3 Easy Steps to Writing Learning Objectives

SMHS Center for Faculty Excellence
Virtual Faculty Connection
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Learning Objective

• Definition:
  • A clear, concise, specific statement of observable student behavior that can be evaluated at the conclusion of a learning event.

• Is not the same thing as a course goal, but serves the course goals by defining the steps students will take along the way to achieving the goal.
Before You Write Any Objectives

• Ask yourself the following questions:
  • Who are the learners?
  • What is their current level of knowledge of the topic?
  • What do they need to know?
  • What’s motivating them to learn this topic?
• Review your session or course goals. Think about where you are trying to move the student from and where you would like them to end up.

• Ex: The goal of this course is teach PA students with various levels of medical experience to safely perform common clinical procedures used in the Emergency Department.
INTERFACE OF LEARNING OBJECTIVES AND TEACHING STRATEGIES

How to use:
1) Select a step: a cognitive processing dimension you want the learner to achieve by the end of the session.
2) Select one word below your step as the first word of the learning objective.
3) Consider the alternative teaching strategies above your step.

Cognitive Processing Dimension

1. Comprehension
   - Knowledge
     - Define
     - List
     - Record
     - Repeat
   - Comprehension
     - Describe
     - Discuss
     - Explain
     - Express
     - Identify
     - Recognize
     - Restate
     - Translate

2. Learning Objectives
   - Application
     - Apply
     - Demonstrate
     - Dramatize
   - Analysis
     - Analyze
     - Calculate
     - Compare
     - Contrast
     - Criticize
     - Debate
     - Differentiate
     - Distinguish
     - Experiment
     - Inspect
     - Inventory
     - Question
     - Relate
     - Test

3. Teaching Strategies Related to Learning Objectives
   - Exercises
   - Practice
   - Demonstrations
   - Projects
   - Sketches
   - Simulations
   - Role Play
   - Microteach

EVALUATION
- Projects
- Exercises
- Critiques
- Simulations
- Appraisals

SYNTHESIS
- Arrage
- Collect
- Compose
- Estimate
- Evaluate
- Judge
- Measure
- Rate
- Revise
- Score
- Select
- Value


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Steps to Developing Learning Objectives

1. Ask yourself which knowledge or skills you want the learners to acquire and demonstrate through participation in this session. Consider the “cognitive processing dimension” which you would like the learner to achieve. Do they need to be able to define a concept, demonstrate a psychomotor skill, or evaluate a complex process?

2. Describe the **one** expected learner performance or outcome in measurable terms using action words from Bloom’s taxonomy.

3. Use a teaching strategy which matches the cognitive processing dimension on Bloom’s taxonomy.
Step 1

Ask yourself which knowledge or skills you want the learners to acquire and demonstrate through participation in this session. Consider the “cognitive processing dimension” which you would like the learner to achieve. Do they need to be able to define a concept, demonstrate a psychomotor skill, or evaluate a complex process?

• Ex: I would like the students to be able to properly perform a lumbar puncture
Step 2

Describe the one expected learner performance or outcome in measurable terms using action words from Bloom’s taxonomy per learning objective.

• “At the end of the session, the student will be able to ...
  • Explain the indications and contraindications for performing lumbar puncture
  • Demonstrate the proper technique for passing the spinal needle into the intrathecal space
  • Analyze the results of CSF laboratory studies
Step 3

Use a teaching strategy which matches the cognitive processing dimension on Bloom’s taxonomy.

• **Ex:** A session on LPs with the learning objectives on the last slide likely will include:
  • *Discussion of indications / contraindications (Comprehension)*
  • *Demonstration and practice of LP technique (Application)*
  • *Various CSF “problem sets” for students to work through (Analysis)*
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How to use:
1) Select a step: a cognitive processing dimension you want the learner to achieve by the end of the session
2) Select one word below your step as the first word of the learning objective
3) Consider the alternative teaching strategies above your step

Teaching Strategies Related to Learning Objectives
- exercises
- practice
- demonstrations
- projects
- sketches
- simulations
- role play
- microteach

APPLICATION
- apply
- demonstrate
- dramatize

ANALYSIS
- analyze
- calculate
- compare
- contrast
- criticize
- design
- differentiate
- distinguish
- experiment
- inspect

SYNTHESIS
- arrange
- collect
- compose
- construct
- create
- plan
- prepare
- propose
- set up

EVALUATION
- appraise
- assess
- choose
- estimate
- evaluate
- judge
- measure
- rate
- revise
- score
- select
- value

COMPREHENSION
- knowledge
- define
- list
- record
- repeat

KNOWLEDGE
- describe
- discuss
- explain
- express
- identify
- recognize
- restate
- translate

Lectures
- discussions
- reviews
- tests
- assessments
- reports

Learner Presentations
- writing

Examples
- visual aids
- video
- audio
- analogies


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“Understand”
“Learn”
“Appreciate”
Time to Vote! #1

At the end of the session, the students will be able to list the common presenting symptoms of colon cancer and discuss indications for diagnostic colonoscopy.
At the end of the session, students will have changed their minds regarding the causes of homelessness.
#3

At the end of the session, students will be able to perform cannulation of a peripheral vein on a model.
At the end of the session students will understand the etiology of breast cancer.
#5

At the end of the session, students will be able to compare and contrast the pathological changes in Crohn’s disease vs. Ulcerative Colitis
Questions?