

Learning Objectives

A key component of adult learning is understanding what information or skill(s) participants will acquire by participating in an event or session. This can be achieved by using learning objectives. They are a clear, concise and specific statement of observable learner behaviours that can be assessed at the end of the learning activity(s).

Learning objectives describe the intended purposes and expected results of learning activities and establish the foundation for assessment for all parties involved. Well-written objectives are specific and should be defined, observable, measurable and valid. They are not just a description of the content of the learning activity, but rather an outline of what a learner will be able to do differently as a result of the learning activity.

They should be written from the learner's perspective and clearly describe the knowledge and skills that are significant for the learning activity, articulate what a satisfactory learner performance should be and describe in *specific and measurable terms* what the learner will be expected to know or be able to do as a result of engaging in the learning activity.

A well written objective is carefully worded to include standards, conditions and terms which must be met and will describe:

- *Performance*
What the learner should be able to do (a measurable verb)
- *Conditions*
The conditions (if any) under which the learner will be able to achieve this (defined levels of accuracy, quality, quantity, time constraints)
- *Standard*
How well the learning must be done (specify the acceptable degree of accuracy or proficiency that the learner must meet.)

There are three types of learning objectives¹ which reflect different aspects of learning:

- *Cognitive objectives: "What do your learners need to know?"*
These are easy to measure and are commonly used. They involve factual knowledge, comprehension, application, analysis, synthesis and evaluation.
- *Affective objectives: "What do your learners need to think or care about?"*
Good assessment for this type of objective is challenging to develop and difficult to assess, given the high need for subjectivity in assessment. They involve specific attitudes, beliefs, emotions or role expectations.
- *Behavioural/skills objectives: "What do your learners need to be able to do?"*

¹ Bloom, B. S.; Engelhart, M. D.; Furst, E. J.; Hill, W. H.; Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals*. Handbook I: Cognitive domain. New York: David McKay Company.

These skills require practice and demonstration and are usually measured in terms of speed, precision, procedures or technique and involve using and coordinating the skeletal muscles including vision, hearing, speech or sense of touch.

For objectives to provide a useful basis for creating test questions, they must contain verbs that describe observable, measurable, achievable actions and specific levels of thinking, because these are things that can be tested. Avoid using verbs that represent actions or concepts that are difficult to measure – they are difficult to assess and to recognise whether the objective has been achieved.

Measurable objectives allow transparent and accurate assessment of whether the objective has been achieved. Objectives that cannot be measured are vague and often result in the inability to objectively assess successful learning as any attempted assessment of these usually involves a lot of subjectivity.

Many very worthwhile goals might be non-measurable but just because some goals are not quantifiable does not automatically make them less valuable; it just makes it harder to objectively determine the level of achievement. Short answer/MCQ assessments are unlikely to be able to do this successfully.

There must be a direct relationship between the learning objectives and the assessment. The assessment should derive directly from the objectives and focus on important and relevant content. Trivia (even if it is interesting) does not need to be assessed.

Effective learning objectives are:

- Consistent with the goals of the learning activity
- Clearly stated
- Clearly measurable
- Realistic and doable
- Appropriate for the level of the learner
- Define the important content

How to create Learning Objectives

Step 1

Learning objectives typically complete a statement.

For example:

- *At the end of this session, participants will be able to....*
- *Upon completion of all activities, participants should be able to....*

Step 2

Connect the statement created in the previous step to a measurable action verb. This should adequately describe what the participant should be able to know or do. Avoid using vague or abstract words such as believe, value, appreciate, be aware of, be familiar with etc.

Examples:

Measurable vs. Non-Measurable Terms	
Measurable - Use words like	Non-Measurable - Avoid words like
Identify	Appreciate
Compare/distinguish	Be familiar with
Justify	Understand/comprehend
Demonstrate	Believe
List	Learn
Describe	Know
Explain	Be aware of
Solve	Realise the significance of
Evaluate	Have a good grasp of

Step 3

End the sentence with the details of what the participant will be doing when they are demonstrating the verb. The detail should be specific and refer to the outcome of the learning objective.

Example of Completed Learning Objectives

1. At the end of this session you should be able to:
 - * identify the signs, symptoms and complications of heart failure
 - * describe the investigations and clinical features used to diagnose heart failure
 - * describe the clinical management of patients with heart failure
 - * explain the non-pharmacological approaches to the treatment of heart failure
2. After completing this workshop you should be able to:
 - * explain the concept of patient-centred care
 - * describe the key communication and consultation skills and techniques required to conduct patient-centred care
 - * apply methods to assess your own practice and identify areas of improvement
 - * support patients, by using a patient-centred approach, to help them get the best from their medicines and/or in making healthy lifestyle choices

List of verbs for creating educational learning objectives

Bloom's Taxonomy of Educational Objectives (1956): Cognitive Skills

A group of educators, led by Benjamin Bloom, identified a hierarchy of six categories of cognitive skills: knowledge, comprehension, application, analysis, synthesis and evaluation. As students learn, they start with the knowledge level and progress through the hierarchy. Thus, advanced courses should include skills at a higher level than introductory or basic skills courses. Below you will find a web-resource as well as a list of measurable verbs to assist you in writing course objectives and assess learning outcomes.

Objective-Builder Resource: <http://teachonline.asu.edu/objectives-builder/>

Knowledge: The successful student will recall learned information.				
Cite	Identify	Quote	Relate	Tell
Count	Indicate	Read	Repeat	Trace
Define	List	Recite	Select	Write
Describe	Name	Recognise	State	
Draw	Point	Record	Tabulate	
Comprehension: The successful student will restate or interpret information in their own words				
Classify	Describe	Estimate	Interpret	Summarise
Compare	Differentiate	Explain	Predict	Translate
Compute	Discuss	Extrapolate	Restate	
Contrast	Distinguish	Interpolate	Review	
Application: The successful student will use or apply the learned information.				
Apply	Employ	Locate	Relate	Sketch
Calculate	Examine	Operate	Report	Solve
Complete	Execute	Order	Restate	Translate
Construct	Illustrate	Practice	Role Play	Use
Demonstrate	Interpret	Predict		
Analysis: The successful student will examine the learned information critically.				
Analyse	Criticise	Distinguish	Question	Test
Appraise	Debate	Infer	Quantify	
Catalogue	Differentiate	Inspect	Separate	
Synthesis: The successful student will create new models using the learned information				
Arrange	Compose	Establish	Modify	Produce
Assemble	Construct	Formulate	Organise	Propose
Build	Create	Integrate	Plan	Specify
Collect	Develop	Manage	Prepare	
Evaluation: The successful student will assess or judge the value of learned information.				
Appraise	compare	Evaluate	Rank	Score
Assess	Critique	Justify	Rate	Select
Choose	Determine	Measure	Recommend	