

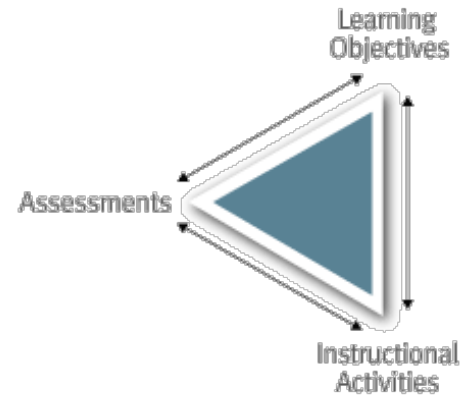
# Carnegie Mellon University

## Why should assessments, learning objectives, and instructional strategies be aligned?

Assessments should reveal how well students have learned what we want them to learn while instruction ensures that they learn it. For this to occur, assessments, learning objectives, and instructional strategies need to be closely aligned so that they reinforce one another.

To ensure that these three components of your course are aligned, ask yourself the following questions:

- **Learning objectives:** What do I want students to know how to do when they leave this course?
- **Assessments:** What kinds of tasks will reveal whether students have achieved the learning objectives I have identified?
- **Instructional strategies:** What kinds of activities in and out of class will reinforce my learning objectives and prepare students for assessments?



## What if the components of a course are misaligned?

If assessments are misaligned with learning objectives or instructional strategies, it can undermine both student motivation and learning. Consider these two scenarios:

Your objective is for students to learn to *apply analytical skills*, but your assessment measures only *factual recall*. Consequently, students hone their analytical skills and are frustrated that the exam does not measure what they learned.

Your assessment measures students' ability to *compare and critique* the arguments of different authors, but your instructional strategies focus entirely on *summarizing* the arguments of different authors. Consequently, students do not learn or practice the skills of comparison and evaluation that will be assessed.

## What do well-aligned assessments look like?

This table presents examples of the kinds of activities that can be used to assess different types of learning objectives (adapted from the revised [Bloom's Taxonomy](#)).

Type of learning objective	Examples of appropriate assessments
<b>Recall</b> <b>Recognize</b> <b>Identify</b>	Objective test items such as fill-in-the-blank, matching, labeling, or multiple-choice questions that require students to: <ul style="list-style-type: none"> <li>• recall or recognize terms, facts, and concepts</li> </ul>

<b>Interpret</b> <b>Exemplify</b> <b>Classify</b> <b>Summarize</b> <b>Infer</b> <b>Compare</b> <b>Explain</b>	<p>Activities such as papers, exams, problem sets, class discussions, or concept maps that require students to:</p> <ul style="list-style-type: none"> <li>• summarize readings, films, or speeches</li> <li>• compare and contrast two or more theories, events, or processes</li> <li>• classify or categorize cases, elements, or events using established criteria</li> <li>• paraphrase documents or speeches</li> <li>• find or identify examples or illustrations of a concept or principle</li> </ul>
<b>Apply</b> <b>Execute</b> <b>Implement</b>	<p>Activities such as problem sets, performances, labs, prototyping, or simulations that require students to:</p> <ul style="list-style-type: none"> <li>• use procedures to solve or complete familiar or unfamiliar tasks</li> <li>• determine which procedure(s) are most appropriate for a given task</li> </ul>
<b>Analyze</b> <b>Differentiate</b> <b>Organize</b> <b>Attribute</b>	<p>Activities such as case studies, critiques, labs, papers, projects, debates, or concept maps that require students to:</p> <ul style="list-style-type: none"> <li>• discriminate or select relevant and irrelevant parts</li> <li>• determine how elements function together</li> <li>• determine bias, values, or underlying intent in presented material</li> </ul>
<b>Evaluate</b> <b>Check</b> <b>Critique</b> <b>Assess</b>	<p>Activities such as journals, diaries, critiques, problem sets, product reviews, or studies that require students to:</p> <ul style="list-style-type: none"> <li>• test, monitor, judge, or critique readings, performances, or products against established criteria or standards</li> </ul>
<b>Create</b> <b>Generate</b> <b>Plan</b> <b>Produce</b> <b>Design</b>	<p>Activities such as research projects, musical compositions, performances, essays, business plans, website designs, or set designs that require students to:</p> <ul style="list-style-type: none"> <li>• make, build, design or generate something new</li> </ul>

This table does not list all possible examples of appropriate assessments. You can develop and use other assessments – just make sure that they align with your learning objectives and instructional strategies!

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