Learning Objectives

ODLS Quick Guide series

UMASS DONAHUE INSTITUTE
Organizational Development
& Learning Solutions

Note From ODLS

The Organizational Development and Learning Solutions team is pleased to offer you this quick guide volume on learning objectives. We created this series to address common topics for existing clients, future clients, and curious minds in general. In each volume, we briefly address some of the key concepts and concerns associated with the topic, offer guidance and best practices, and provide additional resources. We hope that the series inspires confidence and creativity in your present and future projects. If you are overwhelmed or uncertain about approaching your next project, we are here to support your learning project needs.

Setting learning objectives is a standard practice in education and a required accreditation component under many governing bodies. What is a learning objective, however? How do learning objectives support lessons? How do you construct learning objectives? In the following pages, we will begin to answer these questions.

–The ODLS Team

GOALS & OBJECTIVES

By setting learning objectives in the early stages of learning design, you can align the content, activities, and assessment to ensure that they all contribute to a cohesive and successful learning event. In the following paragraphs and pages, we present some of the key concepts and considerations involved in constructing learning objectives.

An **instructional goal** is a general statement describing what learners will be able to do as a result of a learning event. For a course on modern American history, we might state the goal as: "Learners will become familiar with American history from 1900 to 1980." A goal for a single week of that course might be: "Learners will understand the events leading to American involvement in World War I." Setting these goals is relatively straightforward and is based on what you want or need your learners to know or do. ODLS staff can assist with performing analysis to set these goals if you need help.

While instructional goals describe what the learner will do in general terms, **learning objectives** provide specific and measurable performance indicators that will be used to assess learner success. Like instructional goals, these objectives state what the learner will do, but in more concrete terms. An example of a complete learning objective might be: "Learners will define important concepts related to American involvement in World War I given a short-answer quiz and key, with a score of at least 70%."

Instructional strategies include the approaches, tools, and techniques that will be used to support the learners in reaching the objectives. **Assessment** involves the quantitative measures taken to measure the effectiveness of the learning event. While these elements are not covered in this Quick Guide, instructional strategies support objectives, and assessment determines if objectives have been met.

"If you don't know where you're going, you might wind up someplace else."

—Yogi Berra

Remember:

Instructional goals and learning objectives center on learner outcomes, not the instructor, process, or organization. You may also have teaching or organizational goals and objectives which exist alongside these learner-centered goals and objectives.

On target

SELECTING TOPICS FOR OBJECTIVES

Subject matter experts (SMEs) may struggle to define learning objectives when designing courses based on their knowledge. It is natural and admirable to desire that our learners come away from our lessons having acquired a significant level of expertise themselves. This leads to overly ambitious or ill-defined goals and objectives, however. Most experts didn't become experts by learning everything at once, and overwhelming learners with details can create more confusion and uncertainty. Instead, we can serve learners best by structuring our lessons around key aspects of our subjects.

When selecting learning objectives early in the process of creating a lesson, it is crucial to have a focused scope in mind. Learners can only learn so much in any given lesson, and expertise only comes after building up basic competency. The focus for an effective lesson must be on establishing foundational understanding and building from there. When examining a subject for lesson material, we can sort its elements into content which is worth knowing, content which is important to know, and content which represents the big ideas and core tasks involved. It is this last category, big ideas and core tasks, which must be the focus for our primary objectives. While we want learners to take away the important details, and eventually learn the content worth knowing, our lessons must first be structured around foundational understanding.

Once a learner has established this foundational understanding, they can begin to incorporate more and more related information and place it in an appropriate context. Going back to our example of American history, without understanding the concepts related to American involvement in World War I, the events leading to joining the war might be reduced to dates and names without appropriate context. Facts are important, but reciting facts is rarely what we genuinely want our learners to achieve.

When we say "foundational", this shouldn't be taken to mean simple or basic. Instruction is most effective when it builds on what the learners already know. For advanced or highly technical courses, the foundational understanding presented might require an existing base of skills or knowledge to grow from.

Put another way, we can imagine our lesson as a large tent. Constructing the tent itself is our goal, and the poles giving the tent structure are the objectives. From there, we might also need ropes and stakes and counterweights to secure the tent, but they only serve to further secure and support the tent. Likewise, the topics and information covered can secure and support your lesson, but the principal structure provided by the objectives must be the priority.

Figure 1. Prioritizing lesson content, adapted from *Understanding by Design* **by Wiggins & McTighe.**

Note:

For very basic or informal learning materials, you may wonder why you even need learning objectives. If you will not be assessing learners or submitting the materials for accreditation, it may seem like added work for no clear reason. However, the focus and structure provided by learning objectives has clear benefits for you in planning your materials, and has clear benefits for your learners in understanding the materials.
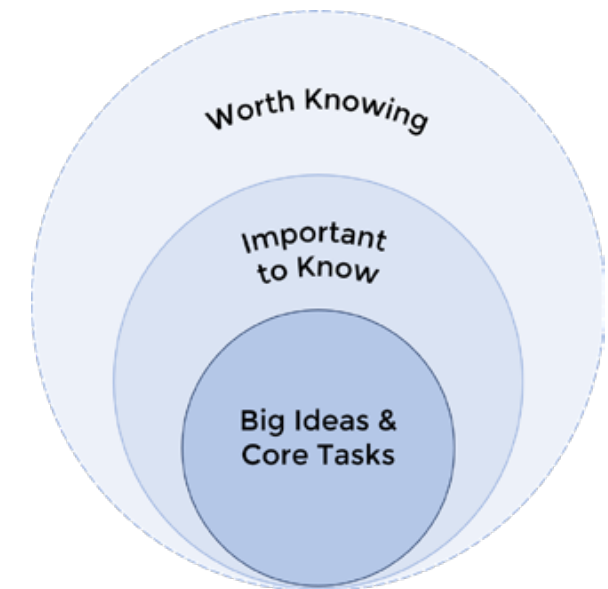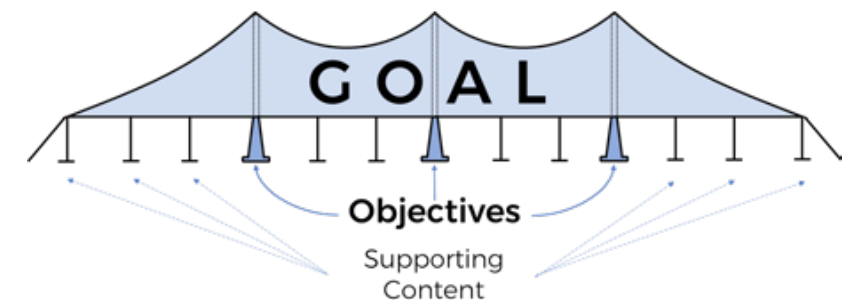

Figure 2. Conceptualizing the structure of a lesson as a tent.

CONSTRUCTING MEANINGFUL OBJECTIVES

If you are already familiar with popular methods for setting goals, like the SMART method, then setting learning objectives should come fairly easily. Indeed, the SMART method can be used alongside learning objectives for designing and assessing lessons. One of the standard formats for objectives is the ABCD method. ABCD stands for audience, behavior, conditions, and degree. Our earlier example, "learners will define important concepts related to American involvement in World War I given a short-answer quiz and key, with a score of at least 70%," follows this structure.

When writing objectives, you can use this format as a basic structure and checklist. The audience is often simply "students" or the more general "learners," but might also be more specific for a specific application, such as "Bell-Atlantic service technicians." The behavior is what the audience will be able to do, including a verb that can be acted on. In our example, the behavior is "define important concepts related to American involvement in World War I." The conditions describe the tools, circumstances, and materials available during the assessment of the objective. In this case, "given a short-answer quiz and key" serves as the condition. Finally, the degree describes a measure of mastery that will apply. In our example, the degree is "with a score of at least 70%." The measure might also be based on speed, qualitative evaluation with a rubric, or other methods as well.

Learners will define important concepts related to American involvement in World War I

audience   behavior

given a short-answer quiz and key, with a score of at least 70%
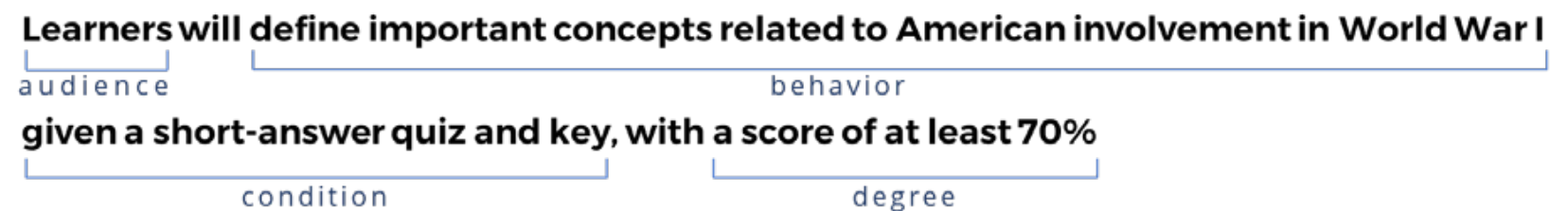
condition   degree

Figure 3. A learning objective in the ABCD format.

VERBS FOR OBJECTIVES

One of the most critical aspects of constructing valid objectives is the selection of the action verb used. Valid objectives have a single action verb, and that action verb must be demonstrable in some way to be assessed. Verbs like "know" or "understand" are frequently used in objectives, but these verbs are inappropriate. How does one evaluate understanding or knowledge in such broad terms?

You may wish to refer to references like Bloom's Taxonomy of Educational Objectives to assist you in selecting verbs. Bloom's Taxonomy, introduced in 1956, described a hierarchy of objective categories. The categories, after later revision, were stated as: Remember, understand, apply, analyze, evaluate, and create. They were presented with an argument that the later categories required higher-order thinking skills than the former categories.

Although subsequent researchers and educators have questioned this hierarchy, the overall taxonomy categories, and the recommended verbs for each category, have remained popular and frequently cited. For example, although "know" is a weak verb for an objective, looking at the verbs suggested for the remember category gives us verbs like "define," "list," and "state." These verbs are more suitable for a variety of assessment methods.

Consider those assessment methods when selecting your verbs. For example, verbs from the understand and remember categories often align well to multiple-choice questions. Verbs from the create and evaluate categories, on the other hand, often require a format like an essay, a video response, or a capstone project to truly fulfill.
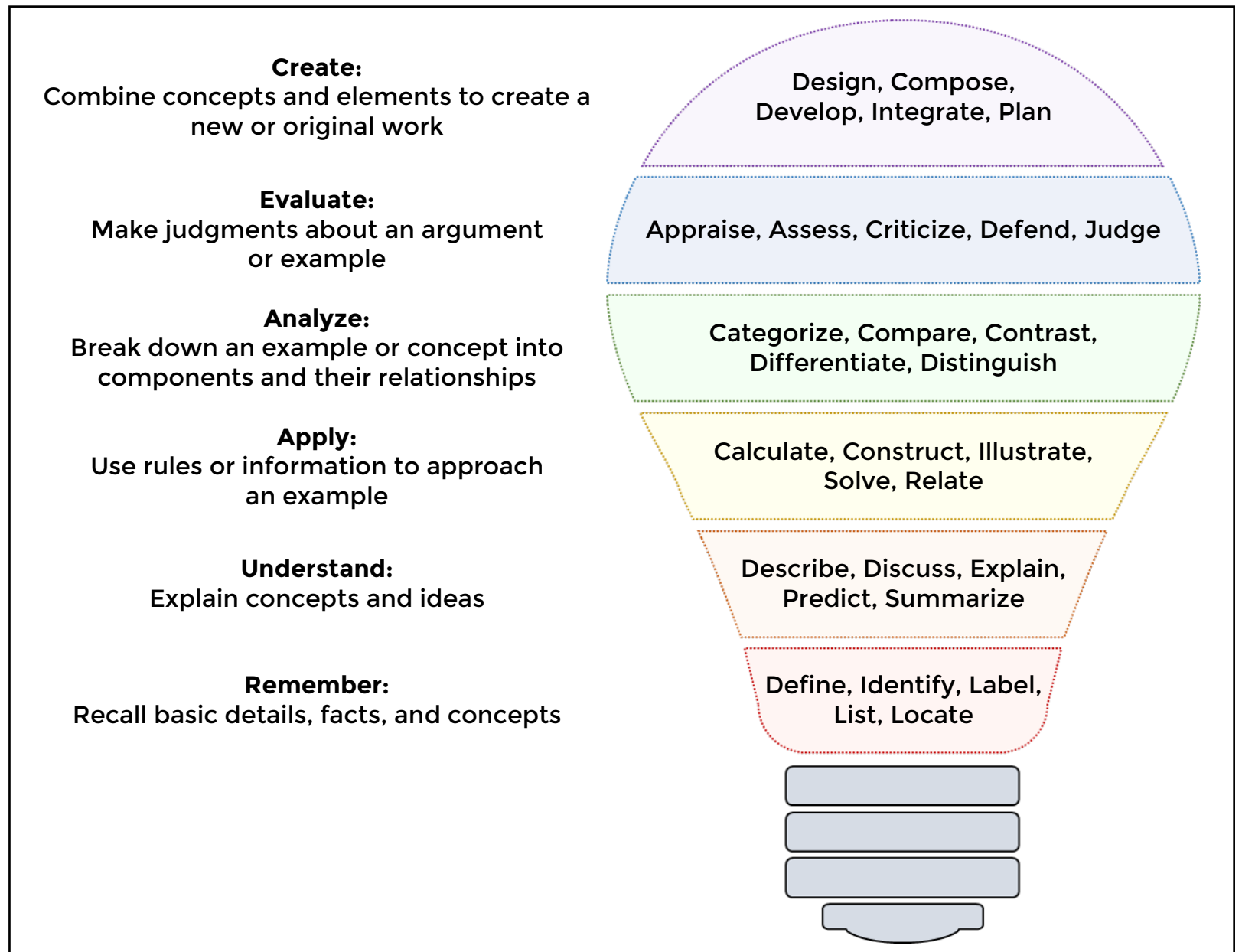
Create:
Combine concepts and elements to create a new or original work

Evaluate:
Make judgments about an argument or example

Analyze:
Break down an example or concept into components and their relationships

Apply:
Use rules or information to approach an example

Understand:
Explain concepts and ideas

Remember:
Recall basic details, facts, and concepts

Design, Compose, Develop, Integrate, Plan

Appraise, Assess, Criticize, Defend, Judge

Categorize, Compare, Contrast, Differentiate, Distinguish

Calculate, Construct, Illustrate, Solve, Relate

Describe, Discuss, Explain, Predict, Summarize

Define, Identify, Label, List, Locate

Figure 4. Bloom's Taxonomy of Educational Objectives

CONCLUSION

We hope that you've found this ODLS Quick Guide volume on learning objectives helpful. By identifying your objectives and building your course, training, or workshop from those objectives, you ensure that your learning event will be focused. By constructing your objectives with a suitable verb and clear parameters, you can then assess your learners and measure how well they have learned the material.

If this all sounds overwhelming or difficult still, don't forget that we are here to help you. From start to finish, ODLS staff can support your organization's design and development of learning materials and events with a wealth of project management, facilitation, design, and development experience.

Thank you.

Learn More:

Learning Objectives from Carnegie-Melon University

Bloom's Taxonomy from Vanderbilt University

Other References:

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