

# **Exploring SAT and ACT Data Trends to Improve SAT Participation Rates**

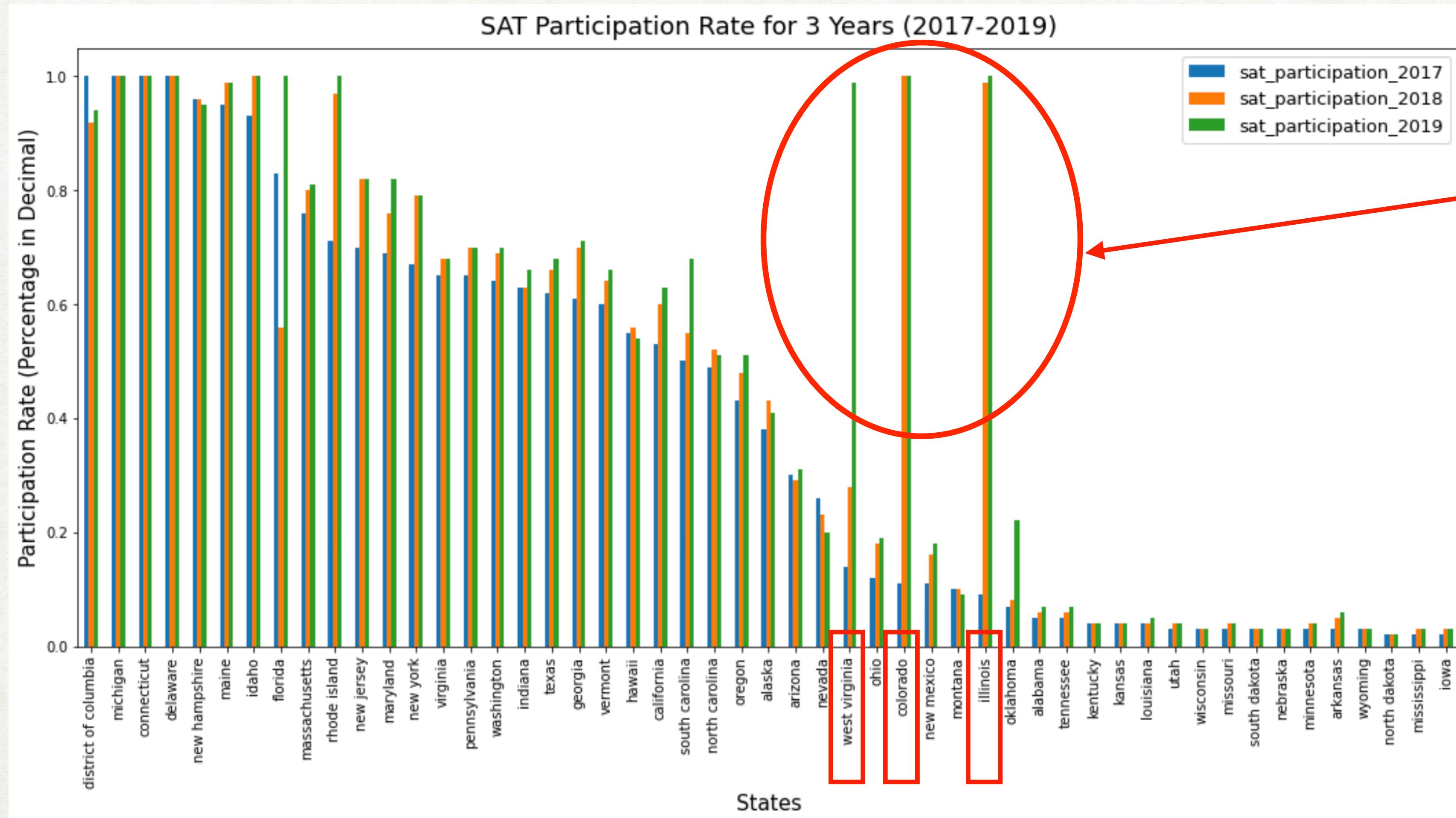
**Project 1: Standardised Test Analysis**

# PROBLEM STATEMENT

On March 2016, SAT was redesigned and was released with a new format. With varying legislative decisions, there have been changes in the participation rates within different states.

This project aims to explore trends between the SAT and ACT participation rates and scores for years 2017-2019, seeking recommendations to improve SAT participation rates.

# SAT PARTICIPATION RATE AFTER 2016



Drastic Increase in:

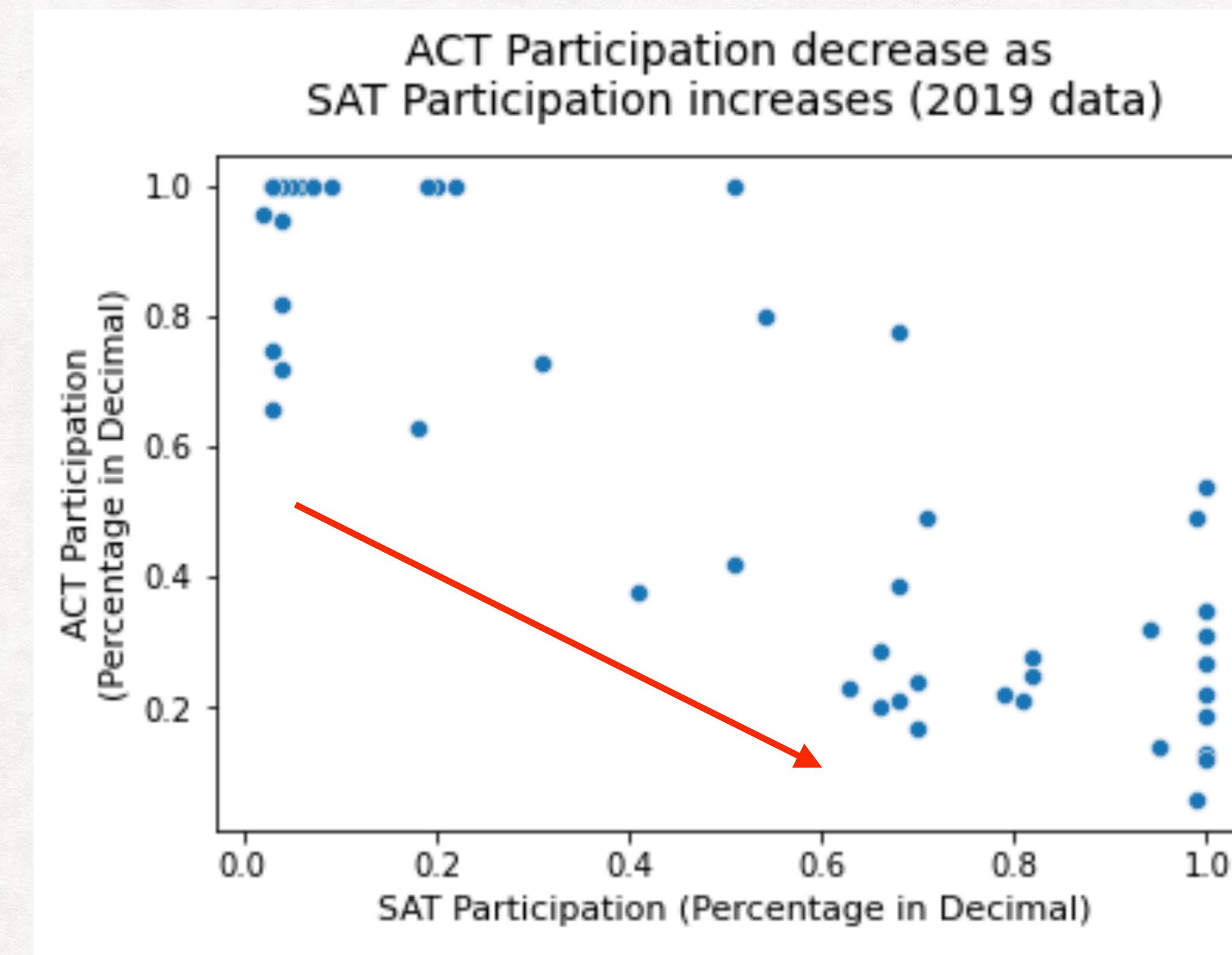
- West Virginia
- Colorado
- Illinois

Reason:

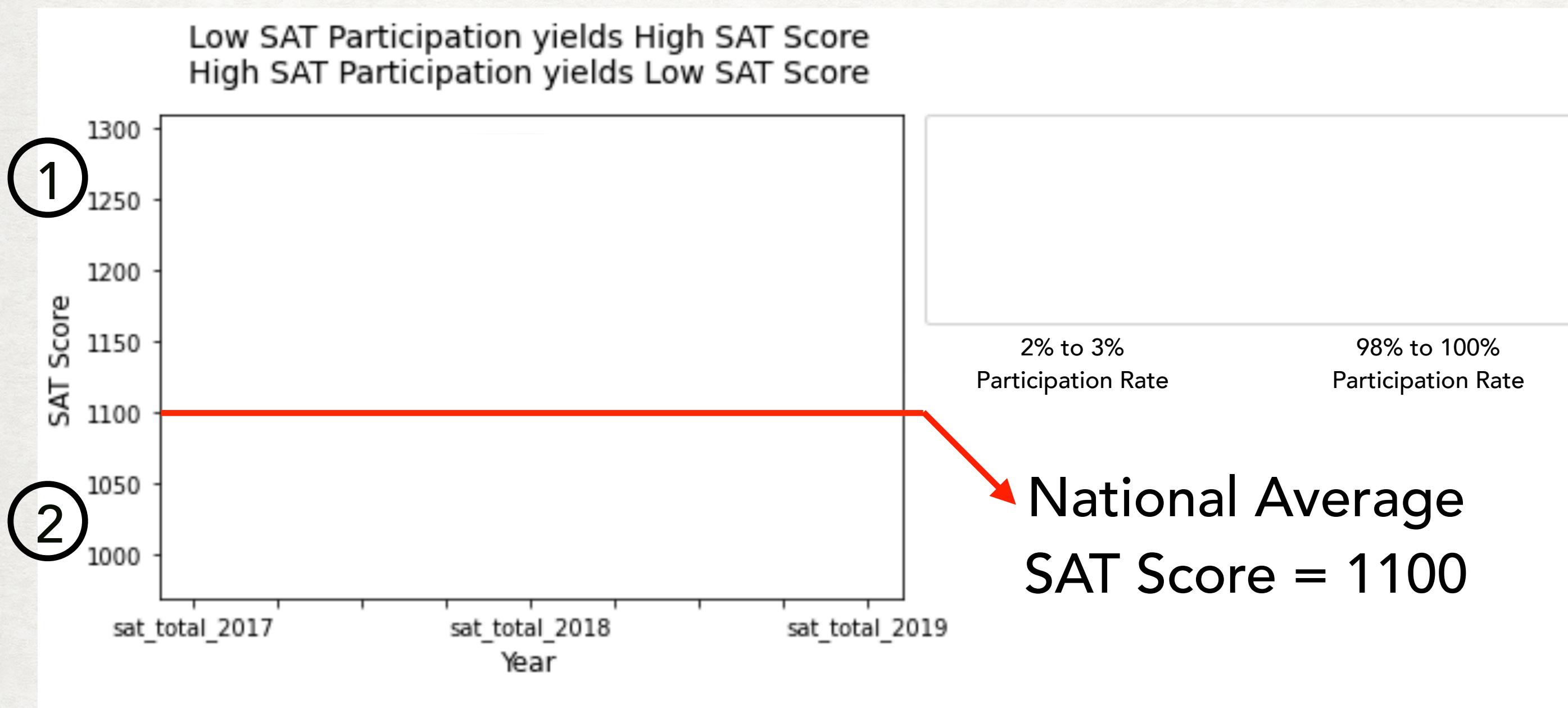
Implemented SAT as mandatory statewide standardised test

Source: [West Virginia](#), [Colorado](#), [Illinois](#)

# SAT AND ACT PARTICIPATION RATE COMPARISON



# SAT PARTICIPATION RATE AND SCORES



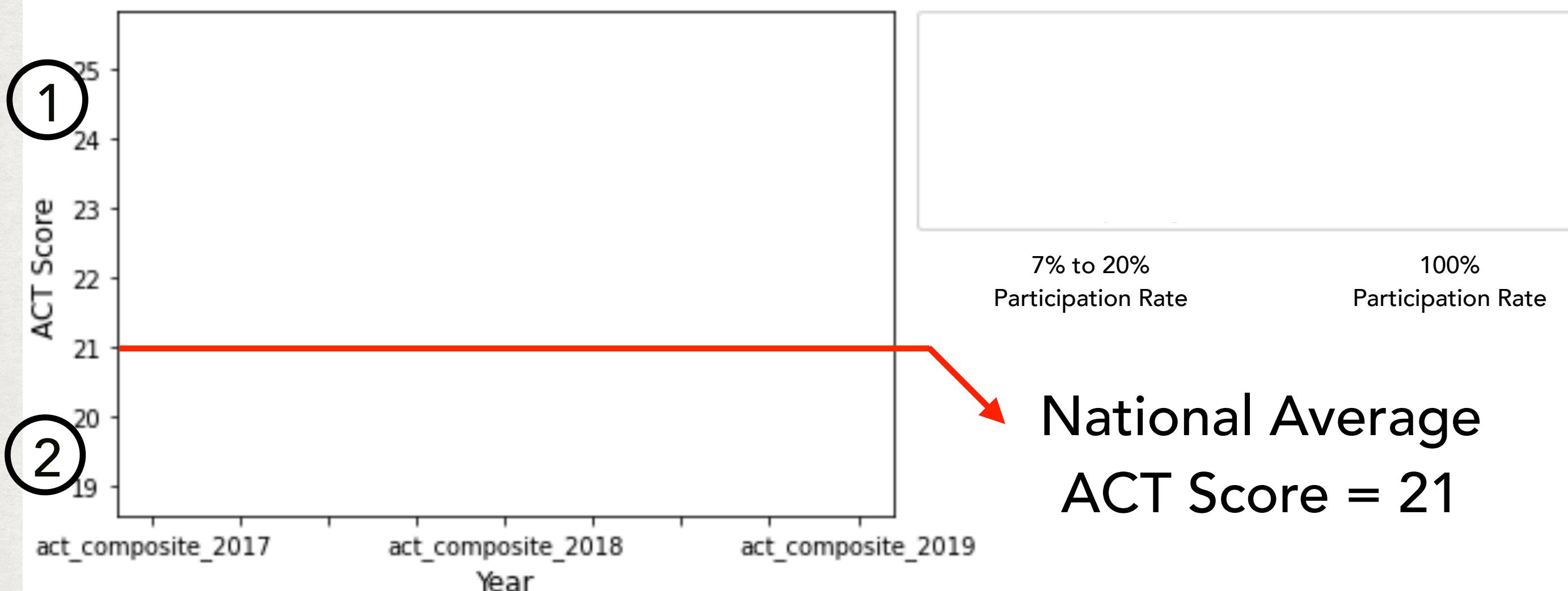
① Above Average SAT Score -> Low SAT Participation

② Below Average SAT Score -> High SAT Participation

Potential Reason:  
Mandatory testing includes unprepared students

# ACT PARTICIPATION RATE AND SCORES

Low ACT Participation yields High ACT Score  
High ACT Participation yields Low ACT Score



① Above Average ACT Score -> Low ACT Participation

② Below Average ACT Score -> High ACT Participation

Potential Reason:  
Mandatory testing includes unprepared students

# SAT AND ACT TRENDS

SAT  
Participation ↑

SAT  
Score ↓

**Potential Reason:**  
Mandatory testing includes unprepared students

SAT  
Participation ↑

ACT  
Participation ↓

**Potential Reason:**  
Mandatory testing of 1 type of test in some states

## Analysis:

- Mandatory SAT test has students not well prepared for SAT
- States with high SAT participation sees low ACT participation
- But ACT participation is not at 0%
- States with low ACT participation sees high ACT scores

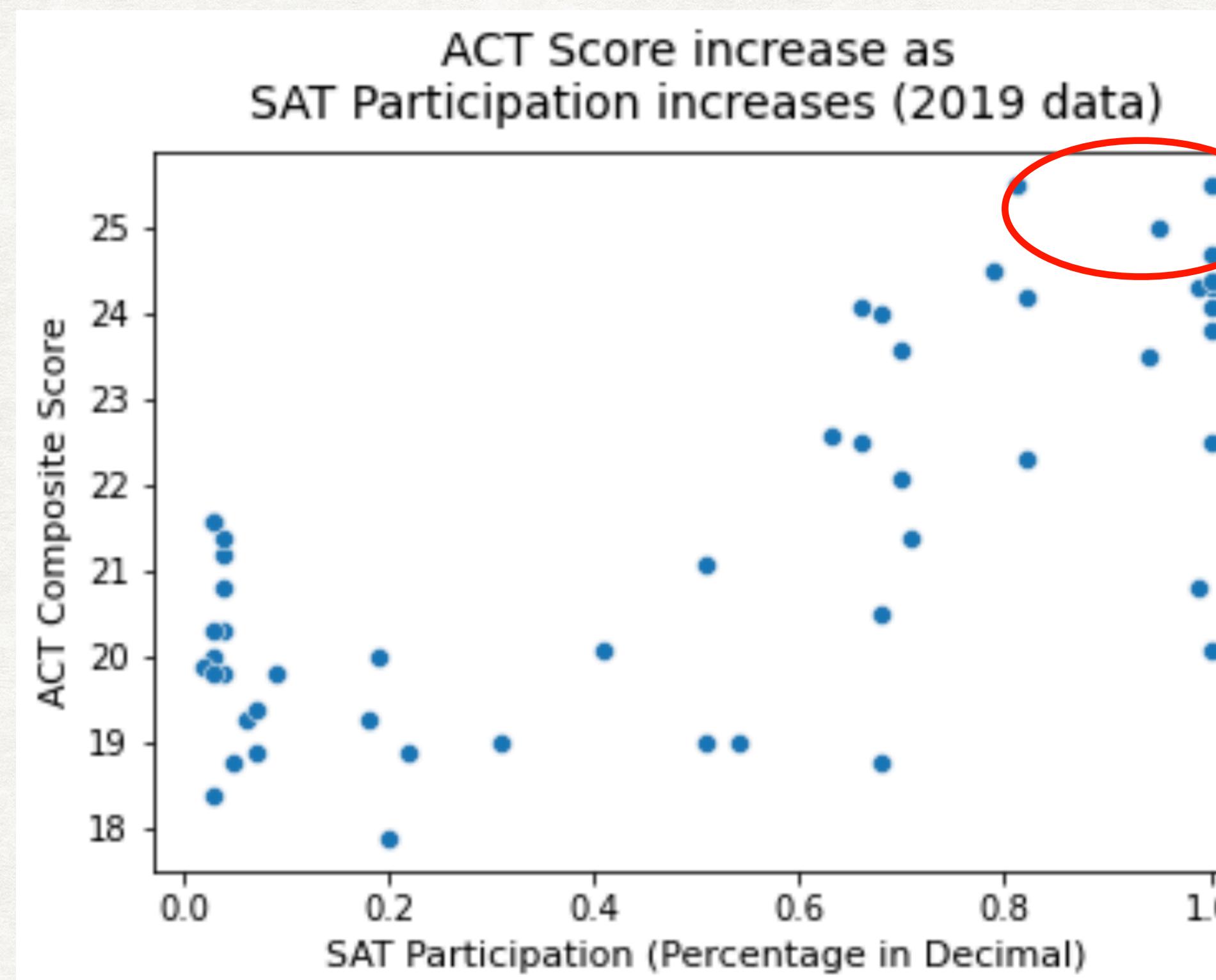
**Students prepared for optional ACT test instead?**

ACT  
Participation ↓

ACT  
Score ↑

**Potential Reason:**  
- Mandatory testing includes unprepared students  
- Students who take the optional tests are usually well prepared

# SAT PARTICIPATION AND ACT SCORE RELATIONSHIP



National Average ACT Score = 21

SAT Participation > 80%  
ACT Score > 24

ACT score tends to increase when SAT participation increases

# RECOMMENDATIONS

- Focus on states with low SAT scores and high ACT scores
- Sign more contracts with states without SAT mandatory testing
- Give discounts/promotions