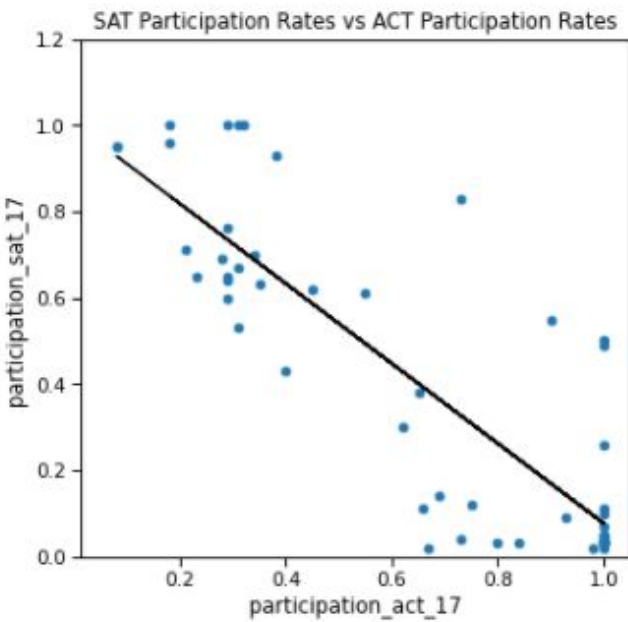
# An investigation into SAT participation rates

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# Problem Statement

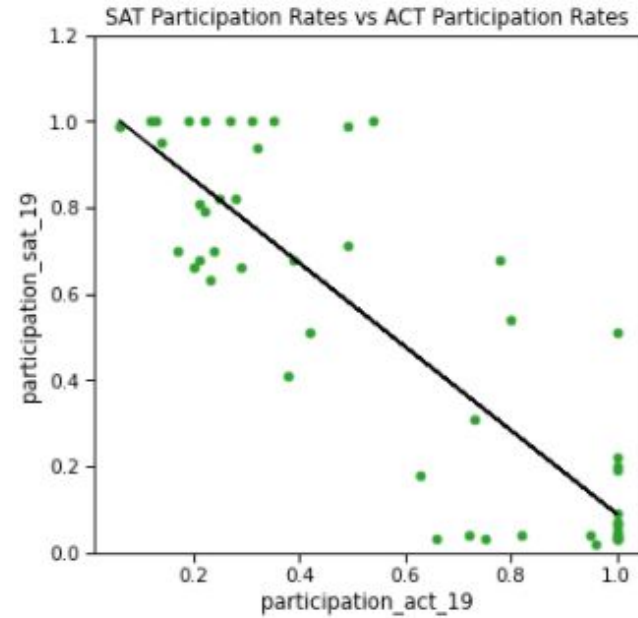
- I have been hired by the College Board as part of a team to track statewide participation rates and recommend where and how money is best spent to improve SAT participation rates. With the data provided as well as some outside research, I hope to provide recommendations on improving participation rates in states by category.

# The inverse relationship of ACT and SAT participation.



# The inverse relationship of ACT and SAT participation.

- This chart clearly shows that where ACT participation is high, SAT participation is low. As per the data, students are not taking both tests.
- This means that to increase the SAT participation rates, we effectively need to get the student, and/or the state to choose SAT over any other testing method.
- Those few dots where SAT and ACT participation seems to be in range of 40% - 60% are states where the choice between the test is optional.



# Conclusion and Recommendations:

1. The ACT and SAT participation rates are inversely related. Those states that have 100% ACT participation, are those that have state mandated ACT testing.

## Recommendation:

- Target the state level selection committees and pitch them the new and improved SAT to use over the ACT or any other test.
- The states that fall into this category are: Mississippi, Kentucky, Wisconsin, Utah, Tennessee, Ohio, Nebraska, Montana, Alabama, Louisiana, Wyoming, Arkansas, North Dakota, Minnesota, Missouri, South Dakota, Kansas, Iowa, New Mexico.

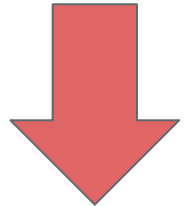
# Some Encouraging Figures

- As the state mandate changed to SAT statewide, the participation rates also changed as expected.

	state	participation_sat_17	participation_sat_18	participation_sat_19
6	Colorado	0.11	1.00	1.0
14	Illinois	0.09	0.99	1.0



	state	participation_act_17	participation_act_18	participation_act_19
6	Colorado	1.00	0.30	0.27
14	Illinois	0.93	0.43	0.35



# States showing more than 50% participation in both tests:

- Other than Florida in the table below, all the other states provide the students with an option of which test to take.
- A two pronged approach to market the SAT to both the individual student and the state will make the biggest difference here.

	state	participation_act_17	participation_act_18	participation_act_19	participation_sat_17	participation_sat_18	participation_sat_19
10	Florida	0.73	0.66	0.54	0.83	0.56	1.00
11	Georgia	0.55	0.53	0.49	0.61	0.70	0.71
12	Hawaii	0.90	0.89	0.80	0.55	0.56	0.54
35	North Carolina	1.00	1.00	1.00	0.49	0.52	0.51
42	South Carolina	1.00	1.00	0.78	0.50	0.55	0.68

# Conclusion and Recommendations:

2. There are a few states with more than 50% participation rates for both tests. These states are the states that do not mandate 1 or the other test, rather it is optional where the students choose.

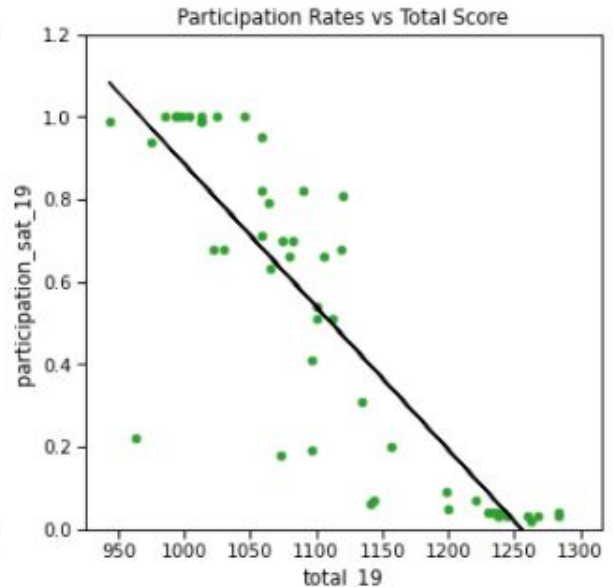
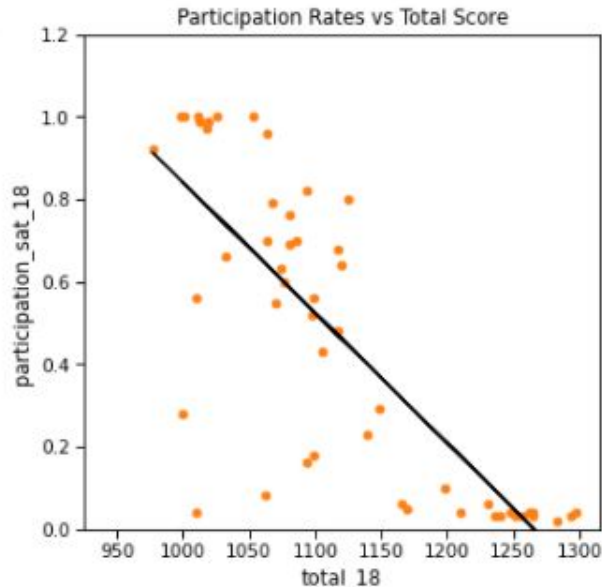
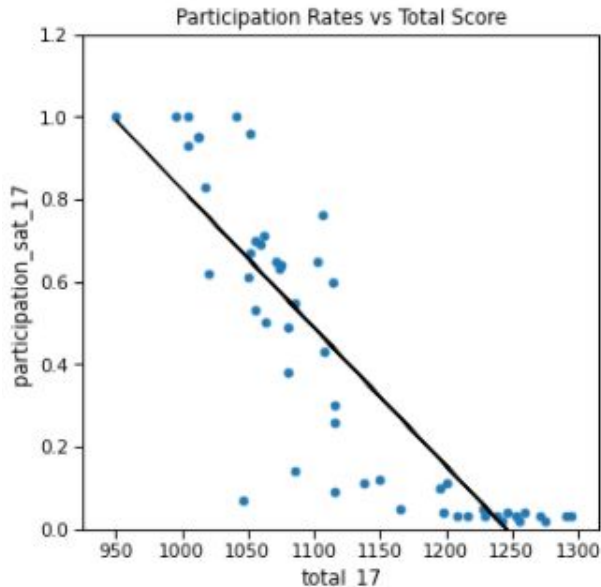
## Recommendation:

- Here we would suggest a two pronged approach.
- First, market to the students why they should choose the SAT over the ACT and the benefits the new and improved SAT provides in terms of giving them a more comprehensive score based on their aptitude.
- Second, approach the state as well (at the same time if possible), starting with those where the SAT participation rates are more than the ACT participation rates. The argument here is that the students already have a preference, why not make this a state mandate, (like many other states have done), which will allow the student foresight on which test they will need to do. This means that they can likely start their prep much earlier, instead of rushing in the three months leading up to the test.
- The states falling into this category are: Georgia, South Carolina, Hawaii, North Carolina



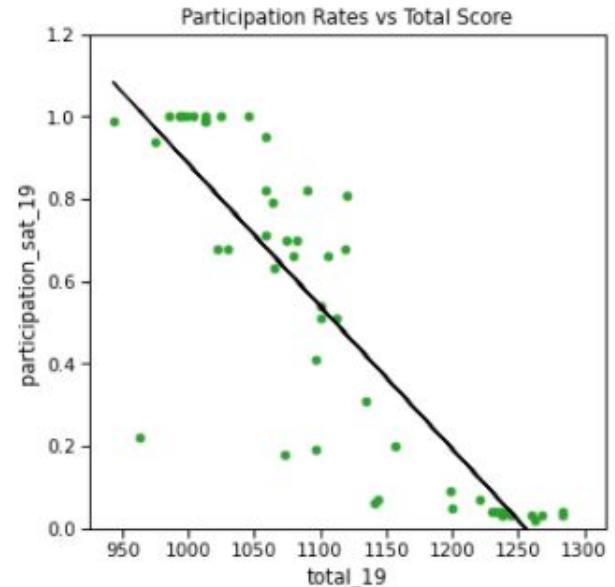
# The inverse relationship between participation and scores.

- The data showed that as participation rates increased, the SAT scores went down.
- The highest recorded mean SAT scores came from the states with the lowest participation rates.



# The inverse relationship between participation and scores.

- However you can see from the chart on the right that there are a few states that are both low in score and in participation rates.
- Therefore it is important to consider that to keep SAT adoption rates high, we may have to deploy resources to help students in such states as well as overall.



# Conclusion and Recommendations:

3. The test participation rates and scores are inversely proportional, meaning as participation rates go up, the mean scores per state will decrease.

## General Recommendation:

- As the SAT participation rates go up, we would have to deploy additional resources to states where they have contracted with the college board to use the SAT statewide. The purpose of these resources would be to help the schools and students understand where they can improve the SAT and how they can get a higher score.
- Maintaining or improving the mean state score will potentially 'future-proof' the adoption of the SAT as we would have shown that even with higher participation rates, the college board is able to deploy enough resources to the states that have contracted with us. This may prompt other states to enter into a contract as well.