## Developing Learning Objectives

### General Guidelines

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

<table>
<thead>
<tr>
<th>Type of Learning Objective</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>Awareness</td>
<td>This leads to greater awareness through the provision of knowledge (normally introductory or beginner level). The improvement of skills can be incorporated only after knowledge is enhanced, as the course develops.</td>
</tr>
<tr>
<td>Knowledge</td>
<td>This is fact and description based, leading to a general understanding of concepts and processes to enhance preliminary knowledge.</td>
</tr>
<tr>
<td>Performance</td>
<td>This illustrates the application of knowledge to have the learner improve skills or demonstrate new ones (e.g. identifying and solving problems).</td>
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</tbody>
</table>

2. Identify the kind of knowledge learners will acquire:

<table>
<thead>
<tr>
<th>Kind of Knowledge</th>
<th>Externalization</th>
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<tbody>
<tr>
<td>Declarative Knowledge: Factual and Conceptual</td>
<td>It is “talk-about” knowledge. Learners can communicate this by naming, explaining and recalling the what and why behind concepts and principles. Activities should provide opportunity to practice declaratively.</td>
</tr>
<tr>
<td>Procedural Knowledge</td>
<td>Type of knowledge that enables learners to act and do things. Activities should adopt a “hands-on” approach such as performing tasks.</td>
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<tr>
<td>Meta-cognitive Knowledge</td>
<td>Self-knowledge or know-how to comprehend and solve problems. It includes, for example, self-awareness of how one best memorises facts or what the ideal physical conditions are for enhancing levels of understanding.</td>
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</table>
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 do the participants of this training course need to demonstrate? What should learners know or be able to do by the end of this training event?

   **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.
<table>
<thead>
<tr>
<th>Level</th>
<th>Behaviors</th>
</tr>
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</table>
| **1. Remember:**  
Retrieval from memory | Acquire, arrange, define, describe, distinguish, draw, find, identify, label, list, locate, match, memorise, name, read, recall, recite, recognise, record, relate, repeat, reproduce, retrieve, select, state, write. |
| **2. Understand:**  
Make sense of information | Categorize, clarify, classify, compare, convert, critique, defend, demonstrate, describe, differentiate, discuss, distinguish, draw, explain, express, fill in, find, group, identify, illustrate, interpret, locate, match, outline, paraphrase, predict, recognise, reiterate, relate, report, represent, restate, review, reword, rewrite, summarise, trace, translate. |
| **3. Apply:**  
Use information that is learned | Apply, calculate, carry out, catalogue, change, choose, classify, compare, complete, conduct, construct, convert, demonstrate, differentiate between, discover, discuss, divide, execute, experiment, illustrate, implement, interpret, make, manage, measure, modify, operate, perform, prepare, produce, provide, put into practice, put together, react, record, respond, role-play, show, solve, test, translate, use, value. |
| **4. Analyze:**  
Differentiate between parts of information and determine connections | Analyze, appraise, break-down, calculate, categorize, classify, compare, contrast, debate, deconstruct, deduce, determine, differentiate, discover, discriminate, distinguish, examine, explain, extrapolate, identify, illustrate, integrate, investigate, outline, put into categories, quantify, relate, select, separate, structure, subdivide, survey, test, transform. |
| **5. Evaluate:**  
Determine implications and make recommendations | Argue, assess, award, check, choose, coordinate, conclude, critique, debate, decide, defend, detect, determine, discuss, establish, estimate, evaluate, integrate, interpret, judge, justify, measure, modify, monitor, prioritise, propose, rate, re-arrange, recommend, reflect, relate, revise, select, test, validate, value, verify, weigh. |
| **6. Create:**  
Combine parts to form a whole/new configuration | Add to, arrange, assemble, blend, create, combine, compose, construct, defend, design, develop, devise, formulate, generate, invent, investigate, organize, plan, prepare, present, produce, propose, rearrange, report, review, rewrite, set-up, synthesize. |
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.

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?