

Data Science Course

Task at hand

How we can increase the participation rate in Oregon.

Questions

- What states are we most successful in now?Why?
- Are there any states that showed significant increases in participation rates from 2017 to 2018? What happened in those states?
- How do we mimic this in Oregon?

2017 and 2018 Data

- ACT and SAT Participation Rates
- ACT and SAT individual section scores
- ACT and SAT Total/Composite
 Score
- Data we should also consider: socioeconomic background/ more information on students
- How many people are taking the exam twice? Is this counted for?

What states are we most successful in?

sat_2017_participation_rates 100.0 100.0 100.0 100.0	District of Columbia Michigan Connecticut Delaware	96.0 95.0 93.0 83.0 76.0 71.0	New Hampshire Maine Idaho Florida Massachusetts Rhode Island	Washington Oregon Idaho	Montana	North Dakota South Dakota	n nesota Wisconsin	New Hampshire Vermont Massachusetts
sat_2018_participation_rates	state	70.0 99.0 99.0	New Jersey Maine Illinois	Nevada Utah	Colorado	Nebraska Kansas	lowa Illinois India	Pennsylvania Ohio Virginia
100.0 100.0	<u>Colorado</u> Connecticut	97.0 96.0 92.0	Rhode Island New Hampshire District of Columbia	Arizona	New Mexico	Oklahoma	Arkansas Mississippi Alab	North Carolina South Carolina Georgia
100.0 100.0	Delaware Michigan	82.0 80.0 79.0	New Jersey Massachusetts New York		Hawaii		Louisiana	Florida
100.0	Idaho	76.0 70.0 70.0	Maryland Pennsylvania Georgia	- in	2 1981B)		

Rhode Island

Connecticut

Are we doing something differently in these states?

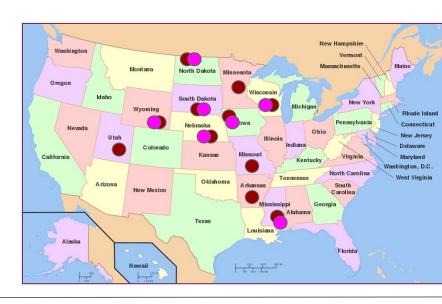
- Colorado: As of the 2016-17 school year, all Colorado juniors in public schools will take the SAT.
- Connecticut: As of the 2015-16 school year, all Connecticut juniors will take the SAT.
- Delaware: In 2016, the SAT replaced Delaware's Smarter Assessment state test for 11th graders.

- District of Columbia: Not required, but the SAT is offered for free
- Idaho: Offers a free administration of the SAT to high school juniors. Also requires the SAT
- Illinois: Beginning with the 2016-17 school year, all Illinois juniors must take the SAT.
- Maine: Each year, Maine offers a free administration of the SAT to high school juniors.
- Michigan: Requires the SAT

What states are we least successful in? Are the ACTs popular in those states?

state	t_2017_participation_rates	
Mississippi	2.0	
North Dakota	2.0	
lowa	2.0	
Utah	3.0	
South Dakota	3.0	
Nebraska	3.0	
Missouri	3.0	
Wisconsin	3.0	
Minnesota	3.0	
Wyoming	3.0	
Arkansas	3.0	

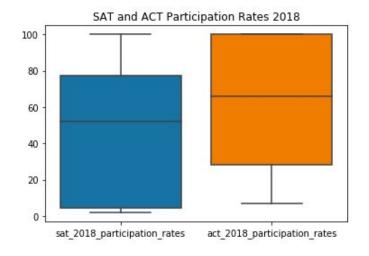
state	ticipation_rates
North Dakota	2.0
Mississippi	3.0
South Dakota	3.0
Nebraska	3.0
Wisconsin	3.0
lowa	3.0
Wyoming	3.0

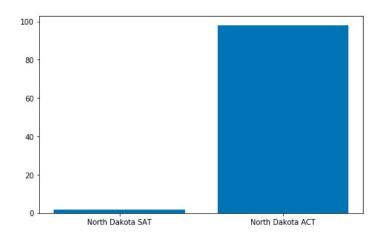


States Requiring the ACT (as of 2017): Alabama, Hawaii, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nevada, North Carolina, South Carolina, Tennessee, Utah, Wisconsin, Wyoming, North Dakota, Nebraska

There is a strong negative correlation between SAT and ACT participation rates (-.86)

- This means that the higher the ACT participation rates, the lower the SAT participation rates were in those states.
- The overall participation rate for the ACT (60%) was higher than that of the SAT (46%) in 2018:





So what happened in Florida?

- Florida does not require the SAT or ACT; this makes for a good opportunity for us!
- Florida also has over 50% participation in both exams
- We had a strong participation rate in Florida in 2017, but this dropped significantly in 2018
- FL has higher ranking education system

	state	sat_2017_participation_rates	sat_2018_participation_rates	act_2017_participation_rates	act_2018_participation_rates
9	Florida	83.0	56.0	73.0	66.0

• After further investigation... there is an error in the data. Florida's sat 2018 participation rate was 97% in 2018

Next recommendation: Oregon

- Oregon does not require the SAT or ACT; this makes for a good opportunity for us!
- Oregon has under 50% participation in both exams; no strong preference,
 room for us to enter
- Ranks low in education system (around 38); this could be a way to increase this
- Ranks high in most educated states (13)





Three main factors:

- Whether or not the state requires the exam
- Cost
- Student confidence in exam.

Other considerations:

- Ranking of education system in each state
- Socioeconomic background of students

Recommendations:

In order of priority

- Data: Put time into making sure data we are working with is correct
- Market Research: What drives states to require college admission exams? What makes states decide one exam over the other? What is the current state of education in Oregon?
- Marketing: To increase student confidence in exam: offer webinars and free online resources via social media platforms for targeted audience
- Discounted price for the exam: Test whether or not this increases participation