

As a society, Americans have demonstrated that we value public education. For more than 100 years we've placed our resources and trust in the institution—and over the decades, we've broadened access in hopes of providing all children a strong foundation for their futures.

Judging from our current education reforms as well as our related innovations, research, philanthropy, and highly spirited public debate, citizens continue to believe that educating our country's children matters.

At its core, education is about the learning process. How do we teach the various literacies, content knowledge, critical thinking skills, ethics, habits of mind, and everything else so that students actually learn, retain, and transfer this knowledge? How do we tell whether students have learned what was taught? And what happens if they have not?

Educational assessment attempts to answer those questions so that we can understand whether the learning process has been successful—and if not, what might be done to improve learning outcomes.

Since the days of Socrates, the fundamental purpose of all types of educational assessment has remained the same: to understand and support student learning. However, the assessment process has greatly evolved. Now, there are different types of educational assessments and a menu of purposes for using them. Educators generally agree on three broad categories of educational assessment: formative, interim, and summative.

FORMATIVE ASSESSMENT GUIDES LEARNING

Formative assessment includes giving clear, actionable feedback to students, sharing learning goals, and modeling what success looks like.

By design, formative assessment:

- has an explicit connection to an instructional unit.
- consists of many kinds of strategies, and can be as informal as asking a well-crafted question.
- helps educators guide the learning process rather than grade or evaluate student performance.

SUMMATIVE ASSESSMENT CERTIFIES LEARNING

Generally, educators administer a summative assessment near the end of an instructional unit to help them answer the question, "What did students learn and did they learn enough?"

All sorts of different assessment tools are used for summative assessment, including:

- end of unit tests and end of course tests
- dance performances
- portfolios
- oral examinations
- standardized state summative assessments

However, it's the state summative assessments that often come to mind. Federal educational policy requires data collected from these tests to be used in high-stakes ways, such as for accountability. Legislators also use state summative assessment data to communicate about the state of education to the broader public.

Since summative assessment happens so late in the instructional process, the most effective use of its test data is evaluative versus instructional. For teachers, data can help guide decisions such as assigning grades for a course, promotion to the next grade, graduation, and credit for courses. Summative assessment data also play a role at the administrative level, where they're extremely useful assets for planning curricula, determining professional development needs, and identifying the resources and federal assistance the school needs to flourish.

INTERIM ASSESSMENT GUIDES AND TRACKS LEARNING

A wide middle ground exists between teachers' dayto-day formative assessment of student learning and the formal protocols of state summative assessment. These opportunities—captured under the umbrella term interim assessment—permit educators to gather information about many things, including:





- individual and collective student growth
- effectiveness of teaching practices, programs, and initiatives
- projection of whether a student, class, or school is on track to achieve established proficiency benchmarks
- instructional needs of individual students

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Educators can use interim assessments in a formative way, to directly guide instruction. When this happens, data aggregation is considered the key difference between formative and interim assessment. "The specific interim assessment designs are driven by the purpose and intended uses, but the results of any interim assessment must be reported in a manner allowing aggregation across students, occasions, or concepts." (Perie, et al. 2009)

This ability to aggregate data at critical points in the learning cycle allows interim assessment to have a broader set of purposes than both formative and summative assessment. As a result, interim assessment is the only type of assessment that provides educators with data for instructional, predictive, and evaluative purposes.

HOW INTERIM ASSESSMENT SERVES A VARIETY OF PURPOSES

To understand the value of interim assessment, it's helpful to understand its variety of purposes. One of the purposes is to provide educators insight into growth patterns in student learning. Growth can be calculated from student achievement scores taken at logical intervals, such as fall to spring, or fall to fall, or whatever makes the most sense for the local district. Many educators use the above schedule when administering Measures of Academic Progress® (MAP®), an interim assessment from NWEA; the seasonal system permits enough instructional time

between test administrations to be able to calculate growth in learning with statistical confidence.

Another purpose of interim assessment is to help teachers make decisions around differentiating instruction. In reality, a student's grade does not necessarily relate to their level of instructional preparedness, meaning what they know and what they are ready to learn. Within any given classroom, teachers will have students who are ready to go deep with concepts, be challenged, and apply and expand their learning. Conversely, there will be other students who need to learn foundational concepts and skills before they're prepared for grade-level concepts and skills.

These missing foundational concepts and skills may be from the previous grade, or even further back. This provides an enormous challenge for teachers whose only information on their students relates to specific grade-level content. For the students who are ready to be challenged—what are they ready to be challenged by? And for the students who are not prepared to learn grade-level standards yet—where are they? What is their level of instructional preparedness?

Trial and error is one way to answer these questions. Another is via an adaptive interim assessment like MAP. MAP quickly and precisely targets every student's level of achievement—including students performing at, above, or below grade level.

Fixed Form or Computer Adaptive?

Fixed-form tests offer a predetermined set of items that have been carefully chosen to construct a test form to accomplish a specific purpose. Fixed form summative assessments designed to measure proficiency or mastery generally have only items that align to the grade level objectives being measured. Other fixed form tests that are designed to sort students across a broad range of achievement have a set of items that span a range of difficulty.

Computer adaptive tests (CATs) select which items a student sees from a bank of items based on the student's response pattern. The items match the student's estimated ability level, thus providing an appropriately challenging testing experience. CATs are valued for their efficiency and measurement precision, and especially for their ability to precisely find a student's instructional level in a much shorter test.

Interim assessment does more than help teachers instructionally. The other purposes of interim assessment are predictive and evaluative. Its data can help educators predict student performance on important markers, such as state summative tests, as well as evaluate whether certain teaching strategies, programs, and curricula are effective.

The table below illustrates the varied uses of interim assessment data. The uses are organized by the headers Instructional, Predictive, and Evaluative, which are key purposes of educational assessment data.

INSTRUCTIONAL	PREDICTIVE	EVALUATIVE
Understand student achievement levels in different content areas	Predict if the students, class, school, and district are on track to achieve proficiency on the state summative by linking to other indicators	Discuss student learning with students, parents, and other educators
Understand student growth patterns in different content areas	Assess on a subset of the specific learning objectives contained within the state summative test's content blueprint. (These types of interim assessments are called benchmark assessments.)	Assess school improvement efforts, such as professional development needs, areas of instructional focus for the whole building, etc.
Indicate where to focus instructional energy	Set challenging and achievable growth targets with their students using individual student's growth history and mean growth norms	Evaluate programs
Understand how to group students effectively		Setting curricular pacing
Identify specific students in need of remediation, or extra instructional time and support, before a cycle of failure starts		
Determine entry point for supplemental curricular materials for gifted and talented students		
Determine entry point for supplemental curricular materials for students in need of scaffolded support		
Identify student's zone of proximal development, where their learning can best be supported and encouraged to grow		
Modify classroom instruction		





INTERIM ASSESSMENT AND STUDENT-OWNED LEARNING

In addition to fulfilling all three key purposes of educational assessment—instructional, predictive, and evaluative—interim assessment has the potential to increase students' assessment literacy. For a student, assessment literacy involves understanding how he or she is evaluated. What do the data mean? What do the data say about his or her learning achievements and challenges? How can a teacher use assessment data with each student to help set personalized learning goals?

If educational assessment is a critical part of the learning process, then assessment literacy is essential for students to become owners of their learning. For students, the ability to understand their own achievement data and what it reveals about their strengths, their growth, and their resilience as learners is nothing short of empowering. Summative assessment results tend to come too late in the year to engage students. Interim assessment, however, supplies information that can motivate students to set, achieve, and celebrate learning goals.

THE CASE FOR INTERIM ASSESSMENT

Interim assessment allows educators to do something immensely important: compare data across groups and track trends in learning over time. The ability to compare the performance of students to that of other students gives educators an important data point. Additionally, it can help with setting reasonable growth targets.

It's impossible to overstate the importance of measuring growth. Whether a student performs at, above, or below grade level, he or she can still show learning growth—and it's the explicit responsibility of teachers to nurture every student's growth potential. For some students, achieving proficiency is a very steep ascent, and assessments that only test for achievement don't give the whole picture. A student may not achieve proficiency for a number of reasons—but if all you know about a student is that he or she didn't "make the grade," one would miss how much effort went into learning and how much progress was made. Progress towards goals is growth. Every student is capable of it.

This article is the first in a multi-part series. In the next part, we'll explore the importance of data comparability.



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 6,800 partners in U.S. 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' ability to accelerate student learning, and research that supports assessment validity and data interpretation. To better inform instruction and maximize every learner's academic growth, educators currently use NWEA assessments and items with nearly 10 million students.

References

Perie, M., Marion, S. and Gong, B. (2009), Moving Toward a Comprehensive Assessment System: A Framework for Considering Interim Assessments. Educational Measurement: Issues and Practice, 28: 5–13. Retrieved on January 23, 2014. http://www.nciea.org/publications/ConsideringInterimAssess_MAP07.pdf

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