

The science behind MAP

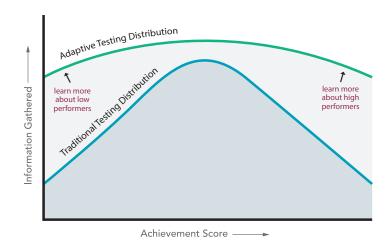
MAP measures growth on a longitudinal scale, regardless of changes to standards. A score of 200 on MAP assessments aligned to rigorous new state or Common Core standards has the same meaning as a MAP score of 200 from 30 years ago.

MAP assessments are based on a well-documented and established theory of measurement called Item Response Theory, under which the difficulty of test questions and each student's achievement level can be measured using the same scale.

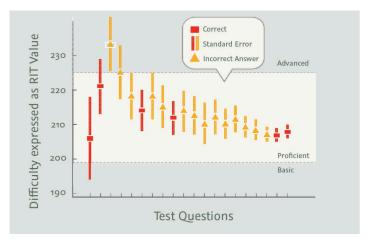
The numerical (RIT) value assigned to a student represents the level of test item complexity at which he or she is capable of answering correctly about 50% of the time. It is simply the most accurate way to pinpoint a student's readiness for new concepts—their precise zone of proximal development.

MAP is computer-adaptive, meaning it is independent of grade level to reach below or above grade level for items to meet the student's ability. This enables educators to use MAP test results to identify relative strength and weakness in goal areas for mathematics, reading, language usage, or science in relation to the standards being assessed. Further, this precise measure of a student's abilities empowers educators to differentiate instruction at the level of the individual student. MAP challenges the top performers while not overwhelming students whose skills are below grade level. No students are lost at the upper and lower levels of achievement.

Because MAP enables teachers to see both what students know and what they're ready to learn, educators can target supplemental instruction accordingly, rather than guessing where the gaps in student understanding may be.



Adaptive tests provide more valuable information for making individual status and progress decisions for all students, but particularly for lower and higher performing students.



MAP assessments adapt throughout the test in response to each student's performance. If a question is answered correctly, the test dynamically selects a more challenging item; if a student misses a question, the follow-up item is easier. First-time MAP users begin with a grade-appropriate item; subsequent tests start at the achievement level demonstrated on the student's previous test.

Putting your data to use

PREDICTING PROFICIENCY

MAP provides information on where students are performing on individual state and Common Core standards, so test results can be used to project proficiency on high-stakes tests. MAP includes technology-enhanced item types and features that allow for deep assessment of reading, language usage, and mathematics comprehension, and increased cognitive complexity, or Depth of Knowledge, enabling students to demonstrate evidence of their learning.

PREDICTING COLLEGE READINESS

NWEA research has shown a high predictive relationship between students' scores on MAP assessments and the college readiness benchmarks of the EXPLORE®, PLAN®, and ACT® achievement tests.

UNIVERSAL SCREENER / RTI PLACEMENT

MAP assessments adapt beyond grade level to find the true level of a student's performance, helping educators identify at-risk students and build a learning plan. MAP assessments received the highest possible rating for classification accuracy, and high ratings in all other categories, from the National Center on Response to Intervention (NCRTI).

DIFFERENTIATED INSTRUCTION

Students within the same grade often perform at different grade levels, and educators face the challenge of ensuring that every child—from highest to lowest achievers—continues to grow. MAP data make it easy to identify learning levels so teachers can engage in differentiated instruction and skill-based grouping that leads to positive results for every child.

PROGRAM EVALUATION

With tightening budgets and expanding student populations, MAP data have become key components in assessing the impact of specific programs. MAP scores show conclusively what works, so when special programs are instituted, educators can see precisely how much growth has occurred with participating students.

STUDENT GOAL SETTING

Students become more committed to the learning process when they can set goals and see results. Using the Student Goal Setting worksheet and other MAP tools, it's easy for teachers and students to build an action plan together, and for parents to become engaged in the process.

Read NWEA partner case studies on these topics, and more, at NWEA.org/CaseStudies.

They know exactly what their goal is every time they walk in. And when you're walking on campus, you'll have a kid run up to you and say, 'I hit my goal!' It means a lot to them. They're into it. They understand it and they know they're getting better."

- Principal Dean Cunningham, Nenahnezad Community Schools, NM



Interpreting your data

From the teachers who work with students every day to the administrators who manage entire districts, data from MAP empower educators.

MAP assessment data are presented in easy-to-access reports available immediately after assessment, and the content serves all levels of educational decision making. The reports are valuable in many areas:

- establishing a student's precise instructional level and identifying which areas to focus on for academic growth
- comparing a student's academic progress with others in the class, grade, school, or district
- tracking academic growth with precision over a school year or over several years, even through the transition to the Common Core State Standards or other rigorous state standards

MAP reports are ideal for:

- planning individual or group instruction
- monitoring student growth and achievement
- predicting state assessment performance
- engaging students and parents
- diagnosing student strengths and weaknesses
- analyzing school or district performance
- planning school improvements

Visit NWEA.org/FeaturedReports to see annotated versions of key MAP reports, including the Student Progress Report, Class Overview Report, and District Summary Report.

Teachers depend on MAP reports to help them streamline teaching strategies and provide differentiated instruction, and to create flexible grouping across the classroom.

School and district leaders use MAP reports to evaluate programs and monitor school and student performance relative to growth, proficiency, and norms.

District decision makers rely on MAP reports to aid in resource management, help determine performance trends by grade and school, and compare local student achievement to the national scale.

The Class Report (excerpt) shows each student's performance level across reported goal categories defined by state standards, including the Common Core. The reports also provide RIT scores that indicate each student's instructional levels.

Class Report (by Test RIT) MAP: Reading 2-5 Common Core 2015/Common Core English Language Arts K-12: 2015									
Name (Student ID)	Gr	Test Date	RIT (+/- Std. Err)	Percentile (+/- Std Err)	Lexile [®] Range	Test Duration	Goal Performance		
							Informational Text	Literature	Found Skills, Vocabulary
Dugaw, Daytan N.	5	09/12/13	178- 181 -184	3-4-6	158-308	75 m	163-177	175-187	187-197
Devany, Noni I.	5	09/12/13	185- 188 -191	7-10-13	288-438	20 m	185-196	185-195	177-189
Scruggs, Ambrose E.	5	09/12/13	194- 197 -200	17-22-31	452-602	42 m	191-202	191-203	192-204

The value of MAP

Measures of Academic Progress® (MAP®) are K-12 interim assessments that measure growth, project proficiency on high-stakes tests, and inform how educators differentiate instruction, evaluate programs, and structure curriculum.

Computer adaptive MAP assessments reveal precisely which academic skills and concepts the student has acquired and what they're ready to learn. MAP assessments are grade independent and adapt to each student's instructional level. Every item on a MAP assessment is anchored to a vertically aligned equal interval scale, called the RIT scale for Rasch UnIT—a stable measurement, like inches on a ruler, that covers all grades.

And because the measurement is reliable and accurate, RIT scores serve as an essential data point in a student's learning plan; educators can see their precise learning level and respond accordingly.

MAP ASSESSMENTS

- MAP for Reading, Language Usage, and Mathematics (includes Spanishlanguage version of MAP Mathematics)
- MAP for Primary Grades (MPG) for Reading and Mathematics
- MAP for Science
- End of Course Assessments in Mathematics

Educators rely on MAP to provide essential information about their students' continuum of learning and promote a positive growth

trajectory. Unlike other standardized tests, MAP is a tool to help students, parents, and teachers identify strengths and opportunities, and focus instruction on the areas of greatest need.

A VALID MEASURE OF GROWTH

The measurement of student academic growth has never been more important to U.S. educators, and MAP is designed to meet that need. MAP provides educators with a stable, valid, and reliable measure of student academic growth on Common Core and other state standards, as well as high-value comparative data and proficiency projections. New MAP test items are introduced every year, but the scale behind the assessment remains stable and consistent year after year, regardless of the standards being assessed.

GROWTH NORMS: THE KEY TO EVALUATING GROWTH

Educators need to know if their students' growth is above the national norm or below, and NWEA provides that context with growth norms that place your students and schools within a representative national sample. Being able to access these growth norms gives teachers the opportunity to help students set realistic growth targets and take ownership of their own learning process, and they serve as a starting point for important growth discussions among students, parents, and teachers. NWEA norming studies also produce status norms that show percentile ranking on a national scale.









Visit **NWEA.org** or call **866-654-3246** to find out how NWEA can partner with you to help all kids learn.

Founded by educators nearly 40 years ago, Northwest Evaluation Association (NWEA) is a global not–for–profit educational services organization known for our flagship interim assessment, Measures of Academic Progress (MAP). More than 7,600 partners in U.S. schools, school districts, education agencies, and international schools trust us to offer pre-kindergarten through grade 12 assessments that accurately measure student growth and learning needs, professional development that fosters educators' abilities to accelerate student learning, and research that supports assessment validity and informed policy. To better inform instruction and maximize every learner's academic growth, educators currently use NWEA assessments with nearly 8 million students.