What Kind of Interpretations Can Be Made on the Basis of ACT Scores?

ACT is often asked whether student scores on the ACT® test can be used to make norm-referenced or standards-referenced comparisons. Norm-referenced interpretations compare students to one another, while standards-referenced interpretations measure student performance against predefined content standards. This brief shows that, while the ACT provides data that permit norm-referenced interpretations of student scores, the ACT is fundamentally designed and developed as a standards-referenced assessment whose scores represent performance at meeting the requirements for college readiness.

The ACT is a curriculum-based achievement test that measures what students need to know to be ready for entry-level college-credit courses. The content of the ACT is based on the results of the ACT National Curriculum Survey®, a nationwide survey of educators conducted every three to four years. The survey results identify what is important for high school graduates to know and be able to do when they enter college. These expectations are summarized in and defined by the ACT College Readiness Standards™. Each test form of the ACT is developed to measure the College Readiness Standards so that student performance on the ACT can be tied directly to these standards. And because these standards remain consistent from one form of the ACT to the next, it is possible for students to demonstrate improvement in their performance across succeeding administrations of the ACT or between EXPLORE® (grade 8), PLAN® (grade 10), and the ACT, the three longitudinal assessment components of ACT’s College Readiness System.

The ACT, then, provides standards-based interpretations of student performance by reporting scores that are directly related to standards that define college readiness. Because the ACT is developed on the basis of content standards rather than developed to maximize differentiation among students, maximize statistical prediction, or ensure a particular statistical distribution of test scores, it is possible—although admittedly highly unlikely—that all students could earn the same ACT score. That is, it is theoretically possible for all students in a state, school, or class to have the same level of achievement, in which case they would all attain the same score on the ACT.

There is also a second type of standards-based interpretation that can be made based on ACT scores, one that helps students determine if their performance is sufficient for them to be ready for entry-level college-credit courses without remediation. As part of our empirical definition of college readiness, ACT has established its College Readiness Benchmarks, which are the typical ACT scores that are used to place students into particular entry-level college courses across the United States: English Composition, College Algebra, introductory social science courses (such as Economics and U.S. History), and Biology.
ACT developed the College Readiness Benchmarks based on actual student performance in credit-bearing first-year college courses at a nationally representative sample of two- and four-year institutions. A student who meets a particular Benchmark has a 50 percent chance of earning a grade of B or above, or a 75 percent chance of earning a grade of C or above, in the corresponding college course. Students who take the ACT can therefore interpret their scores relative to these Benchmarks as another indicator of their readiness for college. Both the College Readiness Standards and Benchmarks provide standards-based interpretations that students can use to compare their performance to 1) the specific knowledge and skills that colleges expect of their entering students and 2) scores typically used to determine whether students are ready for credit-bearing college courses or whether they will likely need to take remedial courses when they enter college.

While the ACT is designed and developed to be a curriculum-based achievement test focused on college readiness standards, students also want to know how their scores compare to those of other students. ACT therefore reports two types of norms that students can use to compare their performance: national norms and state norms. National norms are based on tenth-, eleventh-, and twelfth-grade students in the U.S. who have taken the ACT in the last three years, and state norms are based on the subset of this group from the student’s own state. These norms indicate the percentage of students in the particular group who scored at or below each score point on the ACT. However, the ACT is not developed on the basis of norms. Rather, norms simply summarize, after the fact, how a particular group of students performed on the test during the previous three years.

The ACT has thus been designed to allow students to make legitimate standards-based and norms-based interpretations of their performance. Whether students are interested in how they performed relative to content standards, relative to typical college course placement cutoffs, or relative to their peers, the information provided on the student score reports allows these comparisons. By offering each type of interpretation, students, high schools, and colleges can evaluate student progress toward becoming ready for college in multiple ways.