Guidelines for Writing Learning Objectives

Three to five learning objectives are required for each presentation. These should be expressed in terms of knowledge, skills, and/or values that the learner can demonstrate by an action or behavior; in other words, they should be stated behaviorally. When possible, an objective should name a behavior directly related to patient care (See below example: Objectives 1 and 2). When the outcome is an understanding not directly describable in terms of patient care, the objective should name behavior that would give evidence of the desired understanding (See below example: Objective 3).

The key to writing good learning objectives is to carefully choose verbs to describe what the participant will be able to do as a result of attending the course. The following are some recommended verbs for reference:

**Verbs to Use for Behaviorally Stated Learning Objectives**

**Verbs that Express Communication of Knowledge**

*Information*
- Cite, count, describe, draw, enumerate, identify, indicate, quote, repeat, select, state, tabulate, tell, trace, write

*Comprehension*
- Associate, classify, compute, contrast, differentiate, distinguish, estimate, express, extrapolate, interpolate, interpret, locate, predict, report, restate, translate

*Application*
- Apply, calculate, demonstrate, dramatize, employ, examine, illustrate, interpret, locate, operate, order, practice, predict, review, schedule, sketch, solve, translate, utilize

*Analysis*
- Analyze, appraise, contract, criticize, debate, detect, diagram, differentiate, experiment, infer, inspect, inventory, outline, question, separate, summarize
Synthesis
Arrange, collect compose, construct, create, design, detect, formulate, generalize, integrate, manage, organize, plan, prepare, prescribe, produce, propose, specify

Evaluation
Appraise, critique, determine, estimate, judge, measure, rank, rate, recommend, revise, score, select, test

Verbs that Express Acquisition of Skills
Diagnose, hold, integrate, internalize, manage, measure, palpate, pass, percuss, perform, prescribe, project, treat, visualize

Verbs that Convey Desired Attitudes
Acquire, exemplify, realize, reflect

Verbs to Avoid (too general, cannot measure)
Appreciate, believe, have faith in, know, learn, recognize, understand

Example of Appropriately-Worded Learning Objectives

Upon completion of this presentation, participants should be able to:

1. Interpret and incorporate specific imaging findings in the pathologic work-up of pediatric cystic lung diseases
2. Differentiate histologically the primary malformative pathologic processes from chronic secondary reactive changes
3. Apply in practice recent changes in nomenclature to reflect the current biology-based understanding and classification of the discussed congenital anomalies