



Criterion-Referenced and Norm-Referenced Scores

Criterion- and norm-referenced scores provide important (but different) information to educators. This FAQ explains why *i-Ready* includes both types of data to create a well-rounded view of student performance.



Criterion-Referenced Scores



Norm-Referenced Scores

Simple Definition	Describes a student’s performance based on proficiency on a specific set of skills and concepts. Measures what the student knows and doesn’t know at the time of assessment. The student’s performance is not compared to other students’ performance on the same assessment.	Describes a student’s performance in comparison to the performance of grade-level peers. Students are compared to one another, without indicating expected level of proficiency in skills or concepts.
Used For	Determining if students are proficient in grade-level skills and concepts	Determining how students compare to one another
<i>i-Ready</i> Examples	<i>i-Ready Diagnostic’s</i> grade-level placements	<i>i-Ready Diagnostic’s</i> percentile ranks
Real-World Examples	<p>Driving Test: Driving tests are designed to determine if a driver has mastered proficiency with the skills and concepts required to safely drive on the road. Driving tests do not rank drivers against other drivers. All drivers can get 100% if they master the skills required (and we hope they do)!</p> <p>End-of-Unit Exams in School: These exams are designed to determine whether students have mastered the material presented in a specific unit. Each student’s performance is measured based on the material presented (i.e., what the student knows and what the student doesn’t know). Again, all students can get 100% if they have fully mastered the material.</p>	<p>Pediatric Growth Charts: Growth charts are commonly used by pediatricians to track a child’s growth compared to the growth of other children of the same age. Growth charts compare a child’s height, weight, and body mass index to the height, weight, and body mass index of same-age and same-gender children.</p> <p>The SAT®: A classic example of a norm-referenced test, the SAT is designed to determine one high school student’s proficiency compared to the proficiency of other high school students.</p>

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Why does *i-Ready* have both criterion- and norm-referenced scores?

Having both criterion- and norm-referenced scores provides educators with a well-rounded view of student performance. *i-Ready*'s key criterion-referenced measure is the placement level. This is a standards-based interpretation of the scale score. A student's performance is interpreted to offer an understanding of what the student knows or can do and what the student still needs to work on. *i-Ready*'s normed scores, which are reported as percentile ranks, measure a student's performance against the performance of their grade-level peers. Therefore, if a Grade 4 student scores at the 98th percentile rank, that student is scoring better than 98% of Grade 4 students nationally. Norms are also reported out by season, such that they depend not only on a student's grade, but also on when during the school year the Diagnostic was administered.

How can an assessment serve as both a criterion-referenced and a norm-referenced assessment?

i-Ready Diagnostic describes student performance using both criterion-referenced scores (i.e., grade-level placements) and norm-referenced scores (i.e., percentile ranks). *i-Ready* scale scores and placement levels offer an understanding of which skills a student has mastered and which areas to focus on next for instruction. *i-Ready*'s normed scores were derived by analyzing a sample of students from across the country to understand their performance relative to grade-level peers on the *i-Ready Diagnostic*.

What is the difference between grade-level placements and norm-based grade-level equivalency scores?

The *i-Ready* grade-level placements were developed with the help of educators to indicate the level of knowledge and skill that students need for various levels of proficiency. Most norm-based grade-level equivalency measures, on the other hand, only show how students in a grade relate to one another but actually do not indicate anything about whether a student has achieved the necessary skills for grade-level proficiency.

Why are my most advanced students placing into a lower instructional level than expected?

The placement level, a criterion-referenced score, offers an understanding of which skills a student has mastered and which areas should become instructional priorities. The determination of *i-Ready* placement levels was made through a multiyear standard-setting process that leveraged content experts and a broad range of educators with an understanding of grade-level expectations. This expertise was applied to determine how to translate a scale score into a placement level to best represent a student's skill level across core standards. The placement levels, therefore, represent performance against a set of criteria or expectations for performance at each grade level. In contrast, a student's normed scores reflect performance relative to that of their grade-level peers (not relative to a set of criteria for skill mastery). *i-Ready* was built on a rigorous set of standards, so it is possible that there are foundational or grade-level skills even top-performing students have yet to master. For example, a Grade 4 student may be in the 90th percentile in geometry, meaning they are performing higher than most of the Grade 4 students in the country. However, if the majority of Grade 4 students have significant gaps in their knowledge of geometry skills required by the standards, a student might still have a placement that is below their chronological grade, even though they're performing so well relative to their national peers.