Learning Objectives

Clear statement about the outcome of a training course, which informs what the trainee will be able to do or know after the training. They are presented from the trainee's perspective, expressing as a target the improvement of competencies, which will enhance job performance. The performance signals to the trainees what must be done or learned in very specific terms.

The learning objectives are the starting point of the development of a learning activity. They constitute an essential element in the preparation of a training course. The articulation of adequate learning objectives can be one of the most time-consuming tasks in training design. Even though they may be expressed in a single paragraph of a few lines, they are the foundation of any training course as they relate to the overall training goal.

Characteristics:

- They determine the behavior changes that will occur, setting the targets that are to be reached by the end of the training.
- They provide the trainees with a clear understanding of what they will be expected to know or to do when the course is completed.
- They must be verifiable and measurable even when the training focuses on attitudes.
- They must always have three elements:
  - **Performance**: What the trainee will be able to do as a result of the training, expressed in behavioral terms with action verbs.
  - **Conditions**: Circumstances under which the performance occurs, which should be aligned with real-world performance (e.g. role-play, simulation, using job aids, while being observed).
  - **Standards**: They form the basis for trainee's evaluation, describing how well he/she will be expected to perform each objective.

They directly shape content and procedural aspects of any assessment activity. For each stated objective an assessment exercise/activity has to be designed so as to evaluate the extent to which the trainees have learned what they needed to know and do.

They orient decision on the type of measurement to design: exams, simulations, checklists, quiz, presentation, role play, demonstrations, monitored activities, etc. The decision on the type to utilize varies according to the type of learning to be acquired.

Learning objectives differ from learning goals as they specifically focus on behavioral targets to be achieved at the end of the training, whereas the goals express the general purpose of the training, describing what is covered and how it is organized.

First and Second Level Learning Objectives

The initial statement (or bullet list) of the course learning objectives constitute the primary objectives (First Level). These first level objectives may have other objectives subordinated to them (Second Level Objectives), which are supporting or enabling objectives.

The First Level Objectives give the trainees an overall guide to what they will accomplish in the course whereas the Second Level Objectives are more content specific, telling exactly what they need to do.

First and second level objectives are particularly used when the course content is divided into modules or units. Thus, there will be an overall objective for the course (First Level) and other subordinated objectives in each one of the modules/units (Second Level) that support and directly enable the achievement of the overall course objective.

In case modules/units are again divided into sections, these sections will also have learning objectives (third level), which are even more specific than the ones in the previous levels.

Developing Learning Objectives

General Guidelines

1. Determine whether the training is intended for developing awareness, enhancing knowledge or developing skills:

Type of Learning Objective	Outcome
Awareness	They lead to greater awareness through the provision of knowledge (normally introductory or beginners' level). The improvement of skills can be incorporated only after knowledge is enhanced, as the course develops.
Knowledge	They are facts and descriptions based; they lead to general understanding of concepts, processes, etc., enhancing preliminary knowledge.
Performance	They illustrate the application of knowledge to have the learner improving skills or demonstrating new ones (e.g. identifying and solving problems).

2. Identify the kind of knowledge learners will acquire:

Kind of Knowledge	Externalization
Declarative Knowledge	It is "talk-about" knowledge. Learners will be able to talk about it: naming, explaining, and recalling what/why information. Activities should provide opportunity to practice declaratively.
Procedural Knowledge	Type of knowledge that enables to *act* and *do* things; to perform tasks. Activities should adopt a "hands-on" approach.

3. Determine what knowledge, skills and attitudes trainees will develop by asking the following questions:

    a) **To determine what the trainees will learn**: What learning outcomes participants of this training course need to demonstrate? What should learners know or be able to do by the end of this training event?

b) **To determine how one will be able to verify it**: With what performance criteria?

The answer will determine the type of objectives that must be developed, indicating the modalities of assessments that need to be designed. If the training course is an awareness raising, knowledge based and skills-based one, it needs objectives stating each of these components and assessments must be designed accordingly.

4. Start the statement with *"At the end of the training the trainee will be able to"* so as to make sure the objective makes sense from the trainee's point of view.

5. Decide on the correct behaviors. What you choose in the form of behaviors is what the trainee must exhibit to master the objectives, which represent the performance to be achieved.

6. Include the behavioral part of the objective. Use action verbs with observable behavioral meaning. The action of each objective is what determines whether it is verifiable.

7. Use the list of behaviors categorized according to Bloom's taxonomy. Bloom's taxonomy presents a system of classifying intellectual behavior that is important to learning as it provides a framework to be used when deciding which training component will add value. There are three categories: cognitive, affective, and psychomotor. Cognitive learning, which has to do with factual knowledge, is the category within which most training courses are developed. Bloom's taxonomy categorizes knowledge in six progressively complex levels (from simple to more complex) which facilitate the construction of learning objectives:

Level	Behaviors
1. ***Knowledge***: Recalling or recognizing facts	Arrange, count, define, duplicate, draw, identify, indicate, label, list, memorize, name, order, point, quote, recognize, recall, read, recite, record, relate, repeat, reproduce, state, tabulate, trace, and write.
2. ***Comprehension***: Understanding relationships and meanings	Associate, classify, compare, compute, contrast, describe, differentiate, discuss, distinguish, estimate, explain, express, identify, indicate, interpret, interpolate, locate, predict, recognize, report, restate, review, and select.
3. ***Application***: Being able to appropriately apply solutions to familiar situations	Apply, calculate, choose, classify, complete, demonstrate, dramatize, employ, examine, illustrate, interpret, operate, practice, relate, schedule, sketch, solve, use, and utilize.
4. ***Analysis***: Being able to separate a situation into its constituent parts	Analyze, calculate, categorize, compare, contrast, construct, criticize, detect, differentiate, discriminate, distinguish, examine, experiment, explain, group, infer, order, question, separate, summarize, test, translate, and transform.
5. ***Synthesis***: Being able to combine elements to form a whole	Arrange, assemble, collect, combine, compose, construct, create, design, develop, formulate, generalize, integrate, manage, organize, plan, prepare, prescribe, produce, propose, specify, and set up.
6. ***Evaluation***: Having the ability to appraise the value of something – a subjective ability.	Appraise, argue, assess, attach, choose, compare, critique, defend, determine, estimate, evaluate, grade, judge, measure, predict, rank, rate, select, support, test, recommend, and value.

8. Avoid using unverifiable verbs. *Know* and *understand* are wrongly used quite frequently. Whenever the *action* is inside the trainee's head, the performance component of the objective is not verifiable. Learning can only be tested if it can be verified by the senses.[1] Some verbs that are not observable and which should not be used to develop objectives are: appreciate; be aware of; comprehend; enjoy; know; know how to; learn; like; think about; understand.

[1] Hassel-Corbiell, Ribes, Developing Training Courses: a technical writer's guide to instructional design and development, Learning Edge Publishing, 2006.

9. Match the identified behaviors with adequate assessment activities. The type of assessment activity varies according to the behaviors expressed in each objective as they must match each one of them to allow proper evaluation.

10. Analyze if you have constructed a SMART objective:
    - Specific
    - Measurable
    - Action Oriented
    - Reasonable
    - Timely

Quick check

When writing learning objective statements, ask yourself the following questions:

- Does the objective focus on learner performance, explicitly stating what the learner will be able to do as a result of instruction?
- Does the objective describe the intended outcome of the instruction, **not** the instructional process or procedure?
- Does the objective describe explicit behavior that is observable and measurable?
- Is there a clear link between the learning objectives and the activities and assignments on which the learner's assessment is based?
- Do objectives go beyond recall of information to integrating and applying concepts to solve realistic problems?