



**Progress
Learning**



From Practice to Performance

Progress Learning's SAT[®] Test Accuracy

Summary

Progress Learning, a leader in the development of SAT® and PSAT-aligned practice tests, consistently prioritizes data-driven improvements to enhance the reliability and accuracy of its assessment tools. In the 2023–2024 school year (SY 23/24), Progress Learning partnered with Aurora Public Schools in Colorado to administer six PSAT/SAT® practice tests. These were strategically delivered at the beginning and middle of the school year, followed by the College Board's official PSAT and SAT® assessments at the end of the year. Using descriptive statistics, split-half reliability, and negative discriminator analysis, Progress Learning evaluated its test forms in relation to College Board assessments. This comprehensive analysis led to actionable insights, enabling Progress Learning to refine its assessments for the upcoming 2024–2025 school year.



Data Overview and Methodology

Progress Learning analyzed over 1,500 student records per assessment, comparing results between Progress Learning (HE) and College Board (CB) versions of the SAT®, PSAT 10, and PSAT 8/9. The count of records, shown below, highlights the volume of data used in the analysis:

SAT®

HE1 (1654)
HE2 (1581)
CB (1842)

PSAT 10

HE1 (1814)
HE2 (1791)
CB (1927)

PSAT 8/9

HE1 (1582)
HE2 (2022)
CB (2092)

This volume of data provided a robust foundation for evaluating form reliability, correlation, score characteristics, and the impact of negative discriminators, all aimed at improving the reliability and accuracy of future Progress Learning test forms.

Key Analyses and Findings

Progress Learning conducted multiple statistical analyses to assess its test forms and their alignment with College Board assessments, ensuring that students receive high-quality practice tests. These analyses include:

Form Reliability and Correlation:

Progress Learning compared the correlations between its assessments and the College Board versions, as well as correlations between Progress Learning test versions. The correlations were strong across the board, with the highest being 0.89 between HE2 SAT® and CB SAT®, indicating close alignment. Areas for improvement were identified in the PSAT 10 math section and PSAT 8/9 reading and writing.

Correlation Scores:

Assessment	PL1 to CB	PL2 to CB	PL1 to PL2
SAT®	0.87	0.92	0.98
PSAT 10	0.99	0.94	—
PSAT 8/9	0.98	—	—

Descriptive Statistics (Mean, Median, Standard Deviation):

Progress Learning examined score distributions by calculating means, medians, and standard deviations to highlight the differences between Progress Learning and College Board assessments. The mean score difference for the PSAT 10 total score was -136, indicating that Progress Learning assessments were generally lower. However, adjustments to scoring tables have been implemented to reflect more accurate and reliable conversions.

Split-Half Reliability:

To ensure consistency and parallelism between test forms, Progress Learning utilized split-half reliability analysis. Results confirmed that all forms met industry standards, with reliability coefficients ranging from 0.77 to 0.89. These findings further validated the structural soundness of Progress Learning's test forms.

Split-Half Reliability Scores:

Assessment	Reading/Writing	Math
PSAT 8/9 #1	0.97	0.92
PSAT 10 #2	0.99	0.94
SAT® #2	0.98	—

Negative Discriminant Analysis:

Progress Learning identified and addressed items that negatively discriminated student performance. Through a detailed analysis of item-level response frequencies, poorly performing items were removed or revised. This effort resulted in significant improvements, with approximately 11% of PSAT 8/9 and PSAT 10 items being edited, moved, or swapped to increase overall form reliability.

Next Steps for Progress Learning

Progress Learning's proactive approach to assessment design is anchored in continuous improvement. Based on this year's data analysis, several key updates are planned for the 2024-2025 school year:



Item-Level Swaps and Edits

Progress Learning will revise and replace items in the PSAT 10 math section and the PSAT 8/9 reading and writing sections to enhance test form correlation with College Board assessments.



Scoring Table Modifications

Adjustments will be made to the scoring conversion tables to reflect more precise score calculations.



Focus on Targeted Forms

While the overall reliability of Progress Learning forms is high, targeted improvements will focus on the PSAT 10 and PSAT 8/9 assessments to bring correlations in these areas up to the same level as the SAT® forms.

Conclusion

Progress Learning remains committed to providing high-quality, reliable, and SAT®-aligned assessments for the 2024-2025 school year. Through rigorous data analysis—including form reliability, correlations, split-half reliability, and negative discriminator analysis—Progress Learning has not only validated the strength of its assessments but also identified opportunities for targeted improvements. As a result, Progress Learning is well-positioned to offer students a stable and trusted suite of practice tests that mirror the structure and rigor of College Board assessments.

By continually refining its assessments, Progress Learning exemplifies its dedication to helping students succeed, positioning itself as a proactive and reliable leader in educational testing.

