

SAT & ACT Analysis

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Problem Statement

Although ACT has been the overall leader since 2012, it was reported that more graduating seniors are taking the SAT in 2018. The college board which owns the SAT has pushed to expand its market share through revising their test and making deals with states, but they would like more insight on where they should focus their resources.

Objective

This project aims to assist the college board on their strategy to increase student participation and increase their number of students being accepted to college.

Overview

- SAT vs ACT
- Methodology
- Data Analysis
- Recommendations

Methodology

Scrape and Clean Data

- Preparation for analysis

Exploratory Data Analysis

- Find trends and patterns within dataset

Visualize Data

- Plot useful graphs and table
- Use inferential statistical analysis to describe

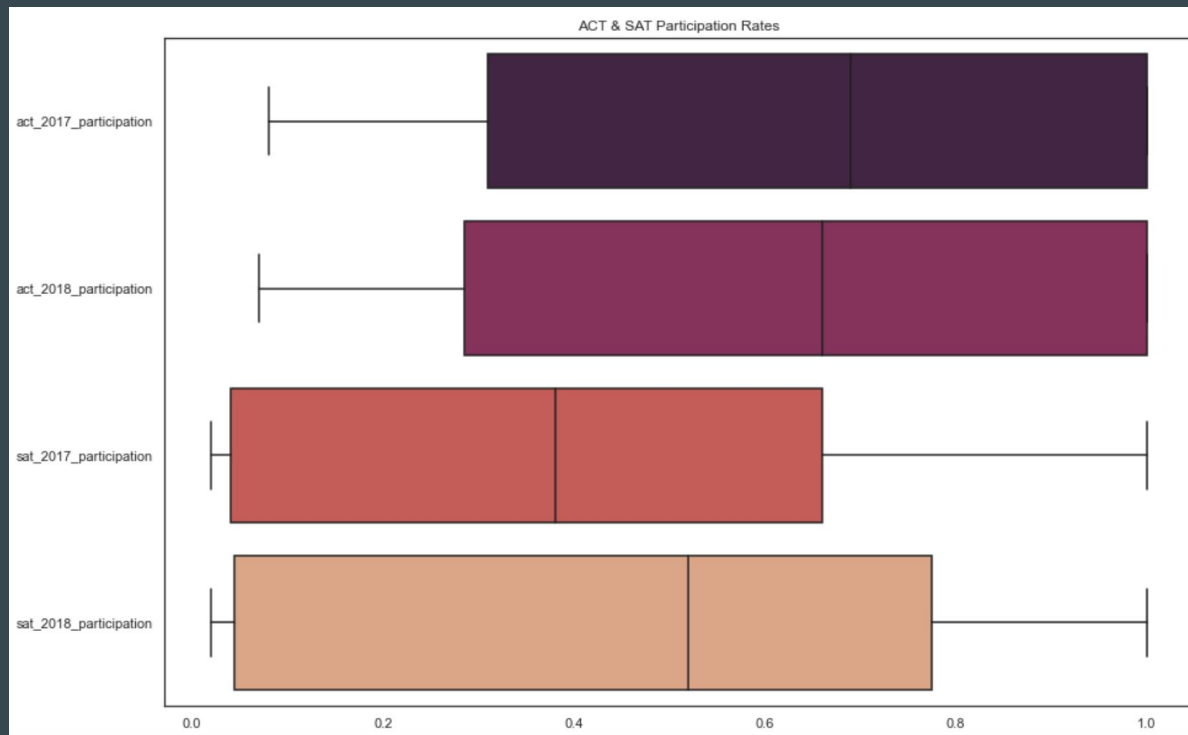
Recommendations

- Provide College Board with recommendations to increase participation rates and student scores

Data Analysis:

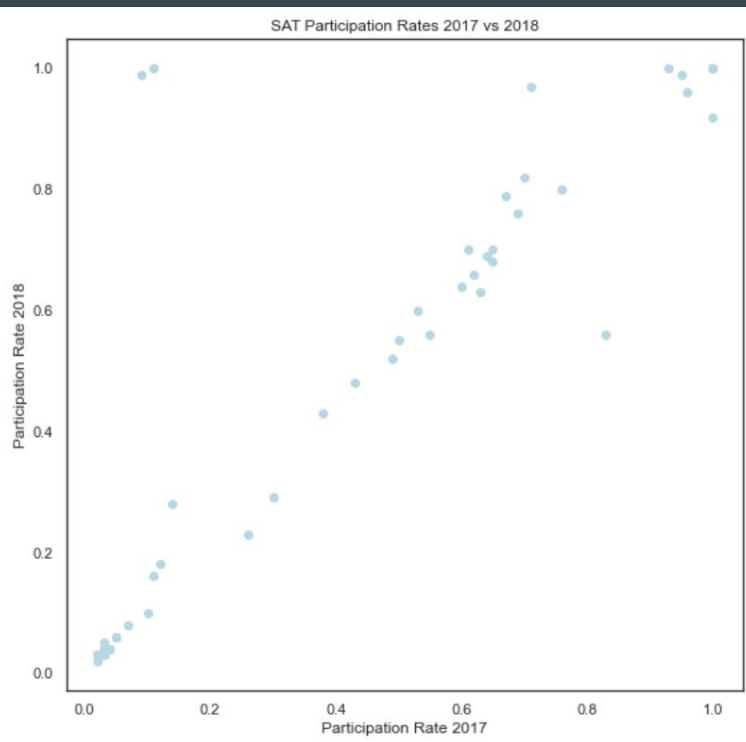
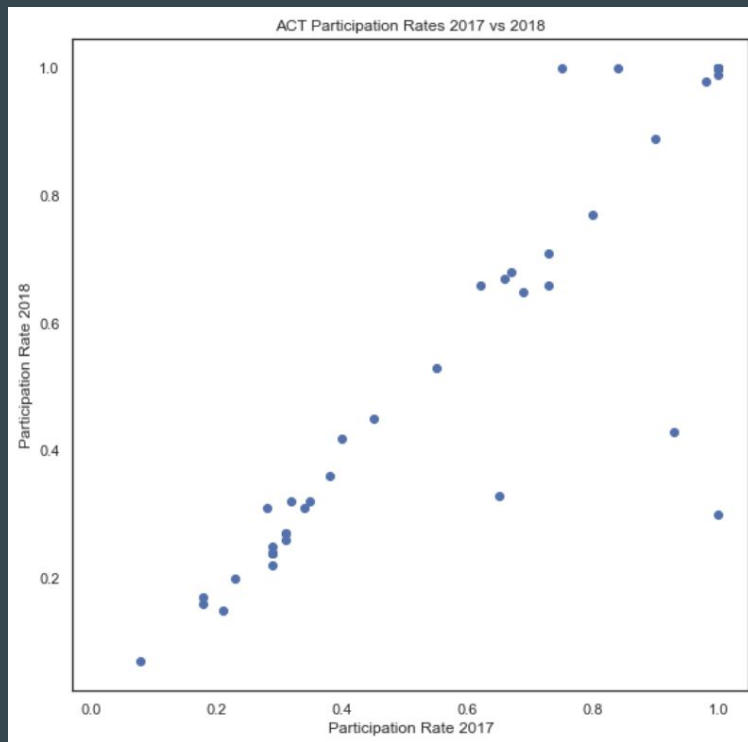
Explore trends in SAT and ACT participation and how students are performing across states

Which test has a higher participation rate?



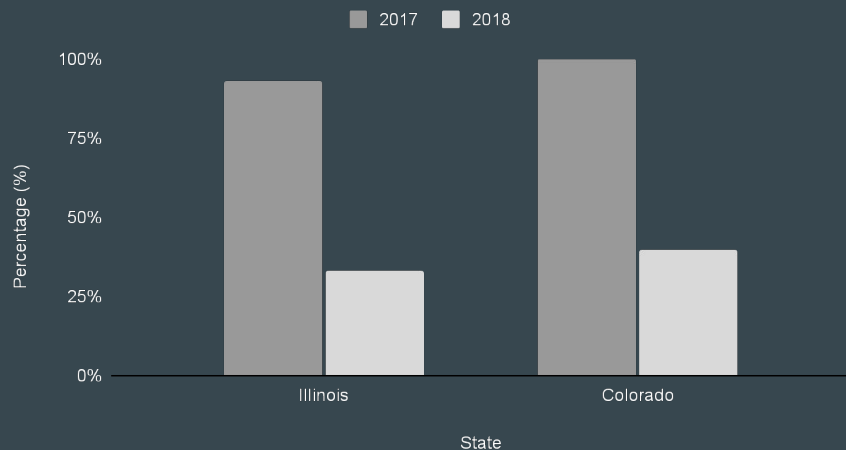
- ACT participation rate dropped slightly, while SAT participation rate rose significantly
- ACT participation rates in some states are close to 100%, while SAT participation rates in some states are close to 0%

Which states have significant changes in participation rates?

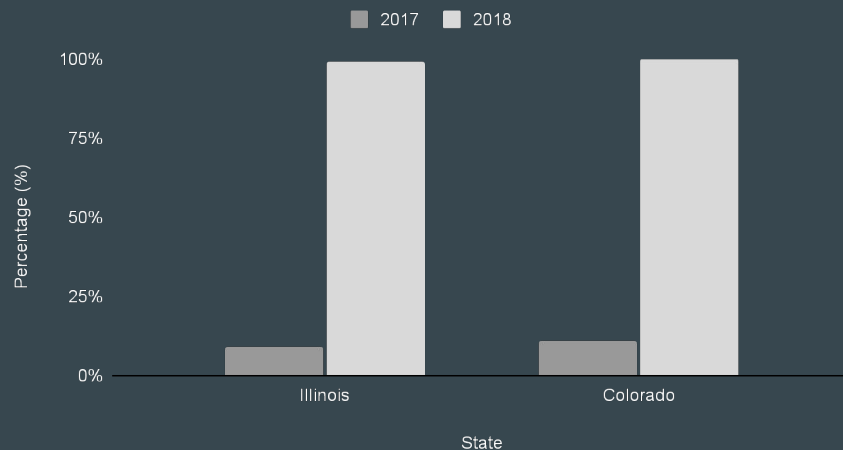


Colorado & Illinois

States with largest change in ACT participation rate

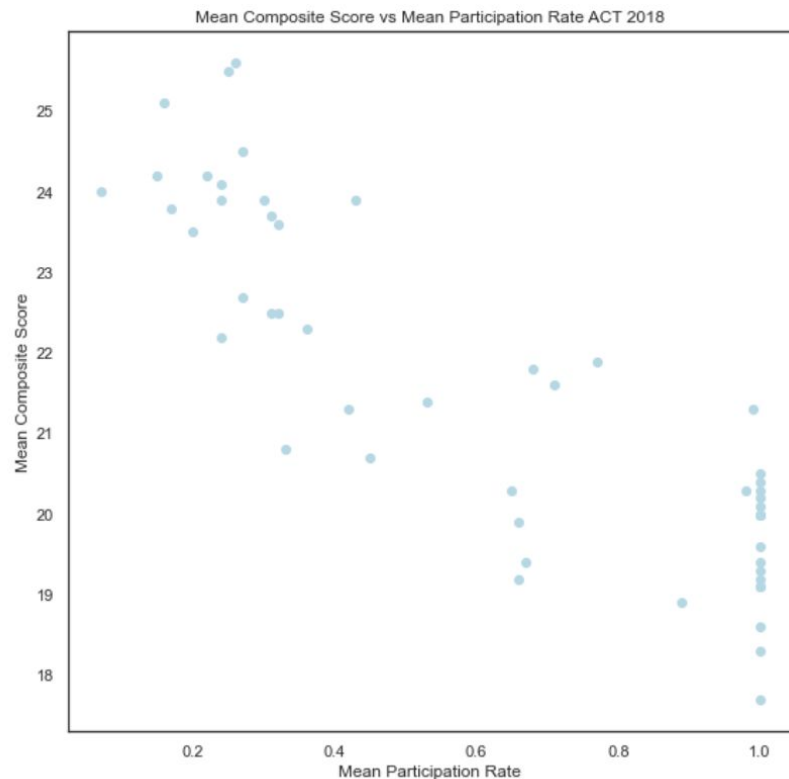
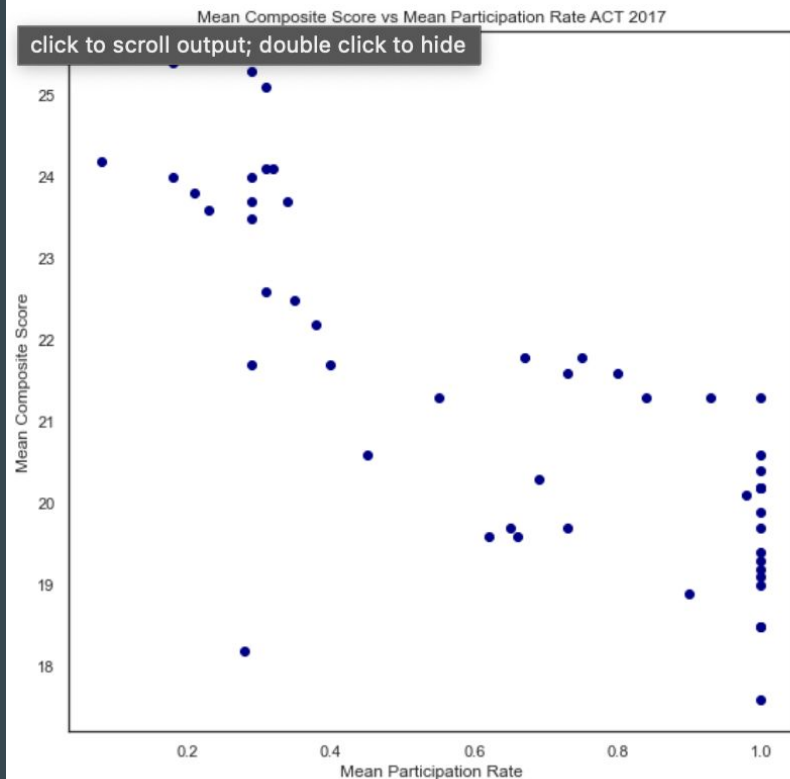


States with largest change in SAT participation rate

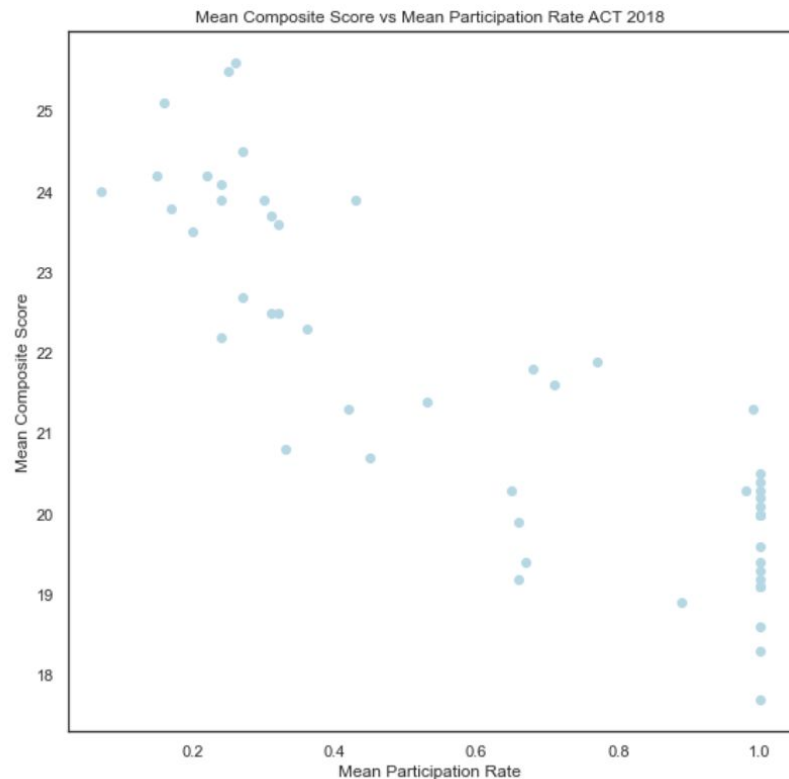
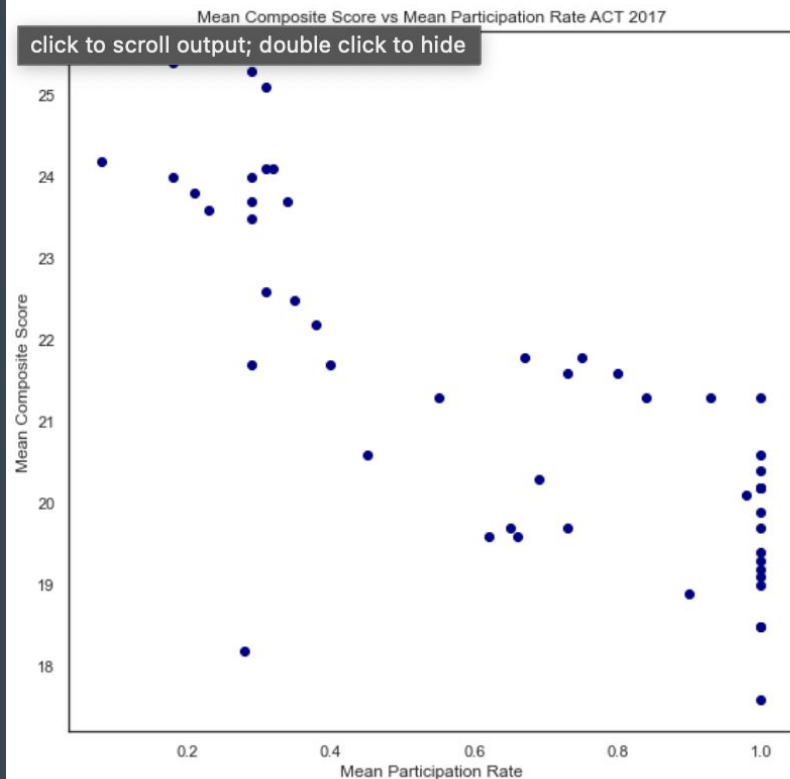


- Colorado made SAT compulsory in mid-2017
- Illinois provided the SAT not only as a mandatory college exam, but also a measure of school achievement

Which states performs better overall for SAT?



Which states performs better overall for SAT?



Recommendations

- Partner with study platforms to provide free official SAT material to have a further reach to states with lower participation rates,
 - Focus more resources to preparing students in states with higher participation rates
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