
Analysis of 2017-2018 SAT & ACT Data

— Neil Yap —

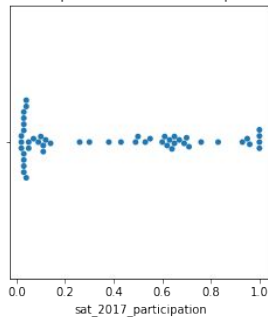
General Assembly Data Science Immersive, May 2021

How might we
increase SAT
participation rates
in the state of Florida?

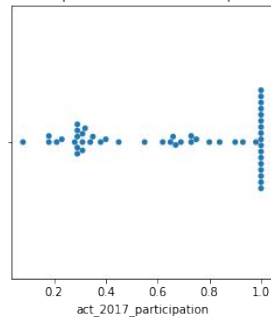
Align Objectives with Department of Education

- Not all states with full ACT participation have a mandatory ACT requirement
- Colorado is a clear case of a state that heavily favoured the ACT in 2016 but switched to the SAT fully in 2017. If a full ACT state can be turned, a semi-SAT state Florida can be made full.
- Show states how the SAT is aligned with their education objectives and standards, and bolster them with free education resources that help them get there.

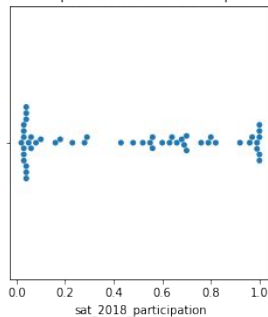
Swarmplot of SAT 2017 Participation



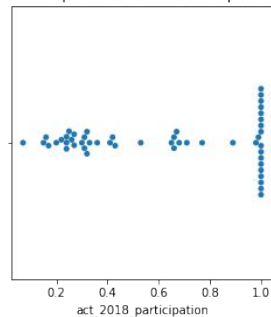
Swarmplot of ACT 2017 Participation



Swarmplot of SAT 2018 Participation



Swarmplot of ACT 2018 Participation



Increase Financial and Venue Accessibility of Tests

- Work with more Florida districts to encourage subsidising transport to test centres, and paying for test participation, especially for students from lower income families.
- Increase the amount of districts that hold SAT Test Days
- Ensure ethnic minorities who have statistically lower average grades get further support for test preparation, either through equipping them to make the most out of the current resources like Khan Academy, or through providing extra tutorial support for them

Collect More Data on Attitudes Towards Math Scores

- The mean SAT Math Scores over both years are lower than the Reasoning Scores, contrasted to ACT Math Scores means that are higher than two of the other ACT subjects.
- Math Scores make up half the SAT score, versus only one quarter of the ACT score.
- Survey more students who are on the fence between the ACT and SAT to see if apprehension to Math scores might affect their decision to choose one test over the other, and whether resources can be developed to alleviate concerns, if they are found.

Summary

1. Align with State Department of Education objectives and support them with teaching resources
2. Encourage Florida to subsidise testing, especially for students from lower income backgrounds, and hold SAT test days across more districts
3. Do more research into student and state education officials attitudes towards SAT Math scores and how they affect desirability to take the test over the ACT