# Learning Objectives – In Class Project

Learning objectives (sometimes referred to as intended learning outcomes or course-specific goals) are clear statements that describe the competences that students should possess upon completion of a Training session or a course (Simon and Taylor, 2009; Anderson et al., 2001; Harder, 2002; Kennedy et al., 2006).

Effective learning objectives state what students should know and be able to demonstrate, as well as the depth of learning that is expected. Clearly defined and intentionally integrated course learning objectives can: 1) help to organize, structure and enhance student learning; 2) improve communication with students and other instructors regarding the important concepts and skills covered in a course; and, 3) improve assessment practices (Simon and Taylor, 2009).

# The Task

Consider a hypothetical training course that you have been contracted to develop for a client organization.

Develop five (5) effective learning objectives for that course, or a component of that course. Refer to the attached guides to ensure that each of the Learning Objectives is written in proper form.

**Course:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

LO1\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LO2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LO3\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LO4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LO5\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Writing Learning Objectives

Select a [verb](http://www.nwlink.com/~donclark/hrd/pdt.html) for performing the task.

Determine if the verb you have chosen best describes the type of behavior that the learners need to display after training (see [Bloom's Taxonomy](http://www.nwlink.com/~donclark/hrd/bloom.html) or the [People, Data, and Things Checklist](http://www.nwlink.com/~donclark/hrd/pdt.html)).

Under what [conditions](http://www.nwlink.com/~donclark/hrd/templates/objectivetool.html#condition) must the task be performed?

Determine to what [standards](http://www.nwlink.com/~donclark/hrd/templates/objectivetool.html#standard) the task must be performed.

Sample outlines for writing a [learning objective](http://www.nwlink.com/~donclark/hrd/objectives.htm):

**Template 1**

After the training period the learner will be able to perform \_\_\_\_\_\_\_\_(task)\_\_\_\_\_\_\_\_\_. The task must be performed under the following conditions: \_\_\_\_(condition 1)\_\_\_\_\_\_, \_\_\_\_\_(condition 2)\_\_\_\_\_, and \_\_\_\_(condition 3)\_\_\_\_\_\_. The following standards must be met: \_\_\_\_(standard 1)\_\_\_\_\_, \_\_\_\_\_(standard 2)\_\_\_\_, and \_\_\_\_(standard 3)\_\_\_\_\_.

**Template 2**

Perform \_\_\_\_\_\_\_\_\_(task)\_\_\_\_\_\_\_\_\_\_ when given \_\_\_\_\_(condition 1)\_\_\_\_\_ and \_\_\_(condition 2)\_\_\_\_\_\_\_. The learners must be trained to \_\_\_\_\_\_\_\_\_\_\_\_(standards)\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Template 3**

Given a \_\_\_\_(condition 1)\_\_\_\_\_, \_\_\_\_(condition 2)\_\_\_\_, and \_\_\_\_(condition 3)\_\_\_\_\_, perform \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(task)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The task must be performed as \_\_\_\_\_\_\_\_\_\_\_\_(standards)\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Template 4**

\_\_\_\_\_\_\_\_\_(task)\_\_\_\_\_\_\_\_\_\_\_\_\_ with  
\_\_\_\_(condition 1)\_\_\_\_\_, \_\_\_\_(condition 2)\_\_\_\_\_, and \_\_\_\_(condition 3)\_\_\_\_\_, by \_\_\_\_(standard 1)\_\_\_\_\_, \_\_\_\_(standard 2)\_\_\_\_\_, and \_\_\_\_(standard 3)\_\_\_\_\_.

# Standards with Examples

Standards are measurable criteria:

***How often?***

at least once per hour

at the start of every cycle

Before starting the task or after

***How well?***

exactly 7%

no more than 1 error

accurate to three decimal points

within 15 minutes (never use a time standard unless it is required by the job)

***How many?***

identify at least 16 items

produce 4 items

***How much?***

100 meters long

1/2 block before turning

How will we know it is OK?

until the left hand is touching

by speaking only after the customer has spoken

***Combination***

produce at least 15 per hour (how many and how often)

until the ditch is 300 feet long with tapering slopes (how much and we know it is OK)

# Conditions with Examples

***What is given?***

by checking a chart

by looking at photo

by referring to the manual

***or not given***

without reference to the manual

with no supervision

What are the variables?

no matter how upset the customer becomes

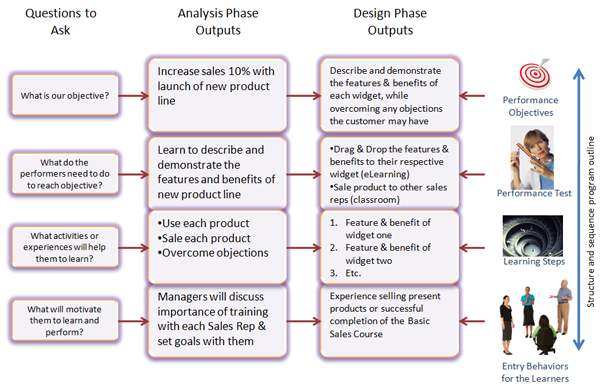
***Combination***

when driving (what is given) in the city (variable)

Source: <http://www.nwlink.com/~donclark/hrd/templates/objectivetool.html>

# Performance and Learning Objectives in Instructional Design

In the analysis phase, the backwards planning model was used to discover what needs to be trained to reach the performance requirements of a business. The information that was collected is now used design the learning platform. And as noted in the [Introduction to Design](http://www.nwlink.com/~donclark/hrd/sat3.html), the starting point is normally the performance or learning objectives:



Learning and performance objectives are created so that we know exactly what the learners must be able to do once they have completed the training process. Of all the activities within the ISD process, this is normally considered one of the more critical steps in that well -constructed learning objectives that align with the business unit's requirements allow:

* The instructors to know what needs to be taught
* The learners know what they are supposed to learn
* The managers know what they are investing their training dollars in.

Learning objectives form the basis for what is to be learned, how well it is to be performed, and under what conditions it is to be performed.

While there are specific objectives that means different things, such as educational, instructional, learning, behavioral, and performance objectives (Saettler, 1990); most instructional designers generally use two terms — terminal or performance objectives and enabling or learning objectives (Mager, 1975):

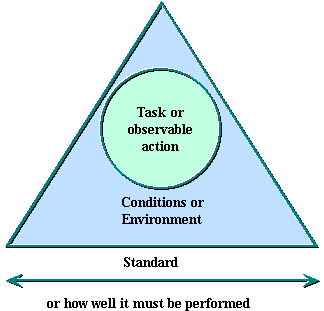
**A *Terminal* or *Performance Objective*** is developed for each of the tasks selected in the learning program. A terminal objective is at the highest level of learning (KSA) appropriate to the human performance requirements a student will accomplish.

Each terminal performance objective is then analyzed to determine if it needs one or more *Enabling* or *Learning Objectives.* These supporting objectives allow the Terminal Objective to be broken down into smaller, more manageable objectives. Each enabling learning objective measures an element of the terminal performance objective.

For example, a terminal objective might teach a salesperson how to sale a product, while an enabling objective might teach the salesperson to overcome objections that a customer has about that product.

**The Three Parts of an Objective**

Every performance or learning objective contains at least three parts:



*Observable Action (task)*

This describes the observable performance or behavior. An action means a verb must be in the statement, for example “type a letter” or “lift a load.” Each objective covers one behavior, hence, normally only one verb should be present. If there are more than one behaviors or the behaviors are complicated, then the objective should be broken down into one or more enabling learning objectives that supports the main terminal learning objective.

*At Least One Measurable Criterion (standard)*

This states the level of acceptable performance of the task in terms of quantity, quality, time limitations, etc. This will answer any question such as “How many?” “How fast?” or “How well?” For example, “At least 5 will be produced”, “Within 10 minutes”, and “Without error.” There can be more than one measurable criterion. Do not fall into the trap of putting in a time constraint because you think there should be a time limit or you cannot easily find another measurable criterion — use a time limit only if required under normal working standards.

*Conditions of performance*

Describes the actual conditions under which the task will occur or be observed. Also, it identifies the tools, procedures, materials, aids, or facilities to be used in performing the task. This is best expressed with a prepositional phase such as “without reference to a manual” or “by checking a chart.”

**Examples of Performance Objectives**

*Example 1:*

Write a customer reply letter with no spelling mistakes by using a word processor.

Observable Action: Write a customer reply letter

Measurable Criteria: with no spelling mistakes

Conditions of Performance: using a word processor

NOTE: If more that one type of word processor or computer is used in the organization, then it should be more specific. For example: *Given a personal computer, Word for Windows, and printer, create a printed customer reply letter with no spelling mistakes.* The conditions of performance are “Given a personal computer, Word for Windows, and printer.” Generally speaking, the larger the organization or the more technical the task, the more specific the conditions of performance must be spelled out.

*Example 2:*

Copy a table from a spreadsheet into a word processor document within 3 minutes and without reference to the manual.

Observable Action: Copy a table from a spreadsheet into a word processor document

Measurable Criteria: within 3 minutes

Conditions of Performance: without referencing the manual

Note: The Conditions of performance may also include a variable as shown in the next example.

*Example 3:*

Smile at all customers, even when exhausted, unless the customer is irate.

Observable action: Smile

Measurable Criteria: at all customers

Conditions: even when exhausted

Variable: unless the customer is irate

Note: Sometimes its helpful to start with the phase “After training, the worker will be able to...”

*Example 4:*

After training, the worker will be able to load a dump truck within 3 loads with a scooploader, in the hours of darkness, unless the work area is muddy.

Observable Action: load a dump truck

Measurable Criteria: within 3 loads

Conditions: with a scooploader in the hours of darkness

# Variable: unless the work area is muddy

The Performance objective spells out the exact training requirement. Without them, time and money could be wasted by training workers to type at 65 WPM when all that is required is to be able to type at 35 WPM, or training employees to sell an item to an easy going customer when what they really need to know is how to sell an item to a skeptical customer, or training them to enter data into a spreadsheet application when the actual job requires them to enter data into a customized database package.

A clearly formulated objective has two dimensions, a behavioral aspect and a content aspect. The behavioral aspect is the action the learner must perform, while the content is the product or service that is produced by the learner's actions. For example, *“the student will learn forklift operations by studying the operator's manual”* refers not to an outcome of training but to an activity of learning. If you observed the student reading, you could make no judgment if he or she was actually learning (behavioral aspect) and there is no service produced by the learner's action (content aspect).

A better example would be *“Given a forklift, load a pallet onto a trailer without any safety errors.”* In this example, the behavioral aspect is loading a trailer, while the content aspect is a pallet placed on the trailer.

Notice that learning objectives look a lot like tasks. A task analysis itemizes each discrete skill found in a job, but it provides only end goal statements. While learning objectives spell out the prerequisite skills and makes them the course objectives.

Source: <http://www.nwlink.com/~donclark/hrd/isd/develop_objective.html>

# Bloom's Taxonomy of Learning Domains

Bloom's Taxonomy was created in 1956 under the leadership of educational psychologist Dr Benjamin Bloom in order to promote higher forms of thinking in education, such as analyzing and evaluating, rather than just remembering facts (rote learning).

The Three Types of Learning

The committee identified three domains of educational activities or [learning](http://www.nwlink.com/~donclark/learning/learning.html) (Bloom, 1956):

### Cognitive: mental skills (*Knowledge*)

### Affective: growth in feelings or emotional areas (*Attitude or self*)

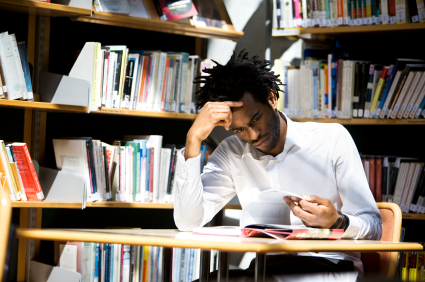
### Psychomotor: manual or physical skills (*Skills*)

Since the work was produced by higher education, the words tend to be a little bigger than we normally use. Domains can be thought of as categories. Trainers often refer to these three categories as KSA (Knowledge, Skills, and Attitude). This taxonomy of learning behaviors can be thought of as “the goals of the learning process.” That is, after a learning episode, the learner should have acquired new skills, knowledge, and/or attitudes.

While the committee produced an elaborate compilation for the cognitive and affective domains, they omitted the psychomotor domain. Their explanation for this oversight was that they have little experience in teaching manual skills within the college level (I guess they never thought to check with their sports or drama departments).

This compilation divides the three domains into subdivisions, starting from the simplest behavior to the most complex. The divisions outlined are not absolutes and there are other systems or hierarchies that have been devised in the educational and training world. However, Bloom's taxonomy is easily understood and is probably the most widely applied one in use today.

**Cognitive Domain**

The cognitive domain involves knowledge and the development of intellectual skills (Bloom, 1956). This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories, which are listed in order below, starting from the simplest behavior to the most complex. The categories can be thought of as degrees of difficulties. That is, the first ones must normally be mastered before the next ones can take place.

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| **Domains of learning, with example levels of sophistication and common verb associations** a **Domain of Learning** | **Levels of Sophistication** | **Common Verb Associations** |
| **Cognitive (Knowledge)**  *What will students know?* | remembering, understanding, applying, analysing, evaluating, creating | define, identify, describe, differentiate, explain, apply, analyse, resolve, justify, recommend, judge, create, design |
| **Psychomotor (Skills)**  *What will students be able to do?* | imitation, manipulation, precision, articulation, naturalization | adapt, arrange, build, calibrate, construct, design, deliver, demonstrate, display, dissect, fix, mimic, operate, sketch, use, perform |
| **Affective (Attitudes, Values or Habits of Mind)**  *What will students value or care about?* | receive, respond, value, organize, characterize | ask, challenge, demonstrate, discuss, dispute, follow, justify, integrate, practice, judge, question, resolve, synthesise |

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