

TIPS ON WRITING LEARNING OUTCOMES

Definition of learning outcome:

Teachers/facilitators phrase learning outcomes for the students to measure their learning by using measurable and observable action verbs. It is a statement including a verb phrase and impact phrase which starts with usually 'end of the session student will be able to state/apply/explain.....'

Bloom's Taxonomy of Educational Objectives (published in 1956 and revised in 2001) helps us to phrase learning outcomes in a way that reflects cognitive skills.

The five levels of cognitive skills are (lowest to highest):

- Knowledge/Remembering
- Comprehension/Understanding
- Application/Applying
- Analysis/Analyzing
- Evaluation/Evaluating
- Synthesis/Creating

Avoid:

We should avoid vague and often not observable or measurable verbs to writing learning outcomes.

Verbs to avoid

Understand	Appreciate	Know about	Become familiar with	Learn about	Become aware of
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List of Measurable Verbs Used to Assess Learning Outcomes

Knowledge Level: Example: End of the session/course student will be able to- (use a verb from the list to measure his/her knowledge level) + rest of the statement.

list,	tell	arrange	identify	reproduce	relate
state	select	describe	outlines	recall label	repeat
name	underline	memorize	recognize	record	define
count	draw	match	write	recite	quote
point	read				

Comprehension Level: Example: End of the session/course student will be able to- (use a verb from the list to measure his/her Comprehension Level) + rest of the statement.

explain	discuss	express	locate	report	compare
translate	tell	classify	review	summarize	estimate
identify	reference	associate	critique	illustrate	reiterate
restate	describe	paraphrase	interpret	generalize	predict
compute	convert	defend	distinguish	extend	rewrite
extrapolate	give example	infer			

Application Level: Example: End of the session/course student will be able to- (use a verb from the list to measure his/her Application Level) + rest of the statement.

apply	manipulate	produce	translate	discover	interpolate
use	demonstrate	show	calculate	divide	modify
practice	complete	subtract	classify	examine	operate
execute	prepare	change	compute	graph	solve
sketch	construct	conduct	dramatize	perform	respond
role-play	employ	add			

Analysis Level: Example: End of the session/course student will be able to- (use a verb from the list to measure his/her Analysis Level) + rest of the statement.

Analyze,	diagram	point out	subdivide	catalogue	test
extrapolate,	distinguish	select	utilize	quantify	critique
calculate	differentiate	relate	inspect,	combine	diagnose
develop	appraise	separate	categorize	design	illustrate
measure	theorize	experiment	debate	arrange	breakdown
detect	discriminate	infer	outline		

Synthesis Level:

Example: End of the session/course student will be able to- (use a verb from the list to measure his/her Synthesis Level) + rest of the statement.

Develop	create	revise	reorganize	transform	combine,
plan	design	formulate	rewrite	specify	compile
build	organize	reconstruct	summarize	categorize	explain
drive	generate	group	order	propose	prescribe
establish	relate	integrate	modify	compose	collect
construct	prepare	devise	manage	rearrange	

Evaluation Level:

Example: The End of the session/course student will be able to- (use a verb from the list to measure his/her Evaluation Level) + rest of the statement.

Review	conclude	interpret	, justify	determine	report on
rank	compare	support	criticize	assess	investigate
test	evaluate	contrast	critique	defend	appraise
argue	rate	score	select	measure	choose
grade	judge				

** There are few verbs which can be used to measure multiple cognitive levels**

Source/Reference:

www.k-state.edu/assessment

<https://www.clinton.edu/curriculumcommittee/listofmeasurableverbs.xml>