Writing a Measurable Program Learning Outcome
All Learning Outcomes Measure Student Learning...

whether in programs, courses, or units
Different Types of Learning Outcomes

Unit Outcome
What the student will be able to do upon completion of the unit

Course Outcome
What the student will be able to do upon completion of the course

Program Outcome
What the student will be able to do upon completion of the program
Learning Outcomes

state what a student should know and/or be able to do

...as a result of what he/she has learned in a course, library orientation, counseling session
Characteristics of a Measurable Learning Outcome

- Describes a Learning Result
- Specific
- Action-oriented
- Cognitively Appropriate
- Clearly Stated
**Criteria for a Measurable Student Learning Outcome**

- **Describes a Learning Result**: A measurable learning outcome specifies what the student will be able to do, not what the teacher does.

- **Specific**: A measurable learning outcome addresses no more than one single result/trait.

- **Action-oriented**: The action verb ([Bloom’s Taxonomy Thesaurus of Verbs](#)) specifies definite, assessable behaviors.

- **Cognitively Appropriate**: The action verb ([Bloom’s Taxonomy Thesaurus of Verbs](#)) identifies the desired cognitive level of student thinking.

- **Clearly Stated**: The meaning of the learning outcome is easily understood by students, administrators and faculty members.
Cognitive Levels Build from Lower to Higher Levels

- Remembering
- Comprehending
- Applying
- Analyzing
- Synthesizing
- Evaluating & Creating
Learning Outcome Structure

Students will be able to

**action verb** + **what will be done**

Note: Learning Outcomes are a single sentence.

[Bloom’s Taxonomy Thesaurus of Verbs](#)
The Logic of the Structure

- **Action verb**
  - Reflects the cognitive level of the learning outcome
    - Describes the depth of student learning

- **What will be done?**
  - Describes the result/trait of what the student will be able to do
  - Describes the breath of the learning
Learning Outcome Example

The student will be able to produce a business plan.

- **Produce**
  - Depth of knowledge (PLO reflects the evaluate/create cognitive level)

- **Business Plan**
  - Breadth of knowledge (PLO is limited to a specific type of plan)
More Examples

- The student will be able to design a logical plan for the development of technical requirements.

- The student will be able to implement a patient care plan.
Cognitive levels using Bloom’s Taxonomy as expressed in the action verb

- The student will be able to **design** a logical plan for the development of technical requirements. *(Evaluating & Creating)*

- The student will be able to **examine** a patient care plan. *(Analyzing)*
Student LO:

Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.

BETTER: Students will be able to apply factual information to a problem. (Bloom’s Cognitive Level: applying)

BETTER BECAUSE:
- Learner is directly mentioned
- Specific because it measures one result/trait
- Measurable because it has only one action-oriented verb
Rewrite the following Student Learning Outcome before moving on to the next slide.

Student LO:

Formulate and test hypotheses by performing laboratory simulation, or field experiments in at least two of the natural science disciplines (one of these experimental components should develop, in greater depth, students’ laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty)
Possible Rewrite

**BETTER:** Students will be able to apply factual information to a problem.

**BETTER BECAUSE:**
- Learner is directly mentioned
- Specific because it measures one result/trait
- Easily understood
- Specific because it uses only one action verb
To further define the SLO in measurable terms, ask

What can my students do that will indicate they have the discrete skills that build to mastery of the learning outcome?
The answers to this question become the **Performance Indicators for the SLO**

- Performance indicators provide a more specific picture of student’s ability.

- They define and clarify the level and quality of performance necessary to meet the requirements of the student learning outcome.
Example of Moving from SLO to Performance Indicators

- **Student Learning Outcome**
  - The student will be able to **plan** a balanced diet.

- **Performance Indicators**
  - The student will be able to **describe** what constitutes a balanced diet.
  - The student will be able to **examine** the implication of a balanced diet to good health.
Adapted from the 2005 TLA presentation by

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