



Standardized Test Analysis Project 1

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Background

Originally established in the US in 1926, developed by the college board for high school students.

- **College Admissions**
- **Indicator of Success**
- **Consists of 3 sections:**
 - Reading
 - Writing
 - Math

However, as of fall 2022 SAT is no longer required in most Universities in the US.



Problem Statement

In **2018**, top ivy universities such as Harvard **dropped** the SAT requirement for **university application**, how did it affect the **total SAT scores and participation rates?**



Methodology

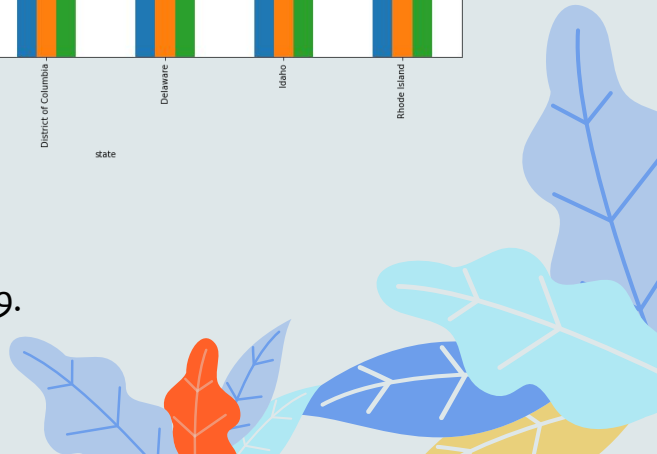
Using historical data of past SAT results from 2017 to 2019

- **Total scores**
- **Participation rates**

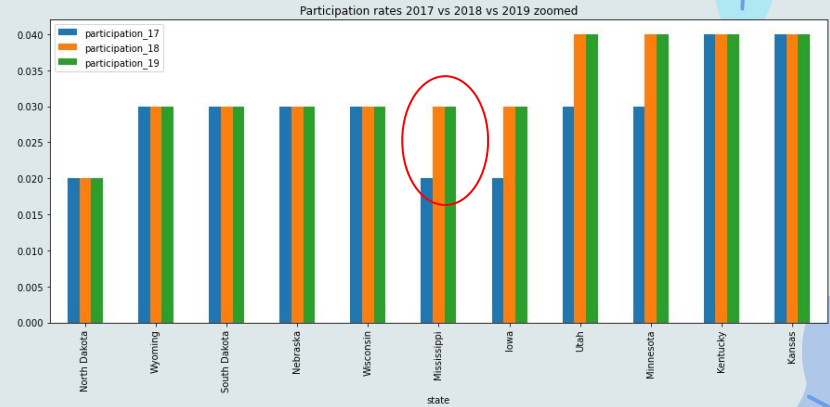
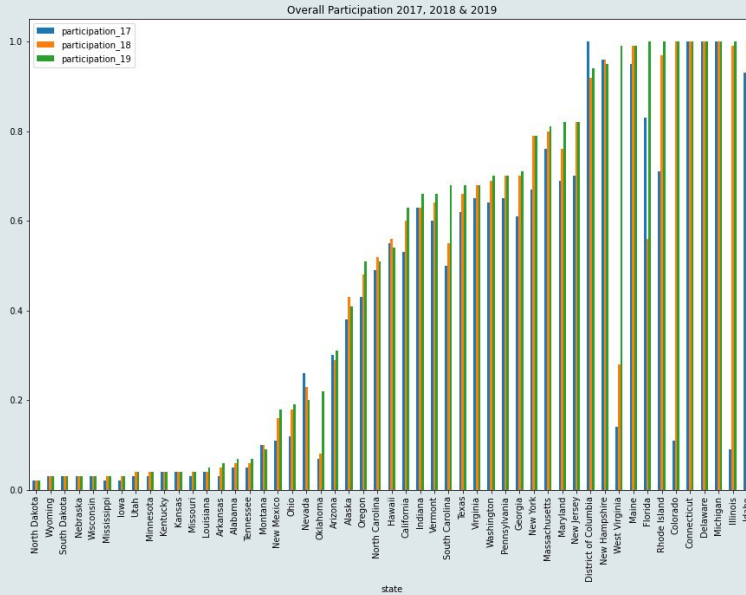
Data is filtered and sorted and unwanted columns removed.

Using python libraries such as matplotlib, numpy, and pandas.



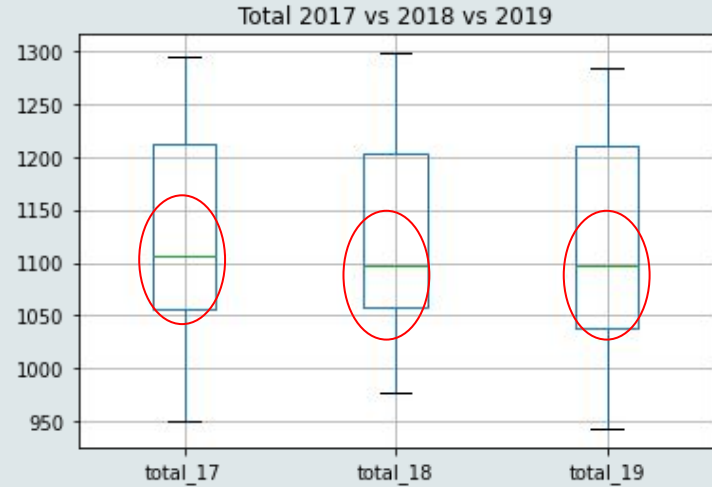
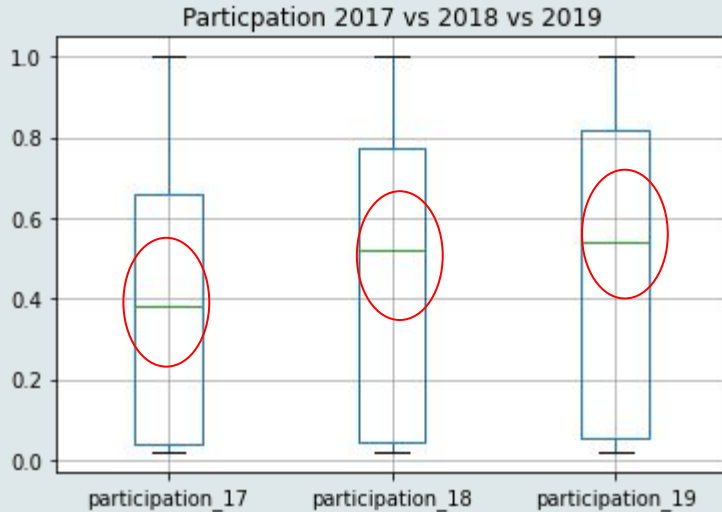


Participation rates



US total participation rates was observed to have an **increase** from 2017 to 2019.

Box plot Representation



Conclusions

Did the Top Ivy Universities had an influence?

- **Total score – decreased slightly**
- **Participation rates– no significant change**

	state	total_17	total_18	total_19
48	West Virginia	1086	999	943
36	Oklahoma	1047	1062	963
8	District of Columbia	950	977	975
7	Delaware	996	998	985
12	Idaho	1005	1001	993
39	Rhode Island	1062	1018	995

	count	mean
participation_17	51.0	0.398039
total_17	51.0	1126.098039
participation_18	51.0	0.457451
total_18	51.0	1120.019608
participation_19	51.0	0.490588
total_19	51.0	1113.078431

	state	participation_17	participation_18	participation_19
34	North Dakota	0.02	0.02	0.02
50	Wyoming	0.03	0.03	0.03
41	South Dakota	0.03	0.03	0.03
27	Nebraska	0.03	0.03	0.03
49	Wisconsin	0.03	0.03	0.03
24	Mississippi	0.02	0.03	0.03



Recommendations



Putting **emphasis** and **educating** high school students on the importance of SAT



Reducing SAT cost and **ease** the fee waiver eligibilities



Restructuring the **learning structure** of high schools to boost the total states SAT scores





Discussion



Other external factors

Pandemic, changes in learning structure, political background)



Checking the **averages of college students** to identify if SAT is a **good indicator of success**



The image features a central text area framed by a blue border. The border is held by two orange hands at the bottom corners. The corners are decorated with autumn leaves in shades of yellow, orange, and light blue. The background is a light gray.

Questions