



FACT SHEET

South Carolina Policy Council

1323 Pendleton St., Columbia, SC 29201 • 803-779-5022 • scpolicycouncil.com

Improved Access No Excuse for Lower Scores: How S.C. Compares to Other States

By Simon Wong

Last week, the S.C. Department of Education almost suggested the state's [second-lowest-in-the-nation SAT score](#) was excused by increased participation rates. At the very least, let's say they focused on increased "access," instead of addressing why the state's scores fell for the second year in a row.

As we responded:

- More access to a failed system is not improvement
- [Participation is actually down](#)

Here, we want to look, in particular, at the myth that increased participation inevitably means lower scores. So the logic goes: a higher percentage of test takers translates into greater participation from a cross-sectional student demographic—rich, poor, different ethnic groups, students with all types of GPA and class rank, etc.

If in select cases (Maine, for instance) there seems to be an inverse relation between higher participation and lower scores, the data demonstrates otherwise. Looking at all 50 states (plus D.C.), there is not a definite correlation between higher participation rates and lower scores.¹

SAT vs. ACT

As is well known, not all states rely primarily on the SAT as a measure for college readiness. Twenty-six of fifty states had a small percentage—less than 40 percent—of their 2010 graduating seniors take the SAT. This number includes several Southern states: including West Virginia, Tennessee, Alabama, Louisiana, Kentucky, Arkansas and Mississippi. All 26 of these states had higher average scores than the national average of 1509.

Why is that? Graduating seniors in these states tend to take the ACT, rather than the SAT. Those students who do take the SAT are generally high performers aspiring to apply to a

¹The coefficient of correlation between change in score and change in participation rate from 2009 to 2010 is -0.29696. The coefficient of determination (R^2) is 0.088184. The low coefficient of determination indicates that the estimated trend—that is, SAT participation rate is inverse to SAT score—does not have a strong degree of linear association. Also, we found that there is no definitive negative correlation between the two variables when we conducted an inference test on correlation coefficient using the two common types of confidence levels: 95 percent and 99 percent.

wider variety of schools nationwide. Hence, we would expect them to have higher than average scores.

On the other hand, states in which 40 percent or more of graduating seniors take the SAT can be identified as relying primarily on the SAT, rather than the ACT. (See cut off between Nevada and Arizona in graph below.) This means SAT test takers in these states already represent a relatively wide cross section of graduating seniors.

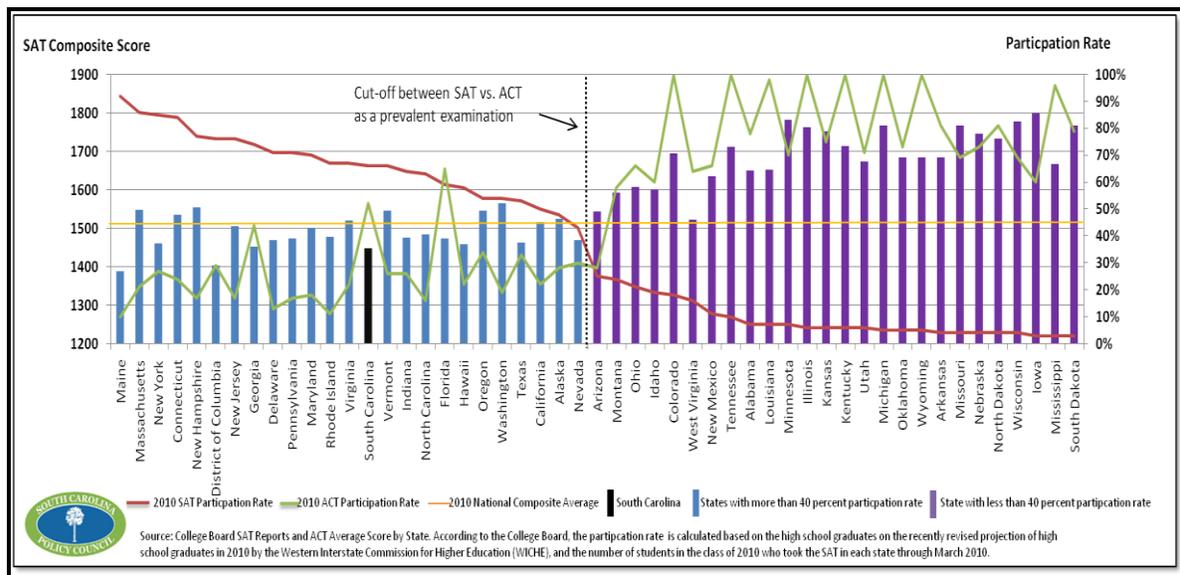
No Definite Correlation Between Participation and SAT Scores

Twenty-five states, plus the District of Columbia, recorded higher than 40 percent SAT participation rates. These states include: South Carolina, Georgia, Virginia, North Carolina and Florida. Among these five states, South Carolina had the lowest average SAT score for 2010. Yet both Virginia and Georgia had higher participation rates than South Carolina. Florida and North Carolina had only a slightly lower participation rate than South Carolina.

Consider also Massachusetts. The state had an 86 percent SAT participation rate for 2010, yet an average score of 1547, 38 points above the national average.

The bar chart below displays participation rates for all 50 states, plus the District of Columbia. Maine had the highest participation rate (and, granted, the lowest average score) for 2010.² But Massachusetts had the second-highest participation rate, and the nation’s 27th highest score. South Carolina had the 14th highest participation rate, but the nation’s second- lowest average score.

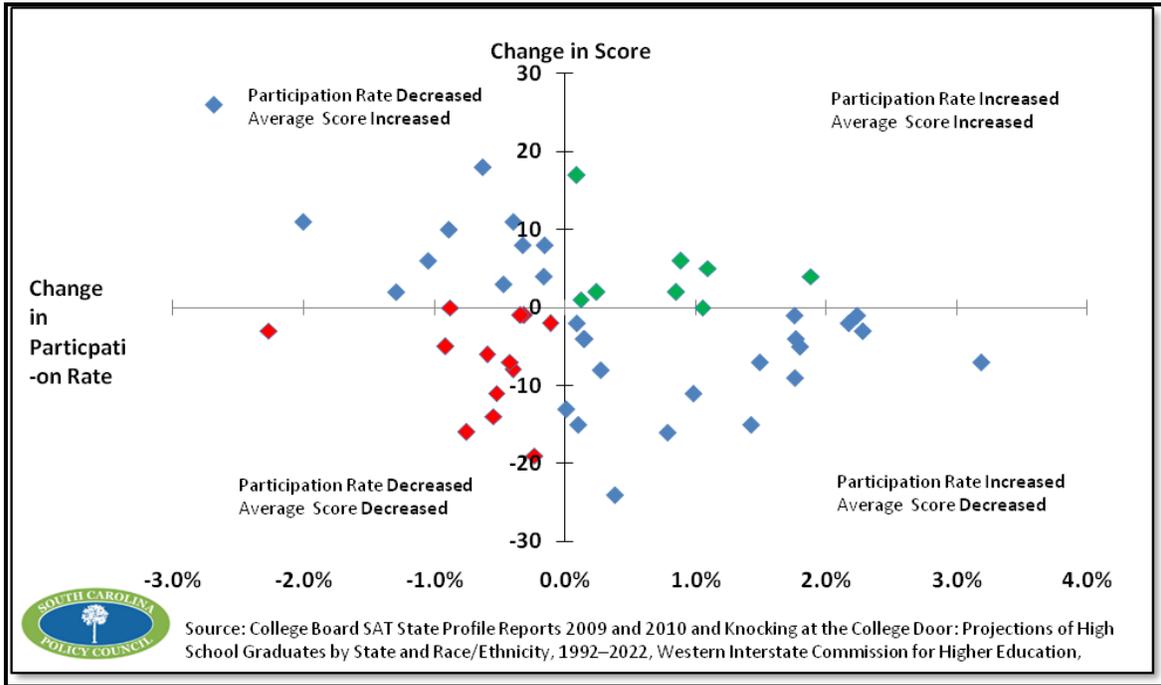
Increased Participation Does Not Necessarily Translate into a Lower Score



²In Maine, all high school students are required to take the SAT in their junior year as the state’s standardized exam under the federal No Child Left Behind Act. A handful of states (see chart) also have mandatory ACT participation.

As also demonstrated in the scatter plot below, there is not a strong correlation between increased participation and lower scores. In fact, for 21 of 51 states (plus D.C.), there is no correlation at all between increased participation and lower scores. In statistical terms, this means there is no significant correlation for the nation as a whole.

For 21 States No Correlation Between Participation and SAT Scores



Conclusion

Of course, the ideal goal is to increase participation and test scores at the same time. But the best way to do this is to be honest about where we stand now. No matter how you spin it, South Carolina’s SAT scores are unacceptable.

*Nothing in the foregoing should be construed as an attempt to aid or hinder passage of any legislation.
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