MaineHealth

Writing Effective Learning Objectives

Educational planners are expected to design activities with the intent of changing clinician and healthcare team competence, performance, and/or patient outcomes, as opposed to merely increasing knowledge.

• competence (knowing how to do something; having the knowledge/ability to apply knowledge, skills and judgment in practice; new strategies a clinician or healthcare team might consider putting into practice)

• performance (what a clinician or healthcare team actually puts into practice)

• patient outcomes (patient health status)

Effective learning objectives must therefore be focused on the learners and teams and not the faculty. In other words, think about what behavioral changes will result for learners instead of how the faculty will deliver education.

Questions to Ask Yourself

• What do you want participants or the healthcare team to be able to do as a direct result of

participating in this activity (workshop, course, seminar, etc.)?

• What does our audience need to know or be able to do to bridge the gap between where they are today and where do we want them to be tomorrow?

• If participants and teams could learn only three concrete things in this session, what would those three things be? What would be your three take-home messages?

Tips for writing

1. Write each learning objective beginning with the phrase “After participating in this activity, clinicians (or the healthcare team) should be able to ..... ”

2. Make sure that objectives are measurable and relate directly to reducing the identified practice gap(s)

3. State what the clinician or healthcare team might specifically do differently (behavioral change) because of what has been learned.

4. Use verbs which allow measurable outcome and thus can then be used in the evaluation process.

See following pages from the ACS on more tips for writing learning objectives and using Bloom’s Taxonomy of Learning Objectives

ACCME ACCREDITED WITH COMMENDATION

AMERICAN COLLEGE OF SURGEONS
DIVISION OF EDUCATION

Tips for Writing Learning Objectives

A **learning objective** is a statement that describes the *knowledge, skills, and/or abilities* that participants *will gain* from the educational activity.

WHEN DEVELOPING OBJECTIVES, ASK THESE QUESTIONS

1. What should the result of the educational activity be for participants?
2. What should the participant be able to do?
3. What should the participant know?

HOW TO WRITE LEARNING OBJECTIVES

Learning objectives should:

- Be congruent with the identified gaps
- Reflect the continuing medical education (CME) mission of the American College of Surgeons (ACS), with a minimum of *improving competence*
- Be in a learner-centric format versus a faculty- or instruction-centric format
- Be measurable *(e.g., do not use "understand," "know," etc., as these are not measurable verbs)*
- Consist of only one action or outcome
- Follow the Kern and Thomas Approach:[1] Who will do how much (how well) of what by when?
  - — Who = The participant, learner, provider, physician, etc.
  - — Will do = What do you want them to do? Describe the expected, observable action/behavior.
  - — How much (how well) = How well should the action/behavior be done? *(if applicable)*
  - — Of what = What do you want them to learn? Describe the knowledge that should be gained.
  - — By when = End of the course, etc.

  Examples

  Upon completion of this learning activity, participants should be able to:

  - — Assess a patient's condition accurately and in a timely manner.
  - — Identify the correct sequence of priorities used when assessing a traumatically injured patient.
  - — Demonstrate central venous catheter placement at a mastery level.
  - — Identify all essential equipment needed when managing a patient with a difficult or potentially difficult airway.

[1] Ken DE, Thomas PA, Hughes MT, eds. *Curriculum Development for Medical Education: A Six-Step Approach.* 3rd ed. Johns Hopkins University Press; 2010.

WHY DEVELOP LEARNING OBJECTIVES?

Through the Accreditation Council for Continuing Medical Education (ACCME), the ACS is an accredited provider of CME. As an accredited provider, *ACS is responsible for ensuring that all CME programs have learning objectives to:*

1. Guide the design and development of the educational activities
2. Provide clear expectations for the educational activity to the learners, and
3. Provide measurable outcomes in terms of *knowledge, competence (knowledge in action)*, and/or *performance (what one does in practice).*

VERBS TO USE: BLOOM'S TAXONOMY

The verb list below has been found to be effective in formulating learning objectives; it is from Bloom's Taxonomy by Benjamin S. Bloom, originally published in *Taxonomy of Educational Objectives* (1956).[2]

Knowledge		Competence		Performance		Evaluation		Avoid
Information	**Comprehension**	**Application**	**Analysis**	**Synthesis**	**Evaluation**	**Skills**	**Attitudes**	**Avoid (unmeasurable)**
choose	associate	adapt	analyze	arrange	appraise	diagnose	acquire	appreciate
cite	clarify	apply	appraise	assemble	approve	empathize	consider	approach
count	classify	calculate	audit	build	assess	hold	exemplify	be aware
define	compare	catalogue	break down	collect	choose	integrate	modify	be familiar with
describe	compute	chart	calculate	combine	conclude	internalize	plan	become
draw	contrast	complete	categorize	compile	confirm	massage	realize	believe
identify	convert	compute	certify	compose	criticize	measure	reflect	comprehend
indicate	describe	consolidate	compare	conceive	critique	palpate	transfer	conceptualize
label	diagram	demonstrate	contrast	construct	diagnose	pass		experience
list	differentiate	develop	correlate	create	estimate	percuss		explore
locate	discuss	employ	criticize	design	evaluate	project		grasp the significance of
match	distinguish	examine	debate	detect	generalize	visualize		grow
name	draw	extend	deduce	devise	grade			improve
point	estimate	generalize	defend	discover	judge			increase
quote	explain	illustrate	detect	draft	justify			know
read	express	infer	diagram	formulate	measure			learn
recall	extrapolate	interpolate	differentiate	generate	prioritize			thinks critically
recite	identify	interpret	discriminate	integrate	prove			understand
recognize	interpolate	locate	distinguish	make	rank			
record	interpret	manipulate	examine	manage	rate			
relate	locate	modify	experiment	organize	recommend			
repeat	outline	operate	infer	plan	research			
retrieving	paraphrase	order	inspect	predict	resolve			
select	predict	practice	inventory	prepare	revise			
state	report	predict	investigate	prescribe	rule on			
tabulate	restate	prepare	question	produce	score			
tell	review	produce	reason	propose	select			
trace	sort	relate	separate	reorder	support			
write	summarize	report	solve	reorganize	test			
	transfer	restate	summarize	set up	validate			
	translate	review	survey	specify				
		schedule	test	structure				
		sketch	uncover	synthesize				
		solve	verify					
		submit						
		tabulate						
		transcribe						
		translate						
		use						
		utilize						

[2] Bloom BS. (1956). Taxonomy of educational objectives: The classification of educational goals. New York, NY: Longmans, Green.