Identifying the Types of Assessments Aligned to Your Learning Outcomes

Following are instructions for a two-step process that will help you to identify the types of assessments aligned to your learning outcomes, with an example of a learning outcome from a music education course.

The learning outcome we will use is "Students will be able to define the steps required for curriculum development using the Understanding by Design framework (UbD)."

Step 1: Identify the cognitive levels of the action verbs in each of your learning outcomes.
- Locate the action verb in your first learning outcome.
  - Example: Students will be able to <u>define</u> the steps required for curriculum development using the Understanding by Design framework (UbD).
- Find the action verb in your first learning outcome on Chart 1.1: "Determining the Cognitive Levels of Your Learning Outcomes," which contains an adapted list of action verbs from Linda Nilson and their corresponding cognitive levels.
  - Example:

Remember	Arrange	Identify	Omit	Repeat
	Choose	Label	Order	Reproduce
	Copy	List	Quote	Select
	Define	Locate	Recall	Spell
	Describe	Match	Recite	State
	Duplicate	Memorize	Recognize	Tell
	Find	Name	Relate	

From the chart, we can see that our outcome is at the cognitive level "remember."

Step 2: Identify the types of assessments aligned to the cognitive levels of your learning outcomes.
- Locate the cognitive level of your first learning outcome on Chart 1.2: "Types of Assessments by Cognitive Level," developed by Carnegie Mellon University's Eberly Center for Teaching Excellence & Educational Innovation.
  - Example:

Type of Learning Outcome	Examples of Types of Assessment
Remember Students will be able to: • recall • recognize	Objective test items that require students to recall or recognize information: • Fill-in-the-blank • Multiple-choice items with question stems such as, "what is a...," or "which of the following is the definition of...") • Labeling diagrams Reciting (orally, musically, or in writing)

Here we can see that assessments aligned to the cognitive level "remember" include fill-in-the blank statements, multiple-choice items with specific question stems, labeling diagrams, and recitation. These are the types of assessments I would use to help students work toward achieving this learning outcome.

Follow this same process for all of the learning outcomes in your course. As you do so, you may come across learning outcomes with action verbs that fall under multiple cognitive levels, action verbs that are not included in Chart 1.1, or multiple action verbs in a single learning outcome. The following chart outlines how to address each of these more complex instances.

Scenario	Action
The action verb in my learning outcome falls under multiple cognitive levels.	Think about the underlying purpose of the learning outcome. What do you want students to know and be able to do? Select the cognitive level that best aligns with the purpose of your outcome.
The action verb in my learning outcome is not included in Chart 1.1.	Find an action verb in Chart 1.1 that is the closest synonym to the action verb in your learning outcome. Use the synonym to determine the cognitive level of your learning outcome.
My learning outcome contains multiple action verbs.	One option is to simplify the learning outcome. If a single verb is well aligned with what you want students to be able to do, you can simplify your learning outcome without losing any intended learning. However, if you want students to complete multiple actions, you should keep both action verbs. Review the assessments aligned to the cognitive levels of your action verbs in Chart 1.2. You may be able to develop certain assessments that cover multiple cognitive levels. For example, an exam may contain short answer questions at the cognitive level "understand" as well as problem sets requiring students to "apply" information they have learned. You might also consider developing multiple assessments for a single learning outcome, especially if it has a high level of importance to the course.