

Educational Objectives

Presented by

Walt Hurley

wlhurley@illinois.edu

University of Illinois at Urbana-Champaign

Bloom's Taxonomy of Educational Objectives

A framework for categorizing educational objectives. This taxonomy has been used around the world for test design and curriculum development. The taxonomy describes six levels of the cognitive domain. Fill in the grid below with the six levels of Bloom's Taxonomy and their relationship to levels of thinking and critical thinking.

Bloom's Taxonomy of Educational Objectives (revised)

How does this compare with the ranking of these terms that you made at the end of the previous set of videos?

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NOTES:

There are several things to note about the Taxonomy.

1. Each level is described by action. That is, **to do something** (retrieve, construct, use a procedure, break material into parts, make judgements, put elements together). The objective of “to know about _____” does not show up in any of the levels. Students are expected “to retrieve relevant knowledge”, “to construct meaning”, “to use a procedure”, etc. Learning objectives are devised and written using action verbs that are clearly associated with the level of the Taxonomy that is the basis for the objective. For additional lists of verbs associated with the levels of the Taxonomy, do an online search for “Bloom’s Taxonomy verbs”.
2. The **remember** and **understand** levels of the Taxonomy require memory and basic understanding. The upper levels of the Taxonomy, including **analyze, evaluate and create**, are challenging the student to **think critically** about the subject. That is, one way to consider whether students are thinking critically is to have them work at those upper levels of the Taxonomy. Note that whether **apply** is considered as an upper level depends on the nature of the expected application.
3. Some modules will focus primarily on the lower levels of the Taxonomy, while other modules may have students working mostly at the upper levels. However, it is important that our students are proficient at working at all levels of the Taxonomy. Therefore, components of the Taxonomy should be interspersed throughout the entire curriculum or learning program of the student. Students need to practice the skills associated with the Taxonomy often and in a variety of settings and content material. Offering one module in which students are asked to think critically or solve problems will not achieve the long-term goal of making them proficient at all levels of the Taxonomy.
4. Learning objectives, learning assessments, and learning activities must be integrated according to the integrated module design model described below. That means that if we expect our students to be able to analyze something as part of our module, then we must purposefully teach them how to analyze, not just assume that they are able to figure that out on their own. If we only teach at the remember-understand levels, it is not then appropriate to assess their learning by expecting them to apply, analyze, evaluate or create based on what we taught them. Likewise, if we are teaching them to analyze something, then including assessment questions where they only need to remember-understand is not providing an assessment of what they have learned.

Activity: See the verbs provided in the tables in the handout
Choose one of the modules that you teach; write out three learning objectives for that module using the format – Students will be able to verb noun phrase.

What do well-aligned assessments look like?

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

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