

— SAT & ACT Analysis —

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Scope

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 - Participation Rate
 - Total/Composite Score
- State of Interest
- Recommendations
- Conclusion

Introduction

Education Facts

Serving Size: 1 SAT Test

Servings per container: 1 (or 2, or 3)

Minutes 225	Minutes of break 20		
	% Daily Value		
Reading	33%		
Math	33%		
Writing	33%		
Year establishe	d 1926		
Grading scale (no essay) 1600		
Test takers (20	14) 1.67 mil		



Education Facts

Serving Size: 1 ACT Test

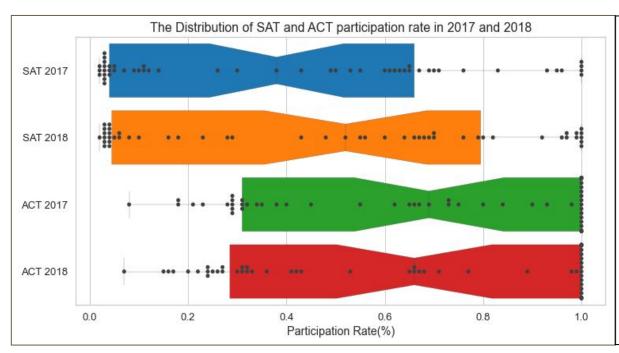
Servings per container: 1 (or 2, or 3)

Minutes 175	Minutes of break 25
	% Daily Value
Reading	25%
Math	25%
Writing	25%
Science	25%
Year established	1959
Grading scale	36
Test takers (2014) 1.85 mil

Problem Statement

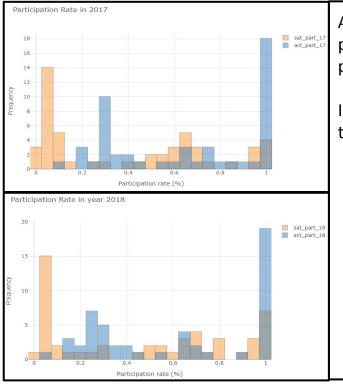
Following the release of a new SAT format in 2016, the College Board is keen to **drive** participation rates for the examination across the country. This study aims to analyze the state participation rates and scores for both the SAT and the ACT examinations in 2017 and 2018, to identify key factors influencing these metrics and provide recommendations on how the College Board can best allocate its funds to further improve the numbers.

SAT vs ACT Participation Rate



- SAT has a higher concentration at the lower end, while the ACT has higher concentration at the upper end
- ACT has higher participation rate than SAT
- There is no visible outlier and the data set is not symmetrical

SAT vs ACT Participation Rate



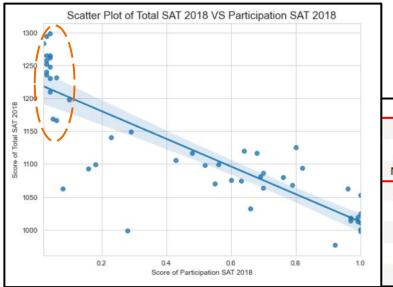
Across states, SAT generally has lower participation rate while ACT has high participation rate.

In both tests, the participation implies there are two groups states fall into:

- States with test mandates (Higher percentage on either test)
- States that do not mandate a test (Participants have the freedom of selection)

- States with high participation rate in one test tend to have a lower participation in another
- Hence, the participation of both tests generally mirrors each other

Findings (Scoring vs Participation)



	4.0 1298 3.0 1294 2.0 1283			
state	sat_participation_2018	sat_total_2018		
Minnesota	4.0	1298		
Wisconsin	3.0	1294		
North Dakota	2.0	1283		
Colorado	100.0	1025		
Connecticut	100.0	1053		
Delaware	100.0	998		
Michigan	100.0	1011		
Idaho	100.0	1001		

- 1. States with lower participation tend to have higher average total scores (2017-2018)
- 2. States with highest total score: (1)Minnesota, (2) Wisconsin, (3) North Dakota

State of Interest - Alaska

Conditions of Choice - Low Hanging Fruit

- States without policy favouring other tests (i.e. ACT)
- States showing no inclination towards other tests

	Participation Rate in Alaska					
	State	SAT 2017	SAT 2018	ACT 2017	ACT 2018	
1	Alaska	38.0	43.0	65.0	33.0	

Alaska has been identified as a <u>target location</u> for College Board:

- 1. In 2017, the requirement for students to take SAT, ACT or workKeys test expired. In 2018, participation rate for <u>SAT increased by 13%</u> year-on-year (YOY) while that of <u>ACT fell by 49%</u> YOY. → **Interest for SAT**
- 2. Total percentage of students taking either SAT/ACT in 2018 less than 76%, there is a **sizeable student population** (who are not taking any tests) that College Board can tap into.

Recommendation - Short Term

[1] SAT School Day Initiative

Offer SAT to graduating students in <u>their school</u>, on a <u>weekday</u>

Benefits

- More convenient for students to take the SAT
 - Familiar setting (location, staff)
 - Provides more flexibility in terms of timing
- Fee waiver benefits for low-income students

In 2018, states with SAT School Day had 98.3% average SAT participation rate for compared to 46.5% average for all states in the US

[2] Social Media Marketing

No mandate on either test in Alaska. Hence, awareness for peaks of SAT should be spread to students

Strategies:

- SAT's revamp, key differences between SAT and ACT:
 - a. Eliminated testing of obscure vocabulary words
 - b. **Dropped the penalty for wrong answers**
 - c. **More time to answer** each question
- 2. Highlight success stories through social media posts
 - a. States with highest total score
 - b. State with 100% participation rate

Recommendation - Long Term

- Mandate SAT at a state-level with College Board's support
 - State mandates and policies impacts participation rates
 - States such as Mississippi, Missouri and Nebraska mandated ACT resulting in 100% participation rates for the test
 - Successful transition from non-mandated to mandated SAT: Illinois and Colorado
- Focus on states that does not mandate a particular test
 - O Potential targets: (1) Alaska, (2) Florida and (3) North Dakota
 - Means:
 - Additional subsidies to support the participants from low income families
 - Offering free tuition classes to maintain/improve the state score

Conclusion

- The study analyzes SAT and ACT participation rates and their respective scores in the years 2017 and 2018.
- Although SAT participation rates have improved in certain states, the ACT still has a stronghold in many states.

Improve Participation Rate

- College Board should target the "low-hanging" states such as Alaska.
- Solutions that can be adopted by College Board:
 - Short Term: Introduce SAT School Day to more schools and market the SAT (via social media) to students
 - Long Term: Work with states to introduce SAT as the mandatory college admissions tests

Questions?

Interesting observation:

Participation rates for SAT and ACT seem to have some correlation with the political leanings of the state (Democrat vs Republican)

[Refer to US Election 2020 for more info]