



CyberCampus®

Tips for writing performance-based objectives

Getting Started

A working definition of a performance-based objectives:

A Learning objective is a statement that describes the specific skills or knowledge a student will be able to demonstrate as a result of completing a course or lesson.

Getting Started

Why are performance-based objectives necessary?

Performance-based objectives are important for four reasons:

1. They provide students with clear goals with which to measure their own success. The students can look at the objectives and know what you expect of them:
2. They provide the instructor and course designer with direction in developing/assembling lesson materials that support the student in meeting the objectives
3. They allow the instructor to develop assessment to measure whether a student meets the stated expectation
4. WASC uses course and lesson objectives as one of the criteria for evaluating course quality.

Providing clear expectations: Active, specific, measurable objectives provide students with clear goals with which to measure their own success. The students can look at the objectives and know what you expect of them: To be able to associate, compile, estimate, gauge, implement, present, synthesize, etc., the content. They can manage their own time better and can be more self-directed in handling their own performance in the class. In discussions you may have with students, you can use the objectives as a clear point of reference to explain what more they may need to do to excel.

Can you imagine a conversation about how well a student "understands" a concept?

Student: Why did I fail this activity?

You: Well, you don't understand the concepts.

Student: Yes, I do.

You: Well, show me.

Student: That isn't fair, you never said I had to show you anything, just understand it.

Obviously, we just made up an oversimplified example. But -- we in CyberCampus hear complaints from students every single term who believe they met the course objective and the instructors believe they didn't.

Instructors who include specific, behavioral objectives do not have these problems nearly as much as others have.

Evaluation: In addition to helping out with our accrediting agency, writing sound performance objectives gives you, the instructor, an easier way to assess and measure learning; if you write objectives well, you can easily convert the objective to activities that test learning and test questions. After you write and sequence your objectives and prepare your tests, then it is so much easier for you to decide what information to include, in what sequence, and via what activities. So the discipline of writing objectives actually serves you as a short cut to designing and developing the course.

WASC: The University's accrediting agency WASC (Western Association of Schools and Colleges) wants us to measure learning outcomes. Part of this process requires that the learning outcomes be described in behavioral terms. This provides an overview to this process:

WASC periodically evaluates courses to ensure they meet standards. Your course may be one that they check - and you, your chair, and we in CyberCampus prefer that WASC think your course is stellar!! Most evaluators know that writing good objectives isn't a skill that every instructor has, so when they see good objectives at the beginning of the course, they are inclined to look more favorably on the entire course.

Writing performance-based objectives

Objectives Have Three Parts:

Performance objectives make tangible a vision of what learners will be able to do as a result of completing planned instruction, NOT what you as an instructor will do – that is your purpose. Ideally, objectives should contain these three elements:

- Performance
- Criteria
- Condition

Performance - describes "what a learner will be able to do to demonstrate that they have mastered the topic"

Criteria - describes "how well the learner must perform" the objective

Condition - describes "the important conditions (if any) under which" the performance occurs

Example:

- At the end of this session you will be able to **explain** (Performance) the difference between an effective performance objective and ineffective performance objective.
- **Use the tools and handouts** (Condition) to compose your own objectives
- Take and **pass at 75%** (Criterion) the test

The goal is to eventually have all three conditions for each objective - but for now all of your session objectives need to have at least the performance and criteria somewhere. As you become more comfortable writing objectives, practice combining the elements into a coherent, concise whole.

Exercise:

What's wrong with the following objectives?

- 1) *By the end of the course, I will present important concepts.*
- 2) *By the end of the course, the students will understand the instructor's lessons.*

Answer:

The problem with the first example is that it states what the instructor will do (not what the student will be able to do as a result of instruction).

The problem with the second example is that it uses the term "understand" which is a thought process, NOT a behavior (action) that a student can demonstrate as evidence of learning.

Why Behavior or Performance?

If your objectives are written with BEHAVIOR or PERFORMANCE in mind (what you can observe and measure), you can track your students' learning more easily because it is action based. The argument can be made that Testing will achieve the same results...right? Well, yes, tests, quizzes, etc., will indeed find out if the student is getting it, but usually by the time you start testing, it is too late. Instead of discovering a problem four or five weeks into the term, you can evaluate students beginning with the first set of objectives they face and master -- or not.

It may be that we inadvertently set the students up to fail -- by being unclear about our objectives, our tests will not be focused, nor will the content be parsed to support the tests and objectives.

Whenever you begin to write objectives ask yourself, "How will I know when the students have met the objective?"

Take a look at the following objective: *Students will understand the purpose of this course.*

Why or why not use this objective?

....In the next section, we will discover the answer, and why.

Terminal vs Enabling Performance Objectives

Here are two terms you should be familiar with: terminal objectives and enabling objectives. What's the difference, you ask? Let's go back to the previous example: *Students will understand the purpose of this course.*

In the example, the objective is a terminal objective, meaning that it focuses on what will happen at the end of the course. The terminal objective is usually broader and can be a little more general. Note that it can be a *little* more general. This is not license to write objectives that are not measurable. In this example, "understand" is barely OK if you are really desperate, but terms like describe, paraphrase, explain the importance of, etc., are much better.

An enabling objective is directly related to a terminal (or end of instruction) performance objective; the enabling objectives total up to the terminal objective. An enabling objective *enables* the learner to master part of the terminal objective.

So in brief, a terminal objective is focused on the ultimate end of the course, while enabling objectives are the smaller bits that help you reach that terminal objective.

When to use terminal and enabling? In CyberCampus, your course objectives in the Syllabus can be terminal objectives, and all of your session objectives are enabling. In your sessions, you are in essence giving the students what they need (*or enabling them*) to achieve the ultimate goal of the course...which is clearly stated in your syllabus ...right?

Getting Your Students to Do What You Want Them to Do!

We are not kidding around here! Behavior can be directly linked to specific kinds of learning. In Bloom's Taxonomy of Educational Objectives. Benjamin Bloom defined three domains of learning - cognitive, psychomotor and affective.



How do you use this information to create performance or behavior based objectives? Here's a job aid that will help guide you in writing performance-based objectives: (see attached Action Verbs). By using specific, active verbs in your objectives, you reinforce the idea that you want students to do something specific and measurable by the end of the session.

Bloom's Taxonomy helps you identify the domain and the level of learning within the domain. You can use specific action verbs as the performance part of the objective, then add the criteria and relevant conditions to create an effective enabling objective.

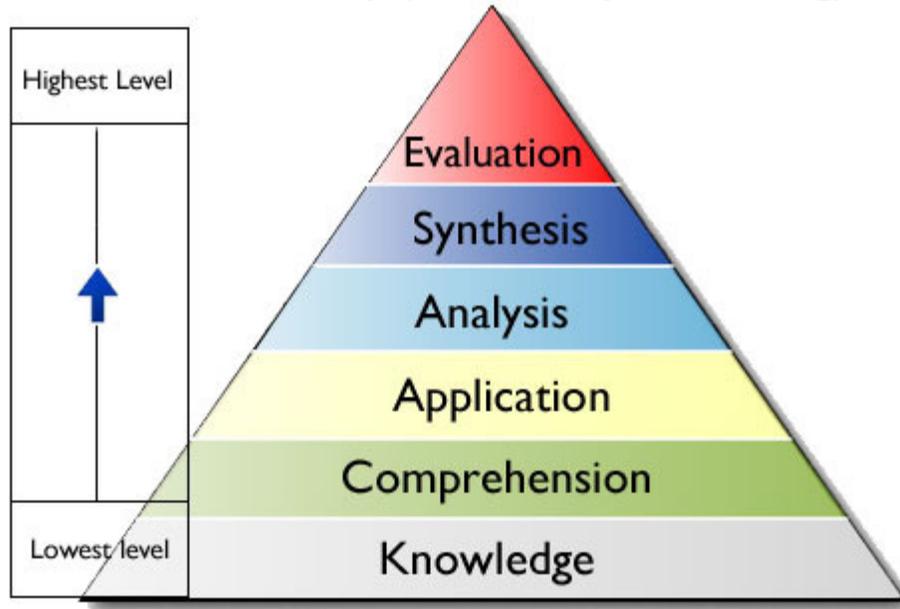
Using objectives well lets you develop your course top down and bottom up to make sure the course is both focused and complete with all needed content and no extraneous content. Armed with your general purpose for the course, you can create measurable terminal objectives, then break out enabling objectives. By sequencing and chunking the enabling objectives, you identify the information which goes into each session.

You can also check yourself by working backwards. You can review your content to see what objectives it meets. Then you can eliminate, re-sequence, or add content to match the objectives. When the enabling objectives match the content, you can derive terminal objectives from them, which should match your original purposes for the course.

The following Matrix is based on Bloom's Taxonomy which categorizes learning hierarchally into six levels of cognitive performance. Using Bloom's taxonomy it becomes possible to write objectives for measuring a wide range of learning outcomes.

Using Bloom's Taxonomy as an aid to writing objectives

Bloom's Taxonomy (Heirerarchy of Learning)



Guidelines for Writing Learning Objectives

Source: <http://apha.confex.com/apha/learningobjectives.htm>

The following guidelines are provided to assist in the development of appropriate learning objectives for a proposed educational experience.

Step 1. Describe the information, skills, behaviors, or perspectives participants in the session will acquire through attendance and participation.

Step 2. Clearly identify the outcomes or actions participants can expect to demonstrate as a result of the educational experiences. See the action words below.

Step 3. Write the learning objectives that relate to these outcomes and that reflect the content of the session. Objectives describe the behavior of the learner, and:

- are stated clearly
- define or describe an action
- are measurable, in terms of time, space, amount, and/or frequency.

Measurable Action Words (examples)

Recognize	Prioritize	Analyze	Create	Discuss
Construct	Articulate	Describe	Apply	Assess
Evaluate	Identify	Develop	Define	List

At the conclusion of the session, the participant (learner) in this session will be able to:

1. List five indicators that link a healthy community to healthy economy.
2. Articulate the procedure for assessing the health status of a patient with Alzheimer's Disease.
3. Develop a care plan for a family of six supported by an annual income of \$32,000, and caring for a child who has cystic fibrosis.

The following Matrix contains a list of verbs for each domain within Bloom's taxonomy. These are useful for writing objectives that ask students to demonstrate intellectual skill.

Observable verbs for the cognitive domain*					
Level 1. Knowledge		Level 2. Comprehension		Level 3. Application	
<i>Recall of information</i>		<i>Interpret information in one's own words</i>		<i>Use knowledge or generalization in a new situation</i>	
arrange	name	classify	recognize	apply	operate
define	order	describe	report	choose	prepare
duplicate	recognize	discuss	restate	demonstrate	practice
label	relate	explain	review	dramatize	schedule
list	recall	express	select	employ	sketch
match	repeat	identify	sort	illustrate	solve
memorize	reproduce	indicate	tell	interpret	use
		locate	translate		
Level 4. Analysis		Level 5. Synthesis		Level 6. Evaluation	
<i>Break down knowledge into parts and show relationships among parts</i>		<i>Bring together parts of knowledge to form a whole and build relationships for new situations</i>		<i>Make judgments on basis of given criteria</i>	
analyze	differentiate	arrange	manage	appraise	evaluate
appraise	discriminate	assemble	organize	argue	judge
calculate	distinguish	collect	plan	assess	predict
categorize	examine	compose	prepare	attack	rate
compare	experiment	construct	propose	choose	score
contrast	inventory	create	set up	compare	select
criticize	question	design	synthesize	defend	support
diagram	test	formulate	write	estimate	value

*Depending on the meaning for use, some verbs may apply to more than one level.

Source: Kemp, J.E., Morrison, G.R., & Ross, S.M. (1998). *Designing effective instruction*, 2nd ed. Upper Saddle River, NJ: Merrill