

2013 Grade 10 FCAT 2.0 Reading Concordance Study

Concordant scores are alternatives to the testing requirement that allow students to demonstrate that they have either met or exceeded the passing standard using an alternative test. These scores must be reviewed, and potentially revised, when test procedures, test content, or large shifts in the testing population change.

Florida Statute 1008.22 states:

The Commissioner of Education shall analyze the content and concordant data sets for nationally recognized high school achievement tests, including, but not limited to, the PSAT, PLAN, SAT, ACT, and College Placement Test, to assess if concordant scores for FCAT scores can be determined for high school graduation. When content alignment and concordant scores can be determined, the Commissioner of Education shall adopt those scores as meeting the graduation requirement in lieu of achieving the FCAT passing score and may adopt those scores as being sufficient to achieve additional purposes as determined by rule. Each time that test content or scoring procedures change for the FCAT or for a high school achievement test for which a concordant score is determined, new concordant scores must be determined.

The FCAT was based on the Sunshine State Standards adopted in 1996. The passing score for grade 10 FCAT Reading was a scale score of 300 and a concordance study conducted in 2003 determined the concordant scores for the ACT and SAT were 15 and 410, respectively. A second study was conducted in 2009 because the content of the ACT and SAT was revised (see highlighted statute excerpt above) and new concordant scores were established (18 for ACT, 420 for SAT).

In spring 2011, Florida began the transition to the FCAT 2.0, which is based on the Next Generation Sunshine State Standards adopted in 2007. For the first FCAT 2.0 administration, scores were reported on the old FCAT scale through equipercentile linking since the scale and cut scores had not yet been established for FCAT 2.0 and grade 10 students passed if they received a scale score of 300 or higher. Once the scale was established for FCAT 2.0, a linking study was performed and determined that an FCAT 2.0 scale score of 241 was equivalent to the FCAT 300, so students who entered grade 9 in 2009-10 or earlier are able to pass the Grade 10 FCAT 2.0 Reading test/Retake with this score. Since the 241 score is equivalent to the FCAT 300, and the FCAT 300 is concordant with the ACT 18 and SAT 420, students required to pass the FCAT 2.0 with a score of 241 may use the previously established FCAT concordant scores.

In fall 2011, a standard setting process took place and, as a result of that process, the recommended Level 3 cut score (or passing score), a scale score of 245, was adopted by the State Board of Education in December 2012. Since earning a scale score of 245 on the Grade 10 FCAT 2.0 Reading assessment is a graduation requirement for students who entered grade 9 in 2010-11 and beyond, the old FCAT concordant scores cannot be used to satisfy this requirement because they are concordant with the FCAT 300 score/FCAT 2.0 241 score, not the FCAT 2.0 245 score. As referenced in the statute above, the test content changed to assess new standards, and a study had to be conducted to determine new concordant scores.

A concordance study is a recognized technical procedure for converting scores from one standardized test to another. Using this procedure, two tests are linked through an analysis of test results of students who have taken both tests. These studies can take some time, because the experts performing the analyses need to wait until a sufficient sample of these students is available to ensure reliable data. Once the study is conducted, two scores are considered concordant when they have equal, or close to equal, Percentile Ranks (PR).

The updated study included students who took Grade 10 FCAT 2.0 Reading for the first time in 2011 or 2012 and also took the SAT or ACT. Only first-time SAT or ACT scores were used. By early January 2013, there were 59,830 students who had taken both the Grade 10 FCAT 2.0 Reading and the ACT Reading, and 62,177 students who had taken both the FCAT 2.0 Reading and the SAT Verbal. The correlations between FCAT 2.0 and these two tests were found to be positive and moderately strong. Based on psychometric analyses of the samples and determined percentile ranks, the new concordant ACT and SAT scores corresponding to the FCAT 2.0 scale score of 245 are 19 and 430, respectively (as indicated in the table below).

Table 1: FCAT 2.0 Reading and ACT Reading /SAT Verbal Concordance Studies

ACT Reading/FCAT 2.0 Reading		SAT Verbal/FCAT 2.0 Reading	
N=59,380 (Correlation: 0.748)		N=62,177 (Correlation: 0.790)	
ACT Reading	FCAT 2.0 Reading	SAT Verbal	FCAT 2.0 Reading
19 (PR: 48.3841)	245 (PR: 42.9623)	430 (PR: 26.0981)	245 (PR: 23.5867)
18 (PR: 42.1320)		420 (PR: 22.6466)	
*PR refers to "Percentile Rank"			

Due to differences in the ACT and SAT scale structures, it is not always possible to identify exact matching PR scores; therefore, the Department has selected the SAT or ACT concordant score that ensures a comparable score by choosing the score that meets or exceeds the PR that corresponds to the FCAT 2.0 passing score.

Providing options for every high school student to meet high school exit examination requirements is consistent with the state's commitment to ensure that every student is prepared to enter postsecondary education or the workplace. Using the results of the concordance study as a basis upon which assessment options are established may ensure that every high school student has graduation exit options without lowering the state's academic standards.