



**WHEN DEVELOPING YOUR STUDENT LEARNING OUTCOMES REMEMBER:**

- ☑ Student learning outcomes (SLOs) are statements that specify what **students will know, be able to do or demonstrate and think or value**, after successfully completing the program/curriculum.
  - Focus on **Mastery of Program Content**.
  - Ask yourself: what are the most important things a student should know, be able to do or demonstrate and think or value after completing my program?
  - Relate the SLO to the overall goal and objectives of the academic program.
- ☑ SLO are usually expressed as **knowledge, skills, and attitudes or values**.
- ☑ SLOs specify an **action** by the student that must be **observable, measurable and able to be demonstrated!**
- ☑ SLOs serve as benchmark assessments for completion of your **program!**
- ☑ SLOs are related to the mission of the program or department, school, and institution.
- ☑ Identify 5-8 student learning outcomes.

**THE SLO'S SHOULD INCLUDE THE FOLLOWING:**

- ☑ **An Action Verb** that results in **overt behaviors that can be observed and measured**.
  - Sample action verbs are:
    - *Analyze, Apply, Argue, Arrange, Assemble, Assess, Calculate, Categorize, Choose, Classify, Compare, Compile, Compute, Create, Criticize, Critique, Defend, Define, Demonstrate, Describe, Design, Develop, Differentiate, Discuss, Distinguish, Estimate, Examine, Explain, Formulate, Identify, Illustrate, Indicate, Interpret, Label, List, Locate, Manage, Memorize, Order, Operate, Organize, Plan, Practice, Predict, Prepare, Propose, Question, Rate, Recognize, Repeat, Report, Reproduce, Review, Revise, Schedule, Select, Solve, State, Translate, Use, Utilize, Write*
  - Avoid verbs that are unclear and call for covert, internal behavior which cannot be observed or measured.
    - *Appreciate, Know, Learn, Understand, Become aware of, Become familiar with....*

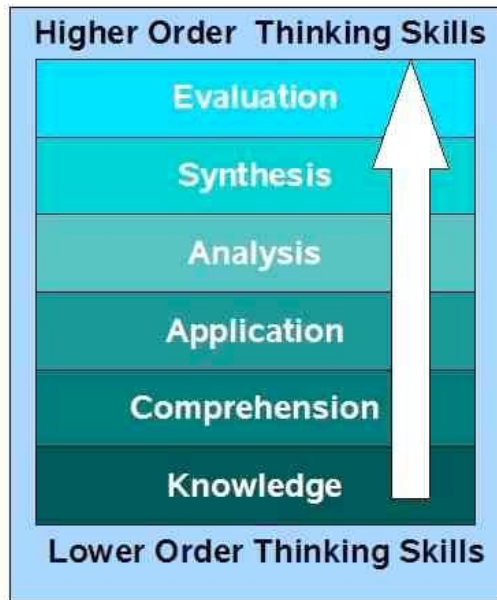


# Quick Guide for Developing SLOs

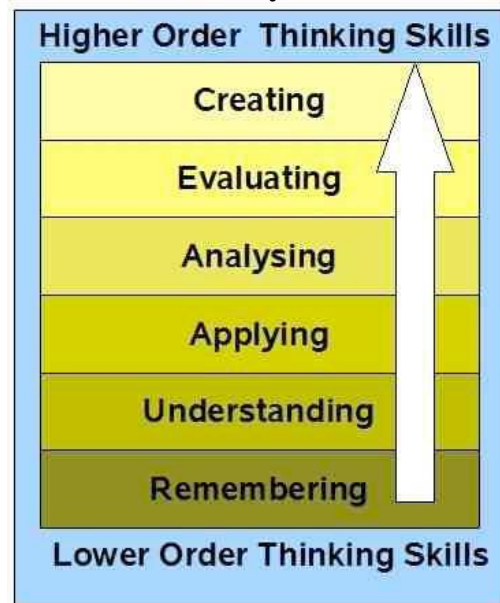
- The verb used may vary depending on the domain of learning and the appropriate level of thinking

Domains of Learning	Examples of Action Verbs	Examples of SLO
What students know (Cognitive)	<i>Interpret, Predict, Apply, Analyze, Synthesize, Write, Judge, Outline, Summarize, Calculate, Generate, Compare</i>	<ul style="list-style-type: none"> <li>• Students will be able to diagnose learning disabilities in K-12 settings</li> <li>• Students will be able to translate a paragraph of text from English to Spanish</li> </ul>
What students can do (Psychomotor)	<i>Respond, Assemble, Build, Dissect, Manipulate, Measure, Sketch, Adapt, Revise, Compose, Design, Sort, Tune, Prepare, Conduct</i>	<ul style="list-style-type: none"> <li>• Students will be able to assemble laboratory equipment appropriate for experiments</li> <li>• Students will be able to relate types of music to particular dance steps</li> </ul>
What students value (Affective)	<i>Support, Debate, Interpret, Balance, Approve, Adopt, Advocate, Formulate, Question, Propose, Verify, Justify, Share</i>	<ul style="list-style-type: none"> <li>• Students will be able to debate numerous sides to an issue</li> <li>• Students will be able to objectively interpret evidence by clients during therapy sessions</li> </ul>

**Bloom's Taxonomy 1956**



**Anderson and Krathwohl's Taxonomy 2000**





- ☑ **Language** that indicate the **BIG PICTURE** rather than nuts and bolts.
  - Does the language describe what students can do, know, think or value as a result of their matriculation (observable/demonstrable)?
  - Does it ask students to apply what they've learned by producing something?
  - Does it address student competency rather than content coverage?

**THE SLO SHOULD BE S.M.A.R.T.**

- ☐ Is the SLO **S**pecific to the program?
  - The SLO's should be **specific** to the program. Include in clear and definite terms **the expected abilities, knowledge, values and attitudes** a student who graduates from the program is expected to have.
- ☐ Is the SLO **M**easurable and result oriented?
  - The **intended outcome** should be one for which it is **feasible** to collect accurate and reliable data.
  - The **intended outcome** should produce results that can identify problems and assist with program improvement.
- ☐ Is the SLO **A**ttainable and realistic?
  - Consideration was given to the **available resources** (e.g., staff, technology, assessment support, institutional level surveys, etc.) in determining whether the collection of data for each student learning outcome is a realistic expectation.
  - There are a realistic **proportion of students able to achieve the stated specific level** (e.g., 80% of graduates pass the written portion of the comprehensive exam with a minimum of 75 points on the assessment rubric).
- ☐ Is the SLO **R**elated and relevant to the unit's mission?
  - It should focus on **intended outcomes** that are **critical to the program and its mission statement**.
- ☐ Is the SLO **T**ime-bound?
  - When defining the outcomes, it is important to indicate when the outcome will be assessed (e.g. each semester, spring, annually, etc.), and for what period of time.



**WHEN DEVELOPING YOUR STUDENT LEARNING OUTCOMES USE:**

**Appropriate Sources:**

- Mission statements
- Written descriptions of the program
- Employers
- Your “ideal” graduate
- Teaching goals inventory
- Accreditation agencies
- Professional/certification exams

**Multiple Measures or Means of Assessment:**

- Direct and Indirect
  - At least 1 direct measure must be used*
- Qualitative/Quantitative
- Formative/Summative

**Established Baseline Data**

- Set goal that are attainable/realistic

**Develop Scoring Guide/Rubric**

- Identify what competencies are assessed

**Identify the Criteria for Success**

- Overall Passing Score
- % of students expected to achieve passing score

**Identify the course/s where learning and/or assessment will occur**

- Curriculum Mapping