



SAT (2017/2018) Analysis

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Problem Statement

We often hypothesize that students from the northeast receive a better education compared to students from any of the other three regions in the U.S. This project seeks to see if a relationship exists between student SAT scores and the different regions in the U.S to support or oppose a the notion of a particular region being academically superior than the others.

The most educated states in the USA

The WalletHub website sifted through 18 metrics and concluded that Massachusetts is the state with the most educated populace.

Mike Kennedy
FEB 04, 2020



Massachusetts is the most educated of the 50 states, according to an analysis by the website WalletHub.

The 10 Most Educated States

These states have the most people with college degrees.



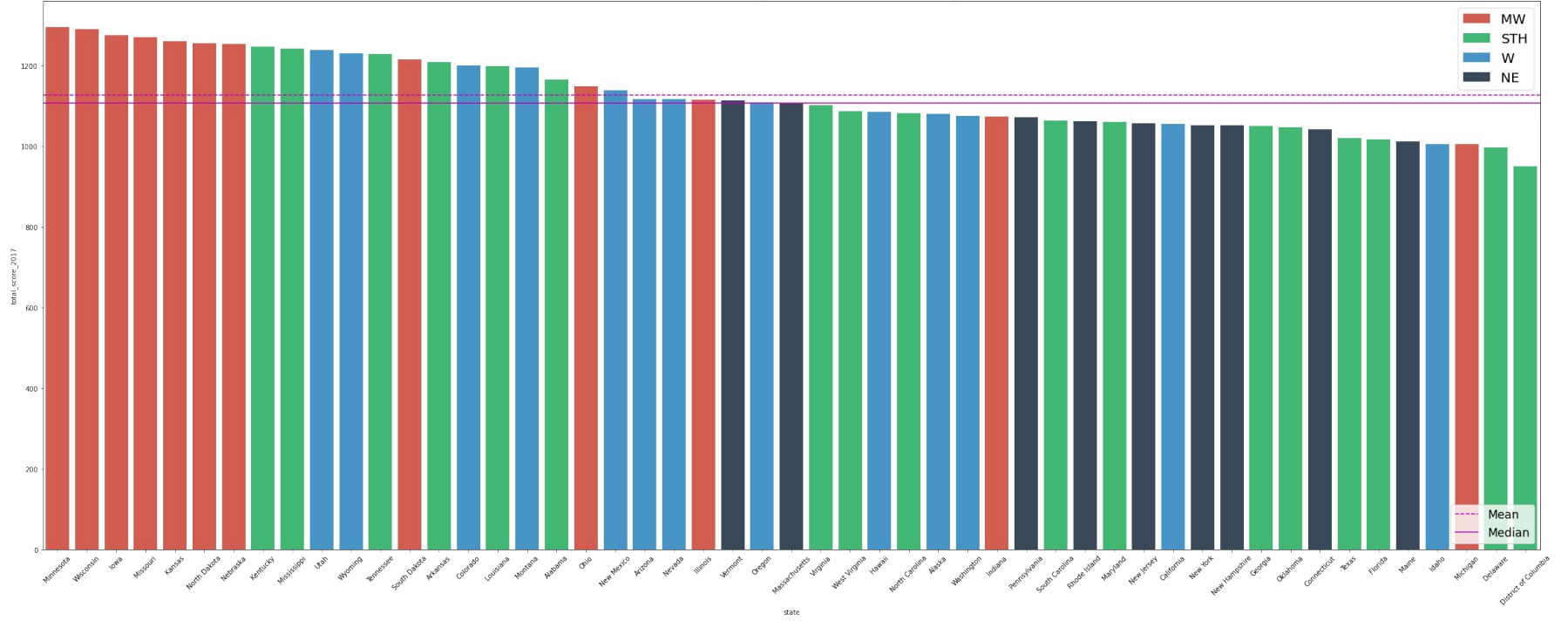
By Casey Leins, Staff Writer May 8, 2018, at 5:15 p.m.

As students across the country graduate from college this month, they must decide not only what career they want to pursue, but where they wish to pursue it.

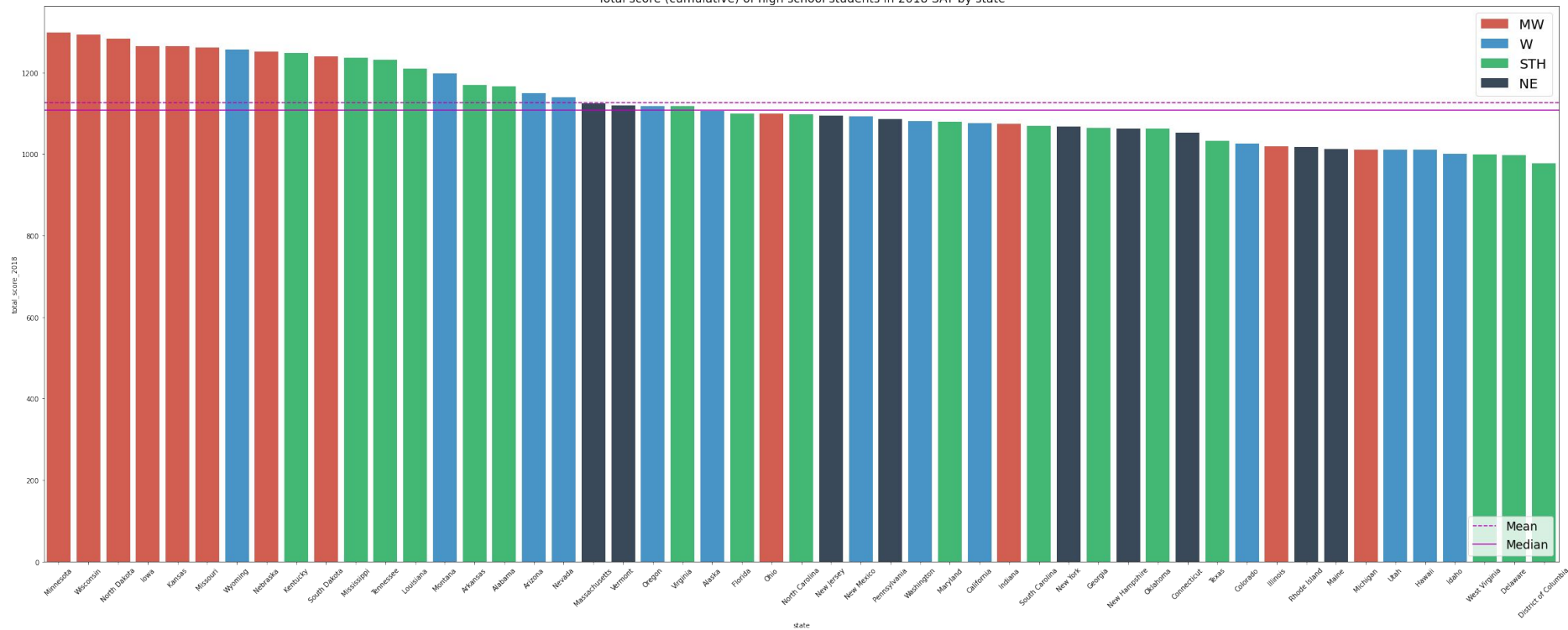
States with the most-educated populations not only draw recent graduates from other regions, but they also retain students from their own college systems.

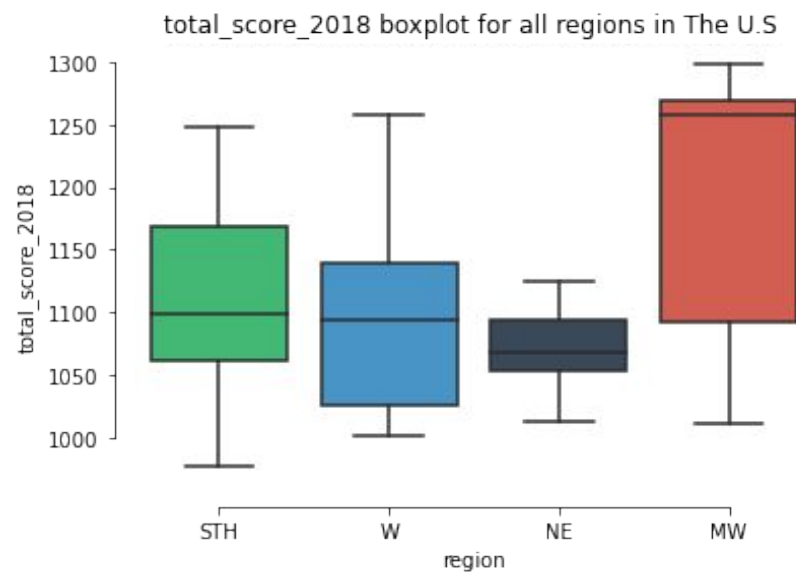
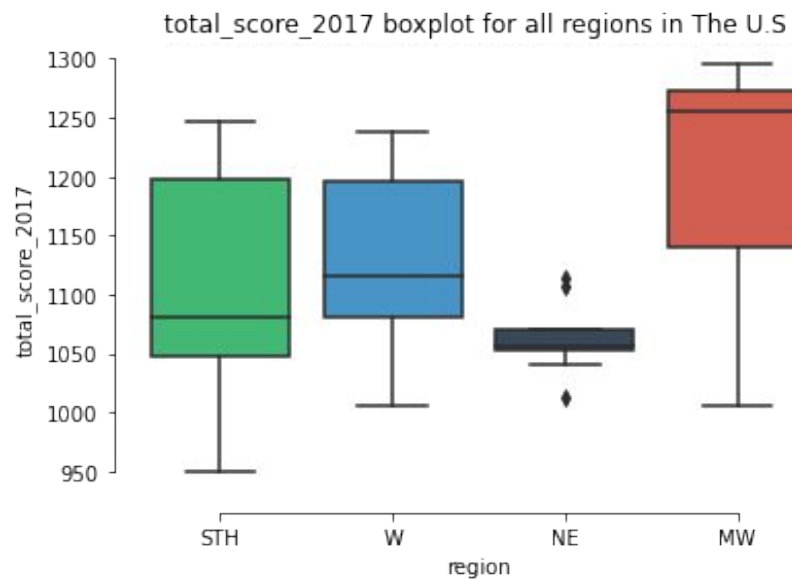


Total score (cumulative) of high school students in 2017 SAT by state

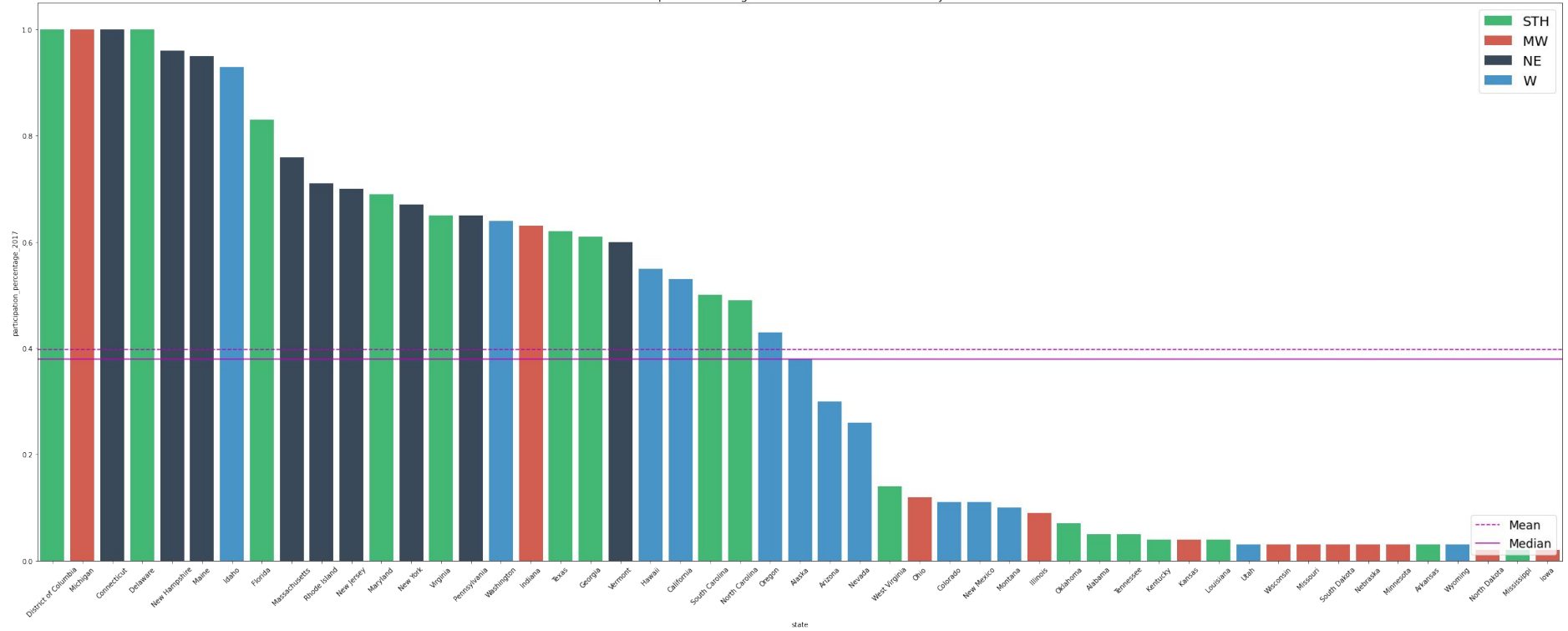


Total score (cumulative) of high school students in 2018 SAT by state

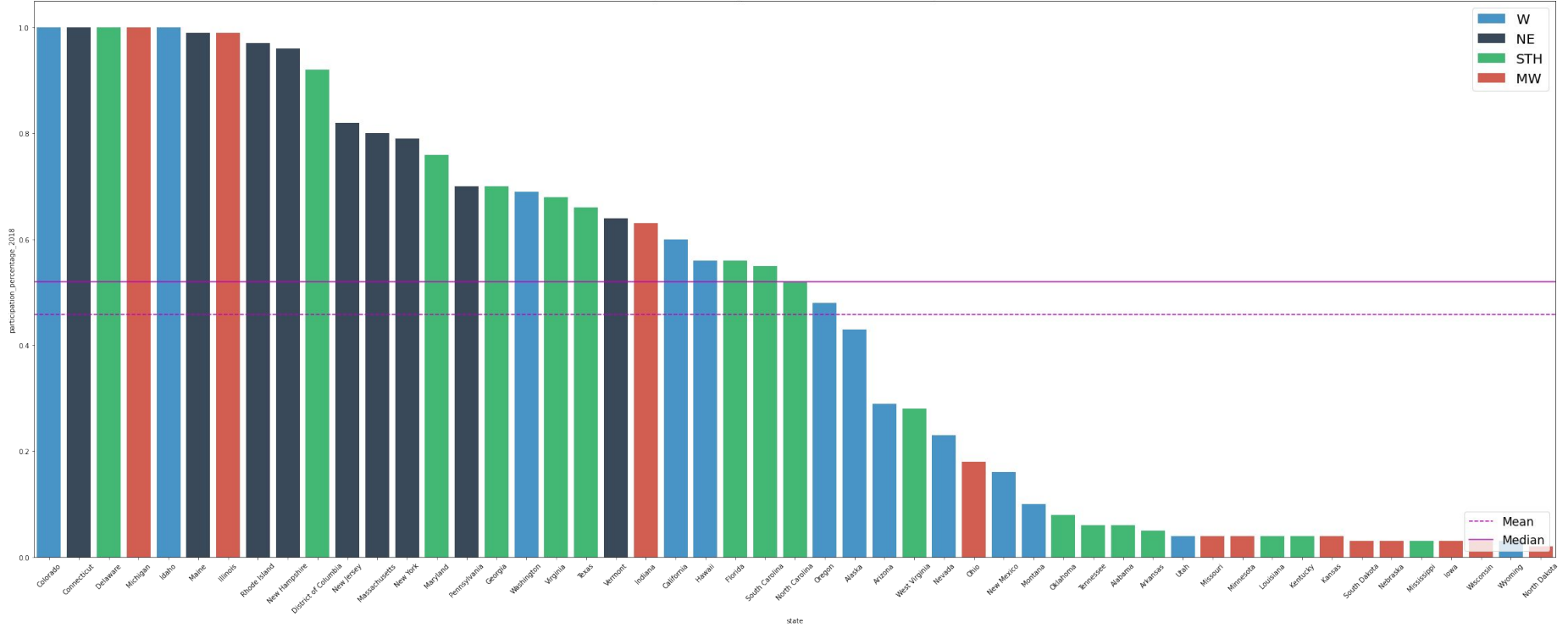




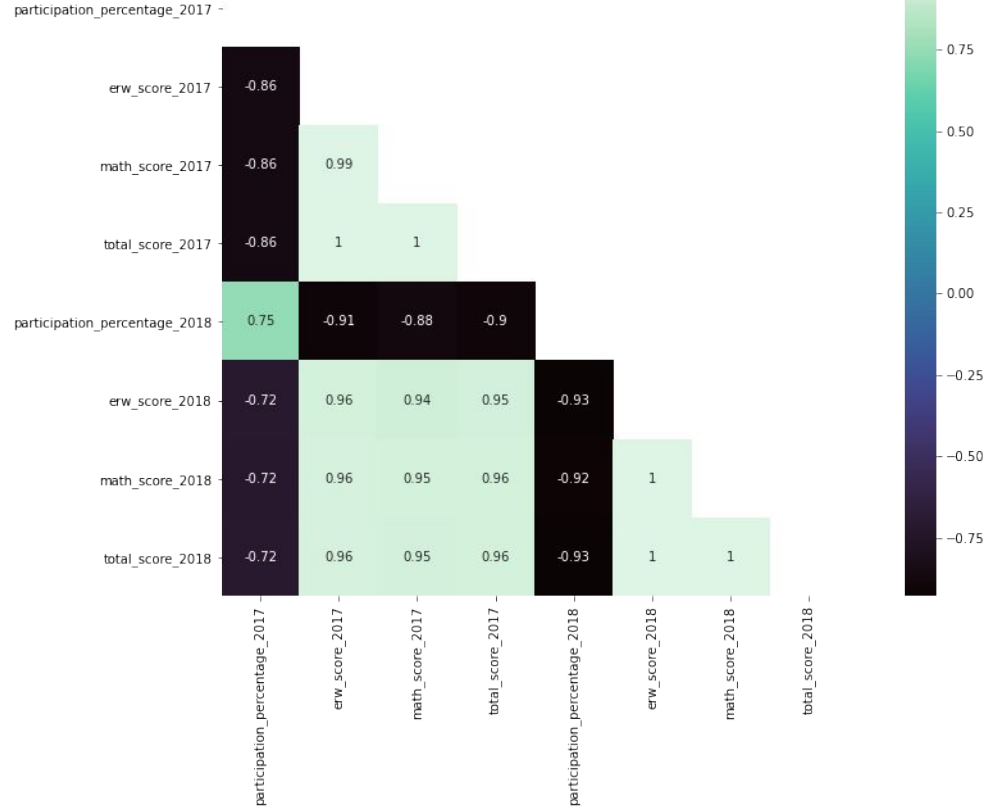
Participation % of high school students in 2017 SAT by state



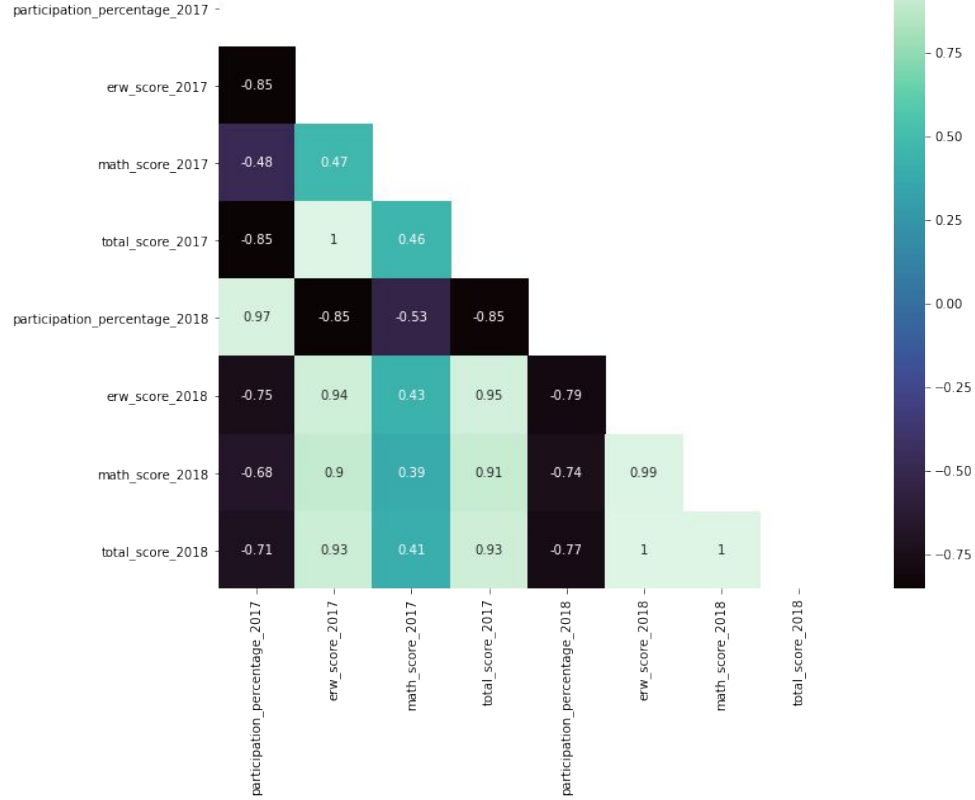
Participation % of high school students in 2018 SAT by state



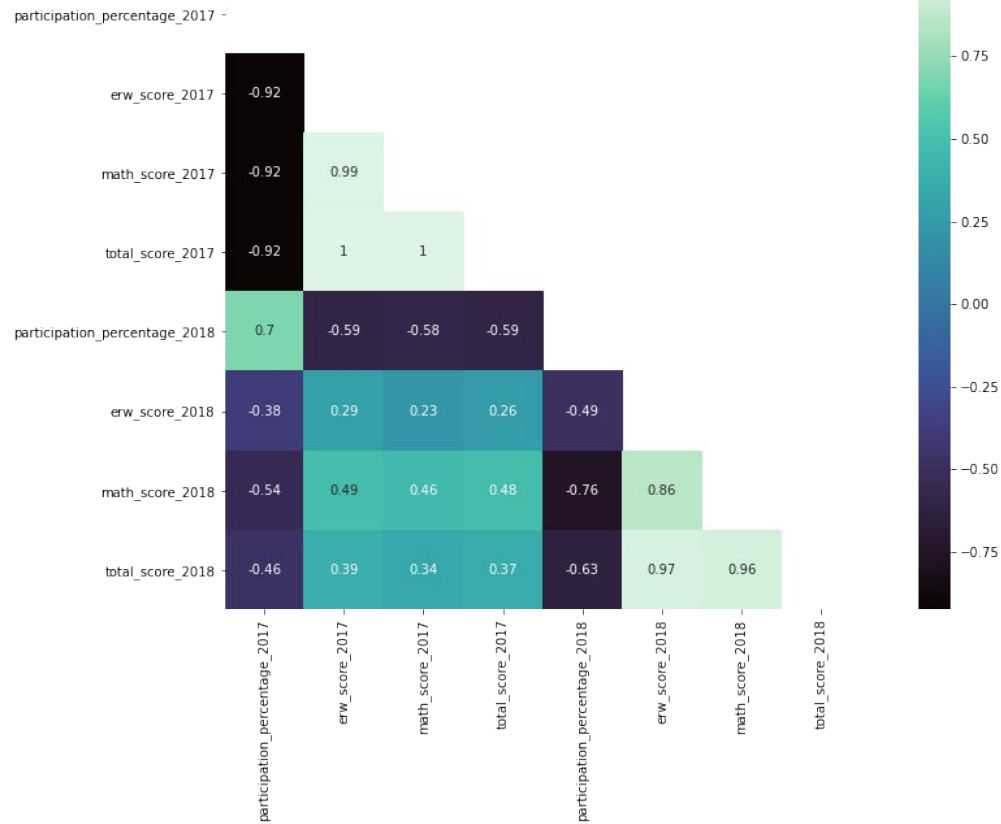
Correlation matrix heatmap of features for Midwest region



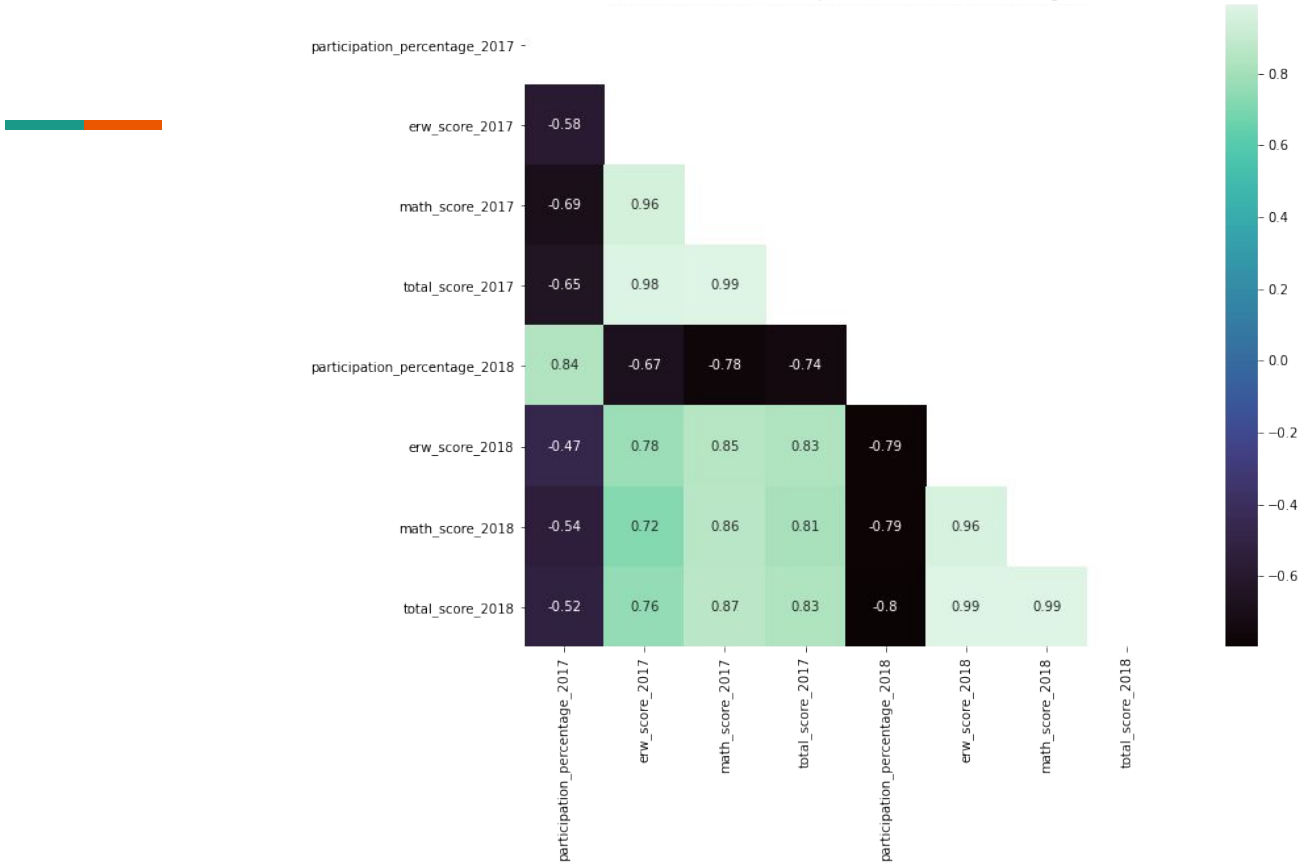
Correlation matrix heatmap of features for South region



Correlation matrix heatmap of features for Western region



Correlation matrix heatmap of features for Northeast region





Conclusions/recommendations

- The data analysis was able to provide the insight that there exist a degree of difference when it comes to regional performance in SAT scores but not so significant as in some cases.
- There is negative relationship between regional performance in SAT scores and the percentage of participation.
- Even though the data insights previously mentioned might create the perspective that the notion that NE cannot be considered as more "educated", I would recommend to expand the analysis to other types of standardized testing and metrics that take into consideration a population that is already part of the higher education to be able to support the claim.