

# **SAT Participation Rates**

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# Agenda

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# Overview

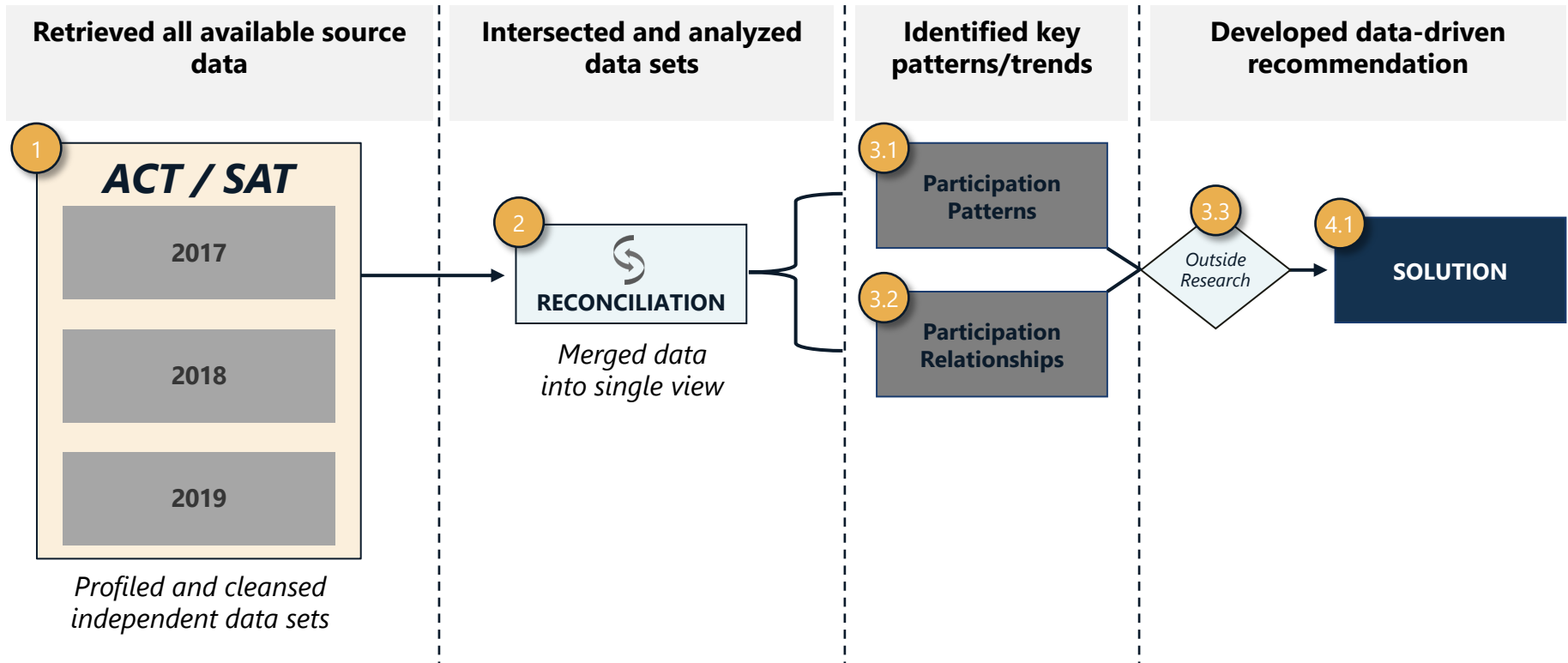
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**Problem Statement:** The college board expected a significant increase in SAT participation rates due to the updated test format released in 2016, but in recent years the results were insufficient compared to expectations.

## Approach:

- Retrieved and profiled SAT and ACT data reflecting participation rates and test scores from 2017 – 2019
- Identified key patterns/trends in the data
- Cross-referenced analysis findings against additional research efforts
  - Conducted outside research for subject areas the given data did not address
- Identified the appropriate action item to address the problem at hand

# Process



# Participation – Findings

## High-Level Summary

### SAT

- Illinois, Colorado, and West Virginia saw ~90% increase in participation rates from 2017 to 2019
- On the contrary, not a single state had a declining rate by more than -1%
  - District of Columbia and Nevada were the highest at -0.6%
- **~7% average increase in participation**

### ACT

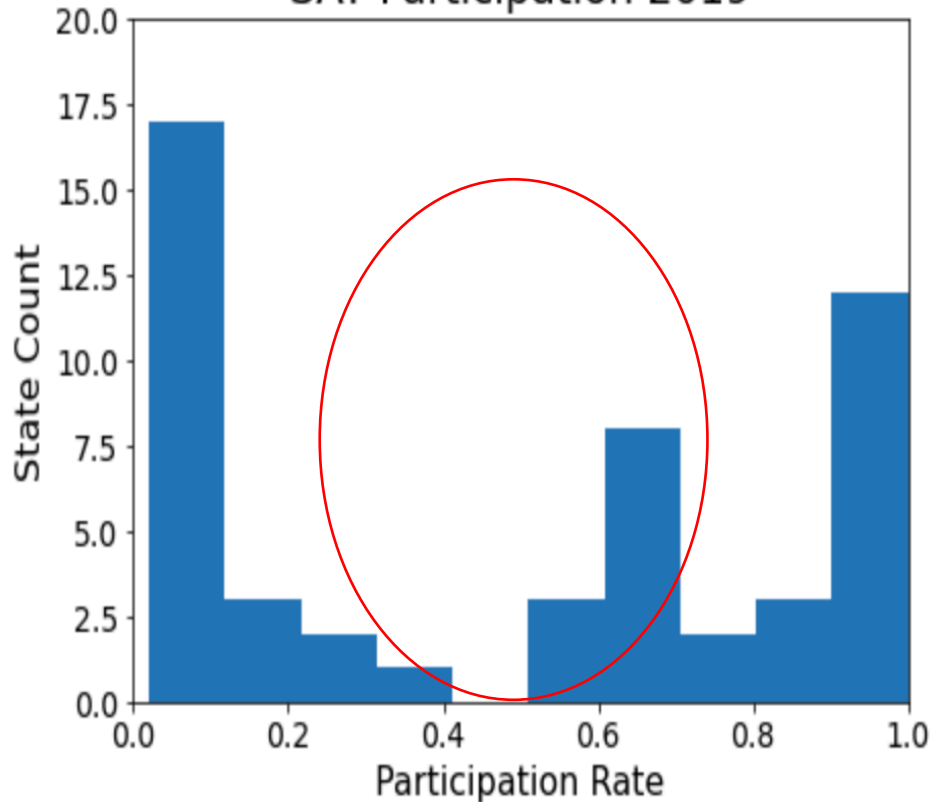
- 39 states saw a decrease in ACT participation by at least -1% since 2017
- Looking at the remaining states, Ohio (+25%), Nebraska (+16%), and Arizona (+11%) had increased participation of at least 10% while the rest saw little change
- **~10% average decrease in participation**

**SAT participation rates have increased for most states in recent years**

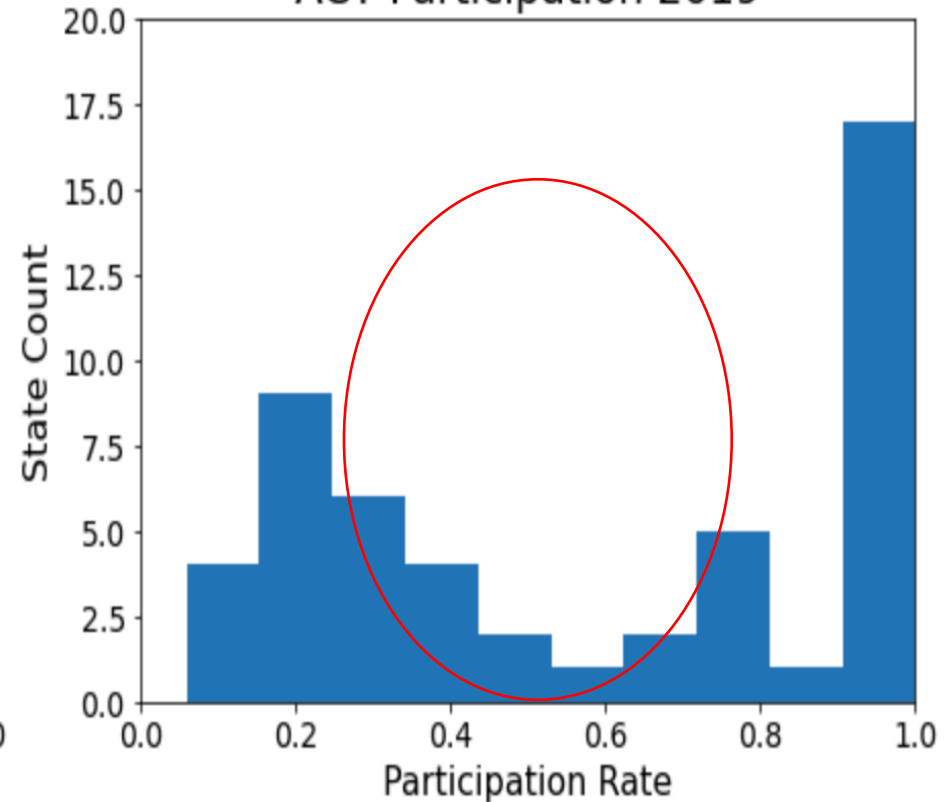
## Participation – Findings

There's a binomial tendency in which states have either lower (below 30%) or higher (above 90%) participation rates; few states around ~50%

SAT Participation 2019

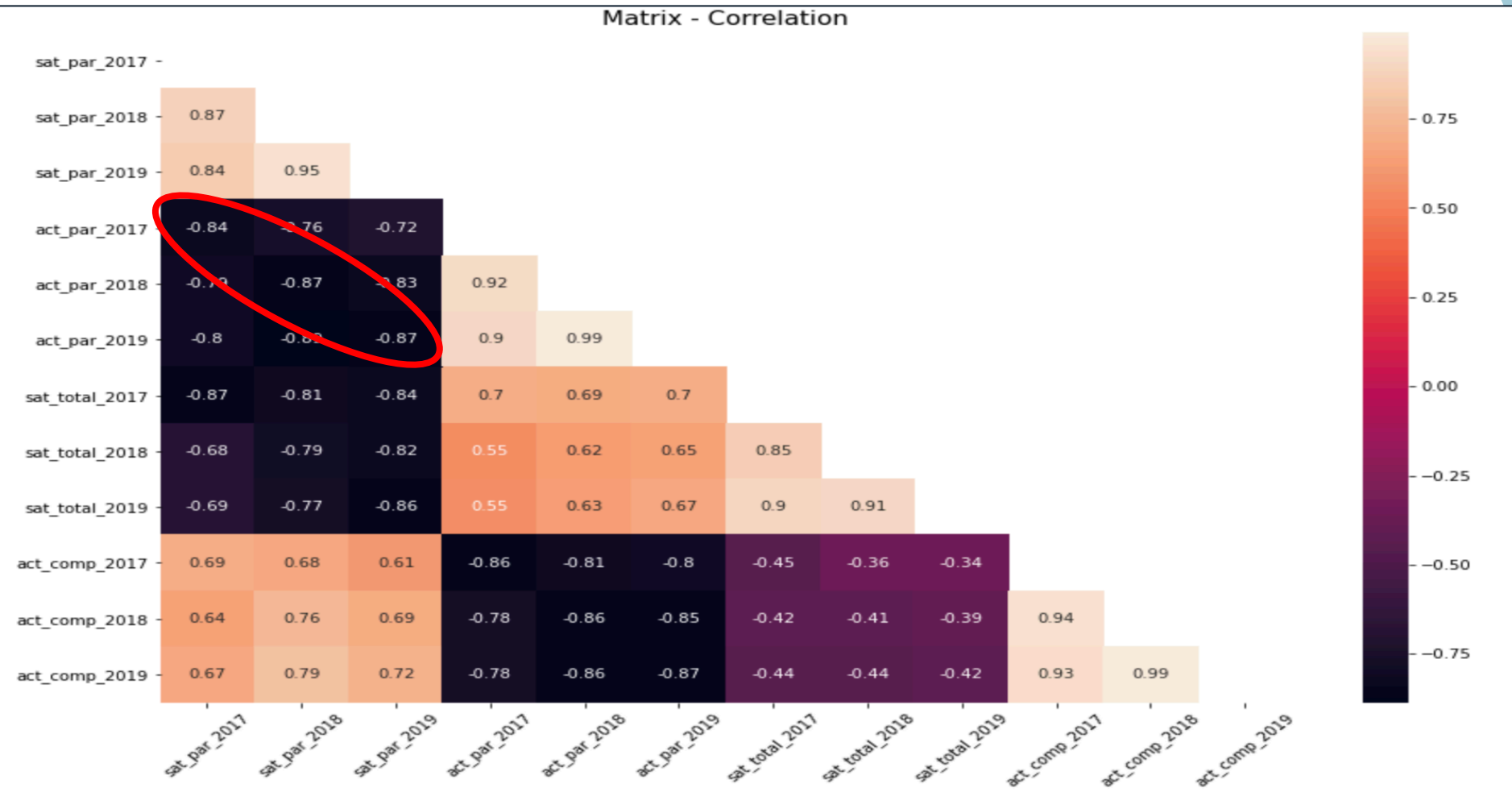


ACT Participation 2019



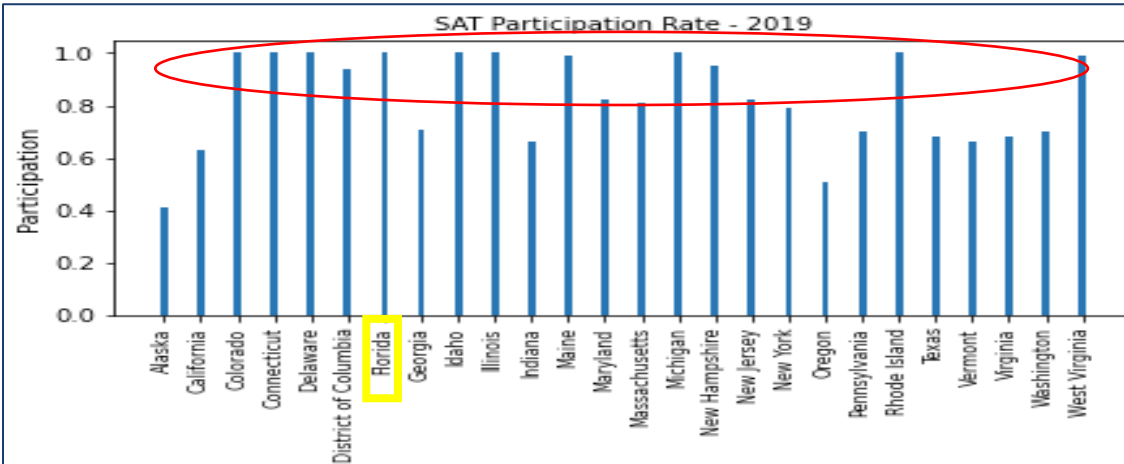
**Why do states favor either one test or the other?**

# Matrix - Correlation



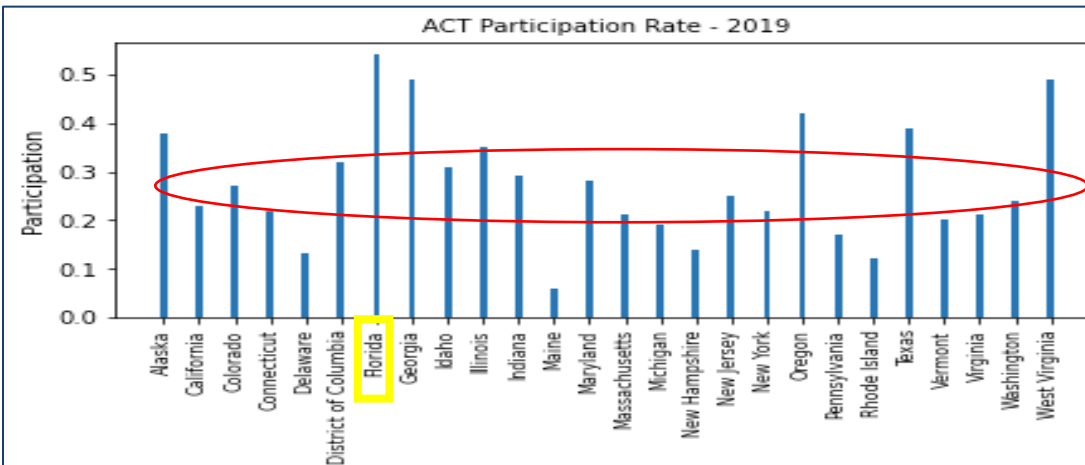
**There's a negative correlation between SAT and ACT participation across all three years (-85% in 2017, -87% in 2018, -87% in 2019)**

# Participation – Findings



## Summary

- 26 states with higher SAT participation rates in 2019
- The majority of these states had well over 60% participation



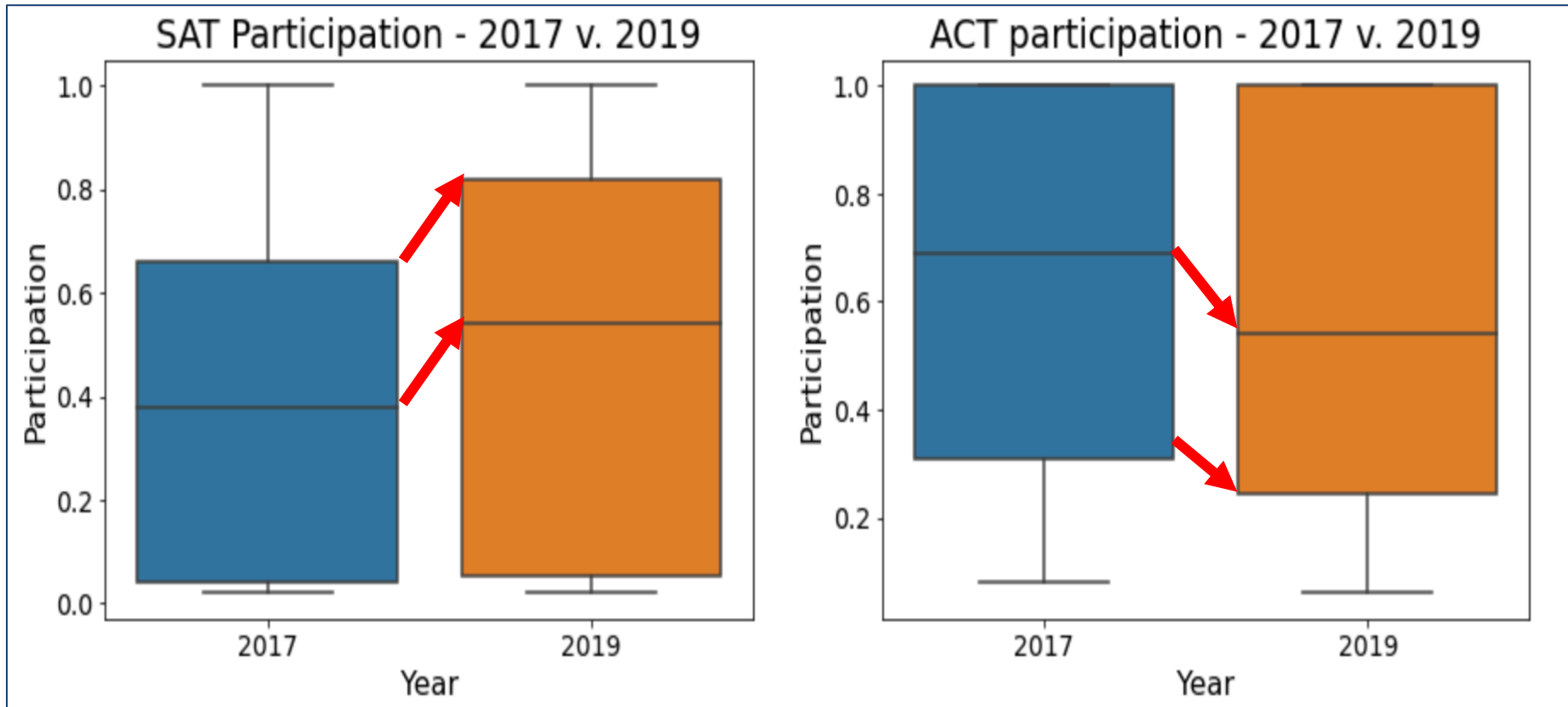
- For this same group of states, the ACT participation rate is below 30% for most
- Florida has the highest ACT participation just above 50%

**Negative correlation between test participation meaning states that have high ACT participation tend to have lower SAT participation, and the same vice versa**



## Participation – Change in Rates Overtime

SAT participation rates have increased while ACT rates have declined

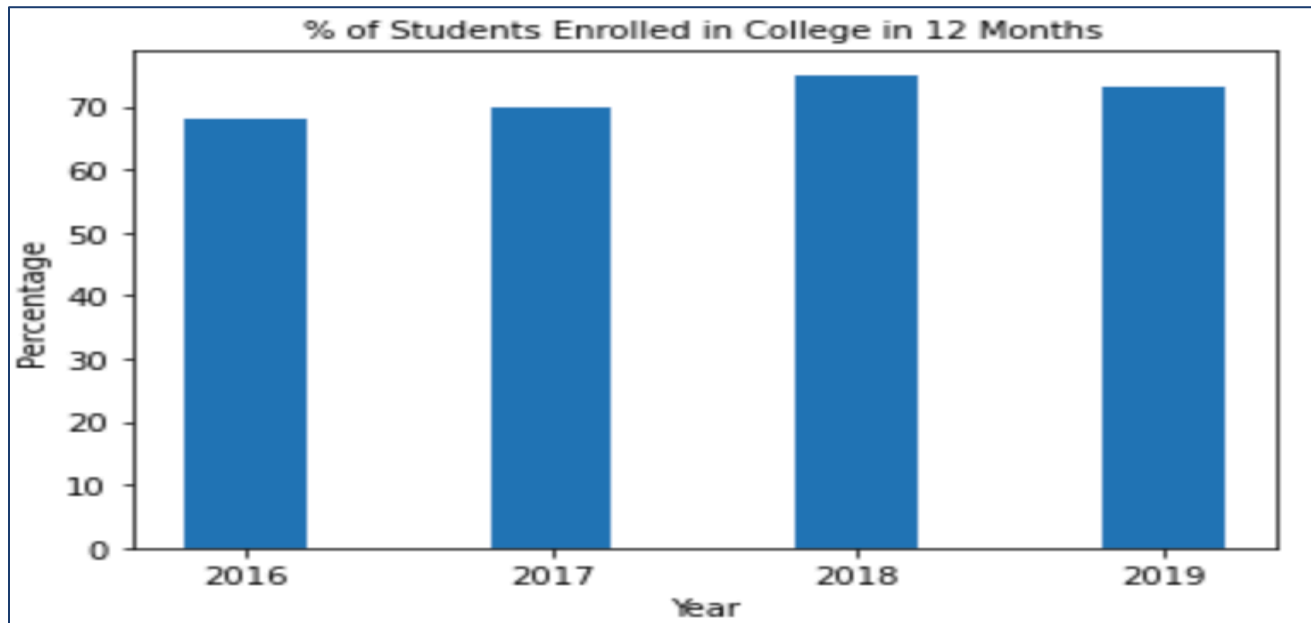


**While SAT participation has risen, there's still 14 states with 100% participation for ACT but only 8 states with 100% participation for the SAT**

## Outside Research

### Illinois:

- In 2016 the state of Illinois decided to require all students to take the SAT instead of the ACT
- There's been a ~5% increase on average in the number of students attending college since 2016



#### Percent of Students

- 2016 – 68%
- 2017 – 70%
- 2018 – 75%
- **2019 – 73%**

[Source Link](#)

**Why did Illinois switch from the ACT to SAT?**

## Outside Research – Additional Information

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-Ivy League schools have accepted almost 10 - 40% more applicants who submitted their SAT versus ACT

<https://blog.prepscholar.com/what-do-ivy-league-schools-think-of-the-act>

-More and more colleges are not requiring students to submit the ACT/SAT to apply; every 10 days another college is added to that list

<https://www.pbs.org/newshour/education/record-number-of-colleges-stop-requiring-the-sat-and-act-amid-questions-of-fairness>

-In 2019, 2.2 million students took the SAT while 1.8 million took the ACT

<https://www.usnews.com/education/best-colleges/articles/act-vs-sat-how-to-decide-which-test-to-take>

-A couple reasons why one may believe the SAT is better than the ACT:

- The SAT is taken at a slower pace
- The SAT organizes its reading questions much better in comparison to the ACT
- The SAT is heavy on algebra, light on geometry and trig; it covers less concepts in comparison to the ACT like logarithms, matrices, and graphs of trigonometric functions

<https://blog.prepscholar.com/why-take-the-sat>

## Conclusions

**Recommendation:** *the College Board should focus on closing contracts with a given state's Education Board*

Target Market:

- States that have a signed contract with the ACT exclusively
- States that don't have a signed contract with either test but have high ACT participation rates and low SAT participation rates

**Reasoning:** *negative correlation between SAT and ACT participation*

- If the ACT is mandatory and free for 18 states, it's more likely majority of students will not take the SAT

## Pitch to Education Board

### Topic Points to Discuss:

- Illinois Use Case:
  - The ~5% increase in students attending college can be leveraged
  - Although multiple factors come into here, the test switch was made in 2016
- 39 states with declining ACT participation while **zero** states have declining SAT participation (greater than -1%)
  - Even with almost double the number of states mandating the ACT, more students took the SAT in 2019
  - Question why? - Better reflection of IQ? Preferred by more colleges?
    - The goal is to have the state's Education Boards question why more students took the SAT given ACT has the advantage

# Sources

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