



Formative and Summative Assessment

What is Formative Assessment?

Formative assessment evaluates students' abilities while they are still learning in a course.

Formative assessment is important for students because it helps them identify strengths and areas for improvement during the course and can help them guide their own learning.

Formative assessment is important for faculty because it helps them recognize where students are struggling with course content. This provides the opportunity for faculty to adjust the course accordingly.

What is Summative Assessment?

Summative assessment evaluates students' abilities as they are about to complete a course (or at the end of a unit). We expect summative results to indicate more complete mastery of learning outcomes than formative assessment.

Why should I use both formative and summative assessment in my classroom?

Formative and summative assessment are both important for understanding the learning happening in our classrooms. The following scenario illustrates the importance of using both types of assessment. In this scenario, the faculty member used summative assessment only to assess student learning at the end of a course unit.

At the end of a unit, students are assessed on their ability to distinguish between concept A and concept B. The assessment shows that 50% of students can correctly distinguish the two concepts.

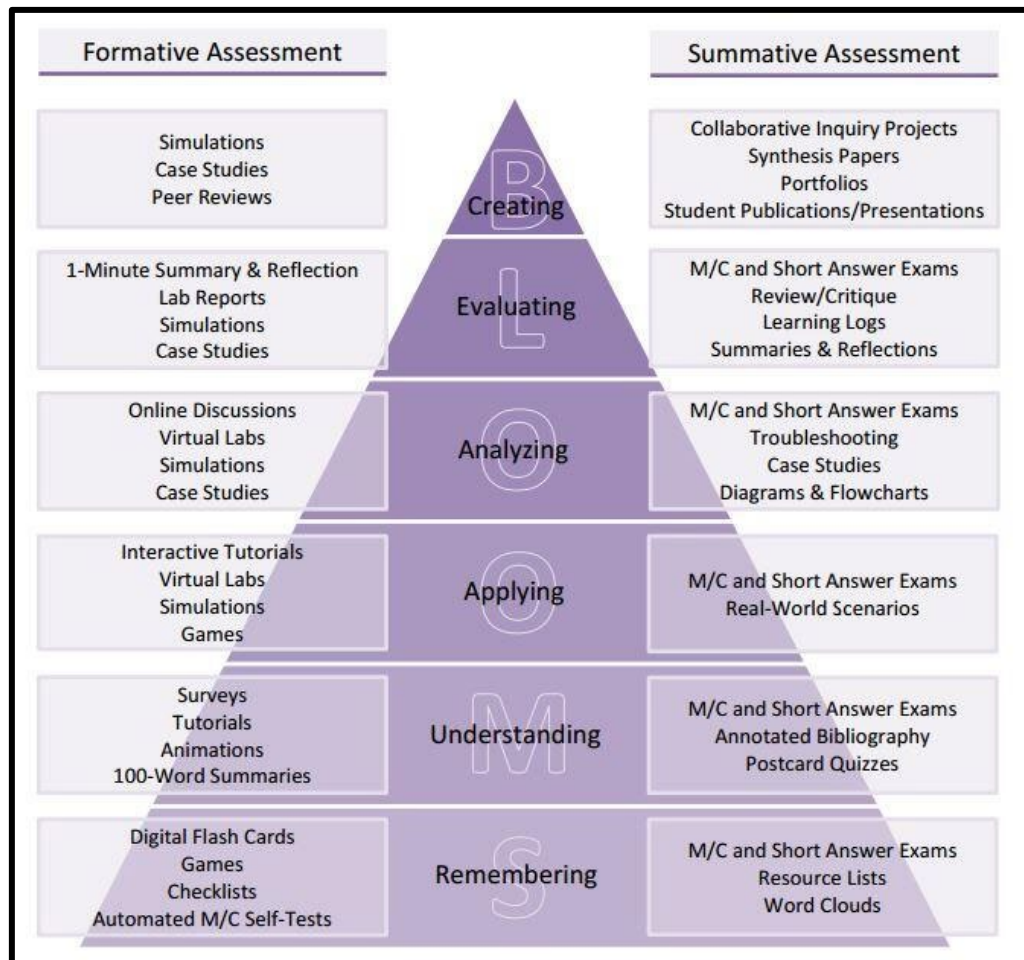
- What do we know about student learning?
- What don't we know about student learning?

Here we know that only 50% of students can determine the differences between Concept A and Concept B. However, we don't know why. The reason for that could be because students didn't do assigned reading, it could be because the concepts are at a more advanced level than where students are at, it could be because 50% of students took the current class before they took another class that would have better prepared them (and so on).

If we had done formative assessment of the concepts during the unit, instead of only assessing learning at the end of the unit, we may have figured out earlier why only 50% of students could distinguish the two concepts. Then, perhaps, our summative assessment results would have been better.

Formative and Summative Assessments with Bloom's Taxonomy

Bloom's Taxonomy is a hierarchical system of ordering thinking skills from lower to higher, with the higher levels including all of the cognitive skills from the lower levels. The following image shows different types of formative and summative assessment activities at the different levels of Bloom's Taxonomy.



For resources to help you design assessments visit CETL's [Classroom Assessment Toolbox](#).