

DEADLINES

- **Complete and return faculty agreement no later than 45 days before the activity, including:**
 - Contact Information**
 - Activity Details**
 - CV and Biography**
 - Educational Needs Assessment and Gaps in Knowledge**
 - Learning Objectives**
 - Topic Designator**
 - Activity Type**
 - Disclosure and Waiver**
- **For knowledge-based activities, submit posttest questions, answers and feedback explaining why chosen answers are correct no later than 20 days before the activity. Your hosting organization reserves the right to alter this deadline in order to ensure materials are to MPA on time.**
- **For application-based activities, submit case studies no later than 20 days before the activity. This can be a copy of your PPT with the case study included. Your hosting organization reserves the right to alter this deadline in order to ensure materials are to MPA on time.**

GUIDE TO ESTABLISHING EDUCATIONAL GOALS AND OBJECTIVES

Objectives for each PCE activity must define what the pharmacist and/or pharmacy technician should be able to do at the completion of each activity. The following is a guide to developing effective learning objectives and goals.

Function of Objectives

The development of objectives serves as the guide in the process of planning, presenting and evaluating instruction.

There is a major difference between goals and objectives. Goals of a course are stated in general terms so that the pharmacy professional can be quickly informed about the nature of the course. Sample terms in goals include: "Know about ... , To understand ... , Become aware ... , and Develop appreciation for ... "

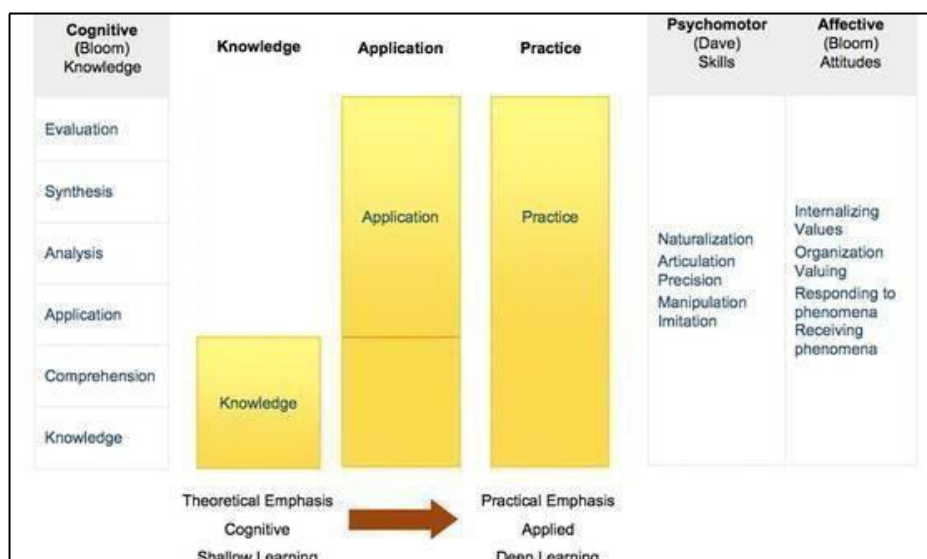
All of these phrases are found in goal or purpose statements.

Objectives are used to attain the stated goal. They assist the presenter and the pharmacy professional in deciding specifically what is to be learned. When participants are informed of the objectives, it will prepare them for what they are expected to do with the information. Typical activities found in objectives include: "to write, to list, to analyze, to solve and to discuss." The most difficult—and the most important—part of constructing an objective is the selection of an appropriate action verb. It should clearly express what the pharmacy professional should be able to do with the subject content—recognize, explain, solve, assess and so on.

These verbs should be avoided in objective statements since they are open to interpretation:

Appreciate	Explore	Perceive	Realize	Understand
Behave	Grasp significance of			
Believe	Have faith in			
Be aware of	Know	Learn		
Enjoy				

The following charts were prepared by ACPE to assist you in developing learning objectives, based on your activity's type. Objectives for knowledge-type activities should only contain verbs from the comprehension and knowledge categories; whereas, objectives for application- and practice-type activities can include verbs from the evaluation, synthesis, analysis, application, comprehension and knowledge categories.



GUIDE TO ESTABLISHING EDUCATIONAL GOALS AND OBJECTIVES (cont.)

Suggested Verbs for CPE Activities by Domain

Cognitive Domain (Bloom)	
Evaluation	To appraise, argue, assess, attach, choose, compare, defend, estimate, predict, rate, core, select, support, value, evaluate.
Synthesis	To arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
Analysis	To analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, investigate, question, research, test.
Application	To apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.
Comprehension	To classify, describe, discuss, explain, express, identify, indicate, locate, outline, recognize, report, restate, review, select, translate.
Knowledge	To arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce, state.

PsychomotorDomain1 (Dave)	
Naturalization	To design, specify, manage, invent, project-manage.
Articulation	To construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, master, improve, teach.
Precision	To demonstrate, complete, show, perfect, calibrate, control, practice.
Manipulation	To re-create, build, perform, execute, implement.
Imitation	To copy, follow, replicate, repeat, adhere, observe, identify, mimic, try, reenact, imitate.

Affective Domain2 (Bloom)	
Internalizing Values (Characterization)	To act, discriminate, display, influence, listen, modify, perform, propose, qualify, question, revise, serve, solve, verify.
Organization	To adhere, alter, arrange, combine, compare, complete, defend, formulate, generalize, identify, integrate, modify, order, organize, relate, synthesize.
Valuing	To complete, demonstrate, differentiate, explain, follow, form, initiate, join, justify, propose, read, report, select, share, study, work.
Responding to Phenomena	To answer, assist, aid, comply, conform, discuss, greet, help, label, practice, present, read, recite, report, select, tell, write.
Receiving Phenomena	To ask, choose, describe, follow, give, hold, identify, locate, name, select, sit, erect, reply, use.

1 Dave, R. H. (1975). Developing and Writing Behavioral Objectives. (R J Armstrong, ed.) Educational Innovators Press.

2 Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1973). Taxonomy of Educational Objectives, the Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Co., Inc.

SUGGESTED ACTIVE LEARNING STRATEGIES FOR USE WITH ACPE'S CPE ACTIVITY TYPES AND BLOOM'S TAXONOMY LEVELS

All CPE activities must include active participation and involvement of the audience. This guide indicates appropriate active learning techniques for activity type verbs.

CPE Activity: KNOWLEDGE	
Bloom's Taxonomy	Suggested Active Learning Techniques
Knowledge-type verbs: Define Repeat List Record	Lecture Visuals Examples Illustrations Analogies
Comprehension-type verbs: Discuss Describe Explain Recognize Identify Translate Restate Express	Test/assessment Review Writing Presentations Matching questions/answers Questions Discussion Report
CPE Activity: APPLICATION AND/OR PRACTICE	
Bloom's Taxonomy	Suggested Active Learning Techniques
Application-type verbs: Interpret Apply Employ Use Demonstrate Illustrate Practice	Role play Simulations Practice exercises Demonstrations Projects
Analysis-type verbs: Distinguish Analyze Differentiate Calculate Compare Contrast Criticize Debate Diagram	Case studies Problems Discussion Pro/con grids Application exercises

CPE Activity: APPLICATION AND/OR PRACTICE (continued)

Bloom's Taxonomy	Suggested Active Learning Techniques
Synthesis-type verbs: Plan Compose Design Propose Formulate Arrange Construct Create Set up Organize Prepare	Problems Case studies Develop plans Simulations Projects
Evaluation-type verbs: Judge Evaluate Rate Compare Revise Score Select Choose Assess Estimate Measure	Case studies Problem exercises Projects Critiques Simulations

MPA Joint Providership Post-test Question Template

Questions:

- 1 Question Text?
 - a. Incorrect
 - b. ***Correct**
 - c. Incorrect
 - d. Incorrect

- 2 Question Text?
 - a. Incorrect
 - b. Incorrect
 - c. ***Correct**
 - d. Incorrect

- 3 Question Text?
 - a. ***Correct**
 - b. Incorrect
 - c. Incorrect
 - d. Incorrect

- 4 Question text?
 - a. Incorrect
 - b. Incorrect
 - c. Incorrect
 - d. ***Correct**

Feedback Option 1:

Question 1: Feedback here

Question 2: feedback here

Question 3: Feedback here

Question 4: Feedback here

Feedback Option 2:

Add >> at the end of the correct answer then supply feedback. Example below:

1. This is a sample post-test question, please select the best answer:
 - a. Incorrect
 - b. Incorrect
 - c. ***Correct >>**This is where your feedback will be inserted
 - d. Incorrect

GUIDE TO DEVELOPING AND PRESENTING VISUAL AIDS

Faculty are required to prepare PowerPoint® slides for use during their presentation. The visual impact of slides help attendees follow the presentation, and slides allow the speaker to present data in a visually stimulating manner. Below are general guide lines to assist you in preparing your slide presentation.

Visual aids should complement your presentation, not be your presentation.

Don't overwhelm your audience with too many visual aids and remember never to present simply by reading your own visual aids.

Use visual aids only to support your most important points.

The effective aid has four characteristics: it simplifies concepts, it illuminates specific points, it holds audience attention, and it reinforces the spoken word with an image.

Think in pictures. A few good visual aids show rather than tell the audience your point.

Present one point at a time.

Utilize 18 point to 24 point font size for slide or PowerPoint® presentation text.

Don't leave the visual aids in view for too long.

Make sure that your comments match your visuals and that your visuals support your comments.

Color is important, but it should be applied in flat areas rather than in graduated tones or shading. Clashing colors tend to annoy the viewer. Don't use non-contrasting font colors.

Don't get fancy—select a good typestyle in which all letters are easily recognizable. Space lettering for readability and make sure it is large enough for everyone to see.

Plan slides so that their longest dimension will be horizontal. It is difficult to view vertically oriented materials in many meeting rooms.

Capitalize only when necessary. It is difficult to read and looks like you are "shouting."

ACTIVITY OUTLINE, REFERENCES AND KEYPOINTS EXAMPLE

Educational materials must be offered for each PCE activity that will enhance participants' understanding of the content and foster application to pharmacy practice. In addition to a handout, each PCE activity must include an outline, references or key points (limited to one page). Examples of each are below.

Outline

1. Introduction/Establishing a Need
 - a. Public Health Perspective
 - b. Role of the Pharmacist
2. Pharmacotherapeutics/Patient Care
 - a. Vaccine Basics
 - b. Diseases and Vaccines
 - c. Targeting and Screening
 - d. Emergency Protocols
 - e. Vaccine Administration Technique
3. Practice Issues
 - a. Documentation and Record Keeping
 - b. Vaccine Storage and Handling
 - c. Legal and Liability Issues
 - d. Marketing and Reimbursement
4. Cases
5. Final Exam

Key Points

- Types of Pain
 - Acute, chronic/persistent, cancer
- Non-Opioid Analgesics
 - Acetaminophen and non-steroidal anti-inflammatory drugs
- Tramadol
 - Central analgesic
- Opioid Analgesics
 - Morphine is a bench mark opioid.
 - Oral administration is most often the preferred route.

References

1. American Psychiatric Association, Diagnostic and statistical manual of mental disorders, 4th edition, Washington, D.C., 2000.
2. Thomason, J.W., Shintani, A., Peterson, J.F., et al., "Intensive care unit delirium is an independent predictor of longer hospital stay: a prospective analysis of 260 nonventilated patients," *Critical Care*, 9: R375 -R381, 2005.
3. Ely, E.W., Inouye, S.K., Bernard, G.R., Gordon, S., Francis, J., May, L., "Delirium in mechanically ventilated patients. Validity and reliability of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU)," *Journal of the American Medical Association*, 286: 2703 -2710, 2001.
4. McNicoll, L., Pisani, M.A., Zhang, Y., Ely, E.W., Siegel, M.D., Inouye, S.K., "Delirium in the intensive care unit: occurrence and clinical course in older patients," *Journal of the American Geriatrics Society*, 51: 591 -598, 2003.