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eBook

Understanding assessments and their role in student learning

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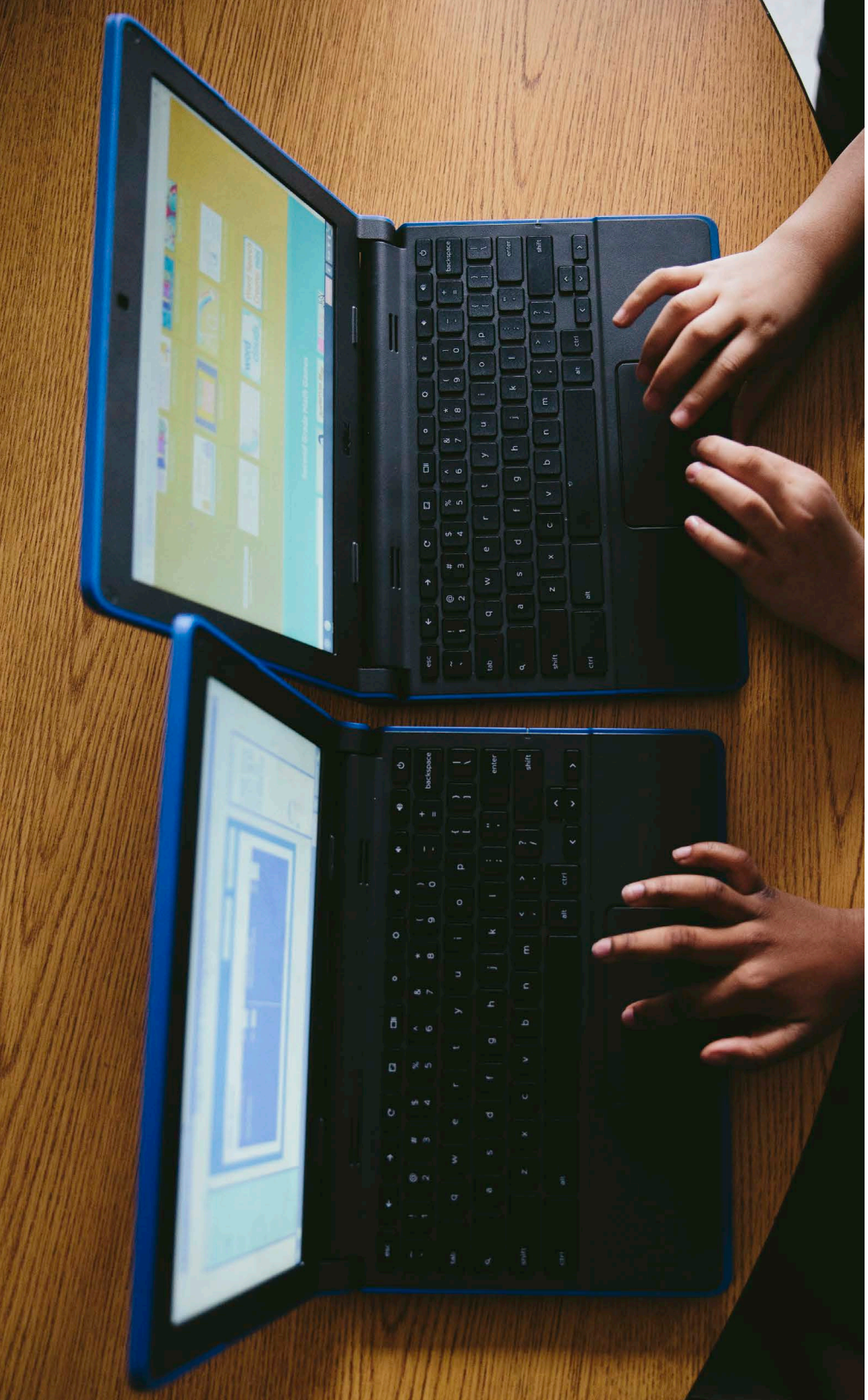
At its core, education is about the teaching and learning process.

How do we teach the necessary literacies, content knowledge, critical thinking skills, ethics, and habits of mind that are essential to prepare our children for productive, fulfilling, and engaged lives? How do we know whether students have learned what was taught and to what degree?

Educational assessments strive to answer these questions, providing valuable insights of the degree to which the teaching and learning process succeeded.

In this best of Teach. Learn. Grow. eBook, NWEA® assessment expert and regular blog contributor Kathy Dyer explores these questions, so you can better understand educational assessments and make them an instrument in your teachers' toolbox.



The big 3

There is often confusion as to what types of assessments are administered when, what data they provide, and how they benefit administrators, teachers, students, and parents. It can be confusing to select the right assessment—and how to know it's working. Let's start with reviewing the three main types of assessment: summative, interim, and formative.

Summative assessment: certifies learning

Generally, educators administer a summative assessment near the end of an instructional unit (or school year) to help them answer the question, "What did students learn?" All sorts of different assessment instruments are used for summative assessment, including:

- end-of-unit tests and end-of-course tests
- performance tasks/simulations
- portfolios
- oral examinations
- research reports
- standardized state summative assessments

Despite the array of possible summative instruments, it's the state summative test that often comes to mind. Federal educational policy requires data collected from these tests to be used for accountability purposes, and other high stakes are associated with summative assessment, such as selection, promotion, and graduation. Policymakers also use state summative assessment data to communicate the state of education to the public.

Since traditional summative assessment happens late in the instructional process, the most effective use of its test data is more evaluative than instructional. For teachers, data can help guide decisions, such as assigning grades for a course, promotion to the next grade, graduation, credit for courses, and more. Summative assessment data also plays a role at the administrative level, where it's used for planning curricula, determining professional development needs, and identifying the resources and federal assistance the district needs to flourish.

Interim assessment: guides and monitors growth

Interim assessment resides in the middle ground between the formal protocols of state summative assessment and teachers' day-to-day formative assessment of student learning. This middle ground offers opportunities—captured under the umbrella term "interim assessment"—to gather information about many things that are relevant to the teaching and learning process, 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

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. 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.

To understand the value of interim assessment, it's helpful to understand its variety of purposes. One 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 school or district. Many educators use a fall-winter-spring schedule when administering MAP® Growth™, the interim growth 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—and formative assessment—is to help teachers make decisions around differentiating instruction. If the assessment is adaptive, those decisions can better serve all the students in the class—not only those who are ready to learn at grade level. 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. Interim assessment can help identify gaps so that all students have the opportunity to grow—no matter where they are starting.

What kind of questions can an adaptive, interim assessment like MAP Growth help answer? MAP Growth quickly and precisely targets every student's level of achievement—including students performing at, above, or below grade level. In addition to helping teachers instructionally, assessment data supports students in looking at their own growth—where they are and want to go, what their goals should be, and what an action plan for learning looks like. The other purposes of interim assessment are predictive and evaluative. Its data can help educators predict student performance on important markers and evaluate whether teaching strategies, programs, and curricula are effective.

Formative assessment: guides learning

Formative assessment is not assessment of learning; rather, it's often called assessment for learning. It is a yardstick for teachers to determine what they need to do to move learners forward. It helps to answer the question, "What's next?"

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

- consists of many kinds of strategies and may be as informal as asking a well-crafted question and using the evidence collected from the question
- helps educators guide the learning process, rather than measure student performance
- provides students with data they can use to determine where they are in their learning, set goals, monitor their learning progress, and serve as instructional resources for their peers

What's perhaps most important about how we see formative assessment is the "minute-by-minute, day-by-day" aspect of it. It's the planned classroom practice of eliciting evidence of learning at all times in the classroom. Formative assessment can inform teachers of what students know or don't know and help students understand what it is they are ready to learn next. This enables teachers to adjust their instruction accordingly for each of their students, and students can adjust their learning tactics.

When teachers use assessment primarily to support learning, the divide between instruction and assessment becomes blurred (which is good). Everything students do, such as conversing in groups, completing assignments, asking and answering questions, working on projects, handing in work—even sitting silently and looking bored or confused—is a potential source of evidence about what they do and do not understand.

Teachers who consciously use formative assessment in this manner —to guide learning—understand that formative assessment is not a thing or an event (such as a test or a quiz). Rather, it is an ongoing, cyclical process that is a seamless part of the classroom culture and routine. Using simple strategies, teachers quickly extract pointed information about student understanding during common classroom activities. They analyze this information on the spot and then use it to make instructional decisions that address the understandings and misunderstandings the evidence reveals.

While the above three assessment types are the most common, not all assessments are created for the same purpose. Or, there is a lack of understanding about the purpose of the measure. Before your teachers give an assessment to their students, they should be sure they are using assessments in a purposeful way.

In a well-designed, quality assessment system, educators understand why they are giving an assessment, what decisions will be informed by the results, how and when the results will be delivered, and what metrics they are using to monitor student achievement. For a more in-depth look at creating a quality assessment system, check out our guide, **Multiple Measures Done Right**.

8 key questions

Here are the questions you should ask when selecting which assessments to give in your classroom, school, or district.

1. What's the purpose of the assessment? How will the results be used and by whom?

Purpose and use top the list when it comes to assessment. If we keep in mind that the student should be at the heart of all assessment, then all assessments should support student learning. The SAGE Handbook of Research on Classroom Assessment has a quote on page 97 that I often use: *The primary purpose of assessment is not to measure but to further learning.*

2. How can students use the assessment as a learning tool and teachers use it as a support for learning?

When educators spend precious instructional time administering assessments and interpreting the results, the utility of the information should be worth the time and effort spent. They want to understand the results and use them to meaningfully adjust instruction and better support student learning. This is the essence of what consequential relevance is. Of course, if we're talking about formative assessment practices—the day-to-day and minute-to-minute kind—then the assessment is not one *of* learning, but *for* learning. These are the types of assessments that teachers can use regularly to elicit evidence of student learning and identify changes in their teaching that are needed to move students forward.

3. What role will students play in the design of the assessment or the assessment process?

Research shows that when students help develop questions for a classroom assessment and have a deeper understanding of what they are expected to learn before the assessement, they take greater responsibility for their own learning. And this makes sense; the activity enables students to better understand what teachers expect them to know, understand, or be able to do—as well as what constitutes a proficient performance. This, in turn, allows students to support each other and take responsibility for their own learning by helping them accurately and appropriately evaluate learning against shared expectations and make any necessary adjustments to the learning.

4. Is the assessment valid?

Aligning the assessment to the learning targets, objectives, and goals—and the way those were taught—is important, as is determining if one—or more than one—target, objective, or goal will be measured in one assessment. Validity allows both students and teachers to make inferences about what students know, understand, and can do. Assessing what was taught—in the manner it was taught and learned—produces stronger inferences.

The next level where content validity matters is the assessment experience itself—meaning when the student sits down to take the assessment, what test questions, or items, do they see? In a fixed-form, grade-level test, most or all students see the same item set, namely those assessing the grade-level standards to which the student is assigned. In a cross-grade, computer-adaptive test, such as MAP Growth, an item selection algorithm presents each student with items from a broad range of standards, from across grades, and adapts to the in-the-moment performance of the test taker. Each student sees items at the difficulty level that's appropriate for them, based on their previous responses. This model of adaptivity provides precise information about a student's learning and performance in a domain area.

5. What kinds of questions will provide information on what students know and don't know—and where they need to go next?

In an interim assessment, question types will allow students to demonstrate achievement at different depths of knowledge, from simple recall to more complex sense-making to building a case using evidence.

With formative assessment practice, this information is derived less by test questions and more from the way the teacher poses a question and reviews the answers. If the entire class is required to complete an exit ticket, for example, the teacher will be able to quickly determine what students know (or don't) and what they need to do to get to the next phase in a particular learning.

6. Will you provide multiple assessment formats from which students may choose?

This question relates more to student choice in demonstrating what they know and can do than responding to a "test." This question may cause us to also consider the topic of fairness. Does each student have the same chance to show what they understand, know, or can do?

Accessibility (part of that fairness) in educational assessment translates into the tools, assists, devices, and accommodations that are allowed so that students can either take the same test as their peers or have an equivalent assessment experience. At a classroom level, teachers are acutely aware when issues of accessibility due to linguistic, physical, cognitive, or emotional capabilities arise. In a school ecosystem, there are teams of support providers, including classroom and special education teachers, tutors, school psychologists, case workers, and social services personnel focused on ensuring that students have equal access to the same educational opportunities as their peers.

7. How will students use the assessment to verify their self-assessment and monitor their progress toward the targets or objectives?

Students generate the most data in a classroom. Teaching them to understand and use the data they generate is empowering. It helps students identify what they know, what they don't know, and make plans to do something about it. Being able to understand how the assessment results—the evidence of their learning—connect to the learning targets and success criteria, as well as their self-assessment, is critical in supporting students to take ownership of their learning. Having a clear picture of what success looks like and where they are in relationship to that success helps students monitor their learning progress. This picture of success gives learners the building blocks needed to plan how they will close the gaps to get them where they want or need to be in their learning.

8. Does the investment of time in preparing and administering the assessment pay off for students, teachers, and administrators?

Assessment data can help to answer all kinds of questions and inform a variety of different decisions. These questions can range from whether a student has shown proficiency on a state summative exam, to whether students have performed well enough to earn college credit via an AP exam. Assessments can also answer whether or not—and how much—each student has grown during different intervals of the academic year. The usefulness of an educational assessment resides in the utility of its data to help inform decisions, and for that, teachers have to understand what the data means. Some questions to help them get there include: What exactly did the assessment measure? What didn't it measure? Given that, what can the data tell teachers? What can't the data tell teachers? What kind of inferences can be made from the data? And, what kind of decisions can the data reasonably inform?

Putting your assessment results to work

Are your interim and formative assessment practices effective? Let’s take a closer look.

Informing decisions with interim assessments

We mentioned this earlier, and it's worth repeating: The usefulness of an educational assessment resides in the utility of its data to help inform decisions. Interim assessment data should be able to be put to immediate use.

Computer-adaptive, interim assessments, like MAP Growth, reveal precisely which academic skills and concepts a student is ready to learn next.

Here are six ways that interim assessment data can be put to work immediately to help your teachers and students:

1. Compare and predict student achievement
2. Act as a universal screener/RTI placement
3. Plan differentiated instruction
4. Set goals with students
5. Predict proficiency
6. Communicate with parents

6 signs your formative strategies are working

Formative assessment is distinct from other types of assessment that take place throughout the learning process. It's a classroom teaching practice focused on continual checks for student understanding. Formative assessment might look like students giving each other feedback in pairs or small groups, a classroom discussion, student self-assessment, or a quick quiz or poll. And at its best, formative assessment becomes an integral part of a teaching and learning cycle that helps both your students and teachers grow.

So, how do you know if your teachers have chosen the right formative assessment strategies to support student learning?

Here are six simple things to look for in your school classrooms to understand if your formative assessment practice is effective:

1. Your teachers regularly identify and share learning expectations with students. Teachers who communicate what students should learn and the goals for their progression help students take ownership of their learning.

2. Your teachers continuously elicit evidence of student learning. Formative assessment is not an isolated event. Teachers who check in frequently and in different ways on student learning gain more information and help students to grow in the process.

3. Your teachers adapt instruction to meet students' immediate learning needs. Formative assessment is, at its core, designed to help teachers advance and better support student learning by making that learning (and gaps in learning) more visible. By using that information to adjust instruction on a continual basis, they will help students realize their full potential in the classroom.

4. Your teachers provide feedback to move learning forward and create a structure for students to act on it. Education expert Dylan Wiliam identifies two key aspects of effective feedback: It must 1) "identify any gaps between a desired learning goal and the student's present status towards that learning goal, and 2) students must take action to close that gap."

5. Students are engaged when they are involved in classroom discussions. When students "tune out," they're no longer learning. By eliminating hand-raising and replacing it with other discussion techniques, for example, teachers can significantly improve student engagement. In this vein, a teacher using randomizer strategies when asking questions helps shift the culture of learning so that all students are expected to have something to say.

6. Students support one another and take responsibility for their own learning. Effective formative assessment encourages students to reflect on their own learning and assess it, which can also lead to improved student performance.

It's important to be assessment literate in today's classrooms. Understanding the three main types of assessment, the questions you should ask when giving assessments, and how to make sure your interim and formative assessment practices are producing results are paramount to help your teachers move learning forward.

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