

Writing Learning Objectives

What is a Learning Objective?

A learning objective is an outcome statement that captures specifically what knowledge and skills learners should be able to demonstrate after instruction.

Key Characteristics:

- Related to intended **outcomes** (rather than process)
- **Specific & measurable** (not broad & intangible)
- Concerned with **students** (not teachers)

Key Components of Learning Objectives

1. Task (“What”)

- What a learner is expected to be able to do
Example: Be able to juggle

2. Conditions (“When”)

- The circumstances under which the performance is to occur
- What’s given/not given; what are the variables?
Example: Given an apple, a tennis ball, and a chainsaw, be able to juggle all three.

3. Standard (“How”)

- Criteria that describe the level of competence that must be reached or surpassed
- How many, how often, how well, etc.
Example: Given an apple, a tennis ball, and a chainsaw, be able to juggle all three for at least two consecutive minutes without dropping anything or causing injury to oneself or any audience members.

Sample Learning Objective Analysis

- **Objective:** Be able to run 400 meters on a dry, level track within sixty seconds

Task = Run 400 meters

Conditions = Dry, level track

Standard = Within sixty seconds

Objective Writing

To prepare an objective:

1. Write a statement that describes the **main intent or performance** expected of the student
 - If the performance is covert, add an **indicator behavior**
 - Discriminate between (*sort into two groups*) normal and abnormal X-rays
 - Determine (*explain in writing*) the cause of the patient's symptoms
2. Describe relevant or important **conditions** under which the performance is expected to occur
3. Describe **how well** the learner must perform the task to be considered "acceptable" or "competent"

Common Pitfalls in Writing Learning Objectives

- Using verbs that are difficult to evaluate (e.g., "understand" and "know")
- Listing *teaching* objectives instead of *learning* objectives
Example: "To provide new information regarding the diagnosis and treatment of periodontitis"
 - This focuses on what the *instructor* plans to do, rather than on what the learner's outcome will be.
- Listing topics instead of objectives
 - "Principles of thermodynamics"
 - "Efficacy of beta blockers in managing cardiac arrhythmias"

"Bad" Verbs vs. "Good" Verbs

Open to Multiple Interpretations	Open to Fewer Interpretations
Know	Write
Comprehend	Recite
Understand	Identify
Learn	Sort
Appreciate	Solve
Grasp the significance of	Construct
Enjoy	Build
Believe	Compare
Internalize	Contrast

Verbs for Creating Learning Objectives & Correlation to Bloom's Taxonomy

Information:

▪ observation and recall of information	▪ knowledge of major ideas	
▪ knowledge of dates, events, places	▪ mastery of subject matter	
cite	identify	quote
indicate	read	repeat
recite	select	trace
state	update	draw
write		
	relate	tabulate
	tell	define
	describe	name
	point	record
		count
		list
		recognize
		summarize

Comprehension:

▪ understanding information	▪ interpret facts, compare, contrast	
▪ grasp meaning	▪ order, group, infer causes	
▪ translate knowledge into new context	▪ predict consequences	
assess	contrast	distinguish
demonstrate	estimate	interpret
estimate	interpret	review
express	predict	compute
	interpolate	restate
	review	classify
	translate	compare
	discuss	extrapolate
		associate
		describe
		differentiate
		report

Application:

▪ use information	▪ solve problems using required skills or knowledge	
▪ use methods, concepts, theories in new situations		
apply	employ	match
examine	operate	report
order	restate	translate
review	treat	demonstrate
use	develop	locate
	relate	sketch
	solve	choose
	complete	interpolate
	interpret	predict
	prescribe	select
		calculate
		illustrate
		practice
		schedule
		utilize

Analysis:

▪ seeing patterns	▪ recognition of hidden meanings	
▪ organization of parts	▪ identification of components	
analyze	criticize	diagram
debate	differentiate	inspect
distinguish	inventory	separate
measure		
	infer	question
	separate	contract
	contrast	detect
		appraise
		deduce
		experiment

Synthesis:

▪ use old ideas to create new ones	▪ relate knowledge from several areas	
▪ generalize from given facts	▪ predict, draw conclusions	
arrange	construct	formulate
create	generalize	plan
integrate	prepare	specify
prescribe	validate	compose
	organize	produce
	propose	collect
	combine	detect
	document	manage

Evaluation:

▪ compare and discriminate between ideas	▪ verify value of evidence	
▪ assess value of theories, presentations	▪ recognize subjectivity	
▪ make choices based on reasoned argument		
appraise	critique	evaluate
decide	grade	rate
judge	recommend	test
revise		
	rank	score
	select	choose
	compare	estimate
		assess
		determine
		measure

Sources:

Bloom, Benjamin S. Taxonomy of educational objectives. Published by Allyn and Bacon, Boston, MA. Copyright (c) 1984 by Pearson Education.

Mager, Robert F. Preparing Instructional Objectives: A critical tool in the development of effective instruction. Atlanta: The Center for Effective Performance, Inc., 1997.

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