

Introduction: The purpose of this document is to better assist you as AAFP Faculty in writing performance-based learning objectives. In order to maintain ACCME accreditation learning objectives must be observable, measurable, and focused on the learner. Learning objectives are important in that they clearly communicate the direction of the curricular content, define faculty and learner responsibilities, and enable the evaluation of the learners and the curriculum. Please follow the provided guidelines in the development of performance-based learning objectives for your presentations.

Goal of a performance-based Learning Objective:

Describe the behavior in measurable terms that you, a faculty member, would expect to observe of the learner upon completion of this learning activity.

Do's and Don'ts

Do: Describe the observable **action** that you would expect to see the learner "doing" upon completion of the learning activity.

Don't: Do not describe the **instruction** that you, the faculty member, will perform in order to teach the learner.

Do: Use **measurable terms** to describe the actions of the learner.

Don't: Do not use **unmeasurable terms** such as *understand, know, be familiar with, comprehend, learn, or appreciate*.

Do: Describe **only one** action in each objective.

Don't: Combine **more than one** action using "and."

Do: Write learning objectives that are **supported by the content** of the learning activity.

Don't: Do not write a learning objective **based on content that is insufficiently addressed**.

Tips (verb samples on following page)

1. Start with a measurable verb followed by a description of the action that the learner will take.
2. When necessary, for the sake of clarity, a learning objective may also need to specify the conditions in which the action will occur (e.g. specific information to clarify clinical focus and/or patient characteristics).
3. Use either the top four levels of Bloom's Taxonomy or the top three levels of Webb's Depth of Knowledge Levels (DOK) to aid in the selection of appropriate verbiage.
4. Be careful when using verbs such as *describe, explain, review, or summarize*. They imply that the learner will communicate verbally with someone. These verbs should be used in the context of communicating with the patient, and not used to describe something that a faculty member would do (i.e. Explain a concept at a live CME activity).

Examples

Poor Wording

Understand how to modulate pain therapy by addressing psychological and personality issues.

Why?

The term "understand" is not measurable; and context regarding the patient's condition is absent.

Better Wording

Modulate pain therapy by addressing psychological and personality issues in patients with chronic pain.

Poor Wording

Explain the benefits of various exercise modalities for an elderly person.

Why?

The learning objective described the instructional method used by the faculty member --the faculty member did the *explaining*.

Better Wording

Determine the most appropriate exercise modality for health maintenance in the patient who is elderly.

Poor Wording

Become familiar with common eye problems.

Why?

The objective is unmeasurable, does not describe the action that the learner should be able to take, and does not describe the context regarding the patient's condition.

Better Wording

Screen for eye conditions commonly associated with type 2 diabetes.

Poor Wording

Formulate a diagnosis and management plan for each of the above.

Why?

Assume this learning objective is the third of four. It refers to previously stated objectives and combines two separate actions: diagnosis and management. Each objective must stand alone without reference to other objectives.

Better Wording

Formulate a sequential diagnosis procedure for the patients with medical complications of pregnancy.

Develop a management plan for commonly diagnosed medical complications of pregnancy.

Poor Wording

List types of abnormal pulmonary functions.

Why?

The verb "list" is too low of mental function for adult learners, let alone physicians.

Better Wording

Given the calculated results of tests compared with predicted normal values, determine the presence or absence of abnormal pulmonary function and classify it as to type and severity.

Verb Selection Guide to Writing Performance-Based Learning Objectives

The following is a quick tool for faculty to use when writing learning objectives that allow the participant to demonstrate the depth to which they can apply their new knowledge. The higher the level, the more rigorous the cognitive demand, so we encourage high level objectives. An effort has been made, in this document, to consolidate Bloom's Taxonomy with Webb's Depth of Knowledge (DOK) Taxonomy to accommodate those who are familiar with either guideline. The associated verbs provided below are a partial list and do not constitute an official AAFP list. They are meant to provide examples for those unfamiliar with either taxonomy.

Consolidated Bloom's & Webb's Taxonomies					
Bloom's Level 2: Knowledge	Bloom's Level 2: Comprehension	Bloom's Level 3: Application	Bloom's Level 4: Analysis	Bloom's Level 5: Synthesis	Bloom's Level 6: Evaluation
DOK Level 1 Activities (Recall):		DOK Level 2 Activities (Skill/Concept):	DOK Level 3 Activities (Strategic Thinking):	DOK Level 4 Activities (Extended Thinking):	
Brief example: Recall elements and details of a diagnosis. Conduct calculations. List typical symptoms. Identify scientific concepts/relationships. Perform routine procedures. Describe treatment options.		Brief example: Summarize a patient's history. Solve routine multiple-step problems. Relate the cause and effect of a particular event. Identify patterns in behavior. Interpret data.	Brief example: Support ideas with details and examples. Develop a scientific model for a complex situation. Assess by exam. Determine a patient's motivation for treatment and describe how it affects the interpretation of a diagnosis.	Brief example: Apply new concepts to a current problem or situation. Analyze and synthesize information from multiple sources. Design resource tools to inform patients and solve practical or abstract problems. Critique literature and formulate an opinion.	
Associated Verbs		Associated Verbs	Associated Verbs:	Associated Verbs	
Arrange Calculate Define Describe Identify Label List Match Match Measure Memorize Name Quote Recall Recite Recognize Repeat Report Review State Tabulate Tell Use		Categorize Cause/Effect Classify Collect Compare Construct Determine Display Distinguish Estimate Graph Identify Patterns Infer Interpret Make Observations Modify Organize Perform Predict Relate Separate Show Summarize	Apprise Assess Cite Evidence Construct Coordinate Care Critique Develop a Diagnosis Diagnose Differentiate Draw Conclusions Explain Concepts Formulate Hypothesize Improve Investigate Prescribe Revise Solve a Problem Use Concepts to	Analyze Apply Concepts Connect Choose Confirm Counsel Create Critique Design Determine Establish Evaluate Integrate Manage Prove Rate Recommend Select Synthesize Validate Verify	
Reference: Webb, Norman L. and others. "Wed Alignment Tool" 24 July 2005. Wisconsin Center for Educational Research. University of Wisconsin-Madison. 2 Feb. 2006. http://www.wcer.wisc.edu/WATindex.aspx . Bloom, Benjamin S. & David R. Krathwohl. (1956). Taxonomy of educational objectives: The classification of educational goals, by a committee of college and university examiners. Handbook 1: Cognitive domain. New York , Longmans. http://www.nova.edu/hpd/testing/ctl/forms/bloomstaxonomy.pdf					