



# American Osteopathic College of Occupational and Preventive Medicine

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## WRITING QUALITY BEHAVIORAL LEARNING OBJECTIVES MADE EASY\*

### WHY BEHAVIORAL LEARNING OBJECTIVES?

When we ask a CME speaker what her/his objectives are, that's usually what we get – “her/his” objectives, i.e. what she/he intends to do, talk about, or cover in the presentation. In reality, we should have asked “What objectives do you have for the physicians who you will present to or what is it that you want them to be able to do differently in their practices as a result of attending your presentation?” We really want to know what the outcome of the presentation will be for the attendee rather than the process that the instructor will use. The entire concept of CME is predicated on the belief that attending conferences, workshops, lectures, other presentations, and participating in individualized written or electronic educational activities will change the practice behavior of the physician in a positive way.

So, what kind of objectives should the faculty member write in order to maximize the benefit to the learner? Obviously, he/she needs to plan the process that will be used, the material covered, the main points to be made, etc. In that planning process, she/he will likely write down some basic outline of how to go about presenting the material and what material to present. This list would constitute the presenters’ “*instructional or teaching objectives*”. *Instructional (teaching) objectives* state what the instructor intends to do during a learning activity. This type of objective describes a process, not an outcome. Unfortunately, instructors often know what they want learners to obtain from presentations but they fail to state appropriate *learner objectives*. *Learner objectives* state what the learner should know at the end of a learning activity. *Behavioral learner objectives* take it one step further by stating what the learner should be able to “do” differently as a result of learning that new knowledge. This type of objective emphasizes learning outcomes. Learning outcomes can be measured by post-event assessments to determine the success of the faculty presenter in improving the knowledge and behavior of the physician. In all educational enterprises including CME, we are constantly being asked to state behavioral learner objectives and assess learner outcomes. So, it is imperative that we begin with a statement of good behavioral learner objectives upon which we can design effective outcome evaluation instruments. This type of objective gives potential CME participants clear information on what they can expect to take away from the session, it communicates what the speaker expects to convey to the learners, and it provides a measurable basis for evaluation of whether the objectives have been met.

### GETTING STARTED

Writing a behavioral learner objective is the easy part! All you have to do is begin writing a behavioral learner objective like so:

**“After participating in this presentation, the physician will be able to:”**

And then, simply state the items that the physician should be able to do. Be careful to use only *action verbs* (behavioral terms) in these statements – verbs such as identify, outline, prescribe, explain, differentiate, diagnose, select, palpate, measure, etc. A good list to choose from is found below. Following this guide and having the list of verbs handy will make it almost impossible to write an inappropriate objective.

Even though there are definitely verbs to avoid using, they still get used all too frequently. Verbs such as “know”, “appreciate”, and “understand” are vague, have multiple meanings and interpretations, are hard to measure, and should be avoided. Consider the implication of beginning verb selection to these supposedly similar objectives:



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“After participating in this presentation, the physician will be able to:”

- ***appreciate*** the risk factors for CVD
- ***recite*** the risk factors for CVD
- ***diagnose*** the risk factors for CVD

It is obvious that the expected learner outcomes are quite different as would be the assessment instruments used to document changes in knowledge and behavior of the learner. They would also affect how the instructor presents material or her/his ***instructional objectives***. It should be apparent that the ***learner objectives*** are quite different from ***instructional objectives***. Yet, we often see conference brochures and announcements with teaching objectives stated instead of learner objectives, such as:

- “To acquaint the physician with risk factors for breast cancer”
- “To update or provide new information on management of diabetes”

These are worthy teaching objectives, but they only indicate what the presentation will cover, not the expected learner outcomes.

Below are a few model learning and behavioral learning objectives which illustrate appropriate design.

“After participating in this presentation, the physician will be able to:”

- **define the treatment modalities of various pneumonias**
- **state the indications for ordering blood gases and blood cultures**
- **outline the diagnostic sequence of laboratory and radiologic studies necessary to diagnose various common cancers**
- **implement a program of multidisciplinary care needed for patients with massive injuries**
- **describe the importance of secondary prevention of coronary diseases**
- **perform appropriate OMT for relief of CTS**

## ACTION VERBS TO USE IN WRITING BEHAVIORAL LEARNER OBJECTIVES

The following verbs are effective in formulating educational objectives.

Verbs that communicate **Knowledge**:

### ***Information***

cite	identify	quote	relate	tell
count	indicate	read	repeat	trace
define	list	recite	select	write
describe	name	recognize	state	
draw	point	record	tabulate	

### ***Comprehension***

associate	describe	explain	locate	translate
classify	differentiate	express	predict	
compare	discuss	extrapolate	report	
compute	distinguish	interpolate	restate	
contrast	estimate	interpret	review	



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## Application

apply	employ	locate	relate	sketch
calculate	examine	operate	report	solve
complete	illustrate	order	restate	translate
demonstrate	interpolate	practice	review	use
dramatize	interpret	predict	schedule	utilize

## Analysis

analyze	debate	distinguish	inventory
appraise	detect	experiment	question
contract	diagram	infer	separate
criticize	differentiate	inspect	summarize

## Synthesis

arrange	construct	formulate	organize	produce
assemble	create	generalize	plan	propose
collect	design	integrate	prepare	specify
compose	detect	manage	prescribe	

## Evaluation

appraise	determine	judge	recommend	test
assess	estimate	measure	revise	
choose	evaluate	rank	score	
critique	grade	rate	select	

## Verbs that impart Skills:

diagnose	integrate	measure	percuss
empathize	internalize	palpate	project
hold	massage	pass	visualize

## Verbs that convey Attitudes:

acquire	exemplify	realize	reflect
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## Verbs you should Avoid:

appreciate	have faith in	know	learn	understand	believe
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**If you have questions or need assistance please contact:** Jeffrey J. LeBoeuf at AOCOPM, PO Box 3043, Tulsa, OK 74101, Ph (800) 558-8686, Fax (918)561-1431, [jeffrey@aocopm.org](mailto:jeffrey@aocopm.org).

\*Modified by Ed Williams, PhD from: "Application Package for Sponsorship of A Continuing Medical Education Activity", Harold A. Kessler, MD, Associate Dean, Post-Graduate Medical Education, Director, Office of Continuing Medical Education, Rush University, College of Nursing, Rush Medical College, Chicago, IL