

Writing SMART Outcomes for Academic Assessment Plans

A student learning outcome is a statement that explains what the student is learning, including the accumulated and demonstrated knowledge, skills, abilities, behaviors, and habits of mind, as a result of actively participating in the course or program of study.

Example: *Students will locate online information and evaluate it critically for its validity and appropriateness by using a rubric.*

Writing Learning Outcomes through a SMART-Based Approach

Content	Definition	Guiding Question
<u>S</u>PECIFIC	The statement tells what will change for whom in concrete terms.	<i>What exactly is the student going to do and learn?</i>
<u>M</u>EASURABLE	The outcome implies the ability to quantify an activity and its results.	<i>Is the demonstration of this learning outcome quantifiable and can we measure it?</i>
<u>A</u>TTAINABLE/ <u>A</u>CHIEVABLE	The outcome is feasible with the available resources, appropriate in scope, and within parameters.	<i>Can we get this done in the proposed time frame with the resources and support we have?</i>
<u>R</u>ELEVANT	The statement addresses the relationship between the program and outcomes.	<i>Will this learning outcome have the desired effect?</i>
<u>T</u>IMELY	A reasonable time frame is incorporated into the outcomes statement.	<i>When will this outcome be accomplished?</i>

Learning Outcomes Summary

Well-written and well-stated learning outcomes are:

- **student-focused** rather than instructor-focused
- focused on the **specific learning** that results from an activity
- driven by the **achievable skills and abilities** relevant to the discipline and professional standards
- worded in **clear, concise, and concrete** language about learning
- focused on learning that can be **developed, measured, and assessed**

The learning outcomes in various frameworks can be summarized into three categories as follows:

- Knowledge and conceptual understanding
- Thinking and other skills
- Behaviors, values, dispositions, and habits of mind

Formula for Writing Learning Outcomes

Students will . . .

+

Taxonomy-based verb

+

Specific SMART-based knowledge, skills, abilities, behaviors, and/or habits of mind

+

why

**Bloom *et al.* Taxonomy
Higher-level cognitive skills**



Lower-level cognitive skills

Descriptions of the Major Categories in the Cognitive Domain	Illustrative General Instructional Objectives	Illustrative Verbs for Stating Specific Student Learning Outcomes
1. Knowledge is defined as the remembering of previously learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information.	Knows basic concepts Knows common terms Knows methods and procedures Knows principles Knows specific facts	Defines, describes, identifies, labels, lists, matches, names, outlines, reproduces, selects, states
2. Comprehension is defined as the ability to grasp the meaning of material.	Comprehends facts and principles Interprets verbal material Estimates future consequences in implied data Justifies methods and procedures	Converts, defends, distinguishes, estimates, explains, extends, generalizes, gives examples, infers, paraphrases, predicts, rewrites, summarizes
3. Application refers to the ability to use learned material in new and concrete situations.	Applies concepts and principles to new situations Applies laws and theories to practical solutions Demonstrates correct usage of a method or procedure	Changes, computes, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses
4. Analysis refers to the ability to break down material into its component parts, so that its organizational structure may be understood.	Recognizes unstated assumptions Recognizes logical fallacies in reasoning Distinguishes between facts and inferences	Breaks down, diagrams, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, points out, relates, selects, separates, subdivides
5. Synthesis refers to the ability to put parts together to form a new whole.	Writes a well-organized theme Proposes a plan for experiment Integrates learning from different areas into a plan for solving a problem	Categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes
6. Evaluation is concerned with the ability to judge the value of material (e.g., statement, novel, poem, research report) for a given purpose.	Judges the logical consistency of written material Judges the adequacy with which conclusions are supported by data	Appraises, compares, concludes, contrasts, criticizes, describes, discriminates, explains, justifies, interprets, relates, summarizes, supports

Adapted from Gronlund, N. E., & Brookhart, S. M. (2009). *Writing instructional objectives* (8th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.