



RESEARCH BRIEF

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Meeting Assessment Graduation Requirements for Seniors: SAT vs. ACT Non-College Reportable

Results at a Glance

This Research Brief examines the success of Miami-Dade County Public Schools (MDCPS) 12th grade students in meeting missing assessment graduation requirements through the non-reportable (NR) American College Testing ACT and the College Board SAT exams. 1337 students took either one of the exams or both in the spring of 2024, and most students took the exams to meet the reading graduation requirement. Overall, the ACT is more efficient in terms of the rate of meeting assessment graduation requirements via concordance scores. In addition, it is less costly for each potential high school graduate for this group of students.

The main goal of this Research Brief is to determine which exam, the College Board SAT or the American College Testing ACT, has the higher success rate for Miami-Dade County Public Schools (M-DCPS) students in 12th grade attempting to achieve the necessary concordant scores in order to meet the assessment graduation requirements. The auxiliary goal is to compare the costs incurred by the District relative to the success rate. In both cases, we consider success rates and costs associated with the non-college reportable administrations of SAT and ACT.

Introduction

According to section 1003.4282 of the Florida Statutes, in order to earn a standard high school diploma in Florida, students must meet certain academic requirements, including passing required courses, earning a minimum number of credits and grade point average (GPA), and passing certain statewide assessments, as defined in Rule 6A-1.09422 of the Florida Administrative Code. The required statewide assessments include the Grade 10 Florida Assessment of Student Thinking (FAST) English Language Arts (ELA) Reading assessment and the Benchmarks for Excellent Student Thinking (B.E.S.T.) Algebra 1 End of Course (EOC) assessment.

In the event that students are experiencing difficulty in passing these statewide assessments, they can use concordant or comparative scores to meet the graduation requirements instead. Rule 6A-1.09422 uses the term “concordant scores” when discussing the ELA graduation requirements and “comparative scores” when discussing the Algebra 1 EOC requirement. For simplicity, we use the term “concordant scores” in the rest of this report for both assessment graduation requirements. Students can meet concordant scores for the Grade 10 ELA FAST reading assessment through the SAT, ACT or the Classic Learning Test (CLT). To achieve a concordant score for the reading graduation requirement, a student must achieve an average score of at least 17.5 between the

English and Reading sections on the ACT, a score of 480 on the Reading section of the SAT, or a score of 36 on the CLT Verbal Reasoning and Grammar/Writing sections combined. Students can meet comparative scores for the Algebra 1 EOC exam through the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT), the SAT, ACT, CLT, or the Geometry EOC exam. To achieve a concordant score for the math graduation requirement, a student must achieve a score of at least 16 on the ACT Math, 420 on the SAT Math, 430 on the PSAT/NMSQT Math, 11 on the CLT Quantitative Reasoning section or a Level 3 on the Geometry EOC exam. Students who would like to take the SAT or ACT to meet graduation requirements can take the “non-reportable” (NR) version of the exam, meaning that their scores cannot be used for college admission, but can be used to meet concordant scores.

Data

This report focuses on high school seniors who took the non-college reportable SAT/ACT assessments in the spring of 2024, as it was their last opportunity to earn concordance scores. In the spring of 2024, 1337 12th graders in M-DCPS took either the NR SAT or ACT exam, or both exams.

Of the total sample of 1337 students, 84.7% needed to meet the reading graduation requirement, and 45.9% needed to meet the math graduation requirement. Note that these percentages add up to more than 100% because some students needed to meet both the reading and math graduation requirements. For these students, the purpose of taking the exams was to meet graduation requirement by achieving a concordant score for the specific graduation requirement that they were missing. Of the total sample of 1337 students, 50.5% were male and 49.5% were female. The majority of the students were Hispanic (68.7%), followed by Black (26.9%), White (2.8%), and Other (1.3%). 25.3% of the students were English Language Learners (ELL) in the English for Speakers of Other Languages (ESOL) program, 6% were students with an identified disability (SWD), and 68.4% were receiving free or reduced-price lunch (FRL), indicating a lower socioeconomic status.

Method

First, students who participated in the non-college reportable SAT or ACT in March or April 2024 were split into three groups: students who only took the SAT (n=120), students who only took the ACT (n=670), and students who took both exams (n=547). Next, students were further divided into three mutually exclusive subgroups within each assessment group; students who only needed to meet the reading graduation requirement, students who only needed to meet the math graduation requirement, and students who needed both. This was done so that the success rates on meeting a specific graduation requirement (or both) via concordance scores on each of the two assessments can be compared more fairly and subsequently translated into the number of potential additional high school graduates.

To make valid comparisons of these success rates, it was important to ensure that student groups were comparable on the demographic and previous academic achievement characteristics. There were no statistical adjustments needed for students who took both exams, as they were the same

exact students. For the other two assessment groups (those who took only SAT vs. those who took only ACT), Table 1 shows their demographic and previous academic achievement characteristics.

As presented in Table 1, there were some differences in ethnicity, ELL status, SWD status, and FAST ELA scale scores between the two assessment groups. Unfortunately, small sample sizes of the subgroups based on the type of graduation requirements students were attempting to meet within the SAT assessment group did not allow for making any statistical adjustments to the success rates.

Table 1

Overall Demographic Characteristics and Previous Achievement by Test Type

	ACT (n=670)	SAT (n=120)
Gender	M = 48.1%	M = 56.9%
	F = 51.8%	F = 43.1%
Ethnicity	H = 63.2%	H = 83.6%
	W = 4%	W = 0.9%
	B = 31.4%	B = 13.8%
	Other = 1.4%	Other = 1.7%
ELL	25.7%	16.4%
SWD	5.5%	16.4%
FRL	68%	65.5%
FAST ELA Scale Score – Mean (SD)	197.71 (74.76)	175.01 (90)
Algebra 1 EOC Scale Score – Mean (SD)	405.65 (56.65)	406.73 (55.54)

Results

Students who Took Both Assessments

Of the 547 students who took both the SAT and ACT, 300 students needed to meet only the reading graduation requirement. 63 (21%) of those students met the ACT reading concordant score and 22 (7.3%) of them met the SAT reading concordant score (see Table 2 below). 68 students needed to meet only the math graduation requirement. 13 (19.1%) of them met the ACT math concordant score and 12 (17.6%) of them met the SAT concordant score. 179 students needed to meet both reading and math graduation requirements. Only 4 (2%) of them met both the reading and math concordant scores on the ACT and none of them met both concordant scores on the SAT. These results demonstrate that students who participated in both assessments had better success in meeting graduation requirements based on the ACT results: they had almost three times higher passing rate for meeting the reading concordant scores and almost 9% higher rate for meeting math concordance scores than they did based on the SAT results.

Table 2

Number and Percentage of Students Meeting Graduation Requirements by Test Type and Graduation Requirement Needed for Students who Took Both Assessments

Students Lacking Reading Graduation Requirement (n=300)			
ACT		SAT	
n	%	n	%
63	21.0	22	7.3
Students Lacking Math Graduation Requirement (n=68)			
13	19.1	12	17.6
Students Lacking Reading and Math Graduation Requirement (n=179)			
4	2.2	0	0.0

Students Who Took Either the ACT or the SAT

Of the 670 students who only took the ACT, 369 students needed to meet the reading graduation requirement only, and 78 (21.1%) of those students met the ACT reading concordant score (see Table 3 below). 98 students who only took the ACT needed to meet the math graduation requirement only, and 27 (27.6%) of them met the ACT math concordant score. 203 students who took only the ACT needed both the reading and math graduation requirements met, and only 10 (5%) of those students met both the reading and math concordant scores on the ACT.

Table 3

Number and Percentage of Students Meeting Graduation Requirements by Test Type and Graduation Requirement Needed for Students who Took Either the SAT or ACT Only

Students Lacking Reading Graduation Requirement			
ACT (n=369)		SAT (n=49)	
n	%	n	%
78	21.1	3	6.1
Students Lacking Math Graduation Requirement			
ACT (n=98)		SAT (n=34)	
n	%	n	%
27	27.6	4	11.8
Students Lacking Reading and Math Graduation Requirement			
ACT (n=203)		SAT (n=32)	
n	%	n	%
10	5	0	0

Of the 120 students who only took the SAT, 49 students needed to meet the reading graduation requirement only, and only 3 (6.1%) of those students met the SAT reading concordant score. 34 students who took only the SAT needed to meet only the math graduation requirement, and only 4 (11.8%) of them met the SAT math concordant score. 32 students who only took the SAT needed to meet both the reading and math graduation requirements, and none of those students met both the reading and math concordant scores on the SAT.

Based on the results, students who took only the ACT assessment had more than three times higher passing rate for meeting the reading concordant scores and more than double the rate for meeting math concordance scores than students who took only the SAT assessment. Additionally, for students who needed to meet both the reading and math graduation requirements, the ACT is the only exam in which students were successful, with no students meeting both requirements on the SAT.

Cost-Effectiveness Analysis

Using the results presented earlier, one can see that among the 547 students who took both assessments, 80 students met whatever assessment graduation requirements they were lacking through the ACT concordance scores. (This result is obtained by summing up the numbers presented in Table 2 for the ACT column.) Similarly, of these 547 students, 34 met the assessment graduation requirements via the SAT concordance scores. Of the students who only took one of the two assessments, an additional 115 students out of 670 met all assessment graduation requirements via the ACT assessment and an additional 7 students out of 120 met them through the SAT concordance scores.

Altogether, 195 students met all assessment graduation requirements using the ACT non-college reportable assessment and 41 met them on the non-college reportable SAT assessment. The District costs for the administration of these two assessments were \$40 per student participating in the NR ACT and \$32.64 per student for the NR SAT. Generally, when conducting cost-effectiveness analysis, all costs of a program or intervention must be considered. In this case, the administration of the assessments occurred on a school day, so the District did not bear practically any additional costs for facilities, electricity, security, teacher substitutes, etc.

Table 4 below shows the results of the cost analysis. The results demonstrate that the District cost per student meeting assessment graduation requirements via concordance score was approximately two times higher with the NR SAT administration than with the NR ACT administration.

Table 4*Cost Analysis for Two Non-Reportable Assessments*

Assessment	Number of Participants	Cost per Participant	Total District Cost	Number of Students Meeting Assessment Graduation Requirement	District Cost per Potential High School Graduate
ACT	1217	\$40	\$48, 680.00	195	\$249.64
SAT	667	\$32.64	\$21, 770.88	41	\$531.00

Summary and Limitations

For this group of students for whom taking the non-college reportable ACT/SAT exams was potentially their last chance to meet assessment graduation requirements, their success rate in meeting the missing assessment graduation requirements via concordance scores on the NR ACT was higher than that based on the NR SAT. In addition, the District cost of administering these assessments for each additional potential high school graduate was approximately two times lower for the NR ACT than for NR SAT. The word “potential” is used here because in addition to satisfying assessment graduation requirements, students must meet other criteria, such as specific number of credits in various curriculum areas. In fact, 38 students (92.7%) out of the 41 who met assessment graduation requirements via concordant scores on the SAT graduated from high school in 2023-2024. Similarly, 184 students (94.4%) out of the 195 who met concordant scores on the ACT became high school graduates. The numbers of actual high school graduates were not used in the cost-effectiveness analysis above because the eligibility for high school diplomas depend not only on meeting the assessment graduation requirements but also on other criteria as mentioned above.

These results should not be overly generalized as they were based on this specific group of students who did not satisfy at least one of the assessment graduation requirements at the end of their senior year. Another limitation of this analysis is that due to the small sample size of the SAT group, it was not possible to make statistical adjustments for students who took only one of the two assessments considered in this report. Therefore, is possible that other factors such as student demographic characteristics or previous achievement may have influenced the results. On the other hand, the analysis based on the group of students who participated in both assessments does not have this limitation.