

2015 NWEA MAP Growth Normative Data

Looking for context to MAP® Growth™ normative percentiles? The “**2015 NWEA™ Comparative Data One Sheet**” includes multiple **College and Career Readiness (CCR)** benchmarks, including those from **ACT®** and **Smarter Balanced Assessment Consortium (Smarter Balanced)**.

By using carefully constructed measurement scales that span grades, MAP Growth interim assessments from NWEA offer educators efficient and very accurate estimates of student achievement status within a subject. Before achievement test scores can be useful to educators, however, they need to be evaluated within a context.

To that end, 2015 RIT Scale Norms allow educators to compare achievement status—and changes in achievement status (growth) between test occasions—to students’ performance in the same grade at a comparable stage of the school year. This contextualizing of student performance:

- + helps teachers as they plan instruction for individual students or confer with parents
- + supports school and district administrators as they focus on allocating resources
- + empowers school staff as they work to improve all educational outcomes

For the research behind changes to the 2015 RIT Scale Norms, please see **page six**.

For many reasons, it is inadvisable to compare performance of a student on one set of test norms to his or her performance on another. NWEA strongly advises educators to use the 2015 norms because they provide the current and most accurate reference for MAP Growth scores.

Slight differences from the 2011 norms have been observed, some of which reflect true change in the performance of the students. In addition, evidence indicates three other plausible sources for these differences.

- + Schools demographics changed between 2011 and 2015 and may have contributed to differences.
- + Methodological improvements such as a larger and more representative sample, the use of nine (vs five) terms of data, and a new model for estimating growth have made the 2015 norms more accurate.
- + The varied nature of Common Core State Standards adoption, implementation, and testing appear to have resulted in lower test scores. The sources of these observed differences are the subject of further research.

Well-constructed test score norms can inform many education-related activities. Educators find RIT Scale Norms especially useful in four key areas:

1. Individualizing instruction
2. Setting achievement goals for students or entire schools
3. Understanding achievement patterns
4. Evaluating student performance

MAP Growth Status and Growth Norms for Students and Schools

The 2015 NWEA RIT Scale Norms Study provides status and growth norms for individual students as well as for schools on each of the four RIT scales: reading, language usage, mathematics, and general science. The study's results are based on K-11 grade level samples. Each sample is comprised of 72,000 to 153,000 student test records from approximately 1,000 schools. These numbers vary by subject. These samples were drawn randomly from test record pools of up to 10.2 million students attending more than 23,500 public schools spread across 6,000 districts in 49 states. Rigorous procedures were used to ensure that the norms were representative of the U.S. school-age population.

Since MAP Growth assessments can be administered on a schedule designed to meet a school's needs, tests can be administered at any time during the school year. The 2015 norms adjust for this scheduling flexibility by accounting for instructional days, allowing more valid comparisons for status and growth. For example, the norms may be used to locate a student's achievement status (as a percentile rank) for any specified instructional week of the school year.

Similar adjustments are made to the norms when comparing student growth. Median growth conditioned on the student's initial score may be determined for any number of instructional weeks separating two test occasions. This allows educators to make appropriate norm-referenced interpretations of test results that are consistent with their chosen testing schedule. As an additional feature, the norms provide the percentile rank corresponding to a student's observed gain over an instructional interval of a specific length. That is, the norms tell educators what percentage of students made at least as much growth as a particular student for the same period of time, whatever its duration. Situating growth as relative to percentages of students nationwide helps educators move beyond the simple conclusion that a student either did or did not "make target growth."

In order for the norms to take instructional days into account, school district calendars for each school represented in the study sample were retrieved. Using the instructional days data plus the dates of testing, NWEA created "periods or testing seasons" for beginning-of-year norms, middle-of-year norms, and end-of-year norms. Tests occurring at the center of these periods were used to construct the status and growth norms tables that appear below. However, if a school's testing calendar does not conform to the one used to construct these tables, the normative references provided through the NWEA reporting system still allow appropriate comparisons to be made.

Understanding Standard Deviation (SD)

The columns labeled "SD" in the tables below contain the standard deviations of the means. An SD is simply a measure of dispersion of scores around the mean value; the smaller the SD, the more compact the scores are around the mean. SDs are particularly useful when comparing student-level norms and school-level norms and can help educators make a range of inferences. For example, knowing the spread of the data can help identify students who fall well above or below the school average. When making determinations of relative effectiveness, the SDs linked to school norms can also help determine if schools have roughly the same range of scores.