

## MEASURING TRAINING EFFECTIVENESS: FORMATIVE VERSUS SUMMATIVE ASSESSMENTS

If you started counting from your earliest years in school, you've probably taken hundreds of quizzes and tests, written dozens of papers and completed any number of surveys or polls.

So as adults, when we talk about getting back to the basics of measuring effective training, it's no surprise that the guaranteed, out-of-the-box tool for this involves assessments. Whether you are a seasoned pro at instructional design or a novice in the profession, you'll find that a balanced use of assessments to be an excellent way to build credible measurement metrics for executives.

Options for assessments can roughly be divided into two categories: formative assessments and summative assessments. So what exactly are these two main types of assessments and how do they work? The answer to whether an assessment is formative or summative lies in its purpose.



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### Formative Assessments

Formative assessments consist of trainer or learner activities that provide feedback during the learning process. This feedback is then used to:

- Modify learner behaviors to achieve greater conceptual development
- Allow trainers to make immediate improvements in their training delivery

In short, formative assessments are an integral part of the learning process. In fact, sometimes, formative assessments are divided into a sub-category, called diagnostic, in which the assessments evaluate current skills and knowledge of learners before training begins.

You can think of formative assessments as knowledge checks, assignments or practice exercises. All of these collect evidence of the learner's progress during the training. With or without a resulting score, these types of assessments never count toward a final grade. Instead, they are an ongoing, dynamic assessment process which allows both learners and trainers to review results and determine the appropriate actions to take to promote further learning.

For example, in a software training program, the training content would include information and demonstrations on how to use a portion of the software. Then, learners would be given an exercise to practice using the software processes described in the training. This could be done during class using a computer lab and facilitator (or via eLearning using on-screen prompts) in which feedback is frequently given as a way to mentor the learner through the exercise.

The activity helps the facilitator gather feedback on which learners are successful in completing the task, and helps learners gain insight and adjust accordingly based on how they are doing. Optimally, the facilitator provides (and the learner seeks) additional sources of knowledge and opportunities for practice, if the assessment results indicate the need for alternate learning sources.

Types of formative assessments can include:

**Visual models:** Learners use words and images to create visual representations of information, allowing them to make connections, increase memory, and facilitate future retrieval of information. Working in this manner also highlights preferences in learning style.

**Peer activities:** Learners are asked to collaborate or assess the quality of each other's work. In doing so, they become more aware of their own strengths and weaknesses and see peers as resources to gain understanding. This form of assessment builds and strengthens a learning community within the training program.

**Lists, charts and graphic organizers:** Learners enhance their ability to communicating clearly and effectively by organizing information, making connections, and noting relationships. Through the use of graphic organizers, learners can demonstrate their ability to architect ideas, make decisions, clarify processes, and help solve problems.

**Complete self-assessments:** Self-assessments (such as [Learner Certainty Assessments](#)) provide learners the opportunity to critically evaluate their own performance and appropriately act on any insights acquired. Learners see themselves as responsible for their own learning, which helps to drive up engagement and increase retention.

**Verbal or written summaries:** Learners use content-specific language to reflect, summarize, and make sense of what they have heard or read. With these activities, learners derive personal meaning from their learning experiences and increase their metacognitive skills.

Regardless of how formative assessments are used, they should be designed to directly relate to measureable and achievable learning objectives and ideally, reflect your corporate and business unit goals and objectives.

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## Summative Assessments

After the delivery of any formative assessments and other training components, use summative assessments to evaluate the effectiveness of the training and determine the resulting competency of learners. This type of assessment happens at the end of a lesson, module and/or course and determines whether long term learning goals have been met.

Summative assessments use grades to measure learner growth after instruction and provide quantifiable data demonstrating proof of what has been learned. For example, an organization could provide a final exam at the end of training that launches from a learning management system (LMS) and tracks a score. Based on the score received, both trainers and learners are then able to identify which areas are mastered and which areas require more work.

Types of summative assessments can include:

**Performance tasks:** Learners complete a task to assess a specific set of skills and/or abilities.

**Written essays/reports:** Learners create a piece of persuasive writing on a particular topic or a reflection about their learning experience.

**Oral presentations:** Learners demonstrate their knowledge or present their research findings to an audience.

**Open book exams:** Learners are able to reference other resource materials to determine answers to questions while taking the exam. Here, the focus is on a learner's understanding of a subject, rather than on recall and memorization.

**Multiple-choice tests:** Learners are given online or paper-based questionnaires to answer.

**Participation tasks:** Learners are asked to actively engage in lectures/seminars/conferences or perform tasks in online discussion boards and group work.

Just as with formative assessments, summative assessments must be instructionally sound with measurable learning objectives in order to be effective. The resulting summative information can be used formatively to guide learners' future training efforts and activities; to shape how trainers organize their curricula; and to help organizations determine which subsequent courses to offer their employees.

"When students are required to think about their own learning, articulate what they understand, and what they still need to learn, achievement improves." (Black and Wiliam 1998)

With the appropriate use of diagnostic, formative and summative testing, you can:

- Know your learners' strengths and weaknesses ahead of time to better plan your training program and how to teach it
- Determine your learners' progress through distinct training goals
- Assess mastery of your training topics after instruction
- Give learners tools to evaluate their own progress

Used together, these assessment methods lay a strong foundation for measuring training effectiveness and can clearly demonstrate quantifiable metrics to show executive management how effective your training is. Further, when implemented correctly, assessments will reinforce your training, improve learner cognition and performance, and align to your company's objectives and goals. Appropriate use of assessments is a win all the way around.

**Next time:** We'll discuss an approach to evaluate your Learning & Development group, business unit and organization. In the meantime, please join the conversation in the comments section of this article or [feel free to send us an email](#). We'd love to hear your thoughts!