

OBJECTIVES/ASSESSMENTS

Lesson Objectives

Terminal Objective (TO) #1: Given a competency, develop a measureable performance-based objective that contains a condition, performance, and criteria component.

Enabling Objectives (EO): In order to reach the TO each student should, by the end of the lesson, be able to...

1. Explain the purpose of performance-based objectives.
2. Explain why performance-based objectives are important to training.
3. Describe the components of a terminal performance-based objective.
4. Differentiate between terminal and enabling performance-based objectives.
5. Recognize well-written terminal performance-based objectives.
6. Describe how to develop terminal and enabling performance-based objective.

Terminal Objective (TO) #2: Given a performance-based objective, develop and administer an assessment that measures the stated learning outcome and meets the minimum criteria specified in the NTC Lesson Plan Evaluation Rubric (LPER).

Enabling Objectives (EO): In order to reach the TO each student should, by the end of the lesson, be able to...

1. Define assessment.
2. Explain why assessments are important.
3. Differentiate between assessment and evaluation.
4. Give examples of different types of assessments.
5. Explain what a rubric is and why it's important.
6. Predict the impact of not having an assessment for training.

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Reasons for Having Objectives

Objectives:

- Keep instructors and participants focused on what is important.
- Keep everyone accountable.
- Describe measurable performance outcomes.
- Communicate to everyone what success will look like
- Provide blueprints for the content of the lesson.

Performance Objectives

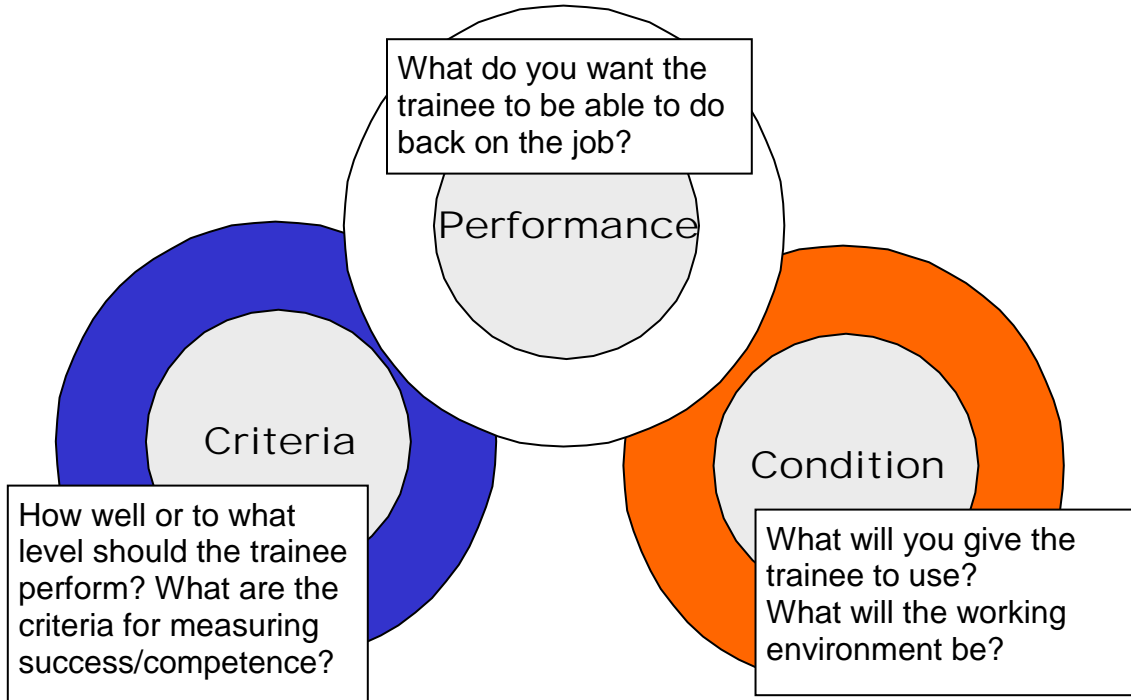
Performance objectives deal with a performance as close as is possible to what participants actually do on the job. The closer the performance to the actual work participants do or should do, the more successful the lesson.

Performance objectives focus on the skills needed to do the job. The instructor will present the knowledge needed to do the skill, but the focus is on what the participant will do with that knowledge. Good performance based objectives are divided into two categories, terminal and enabling.

Terminal and Enabling Objectives

According to Jolly T. Holden, Ed.D, author of “A Quick Reference Guide to Developing Cognitive Learning Objectives” written for the Federal Government Distance Learning Association (FGDLA), “Terminal Objectives describe, in broad terms, what the learner’s expected level of performance, competency, or knowledge must be at the end of a course, module, or lesson. Enabling objectives are derived from the terminal objective and are more detailed by defining the specific performance and/or knowledge of the learner. Enabling objectives define specific, measureable outcomes that must be mastered in order to satisfy the terminal objective.”

Three-Part Terminal Objective



EXAMPLES:

- Condition.....Given a patient of any weight,
Performance.....start an IV
Criteria.....after no more than two needle punctures.
- Performance.....Carry out a confined-space entry and exit
Condition.....with the assistance of two other team members and using
standard equipment.
Criteria.....Entry and exit will meet ATA-7 Safety Practices.
- Condition.....Given all necessary gardening equipment and material,
Performance.....the participant will plant a lawn.
Criteria.....All steps will be completed in accordance with a performance checklist.

EXERCISE:

For your objective, identify the Performance, Condition, and Standard.

Performance: _____

Condition: _____

Criteria: _____

Tips For Writing Objectives

- 1. Start by writing a job performance objective.**
Useful objectives must be based on the requirements for competent job performance. The performance specified in the objective must match the performance expected on the job.
- 2. Keep the end in mind!**
Figure out what you want your participants to leave your training session being able to do back on the job. Design training so that what participants do in training is as close as possible (and in as many ways as possible) to what they are expected to do on the job.
- 3. State the performance in terms of what the employee has to do rather than know.**
Describe the objective by the targeted trainee performance on the job or a simulated behavior in the training room, such as delivering training, writing a program, wiring a circuit, or leading a discussion. Using specific action words: write, compare, inspect, etc. Avoid such words/phrases as understand, know, learn, and gain knowledge of.
- 4. State the criteria – the required level of performance for the learning to be satisfactory.**
Examples: 80 percent score, less than two errors, within 15 minutes, or illustrating five of the six principles taught in class.
- 5. Describe any conditions under which the required level of performance must be attained.**
Examples: on a simulator, in a role-play, or using data from a field inventory.

Cognitive Levels Of Bloom's Taxonomy

Competence	Skills Demonstrated	Sample Verbs*
Evaluation	<ul style="list-style-type: none"> • compare and discriminate between ideas • assess value of theories, presentations • make choices based on reasoned argument • verify value of evidence • recognize subjectivity 	assess, decide, rank, grade, test, measure, recommend, convince, select, judge, support, discriminate, conclude, compare, summarize, evaluate
Synthesis	<ul style="list-style-type: none"> • use old ideas to create new ones • generalize from given facts • relate knowledge from several areas • predict, draw conclusions 	combine, integrate, modify, rearrange, substitute, plan, create, design, invent, compose, formulate, prepare, generalize, rewrite
Analysis	<ul style="list-style-type: none"> • seeing patterns; organization of parts • recognition of hidden meanings • identification of components 	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer, prioritize
Application	<ul style="list-style-type: none"> • use information • use methods, concepts, theories in new situations • solve problems using required skills or knowledge 	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Comprehension	<ul style="list-style-type: none"> • understanding information; grasp meaning • translate knowledge into new context • interpret facts, compare, contrast • order, group, infer causes • predict consequences 	describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Knowledge	<ul style="list-style-type: none"> • observation and recall of information • knowledge of dates, events, places • knowledge of major ideas • mastery of subject matter 	list, define, tell, describe, identify, show, label, collect, quote, name, recognize, explain,

Higher Levels of Thinking

Often verbs can represent more than one level depending on the context.

Adapted from: Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives:

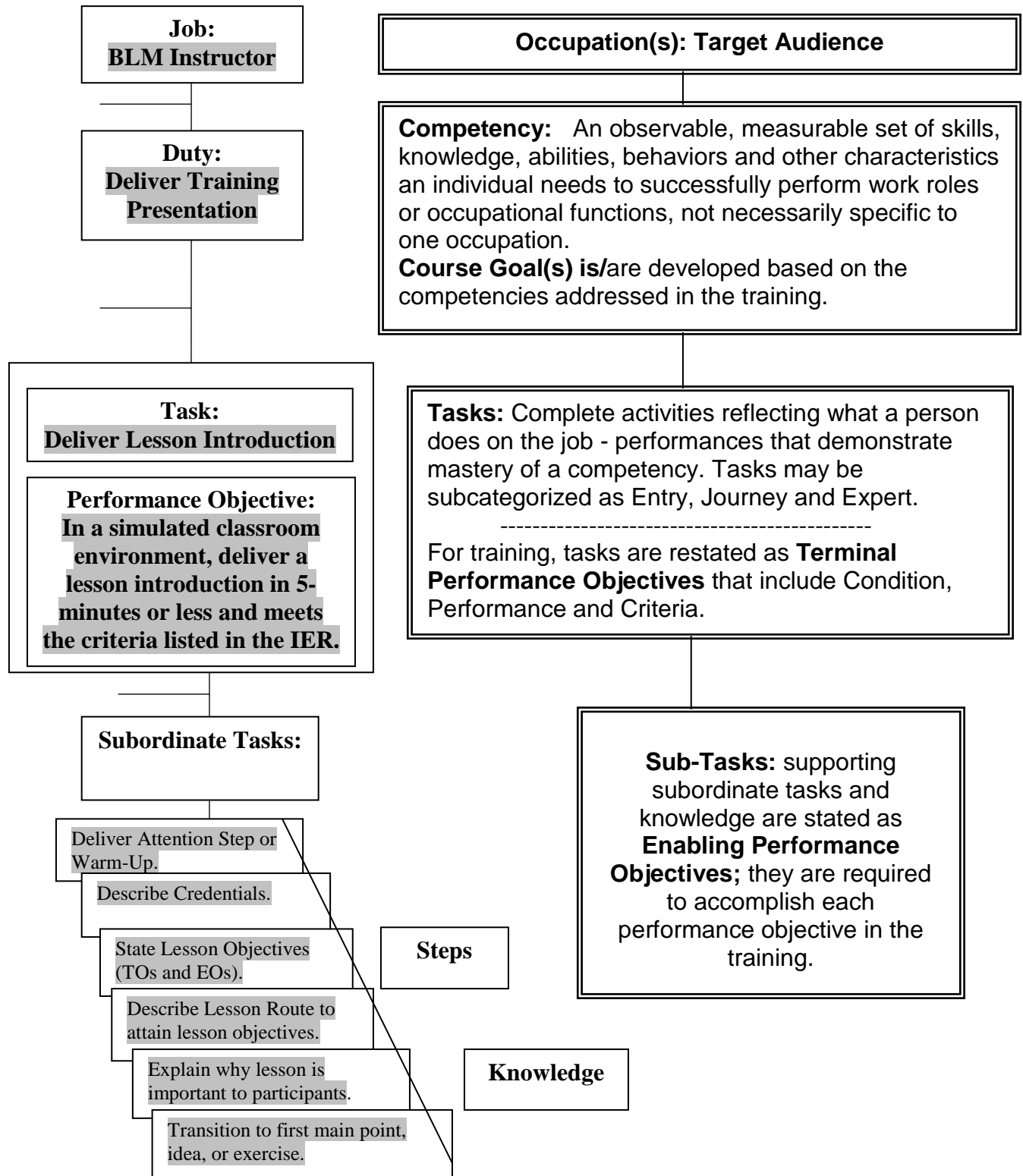
Selection of Verbs For Objectives

This list is far from complete but may give you some inspiring thoughts.

Response to stimulus	Action request	Verbal responses	Multiple Discriminating	Concepts	Principles (1st column)	Principles (2nd column)	Problem Solving	Other
association	activate	brief	choose	account	anticipate	figure	accommodate	acquire
gave a word for	adjust	cite	compare	allocate	authorize	foresee	adapt	accept
grasp	align	copy	contrast	arrange	approve	generalize	adhere	allow
hold	acquire	enumerate	couple	assign	calculate	illustrate	administer	agree
identify	apply	letter	decide	budget	calibrate	infer	adjust to	adopt
indicate	attend	list	detect	calibrate	catalog	interpolate	analyze	advise
label	close	quote	differentiate	catalog	check	interpret	compose	approve
lift	copy	recite	discern	categorize	compile	monitor	contrive	collaborate
locate	count	record	discriminate	characterize	compute	organize	correlate	conduct
loosen	(dis)assemble	reiterate	distinguish	classify	conclude	plan	create	confer
move	dispose	repeat	divide	collect	construct	predict	develop	consolidate
name	(dis)connect	reproduce	evaluate	evaluate	convert	prescribe	devise	consult
pick up	draw	(re)state	isolate	file	coordinate	program	diagnose	delegate
place	duplicate	transcribe	judge	grade	correct	project	discover	disseminate
press	insert	type	pick	group	deduce	schedule	find a way	execute
pull	load	write	recognize	identify	define	solve	invent	extend
push	manipulate		reject	index	demonstrate	translate	realize	furnish
recognize	measure		select	inventory	design	verify	reason	edit
repeat	open		translate	itemize	determine		resolve	fabricate
reply	operate		validate	match	diagram		study	file
respond	remove			mate	equate		synthesize	gather
rotate	replace			order	estimate		think through	guide
say	stencil			rank	evaluate		troubleshoot	manufacture
set	trace			rate	examine			make
slide	tune			reject	expect			modify
signal	turn off/on			screen	extrapolate			operate
tighten				select				prepare
touch				sort				secure
turn				specify				upgrade
twist				survey				
				tabulate				

Competency, Task Analysis and Training Design Terminology

Example



Why Assess?

Did learning occur?

Assessments allow trainees to apply skills and knowledge to job-like situations in the classroom.

Assessment is important to determine whether the trainee has acquired the knowledge or skill to meet the objectives of the class/course.

Assessments give participants an opportunity to succeed on the job by focusing on required job skills and knowledge. Assessments help instructors and course administrators to validate participants have the required skill sets when they leave the class and return to the job.

Later when you determine the effect of the training on the job there are some questions that will determine that the original assessment was correct. Are they able to use the skills learned in the training? How effectively are they using these skills in their job?

Does the lesson need to be improved?

Assessments help to determine if the lesson was designed so the learners can achieve the objective.

Assessments provide the instructor with a means of measuring the effectiveness of the course material and delivery methods.

Were the objectives clear? If they were and the trainees were able to meet the objectives, that's great. If some have difficulty meeting the objectives, the course coordinator (and associated instructors) may need to review the course to determine if changes need to be made or if there is some other reason why the trainees did not meet the objectives.

You can revisit the lesson content to determine if all necessary components were covered. If they were, then you can verify that the appropriate delivery method was used. Was there too much lecture? Should there have been more hands-on opportunities? Could additional exercises provide additional learning opportunities to ensure full coverage of established terminal and enabling objectives?

Guidelines for Assessment

TIMING

- Assessment happens throughout a lesson. Don't wait until the end-of-lesson to see if they got it. Ask questions and conduct exercises throughout the lesson.
- If you are "chunking" a large lesson into manageable parts, you may want to have an assessment exercise at the end of each "chunk" that measure enabling objectives. You might want to use the technique of "building" an exercise; do a related step after each "chunk" and pull it all together at the end of the lesson.

CONTENT

- Always assess to the objectives.
- The subject matter of an assessment should match what was taught in the unit. It isn't fair to assess learners on information or skills that have not been covered.

CLARITY

- An assessment exercise should be explained clearly in easy-to-understand language. Tell participants at the beginning of a lesson how they are going to be assessed. Write and state the objectives in clear, simple, and measurable words.

PARTICIPATION

- Decide whether to assess participants individually or in groups by simulating the job as much as possible. If the task is performed in a team on the job, it should be assessed in a group. However, the group should be observed to assess the performance of each participant. If they will perform the task individually, be sure that each participant has a chance to complete the assessment individually and check to be sure each participant can do it on their own.
- Keep your trainees actively involved in the learning. Active involvement will set up their willingness to participate in an assessment exercise.

Considerations in Designing Assessments

IN ALL CASES, the assessment used to measure learning should be **DETERMINED BY THE OBJECTIVES**, not by the subject-matter or the time available.

If the OBJECTIVE is aimed at:	Learning Strategy ideas include but not limited to:	Assessment ideas include but not limited to:
1. Perform a specific task or skill.	Demonstration-Performance	Simulation, Participant Demonstrates Performance, Self-Critique Of Own Performance, Role Play.
2. Recall of facts, terms, principals, and concepts.	Lecture or Informal Lecture Method	Questioning, Case Study/Discussion, and Written Test.
3. Ability to apply skills and knowledge to real situations.	Experiential Methods	Experiential Methods Such As Role Plays, Simulations, Projects.
4. Ability to use information, facts, and processes to solve sample problems.	Guided-Discussion Methods	Discussion, Case Study, Problem Solving Scenarios.
5. Ability to converse in an informed, articulate manner about the topic.	Guided Discussion or Experiential Methods	Guided Discussion or Experiential Methods

REMEMBER! Objectives indicate the desired learning outcomes; therefore, assessments should **MEASURE LEARNING OBJECTIVES**.

Assessments should present tasks that are worthwhile, significant, and meaningful to students and that reflect the kinds of mastery demonstrated by experts. Authentic assessments both mirror and measure student performance in "real-world" tasks and situations.

Assessments may be used for individuals or groups.