More Tests?

Increasing SAT Participation
By Nick Cote

Agenda

1. Problem Overview
2. Data Overview
3. Key Facts and Figures
4. Problem Analysis
5. Recommendations

Problem Overview

- How do we increase participation in the SAT amongst high school graduating classes from the lowest SAT participation states?
- How can we best allocate resources to facilitate the increase?

Data Overview

We analyzed the following data sets:

1. 2017 and 2018 SAT Data on a State-by-State basis
    a. Data includes participation rates, Math section score, English & Reading section score, and total score
2. 2017 and 2018 ACT Data on a State-by-State basis
    a. 2017 data includes participation rates, section scores (Math, Science, English, and Reading), and a composite score that is the average of the four sections
   b. 2018 data does not include section scores and only includes participation rates and Composite score

Key Facts & Figures

| 2018 SAT Total Mean	2018 SAT Total Median	2018 ACT Composite Mean	2018 ACT Composite Median
1120	1098	21.5	21.3

State	2018 SAT Participation	ACT Participation
North Dakota	2%	98%
Wyoming	3%	100%
South Dakota	3%	77%
Nebraska	3%	100%
Wisconsin	3%	100%

State	2018 SAT Total Score	2018 ACT Composite
North Dakota	1283	20.3
Wyoming	1257	20.0
South Dakota	1240	21.9
Nebraska	1252	20.1
Wisconsin	1294	20.5

Key Facts & Figures (Continued)

2018 SAT vs. 2018 ACT Total Score by State

2018 SAT Total vs. 2018 SAT Participation
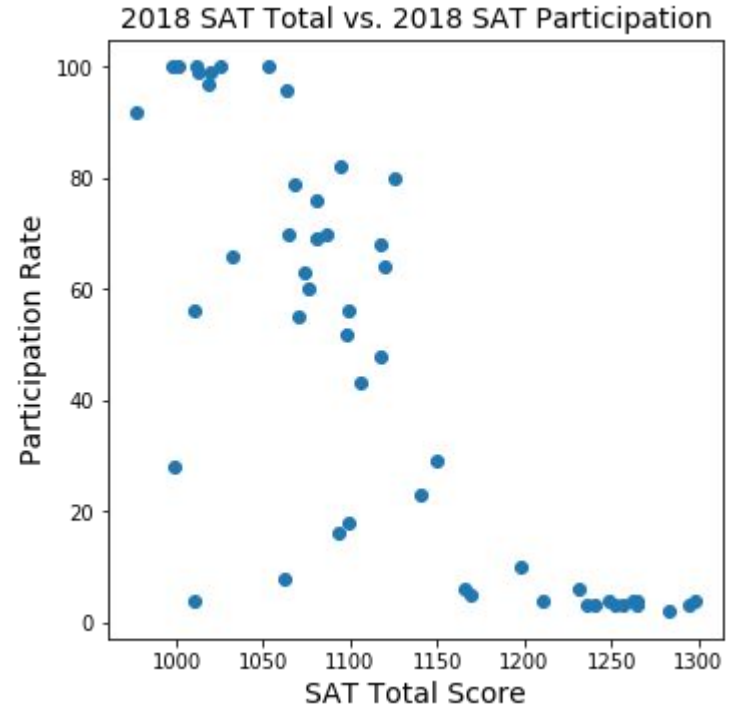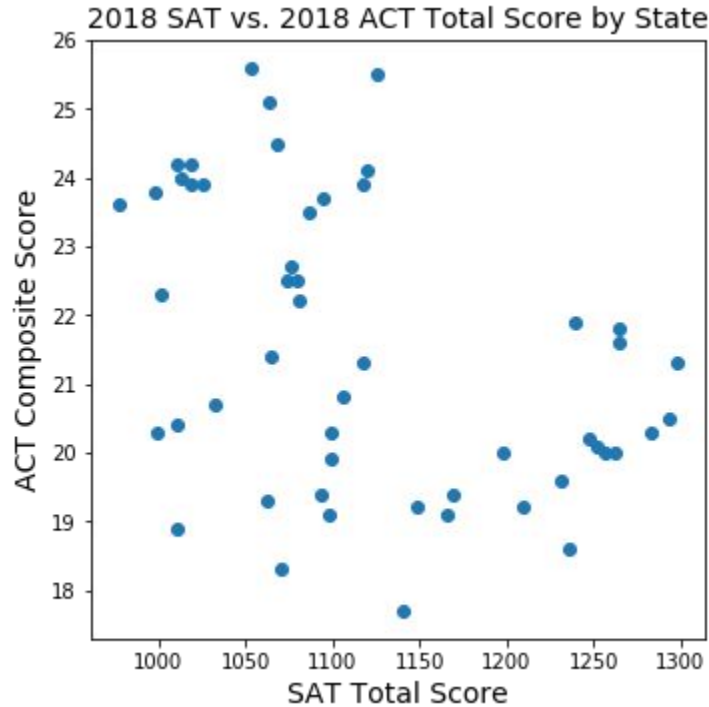
Key Facts & Figures (Continued)
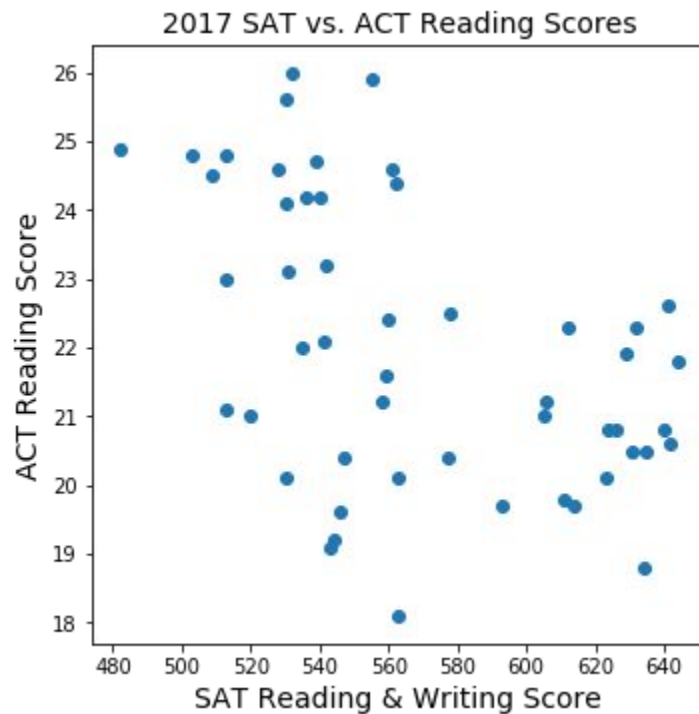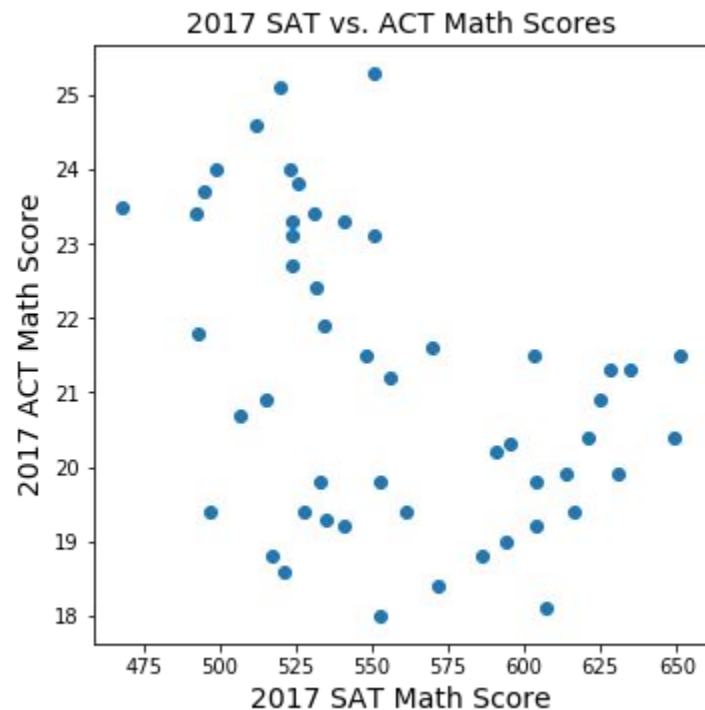
Problem Overview

- Our lowest participation states are actually scoring above the mean

- Negative correlation between score and participation

- Negative correlation between subject scores on the two tests

Key issue - in low participation states, does the fact that only certain types of people take the SAT dampen enthusiasm?

Recommendations and Areas for Further Research

- Access to tudors / other score improvement methods

- Network effects - focus on specific schools

- Can we link income to score and participation?

  - Population density?

- Potential for survey data to link study time and score