

Background

Any assessment is basically a process for making inferences about individuals or group of individuals. Sometimes, these inferences take the form of measurements. We want to be able to say that this student knows more third grade mathematics than that student.

However, measuring the amount of knowledge of third grade mathematics possessed by a student is not as straightforward as measuring the weight of an object on a scale or measuring the length of a table with a ruler.

In an assessment context, however, measurement is indirect—we cannot directly observe what is going on inside a student's head (and it probably wouldn't tell us much if we could!). We can only observe how a student responds to a series of questions, prompts, or tasks. We hypothesize that correct responses to these questions, prompts and tasks require the possession of certain knowledge, skills or capabilities, so when a student does better than another, we infer that this is because they have more of the knowledge, skills or capabilities in which we are interested.

Assessment is about trying to understand what or how much is “in a student's head.” A central component of formative assessment is helping teachers learn how to elicit such evidence so that their insights into student thinking can be used by both them and their students in order to advance learning. Since we cannot measure directly, we ask questions that attempt to get at knowledge or skills in order to make reasonable inferences.

Definitions

These labels and definitions are offered because it is preferable to refer to tests and assessment processes accurately. Lack of clarity in labeling educational assessments and tests can foster confusion among educators. This confusion particularly affects formative assessment, since often there is a misunderstanding that among educators that it is a particular test or other product, rather than a process used by teachers and their students on an on-going basis to gauge the success of teaching and learning, and to adjust each where necessary. This understanding is vital so that educators receive the assistance that they need to learn what formative assessment is and how it can be deployed to improve their instruction and student learning. This professional learning is essential to assuring that effective formative assessment practices are used in the nation's classrooms to improve student achievement.

Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievements of intended instructional outcomes” (FAST SCASS, October 2006). As can be seen, formative assessment is a process, not a “thing.”

Interim tests are typically administered periodically throughout the school year (e.g., every few months) to fulfill one or more of the following functions: predictive (identifying students readiness for success on a later high-stakes test), evaluative (to appraise ongoing educational programs), and/or instructional (to supply teachers with individual student performance data).

Summative assessment is designed to provide information regarding the level of student, school, or program success at an end point in time. Summative tests are administered after the conclusion of instruction. The results are used to fulfill summative functions, such as to (1) reach an evaluative judgment about the effectiveness of a recently concluded educational program; (2) arrive at an inference about a student's mastery of the curricular aims sought during an in-class instructional sequence; (3) arrive at a grade; or (4) meet local, state, and federal accountability requirements.

Curriculum-embedded tests are those that have been deliberately incorporated either in the instructional materials being used by students or in the instructional activities routinely taking place.

Diagnostic assessments are evidence-gathering procedures that provide a sufficiently clear indication regarding which targeted subskills or bodies of enabling knowledge a student possesses or does not possess—thereby supplying the information needed by teachers when they decide how to most appropriately design or modify instructional activities. Because of their time intensive and specific nature, they are only used with that subset of students for whom the learning process has broken down and the students are not making sufficient progress.

Universal screening tests are periodically conducted, usually two or three times during a school year, to identify students who may be at risk, monitor student progress, or predict students' likelihood of success on meeting or exceeding curricular benchmarks. Universal screening tests are typically brief and conducted with all students at a particular grade level.

Progress-monitoring tests are periodically administered, typically weekly or biweekly, to gauge students' growth toward mastery of (1) a target curricular aim or (2) the en route-subskills and bodies of enabling knowledge contributing to students' mastery of a target curricular aim.

These definitions are excerpted from a paper produced by the Formative Assessment for Students and Teachers (FAST) State Collaborative on Assessment and Student Standards (SCASS).