

## More is More

## The Case for Taking Multiple Tests, Including Both the SAT and ACT

Pinnacle Prep

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#### Introduction

It is easy to find advice regarding standardized testing. One can look to friends, neighbors, educators, blogs, and tutors, and each will likely have something slightly different to say. Most of these opinions and suggestions, however, are presented without any supporting evidence. How is one to know what is true? Incorrect or contradictory information can lead students or parents to make decisions that are not in the students' best interests and do not help to maximize their test scores. Our study, therefore, is intended to provide reliable information and guidance about SAT and ACT test plans to parents, students, and educators.

In this study, we examine two questions:

1: Can students use diagnostic tests to reliably predict whether they will perform better on the SAT or the ACT?

2: Do students who take multiple tests tend to achieve higher score improvements?

We wanted to answer these questions using data from real students, debunking rumors that are based on conjecture. Our data set consists of the complete test records of four class years of students from two elite private schools, comprising 544 students in total. This study analyzes and compares the scores of these students, who naturally followed a wide variety of test plans with a wide range of results.

Of course, no study can address the specific circumstances of any individual student. Instead, we present this information as a case study, a resource, and a reference point for those making decisions about test planning.

### Acknowledgements

We gratefully acknowledge and thank the schools that participated in this study.

# Section 1: How Reliable Are Diagnostics?

### Methodology

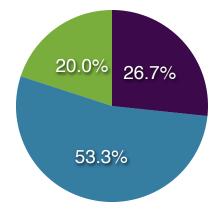
Our first question was: Can students use their results from diagnostic tests to reliably predict whether they will perform better on the SAT or the ACT? Many companies offer diagnostic tests, and the most common format contains a mix of questions from both the SAT and the ACT, in order to see which questions a student does better on. The best possible diagnostic tests, however, would simulate the real tests as closely as possible -- in structure, content, and scoring -- rather than an unofficial one that is a hybrid of the two.

Fortunately, such tests already exist and are widely administered to high school students: the PSAT, published by The College Board, and the PLAN, published by ACT. So, this section of the study only included those students who took all four tests: the PSAT and the PLAN, which served as baselines, and both the SAT and the ACT.

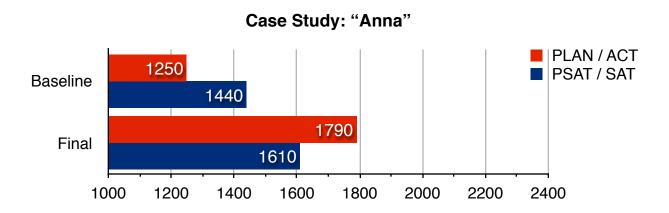
### Results

The baseline tests (diagnostic results) did not accurately predict whether a student would ultimately perform better on the SAT or the ACT. Of the students who took both the PLAN and the PSAT, 68% did significantly better on one baseline test than the other. Intuition suggests that these students would also perform significantly better on the same subsequent test, but this did not turn out to be the case. In fact, over half of them went on to perform at least 50 points higher on the *opposite* test.

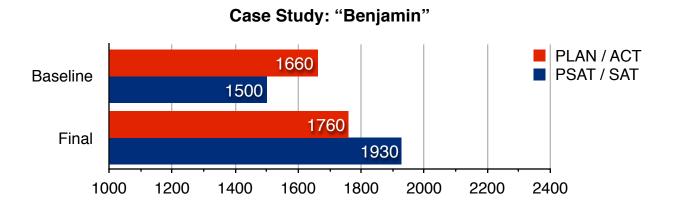
- Final Best Test Matched Baseline
- Final Best Test Was Opposite of Baseline
- Student Performed Equally on Both Final Tests



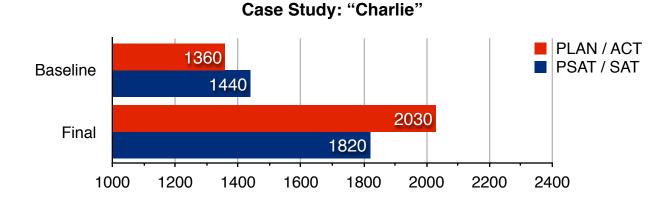
The three students below illustrate our findings. Please note that ACT & PLAN scores have been converted to an SAT scale.



"Anna" scored 190 points higher on the PSAT than she did on the PLAN, but she went on to score 180 points higher on the ACT than she did on the SAT.



"Benjamin" scored 160 points higher on the PLAN than he did on the PSAT, but he later scored 170 points higher on the SAT than he did on the ACT.



"Charlie" scored 80 points higher on the PSAT than he did on the PLAN, but he ultimately scored 210 points higher on the ACT than he did on the SAT.

### Conclusion

The SAT and the ACT do not necessarily present the same level of difficulty for each student. It certainly sounds reasonable to assume that diagnostic tests would predict later test performance with some accuracy. One would think that a student who does better on the PSAT than the PLAN, for example, would probably do better on the SAT than the ACT. However, the data in this study show that that assumption is not accurate. In fact, this study clearly demonstrates that diagnostic tests such as the PSAT and PLAN do not accurately predict whether a student will go on to do better on the SAT or the ACT. In this respect, **diagnostic tests have no predictive value**.

# Section 2: Taking Multiple Tests

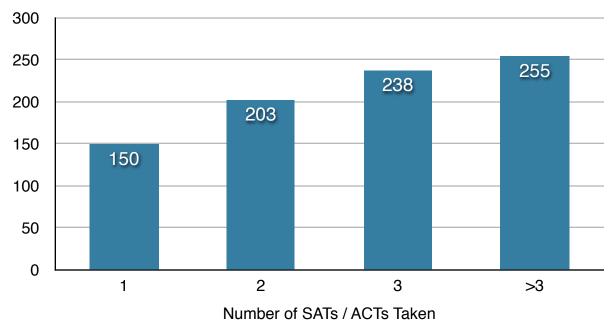
# Methodology

Our second question was: Do students who take multiple tests tend to achieve higher score improvements? To examine this, we looked at the data from students who took the PSAT as well as at least one SAT or ACT. The PSAT established a baseline score for each student, which we then compared to his or her best score.

### **Results**

The trend is clear: taking more tests led to greater score gains. In fact, each additional test tended to result in additional gains. For example, students who took just one SAT or ACT improved by an average of 150 points over their baselines. Those who took two tests saw average gains of 203 points. Those who took three tests had an average improvement of 238 points, while those who took more than three tests had an average improvement of 255 points. Our findings are summarized in the graph below:

# **Average Score Improvement Relative to PSAT Baseline**

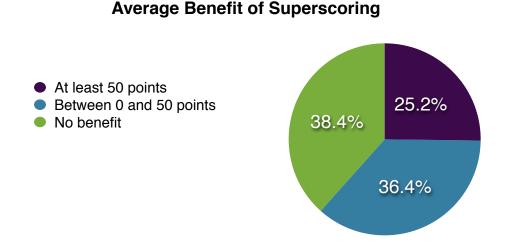


These two students also illustrate our findings, as each of them continued to improve as he or she took multiple tests:

Case Study: "Ernesto" Case Study: "Darcy" +240 points from +280 points from 1st test to 3rd test 1st test to 4th test 2160 2020 1950 1880 1780 1610 1540 2nd Test 3rd Test 1st Test 2nd Test 3rd Test 4th Test 1st Test

## A Word About the Benefit of Superscoring

Many of the students in this study - over 60% - benefitted from SAT Superscoring. Over 25% earned at least 50 points from Superscoring, over and above their highest single-test total. More than a third of students saw smaller, but nonetheless valuable, gains.



There were some outliers, of course - some students had Superscores that were 100 or more points higher than their top test. For example, "Felix" (see table below) took the SAT three times and his best single-test score was 2120. However, because his reading and writing scores were

stronger in his second SAT and his math score was stronger in his third SAT, he was able to build a Superscore of 2220 - one hundred points higher than his best single-test score.

Case Study: "Felix"

	Reading	Math	Writing	Total
SAT #1	680	680	650	2110
SAT #2	710	650	760	2120
SAT #3	660	750	690	2100
Superscore	710	750	760	2220

### Conclusion

There are several reasons for students to take multiple tests. This study indicates that students who took multiple tests after their junior year PSAT saw a continuously upward trend with each test. In addition, students who take multiple SATs are able to take advantage of Superscoring. The overall indication is that **taking more tests is likely to result in higher scores.** 

### **Final Notes**

We do not have information about what preparation the students in this study had for their tests, if any. Pinnacle Prep students' average increases are far higher: our average score improvement is over 360 points. More information on our statistics can be found on our website: www.pinnacleprep.com.

Also, you've probably heard that the SAT will be changing soon. Students from the class of 2017 will be the first to be affected by these changes. While the results of this study will certainly help with test planning for the class of 2016, we expect the principal findings to stay relevant even after the test changes.

As we always strive to make recommendations based on both our experience and the most accurate data available, we plan to continue conducting studies of the tests, test plans, and student performance in the future. If you have thoughts or suggestions for studies you'd like us to do, or if you know of a school that might be interested in participating, please let us know.