How to Write Great Learning Objectives
by Kevin Kruse

Robert Mager is the third titan of instructional design, and his 1962 book, Preparing Objectives for Programmed Instruction, influenced school systems for decades and continues to shape the vast majority of corporate training programs developed today. Mager argued for the use of specific, measurable objectives that both guide designers during courseware development and aid students in the learning process. These instructional objectives, also known as "behavioral" and "performance" objectives, can be applied directly in Gagne's second event of instruction, which is to inform learners of objectives.

Mager's Theory of Behavioral Objectives

In the design of instructional materials, training needs are first analyzed and the learning goals of the program are determined. Mager's central concept is that a learning goal should be broken into a subset of smaller tasks or learning objectives. By his definition, a behavioral objective should have three components:

1. **Behavior.** The behavior should be specific and observable.
2. **Condition.** The conditions under which the behavior is to be completed should be stated, including what tools or assistance is to be provided.
3. **Standard.** The level of performance that is desirable should be stated, including an acceptable range of answers that are allowable as correct.

Consider the following behavioral objective:

Given a stethoscope and normal clinical environment, the medical student will be able to diagnose a heart arrhythmia in 90% of effected patients.
This example describes the observable behavior (identifying the arrhythmia), the conditions (given a stethoscope and a normal clinical environment), and the standard (90% accuracy).

Today, the performance objectives in most training programs ignore an indication of the conditions and standards. When these are omitted, it is assumed that the conditions involve normal workplace conditions, and standards are set at perfection. What is always included, however, is the most important criteria for a valuable objective - a written indication of the behavior using measurable or observable verbs.

According to Mager, vague verbs such as "understand," "know," or "learn about" should be replaced with more specific verbs. The list that follows provides some of the verbs appropriate for use with the statement "At the conclusion of this lesson you will be able to:"

* list
* identify
* state
* describe
* define
* solve
* compare and contrast
* operate

For an example of how behavioral objectives can be developed, let's assume that we are creating a training program for receptionists. The goal of the program is simply to train people in proper phone use. What might the specific tasks and associated learning objectives include?

An example of a poorly defined objective is:

_in this course you will learn how to operate the phone and properly communicate with callers._
This statement is not an objective but a description of the course contents. Other examples of poorly written objectives are:

After completing this course you will be able to:

- operate your phone
- know how to greet callers
- understand the procedure for transferring a call

These objectives do not indicate observable behaviors, making assessment of their mastery impossible. How does one know if someone knows or understands something? What does it really mean to operate the phone?

The following performance objectives are good examples of the use of observable behaviors.

After completing this course you will be able to:

* place a caller on hold
* activate the speaker phone
* play new messages on the voice mail system
* list the three elements of a proper phone greeting
* transfer a call to a requested extension

These objectives are built around very discrete tasks. Instead of the vague objective to "operate the phone," the learner knows exactly what is expected for successful operation - namely, using the hold feature, speakerphone, and voice mail system. More importantly, these behaviors are observable. A student can be watched as he activates the speakerphone or listened to as she describes the elements of a good phone greeting. Because there is no ambiguity, learner expectancy is achieved and a proper evaluation can be made.