

CTEL Resource Guide

Formative and Summative Assessments

Key Concepts & Highlights

Assessment is most effective when it supports both teaching and learning. Formative assessments are used during the learning process to monitor student understanding, provide feedback, and guide instructional adjustments. Summative assessments are used after instruction to evaluate what students have learned and determine whether they have met course outcomes. Both types of assessment are valuable, but they serve different purposes. Formative assessment helps students practice, receive feedback, and improve before high-stakes evaluation. Summative assessment documents achievement and provides evidence of learning at the end of a unit, module, course, or program.

Definitions & Examples

Assessment Type	Definition	Examples
Formative Assessment	A low-stakes or ungraded assessment that occurs while students are still learning. Its purpose is to identify what students understand, where they are struggling, and what support they need next.	Practice quizzes; exit tickets; minute papers; drafts; polls; discussion check-ins; think-pair-share; concept maps; peer review; muddiest point reflections; low-stakes homework; classroom response questions
Summative Assessment	Assessment that occurs after instruction and is used to evaluate student achievement. It is usually graded and connected to course learning outcomes.	Unit exams; final exams; research papers; lab reports; presentations; portfolios; capstone projects; practical demonstrations; case study analyses; major essays; final projects; common assessments

Recommended Strategies & Practices for Implementation

1. Strategy: Align Assessments to Learning Outcomes

Why it matters:

Assessment should measure what students are expected to learn. Strong alignment helps ensure that assignments, activities, and exams accurately reflect course goals.

How to implement:

- Begin with the learning outcome
- Identify what students must know or be able to do
- Choose an assessment method that allows students to demonstrate that skill
- Use formative assessments to build toward summative assessments
- Review assessments regularly to ensure they still match the intended outcomes

2. Strategy: Use Formative Assessments Early and Often

Why it matters:

Students benefit from feedback before high-stakes assessments. Frequent formative checks help instructors identify misunderstandings while there is still time to intervene.

How to implement:

- Add short practice quizzes before exams
- Use exit tickets or reflection prompts after difficult lessons
- Ask students to submit drafts or outlines before major assignments
- Use polls or classroom response questions to check understanding in real time
- Review common errors and adjust instruction accordingly

3. Strategy: Provide Timely and Actionable Feedback

Why it matters:

Feedback is most useful when students receive it soon enough to apply it. Effective feedback helps students understand what they did well, what needs improvement, and what steps to take next.

How to implement:

- Focus feedback on the learning outcome or assignment criteria
- Use short comments that identify specific strengths and next steps
- Provide class-wide feedback when many students make similar errors
- Use rubrics to clarify expectations
- Allow students to revise or apply feedback when possible

4. Strategy: Design Summative Assessments that Demonstrate Meaningful Learning

Why it matters:

Summative assessments should provide clear evidence that students can apply knowledge, solve problems, communicate ideas, or demonstrate skills.

How to implement:

- Use authentic tasks when appropriate, such as case studies, projects, or presentations
- Include questions or tasks that require application and analysis, not only recall
- Provide clear instructions and grading criteria
- Use rubrics for complex assignments
- Offer practice opportunities before the summative assessment

5. Strategy: Use Assessment Results to Improve Teaching and Learning

Why it matters:

Assessment data can help instructors identify patterns, refine instruction, and improve future course design.

How to implement:

- Review common errors after quizzes, exams, or assignments
- Identify outcomes where students struggled most
- Adjust examples, practice activities, or explanations in future modules
- Use formative results to guide review sessions
- Use summative results to revise future course materials and assessments

Quick Tips

- Formative assessment is assessment for learning
- Summative assessment is assessment of learning
- Use low-stakes practice before high-stakes evaluation
- Align every major assessment with learning outcomes
- Provide feedback students can actually use
- Use rubrics to clarify expectations
- Let assessment results guide instructional decisions

Additional Resources

[Carnegie Mellon University Eberly Center: Formative and Summative Assessment:](#)

Guidance on the purposes and uses of formative and summative assessment.

[Vanderbilt University Center for Teaching: Assessment:](#) An overview of assessment approaches and considerations for teaching and learning.

[NILOA Assignment Library:](#) A collection of assignments designed to support meaningful student learning and assessment.

[CTEL Faculty Resources:](#) Faculty-development resources and professional learning opportunities.