

A Primer on Learning Outcomes



Introduction

If you are an instructor, trainer or educator, it is imperative that you have a thorough understanding of learning outcomes—also known as behavioral outcomes, instructional outcomes, and performance outcomes.

Definition

A learning outcome can be defined as a clear and concise measurable statement of the behaviors (e.g., skills, knowledge or attitudes) we expect our participants to demonstrate as a result of learning. Basically, it is what we want learners to exhibit or demonstrate at the end of a learning event or unit of instruction.

Three Purposes of Learning Outcomes

Well-written learning outcomes serve three purposes. They provide—

- 1. A sound basis for selection and design of instructional materials.
- 2. Standards for determining whether instructional outcomes have been achieved.
- 3. An established framework for performance.

Outcomes by Any Other Name

Behavioral outcomes, learning outcomes, instructional outcomes and performance outcomes are terms that refer to **descriptions of observable learner behaviors or performance that relates to learning.** At some point, almost every teacher, instructor and trainer must learn to write these types of outcomes. Acquiring this skill is something of a rite of passage in the process of becoming an instructor, yet it is a skill that requires practice, feedback and experience.

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Learning outcomes are about the learner and curriculum, not the instruction. Learning outcomes specify what behavior(s) a learner must demonstrate or perform in order for an instructor to infer that learning took place. This behavior can take many forms and can be assessed or measured using both formal and informal assessment tools. Since learning cannot be observed directly, instructors must make inferences about learning from evidence they can observe and measure. Learning outcomes, if constructed properly, provide an ideal

vehicle for making those inferences.

The purpose of a learning outcome is to communicate. Therefore, a well-constructed outcome should leave little room for doubt about what is intended. A well-constructed outcome describes an expectation of intended learning from an audience and contains three parts, each of which alone means nothing, but when combined into a sentence or two,



The parts of an outcome are the conditions, behavioral verb, and criteria.

communicates the **conditions** under which the behavior is performed, a **verb** that defines the behavior itself, and the degree **(criteria)** to which a learner must perform the behavior. If any one of these three components is missing, the outcome cannot communicate accurately.

The parts of a learning outcome are as follows:

- Conditions—a statement that describes the conditions under which the behavior is to be performed.
- 2. **Behavioral verb**—an action word that connotes an observable learner behavior.
- 3. **Criteria**—a statement that specifies how well the learner must perform the behavior.

An outcome is the focal point of a lesson plan or presentation. It is a description of an intended learning achievement and serves as the basis for the rest of the lesson. It provides criteria for constructing an assessment for the lesson and for the instructional procedures the instructor designs to implement the lesson. Without a behavioral outcome, it is difficult if not impossible to determine exactly what a particular lesson and the intended learners are supposed to accomplish. Toward this end, learning outcomes should provide uniform understanding of what will be achieved from a learning event. To write behavioral outcomes, one should begin with an understanding of the particular content to which the outcomes will relate. Comprehensive understanding of the content to be learned should be a goal of instructors as well as learners. This implies that instructors or others who prepare outcomes as part of lesson plans or curriculum documents and guides should have more than just a superficial knowledge of the appropriate content. Writing a series of outcomes within a body of content that lack internal and external consistency with that body of content is not a productive use of time. However, the purpose of this is not to delve into the area of curriculum consistency, but rather present some pointers to help write better outcomes. With that in mind, let us begin.

1. The Conditions

The condition part of an outcome specifies the circumstances, commands, materials, directions, etc., that the learner is given to initiate the behavior. All behavior relevant to intended learning outcomes can best be understood within a context of the conditions under which the behavior is to be performed or demonstrated. The condition part of an outcome usually begins with a simple declarative statement such as the following:

At the end of this lesson, the learner will be able to: (this means the learner is given an oral or written request to do something).

Given (some physical object), the learner will: (this means the learner is actually given something such as a map, a case study, a graph, etc., that



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describing.

relates to and is required for performing the intended behavior). Notice that in these examples, there is no mention of the instruction description that precedes the initiation of the behavior. The instruction that leads to the behavior should never be included in the actual outcome; it is a separate issue.

Here, we want to concentrate on just describing the conditions under which the desired learner behavior is to be performed.

2. The Verb

We all learned in elementary school that a verb is an action word. In a behavioral outcome, the verb is a special kind of action word. The verb in a behavioral outcome connotes an observable behavior. For example, although we as instructors all want our learners to appreciate one thing or another, it is impossible to see when a learner "appreciates" something. "Understand" is another noble word that connotes something we want our learners to do, but we cannot observe or physically see "understanding." The best we can do is to make inferences that a learner appreciates or understands something based on what that learner does or says in a controlled situation.

What then are appropriate verbs for behavioral outcomes? The answer is quite simple. A behavioral outcome verb is a word that denotes an observable action or the creation of an observable product. Verbs such as "identify," "name," "design," "prepare" and "describe" are behavioral because you can observe the actual act or final product of identifying, naming, designing, preparing and describing.

3. Criterion Statements

The third component of a well-written learning outcome is the criterion or desired standard for acceptable performance. A performance criterion statement describes the quality or quantity standards required for acceptable achievement during the training or education program.

Criterion statements can also be referred to as "level of mastery" statements. A criterion should be measurable and may include specifications relating to time, speed, accuracy or overall quality.

Level of Mastery Indicators

The level of mastery indicators usually follows the performance statement with such phrases as those listed below:

- · percent of the time
- number out of number of times
- with percent of accuracy number out of number of attempts
- with less than number



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• in (state amount) of time

Levels of mastery may be implied by using phrases that illustrate 100% accuracy, such as "totally," "correctly," "accurately," "each," "all," "every," "corresponding," "successfully" and "without error."

The criteria are a set of descriptions that identify HOW WELL the behavior must be performed to satisfy the intent of the behavioral outcome verb. Usually, criteria are expressed in some minimum number or as what must be, as a minimum, included in a learner response. For example, an outcome might be as follows:

Given a list of twenty government agencies, the learner will **identify** (verb) the 13 member organizations of the National Foreign Intelligence Community (criteria).

Putting it All Together

Well-written behavioral outcomes are the heart of any lesson plan. If the outcomes you compose are "fuzzy" and difficult (if not impossible) to measure, the rest of the lesson plan that you create based on those outcomes is likely to be flawed.

Before you begin to write an outcome, spend a little time thinking about what you are describing and remember to make the learner behavior observable and measurable. You will find this process helps to clarify what you intend and you will be able to better communicate that intent to your learners, regardless of their skill level or background with the subject matter.

Any time you write a behavioral outcome, ask yourself the question, "Does this outcome clearly communicate and describe the intended learning outcome?" If you can find exceptions or loopholes as a way of meeting the outcome, then the outcome should be rewritten.

DO NOT use any of the following verbs or phrases in writing learning outcomes: "understand," "learn," "know," "look," "encourage," "be familiar with," "appreciate," "think about," "grasp" or "comprehend." Learning to write outcomes that describe what you want takes patience and practice. Make sure you get as much feedback as possible, especially from someone with a background in education.



Avoid vague or non-measurable verbs in outcomes such as grasp, understand, and know.

Well-Written Learning Outcomes—Examples

Here are some examples of well-written learning outcomes:

- Given an intelligence report, the learner will be able to accurately discuss two key points for determining the report's relevancy.
- At the end of this lesson, the learner will be able to correctly identify three major intelligence disciplines.
- At the end of this lesson, the learner will be able to create two corresponding strategies to build effective multinational relationships.
- Given an intelligence scenario, the learner will be able to accurately recommend three viable solutions for an intelligence problem.
- Given an MID article, the learner will be able to successfully—
 critique the article in writing, utilizing the four criteria for review
 taught in this learning event.

Poorly Written Learning Outcomes

Here are some examples of poorly written learning outcomes:

- · Intelligence community organizations and policy.
- Understand the nature of intelligence.
- Gain insight into the nature of a terrorist threat.
- Learn a systematic, organized approach to the acquisition of open source info.
- Understand XXA's counter-intelligence reporting vehicles.

Three Characteristics of Learning Outcomes

Well-written learning outcomes have three characteristics. They-

- 1. **State performance**, or what the learner should be able to do, as close to the actual job performance as possible.
- 2. **Specify the conditions** under which the learner is to perform.
- 3. **Specify the criteria for acceptable performance** and the standards from which the degree of achievement can be measured or observed.

Learning outcomes are purposeful and an inherent part of the instructional planning process. Task or needs analysis form the foundation of the learning outcomes; therefore, the learning outcomes should tie directly back to the analysis.



Bloom's Taxonomy is a useful tool when developing outcomes and assessments.

Classifying Learning Outcomes: Domains and Bloom's Taxonomy

Learning outcomes form the foundation of any educational program. Before developing instructional materials, decisions must be made about what the learners are expected to accomplish as a result of a lesson, learning event or curriculum. The buzz of learning outcomes is not a new concept.

Following the 1948 Convention of the American Psychological Association, Dr. Benjamin S. Bloom took a lead in formulating a classification of "the goals of the educational process." Eventually, Bloom and his co-workers established a hierarchy of educational outcomes, which is generally referred to as Bloom's Taxonomy, that attempts to divide cognitive outcomes into six subdivisions ranging from the simplest behavior to the most complex. It is important to realize that the divisions outlined herein are not absolutes, and other systems or hierarchies have been devised. However, Bloom's Taxonomy is easily understood and widely applied in the field of education and training.

Cognitive Learning Domain

Cognitive learning is demonstrated by knowledge recall and intellectual skills: comprehending information, organizing ideas, analyzing and synthesizing data, applying knowledge, choosing among alternatives in problem solving and evaluating ideas or actions. The cognitive domain focuses on the acquisition and use of knowledge and is predominant in the majority of learning events.

For details on how to use Bloom's Taxonomy to construct learning outcome statements, please refer to the Bloom's Taxonomy Document on the IACET Provider site. This document provides detailed examples from the Bloom's model as well as more recent, updated information.

