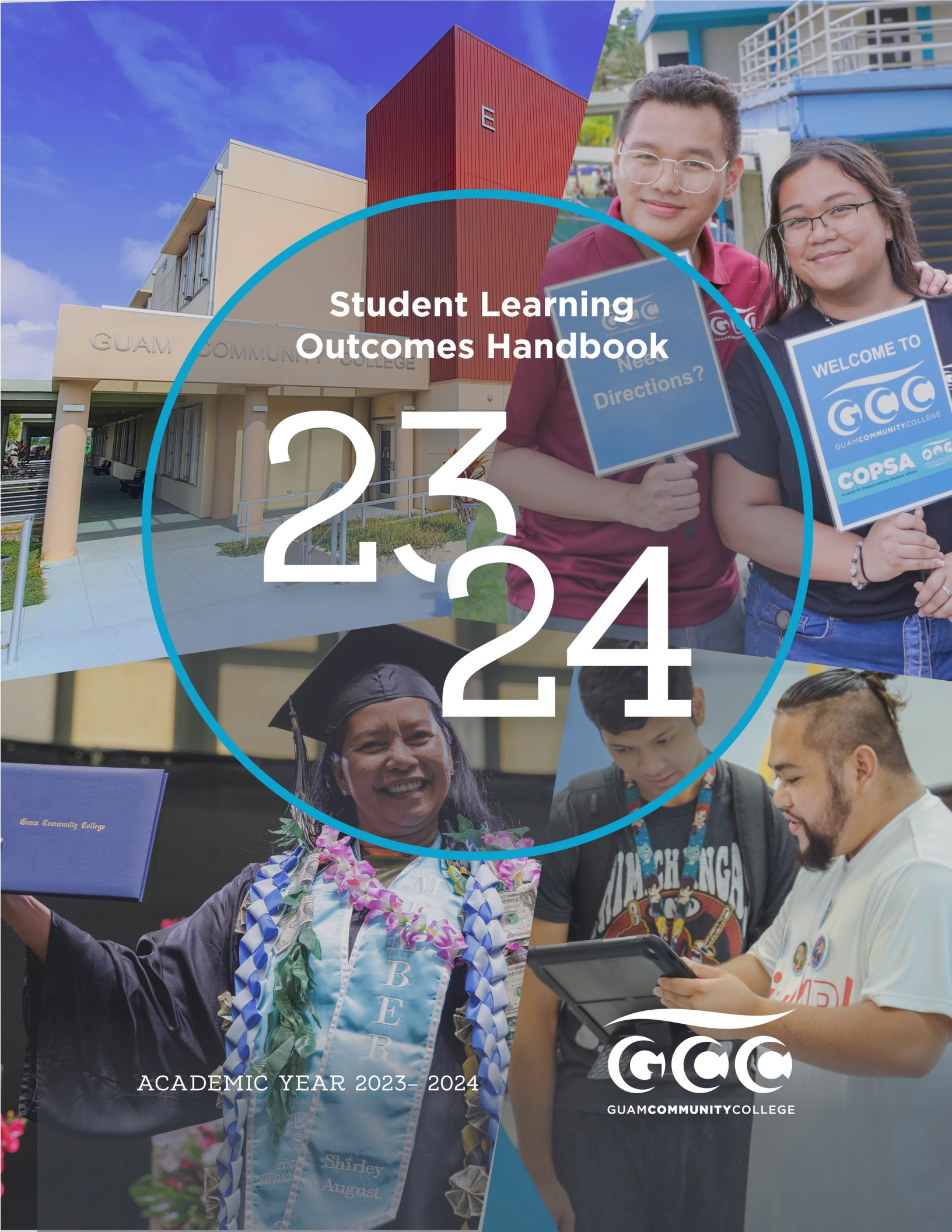

Student Learning Outcomes Handbook

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ACADEMIC YEAR 2023- 2024

GUAMCOMMUNITYCOLLEGE

GCC is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC), Western Association of Schools and Colleges (WASC).

Vision

Guam Community College will be the premiere educational institution for providing globally recognized educational and workforce development programs.

Mission

Guam Community College is a leader in career and technical workforce development providing the highest quality student-centered education and job training for Micronesia.

Sinangan Misión

(CHamoru translation)

Guiya i Kulehon Kumunidåt Guåhan, i mas takhilo' mamanaguen fina'che'cho' yan i teknikåt na kinahulo' i manfáfache'cho'ya u na' guáguaha nu i manakhilo' yan manmaolek na tiningo' ni i manmafananågui yan i fina'na'guen cho'cho' para Maikronesiha.

Authored by School of Trades and Professional Services, Guam Community College

First Printing: Fall 2014, Revised, Spring 2017, Revised Summer 2017, Revised Spring 2022, Revised Summer 2022, Revised Spring 2023, Revised Fall 2023

Please forward any recommendations for improvement to this document to pilar.williams@guamcc.edu

Cover Design by Angela Cabrera

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Higher education institutions in recent years have demonstrated their full commitment to the teaching and learning process by recognizing the importance of assessment. This entails documenting what and how much students are learning and utilizing this information to improve the educational experiences being offered.

As educators, we have been engaging in assessment at the most basic level when we articulate the main objectives of the course, check to see whether students achieved them, and use the results to improve our courses. Guam Community College is capitalizing on what we are already doing by instituting a systematic and formalized process, creating a culture in which institutional effectiveness and student learning are highly valued by the college community, and encouraging an organizational-wide culture of dialogue, assessment, Reflection, and collective effort.

Student Learning Outcomes (SLOs) were first formally published at GCC in the Spring of 2009 in an effort to sustain improvement in teaching and learning. In conjunction with the Institutional Learning Outcomes (ILOs), SLOs serve an important role by guiding our programs to ensure alignment with industry standards, to establish a baseline of consistency in the quality of education that students receive, to stimulate dialogue, and to establish high expectations for all. By 2010, all programs had established SLOs. By the Fall of 2011, the Student Learning Outcomes and Curriculum Mapping Booklet was published.

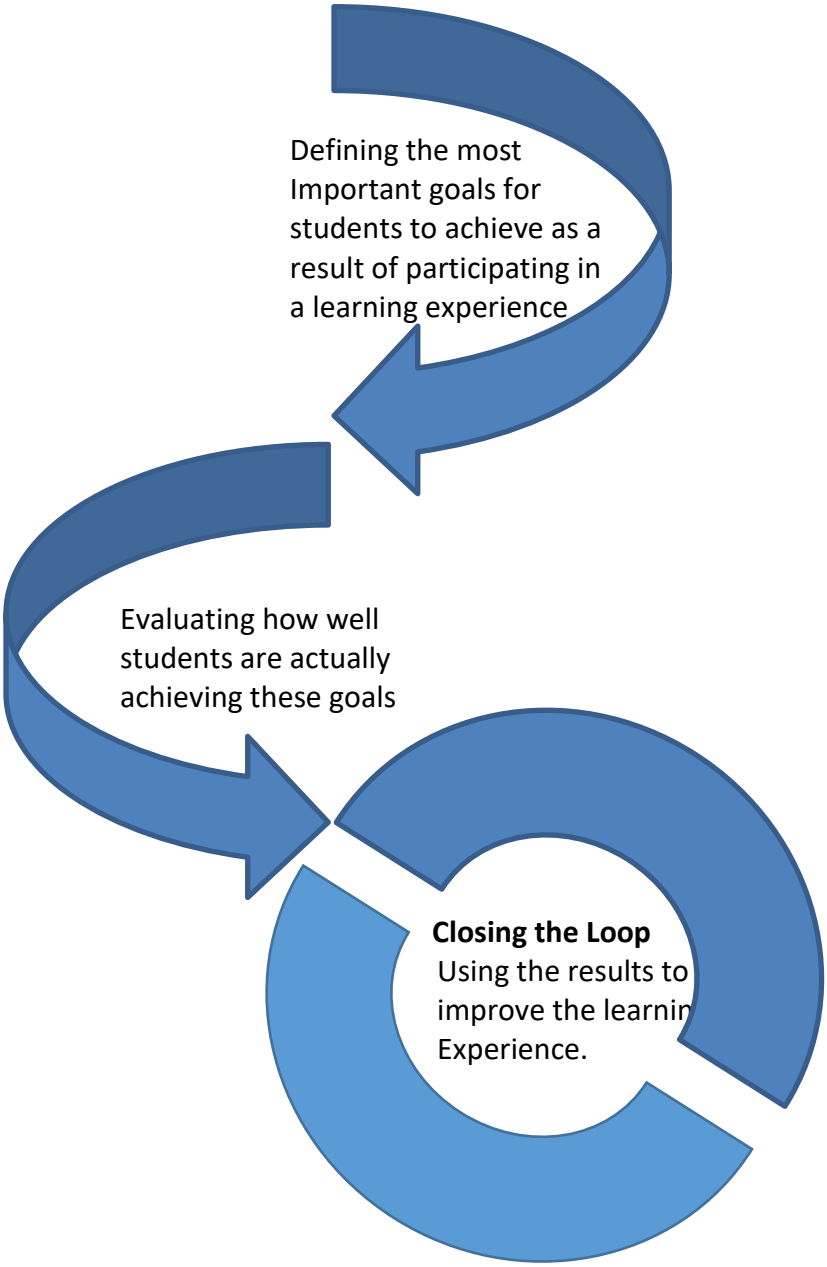
It is critical that the review and revision of SLOs be a systematic and continuous process as clear articulation of learning outcomes provide a solid foundation for evaluating our effectiveness in the teaching and learning endeavor.

This handbook serves two main purposes:

1. To provide all members of our college community with a valuable resource tool.
2. To provide consistent guidance for the SLO review and revision process.

WHAT IS OUTCOMES ASSESSMENT?

Outcomes Assessment is the process of collecting information that will tell an organization whether the services, activities, or experiences it offers are having the desired impact. Otherwise stated, **is the organization making a difference in the lives of the individuals it serves?**



WHY ARE WE DOING ASSESSMENT?

While it is of utmost importance for our College to satisfy accreditation requirements, in all honesty, the question that we should be asking ourselves is to what extent is there genuine commitment in the ongoing process of identifying our strengths and weaknesses in our programs as reflected in student performance?

WHO BENEFITS FROM ASSESSMENT?

For **students**, outcomes will:

- Communicate clear expectations about what's important in a course or program
- Will enable students to articulate what it is they are learning and have learned
- Will help students to explain what they can do and what they know
- Inform them that they will be evaluated in a consistent and transparent way
- Allow them to make better decisions about programs based on outcomes results

For **faculty**, outcomes will:

- Help determine what's working and what's not in their courses or programs
- Provide feedback
- Facilitate valuable interdisciplinary and intercampus discussions
- Provide powerful evidence to justify needed resources to maintain or improve programs

For **administrators**, implementing outcomes will:

- Demonstrate an institutional commitment to continually improving the academic programs and services offered by the College.
- Provide valuable data to support requests for funds
- Demonstrate accountability to funding sources
- Provide valuable data for academic planning and decision-making

WHAT OVERALL QUESTIONS SHOULD THE ASSESSMENT PROCESS & SLO ADDRESS?

1. What **knowledge, skills, abilities**, and **dispositions** should the **ideal** student graduating from our program demonstrate?
2. How **will** they be able to demonstrate these capacities?
3. How **well** does our **program** prepare students for careers, further education, or lifelong learning?
4. What **assessments** can we use to demonstrate growth in students' knowledge, skills, abilities, and dispositions as they progress through our program?

WHAT ARE THE TYPES OF ASSESSMENT?

There are basically two **types** of assessments:

1. Program review—examines issues pertaining to enrollment, retention, curriculum, graduation, placement, and satisfaction.
2. Student learning outcomes—describes what students are expected to learn as a result of participating in academic activities or experiences at the College. They focus on knowledge gained, skills and abilities acquired and demonstrated, and attitudes or values changed. **These are outcomes that we as educators should be most concerned with** and are the most challenging to measure, and may re- quire a number of iterations before the data collected are deemed valid and reliable.

WHAT IS SO IMPORTANT ABOUT SLOs?

- Students who know what is expected of them with respect to their learning are provided a framework for maximum learning to occur and are thus, more successful.
- Faculty who have a deep grasp of what they want their students to learn are able to align their instructional activities to these outcomes.
- It is for these two reasons that **clearly articulated outcomes are critical to student learning**.

HOW IMPORTANT IS THE ROLE OF SLOS IN THE ASSESSMENT PROCESS?

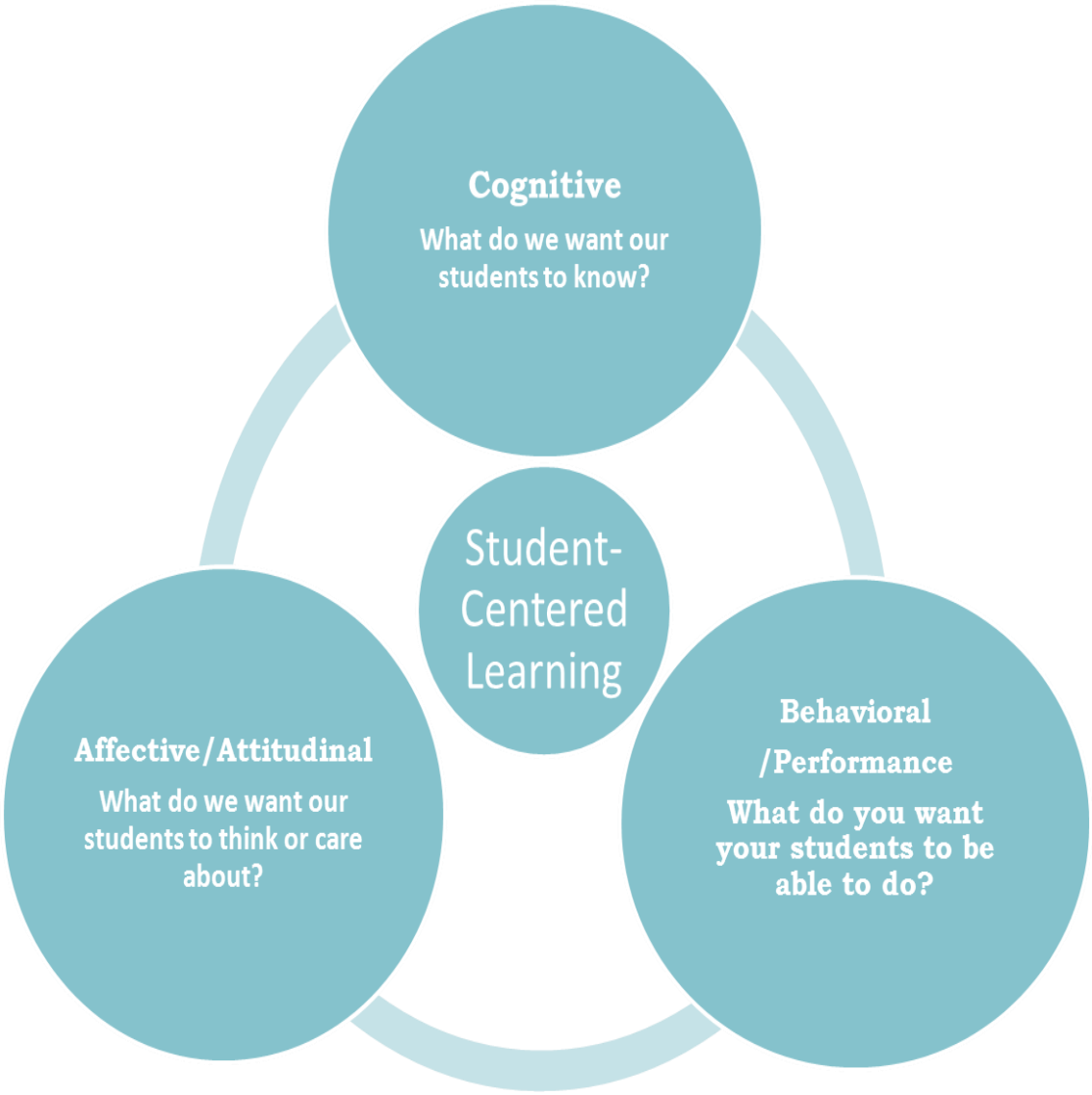
The link between the assessment method and learning outcome must be logical. Too often, an assessment method is selected without giving serious consideration as to whether or not the method is appropriate. Equally important in the process is that we ask ourselves the question:

Is my assessment accurately measuring what it is intended to measure?

The role of the SLO is extremely important! **Clear articulation of learning outcomes serves as the foundation** to evaluating the effectiveness of the teaching and learning process. If you don't have a solid SLO, the rest of the process will be greatly affected.

WHAT QUESTIONS SHOULD GUIDE US IN THE REVIEW & DESIGN OF SLOS?

Three central questions that remain important in the **review process** and in the **effective design** of SLOs are:



WHAT SHOULD YOU FOCUS ON WHEN DESIGNING SLOS?

In general and perhaps the most important, is that good learning outcomes focus on what students can do instead of the effort we put into teaching them.

Instructor-Directed Student-Centered

Second, college-wide outcomes must be **essential to the course goal**; something that everyone teaching the course agrees is important. It is wise to avoid outcomes that are idiosyncratic or tied to a particular instructor's approach to a course.

Third, design outcomes that are **meaningful for faculty and students**. If you cannot explain ***why*** a certain outcome is important, it probably isn't very meaningful.

Lastly, outcomes often reflect a **range of thinking skills**, from low-level identification to higher-level application of knowledge or skills.

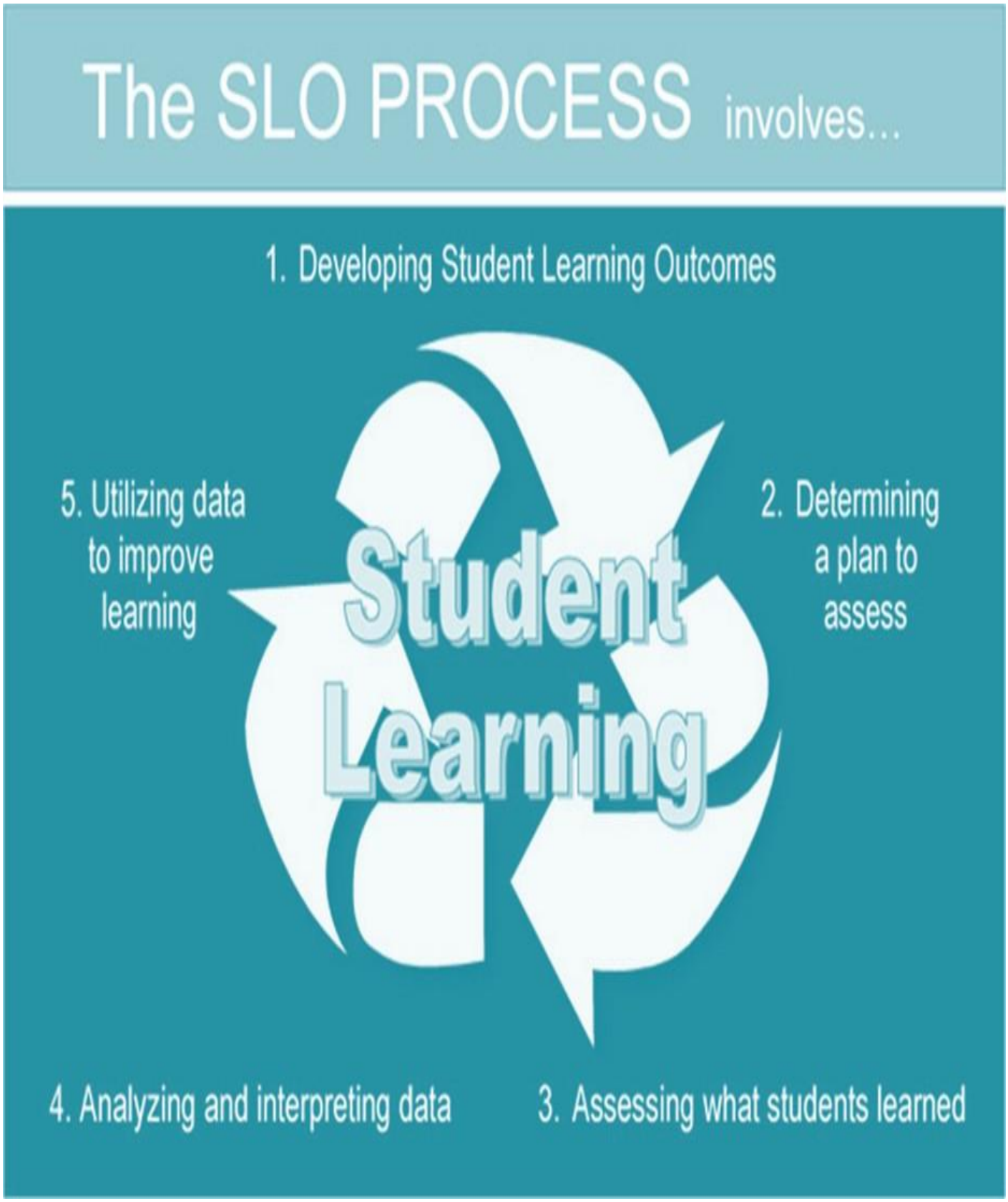
Good outcomes **can be measured** in some way; they communicate what student learning will be evaluated in the course. Often courses will have two levels of outcomes; some broader based outcomes which reflect higher order thinking skills and broad topics, and some more narrow, lower level thinking skills outcomes which are essential to reaching the broader outcomes.

When defining student learning outcomes to assess, it is tempting to take the easy route and think only in terms of learning outcomes that represent lower order skills because they will be simpler to evaluate. Instead, concentrate on the skills and knowledge which are essential for a student to be considered competent at the end of the semester. While some lower order types of learning outcomes may be essential to reaching higher level outcomes, make sure that you define a range of outcomes which reflect higher order, complex application tasks in addition to any essential supporting learning outcomes which may reflect lower order thinking skills.

WHAT IS CONSTRUCTIVE ALIGNMENT AND HOW DOES IT RELATE TO SLOs?

The curriculum should be designed in a way so that the teaching activities, learning activities, and assessment tasks are coordinated with the learning outcomes. This process is called ***constructive alignment.*** Constructive refers to the type of learning and what the learner does. Alignment refers to what the teacher does. A good teaching system is characterized by the coordination of the method of teaching and assessment and learning activities that support student learning. The **basic tasks** involved in constructive alignment are:

1. **Clearly defining** the learning outcomes
2. **Selecting teaching and learning methods** that are likely to ensure that the learning outcomes are achieved.
3. **Assessing the student learning outcomes** and checking to see how well they match with what was intended.


The SLO PROCESS involves...
1. Developing Student Learning Outcomes
2. Determining a plan to assess
3. Assessing what students learned
4. Analyzing and interpreting data
5. Utilizing data to improve learning
Student Learning

WHAT IS THE DIFFERENCE BETWEEN PROGRAM AND COURSE LEVEL STUDENT LEARNING OUTCOMES?

Program Student Learning Outcomes **At this level, 3 to 5 central goals describe what the students will have attained by the end of the program.**			
Characteristics of Student Learning Outcomes at the Program Level:			
Encapsulates the knowledge, skills, and attitude that students are expected to learn from the program**.**	Are the broadest goals for the program?	Require higher order thinking skills (is a synthesis of distinct skills and specialized areas of content).	Are evaluated or regularly updated each academic year.

Course Student Learning Outcomes			
Characteristics of Student Learning Outcomes at the Course Level:			
Are more specific and identify the unique knowledge and skills expected to be gained in a particular course**.**	Clearly relate to topics, assignments, and exams that are covered in the present course.	Are measurable?	Use action verbs

HOW DO WE KNOW THE SLO IS A GOOD ONE

Two questions must be answered to make this determination.
You should be able to say yes to both otherwise, the SLO needs some more work:

1. Can it be measured?
2. Is learning being demonstrated?

Please keep in mind that writing SLOs is an on-going process which requires several iterations and collaboration.

COMMON EXAMPLES OF STUDENT LEARNING OUTCOMES THAT FAIL THE 2-QUESTION TEST

Examples that are **TOO general and DIFFICULT to measure**:

- ...will appreciate the benefits of learning a foreign language (too ambiguous; how would appreciation be measured?)
- ...will be able to access resources (too vague; how would the ability to access resources to measured?)
- ...will develop problem-solving skills (too general; how would development of problem-solving skills be measured and which ones?
- ...will have confidence in their knowledge of the subject matter (too vague; what is being

measured: level of confidence or knowledge of the subject matter? How would degree to which one has confidence determine the extent of their knowledge of the subject matter?)

- ...will demonstrate knowledge, skills, and attitudes (too broad; covers too many at once; which knowledge, skills, and attitudes will be measured?

Examples that are **still general and hard to measure**:

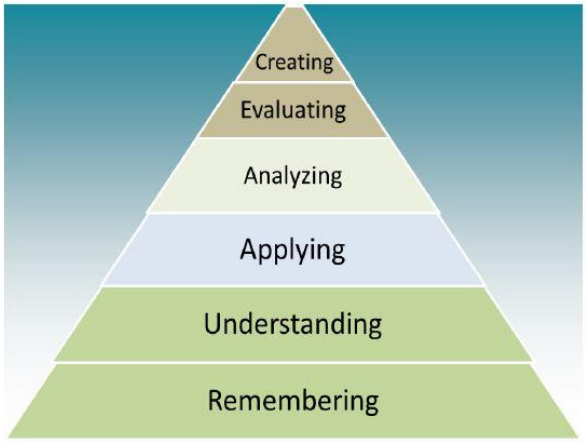
- ...will value knowing a second language as a communication tool (how will value be measured?)
- ...will develop and apply effective problem-solving skills (too general—how is development of the skills defined and how will it be measured? Also, how will effectiveness be defined?)
- ...will demonstrate the ability to resolve problems (to what extent would one's demonstration show ability?)
- ...will demonstrate critical thinking skills (too general; which critical thinking skills and how will these be measured?

LEVELS OF THINKING IN BLOOM'S TAXONOMY & WEBB'S DEPTH OF KNOWLEDGE (DOK)

REVISED BLOOM'S TAXONOMY	WEBB'S DEPTH OF KNOWLEDGE
Creating • Put elements together to form a coherent of functional whole • Reorganizing elements into a new pattern or structure through generating, planning, or producing	**Level 4: Extending Thinking** (Correlates to Bloom's 2 highest levels) • The most complex cognitive effort • Students synthesize information from multiple sources, often over an extended period of time • Requires investigation, complex reasoning, planning, developing, and thinking over an extended period of time
Evaluating • Make judgements based on criteria and standards	
Analyzing • Break down material into component parts to explore understanding and relationships	**Level 3: Strategic Thinking** • Thinking is more abstract • Students use planning and evidence • Requires reasoning, developing a plan or a sequence of steps, some complexity, more than one possible answer(students must justify their choices)
Applying • Use learned material in new and concrete situations	**Level 2: Skills and Concepts** • Engages mental process beyond habitual response using information or conceptual knowledge. Requires two or more steps. • Student makes some decision(s) about his/her approach.

Understanding • Grasp the meaning of material so that the knowledge can be reproduced or communicated	**Level 1: Recall and Reproduction** (Correlates to Bloom's 2 lowest levels) • Does not require any cognitive effort beyond remembering the right response or formula
Remembering • Recall appropriate information	

Revised Bloom's Taxonomy



(RBT) 2001

Main Description: Describes the type of thinking needed to interact with information during an activity.

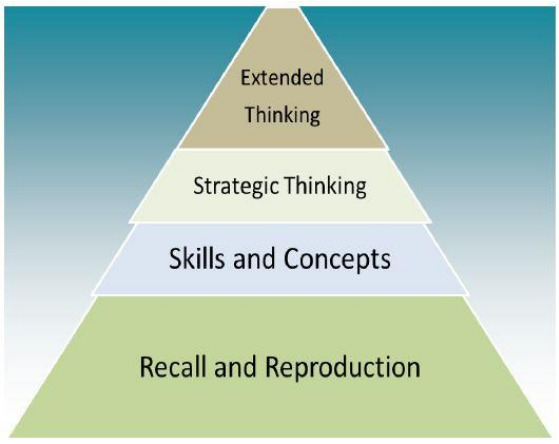
Bloom's Taxonomy of Learning

Bloom's taxonomy was originally published in 1956 under the leadership of educational Psychologist, Benjamin Bloom. The Taxonomy is a classification system used to define and distinguish different levels of human cognition—i.e., thinking, learning, and understanding. Educators have typically used Bloom's taxonomy to inform or guide the development of assessments (tests and other evaluations of student learning), curriculum (units, lessons, project, and other learning activities), and instructional methods such as questioning strategies.

The most recent adaption (referred to as Revised Bloom's Taxonomy (RBT) or Bloom's work released in 2001, came about as a result of the work of Krathwohl, an original member of Bloom's committee, and Anderson, a former student of Bloom. This latter group redefined Bloom's original concepts and considered many of his concerns and criticisms about the original taxonomy.

At first glance, rewordings from nouns to verbs, renaming some of the components, and repositioning are the obvious differences. However, the major differences lie in the more useful intersects and acts upon the different types of knowledge.

Webb's Depth of Knowledge (DOK) 2002



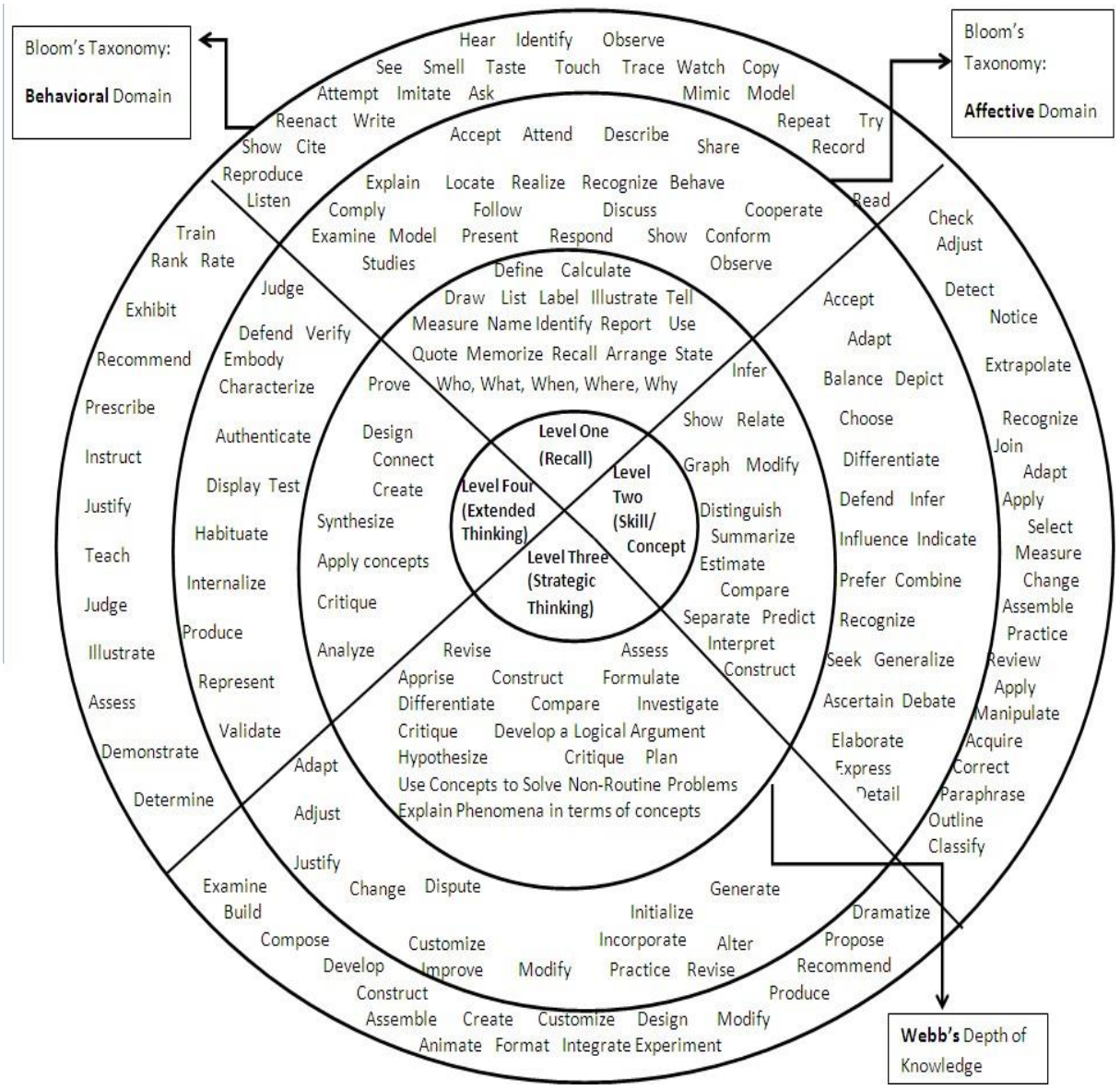
Categories the cognitive complexity of an activity. Measures the degree to which the knowledge elicited from students on assessments is as complex as what students are expected to know.

Webb's Depth of Knowledge (DOK)

A scale developed in 1997 by Norman Webb that measures the level of cognitive demand (thinking). Released in 2002, Webb's Depth of Knowledge (DOK) model has these main components:

- The context in which the verb is used and the depth of thinking that is required to successfully complete a task
- Each grouping of tasks reflects a different cognitive expectation or depth of knowledge required to complete a task
- The DOK level should reflect the complexity of the thinking process demanded by the task as opposed to whether or not the task itself is difficult.

ACTION VERBS THAT YOU CAN USE IN SLOS



Verb Wheel: Combined Bloom's Taxonomy & Webb's Depth of Knowledge
These tools were combined to provide a resource of active/action verbs for you to select from in writing/designing your SLOs. The verbs contained in the wheel are by no means exhaustive.

Depending on a number of factors such as cognitive complexity and tasks, there are verbs repeated at varying levels on the wheel.

Please note: While there are similarities in the use and meaning of the verbs, these two distinct systems that have different emphasis. Thus, the verb construct under Revised Bloom's Taxonomy (RBT) differs from the verb construct under Webb's Depth of Knowledge (DOK).

WHAT ARE THE PITFALLS TO BE AVOIDED WHEN WRITING SLOS?

The learning outcome does not follow department, division, or college goals
All learning outcomes should have meaning for you, your department, and the students participating in the programs or receiving services. This meaning should be derived from the specific goals of your department.

The learning outcome includes words that are difficult or impossible to measure
Avoid words or phrases that are too general, ambiguous, vague, and difficult to measure such as know, understand, appreciate, value, become familiar, learn, realize, and comprehend. These words are usually associated with teaching objectives and not SLOs.

Utilize Bloom's Taxonomy & Webb's Depth of Knowledge for **active /action** verbs (Diagram can be found on pages 20 & 21 of this handbook). **Recommendation**: **One** active verb per learning outcome.

The learning outcome includes too many skills in one statement
Have only one skill per statement. If multiple skills are included, the outcome becomes complex and difficult to measure

The learning outcome is written in a way that includes too many or all the possible things students can learn by participating in a learning activity
Focus on the key things you want students to learn as a result of the learning activity

The learning outcome is too broad

The challenge of a broad SLO is that there is no discernible knowledge or skills that are identified

For example: 80% of the students will successfully pass the course as reflected in a "C" grade or higher

The learning outcome joins too many elements (is a bundled statement)

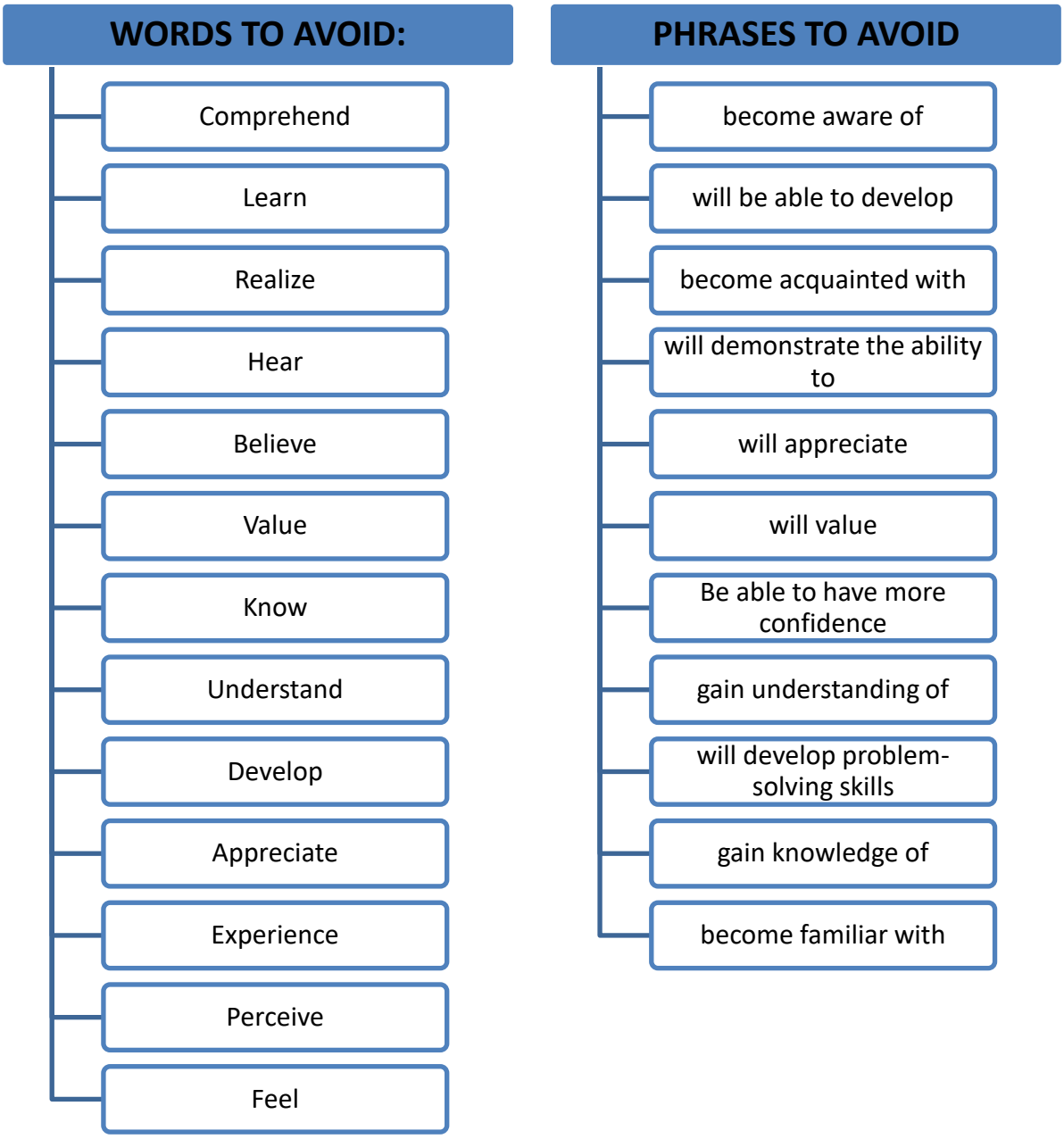
Example: Engineering students will demonstrate knowledge of math, science, and engineering fundamentals, and gain competency in basic skills in writing reports, communicating research ideas and make oral presentations.

One challenge of this SLO is that too many skills need to be assessed which most likely will also require different assessment methods.

WHAT IS SO IMPORTANT ABOUT USING ACTIVE/ACTION VERBS IN SLOS?

The learner's performance should be observable and measureable. The use of active/action verbs in an SLO will facilitate the teaching and learning process much more effectively because action verbs result in overt behavior that can be observed and measured.

COMMON ERRORS FOUND IN SLOS



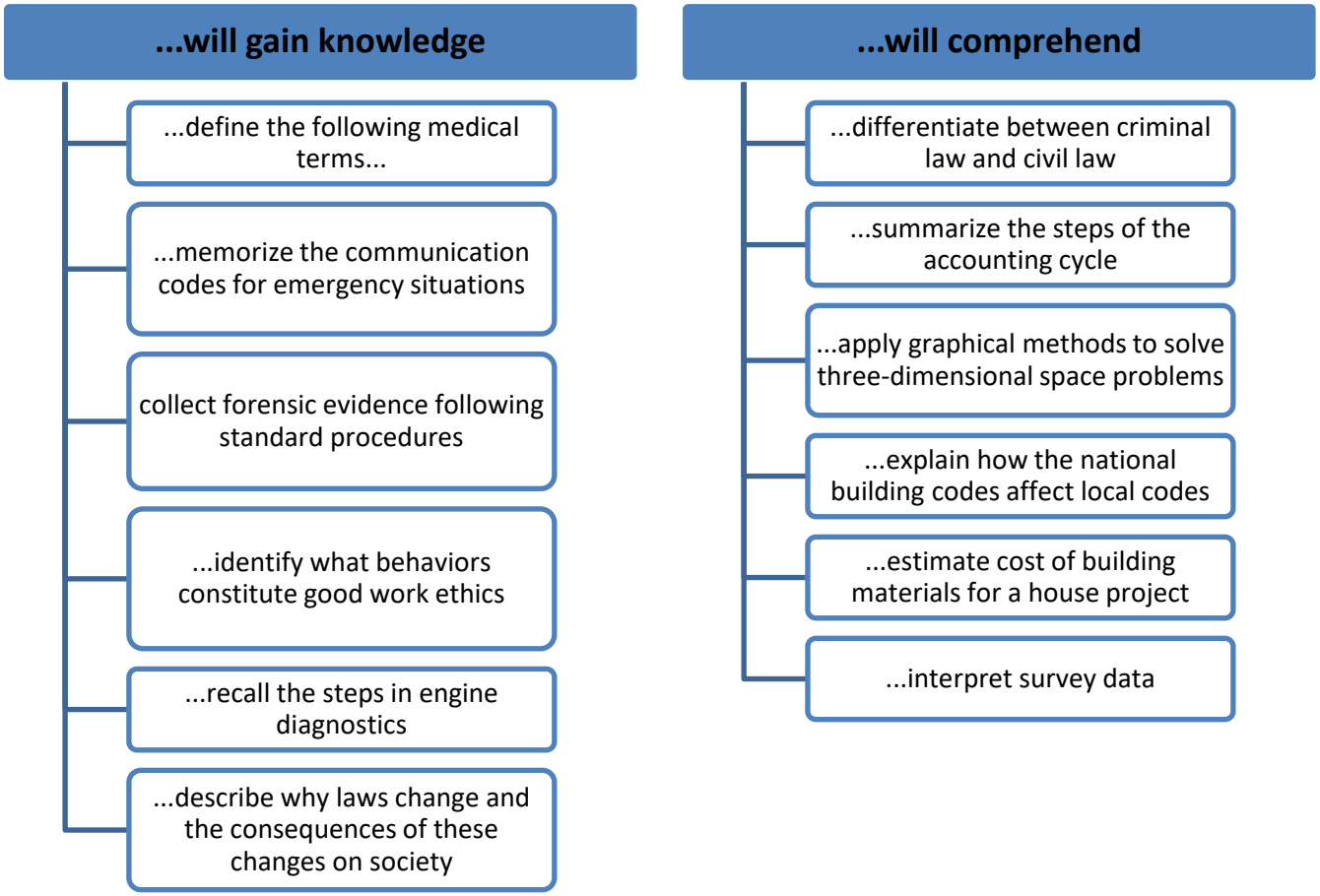
They are too ambiguous/vague, too general, and difficult to measure.

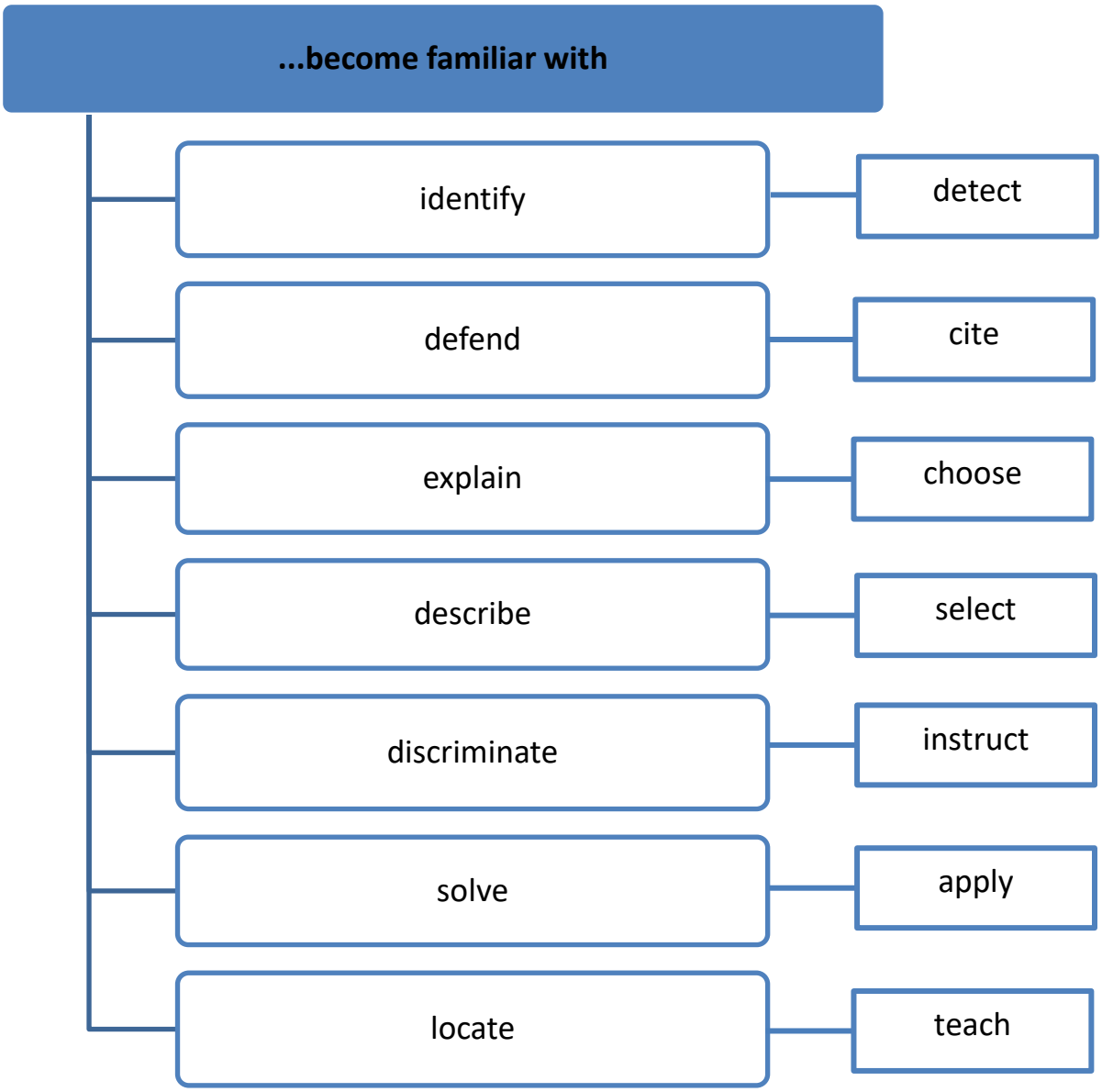
REVISED BLOOM'S TAXONOMY ACTION VERBS

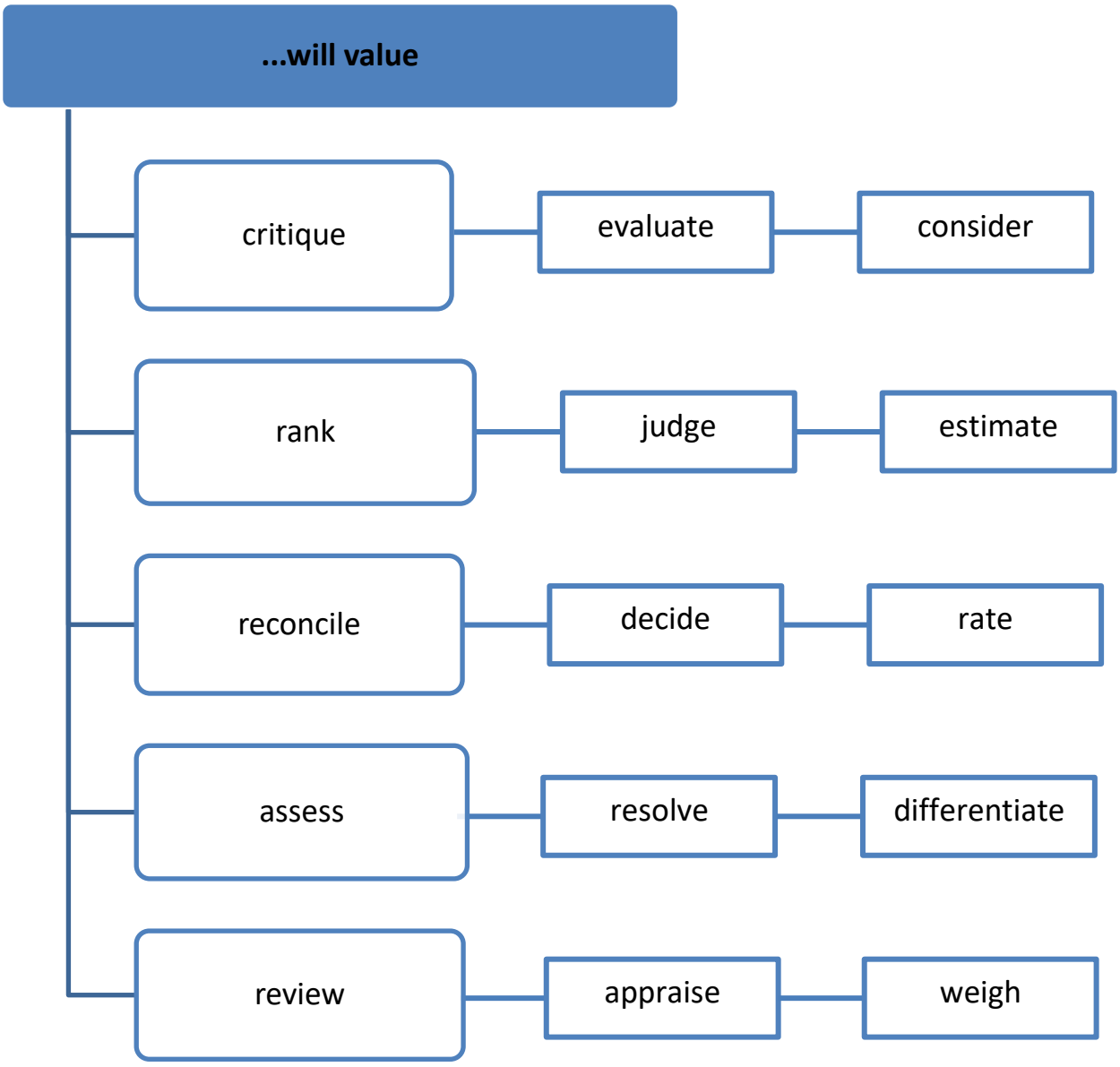
Definitions	I. Remembering	II. Understanding	III. Applying	IV. Analyzing	V. Evaluating	VI. Creating
Bloom's Definition	Exhibit memory of previously learned material by recalling facts terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.
Verbs	• Choose • Define • Find • How • Label • List • Match • Name • Omit • Recall • Relate • Select • Show • Spell • Tell • What • When • Where • Which • Who • Why	• Classify • Compare • Contrast • Demonstrate • Explain • Extend • Illustrate • Infer • Interpret • Outline • Relate • Rephrase • Show • Summarize • Translate	• Apply • Build • Choose • Construct • Develop • Experiment with • Identify • Interview • Make use of • Model • Organize • Plan • Select • Solve • Utilize	• Analyze • Assume • Categorize • Classify • Compare • Conclusion • Contrast • Discover • Dissect • Distinguish • Divide • Examine • Function • Inference • Inspect • List • Motive • Relationships • Simplify • Survey • Take part in • Test for • Theme	• Agree • Appraise • Assess • Award • Choose • Compare • Conclude • Criteria • Criticize • Decide • Deduct • Defend • Determine • Disprove • Estimate • Evaluate • Explain • Importance • Influence • Interpret • Judge • Justify • Mark Measure • Opinion • Perceive • Prioritize • Prove • Rate • Recommend • Rule on • Select • Support • Value	• Adapt • Build • Change • Choose • Combine • Compile • Compose • Construct • Create Delete • Design • Develop • Discuss • Elaborate • Estimate • Formulate • Happen • Imagine Improve • Invent • Make up • Maximize • Minimize • Modify • Original • Originate • Plan • Predict • Propose • Solution • Solve • Suppose • Test • Theory

Anderson, L W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing, Abridged Edition. Boston, MA: Allyn and Bacon.

SOME EXAMPLES OF REPLACING VAGUE WORDS WITH ACTION VERBS




...become familiar with
identify
detect
defend
cite
explain
choose
describe
select
discriminate
instruct
solve
apply
locate
teach


...will value
critique
evaluate
consider
rank
judge
estimate
reconcile
decide
rate
assess
resolve
differentiate
review
appraise
weigh

EXAMPLES OF GOALS/EXPECTATIONS THAT ARE NOT SLOS

...will review and prepare for the national exam

...will receive at least a C grade on all assignments

...will submit assignments by scheduled due date

….will pass the final exam with a minimum 80%

...will arrive to class on time

...will dress appropriately

...demonstrate professionalism and appropriate work ethic

...offer opportunities for students to master integrated use of technology

...the program will engage a significant number of students in a formalized cultural studies program

...students will be exposed to exceptionality learning disabilities

<u>Cognitive</u>

…identify shop safety procedures

...name the elements in a periodic table

...interpret information from basic statistical graphs

<u>Behavioral/Performance</u>

...practice officer survival skills in mock situations

...apply hair coloring using the correct steps

...perform cylinder head and valve train diagnostics

...analyze a food and beverage establishment's standard operating procedure for proper implementation

...calculate house load requirements

<u>Affective</u>

...revises judgment in light of new evidence

...listens to others without interruption

...gives a presentation on the need for professional ethical standards

...prioritizes time to meet the needs of the group

...explain the importance of confidentiality in the professional-client relationship

…shows self-reliance when working independently

EXAMPLES OF STUDENT SERVICE UNIT OUTCOMES (SSUOS)

For Student Service Unit Outcomes (SSUOs), program outcomes are written to identify what the program staff want the students to be able to do after completion of a service.

Administrative support for our students' learning can be either direct or indirect. Administrative Unit Outcomes (AUOs) identify what we want students to be able to do after completion of an administrative unit's direct service or they identify how the unit function's indirectly to support student learning.

Examples- Upon successful completion of services rendered, students will be able to:
...access and successfully submit the FAFSA online.
...identify the steps in the student complaint process.
...complete a plan of action for the upcoming academic year.
...identify resources and procedures needed to organize a student event.
...apply for and receive a supplemental grant.
...register online using the Banner system.
..apply strategies and interventions to overcome barriers to academic success.
...identify accommodations related to his/her disability.
...complete the financial aid application independently.
...apply positive strategies for reducing stress and anxiety.
...locate a variety of library resources for information specific to topic/assignment.
…apply study skill techniques for reading textbooks and other course materials.
...use a time management schedule to complete assignments.
...identify their own learning styles.

SLO STATEMENT STEMS

1. Upon successful completion of services rendered by (Student Service Unit), students will be able to:
2. Upon successful completion of (name of program), students will be able to:
3. Upon successful completion of (name of the course), student will be able to:

WHAT ARE THE SIMILARITIES/DIFFERENCES BETWEEN OBJECTIVES, GOALS, AND OUTCOMES?

Objectives:	**Goals:**	**Outcomes:**
• Use the language of outcomes • Describe intended purposes and expected results of teaching activities • Are intended results or consequences of instruction, curricula, program, or activities • Express intended results in specific terms *Key distinguishing feature between objectives & goals is the level of specificity • Brief, clear statements that describe the desired learning outcomes of instruction i.e., the specific skills, values, and attitudes students should exhibit that reflect the broader goals • May also reflect different levels of learning or specific types of performances: Mastery—those learning tasks/skills that must be mastered before moving on to the next level of instruction Developmental—those learning tasks students can be expected to demonstrate at varying degrees of progress Instructional—describe in detail the behaviors that students will be able to perform a conclusion of a unit of instruction and the conditions and criteria which determine the acceptable level of performance • Written more in terms of teaching intentions and usually indicates the subject content that the instructor intends to cover	• Use the language of outcomes • Describe intended purposes and expected results of teaching activities • Express intended results *(in general terms) • Statements about general aims or purposes of education that are broad, long-range intended outcomes and concepts	• Are achieved results or consequences of what was learned • Are more precise, specific, clear, and focus on the ability to demonstrate learning on the part of the student • Usually expressed as knowledge, skills, attitudes, or values • Specifies an action by the student that must be observable, measurable, and able to be demonstrated • Statements that describe significant and essential learning that learners have achieved and can demonstrate at the end of a course or program • Identifies what the learner will know and be able to do as a result of a learning activity • Base program and curriculum design, content, delivery, and assessment on an analysis of the integrated knowledge, skills, and values needed by both students and society • Is student-centered: describes what the learner should learn • Support the goal(s) • Focus on student behavior (it is not about what the instructors can provide but what the students can demonstrate)

HOW DO I FIX A STUDENT LEARNING OUTCOME?

Again, the 2-Question Test has to be applied:

1. Can it be measured?
2. Is learning being demonstrated?

Examples follow to illustrate whether the SLO passes the 2-Question test:
-Participants will understand the 6 reasons for conducting a complete diagnostic test.
(Learning is being demonstrated, but the extent of understanding will be difficult to measure)
The fix: Students will list the six reasons for conducting a complete diagnostic test.

-The student will understand the importance of arriving on time during the internship period.
(Can be measured, but learning is not necessarily being demonstrated)
The fix: The student will articulate the necessity of maintaining office hours during the internship period.

-Students will develop an appreciation of cultural diversity in the workplace.
(Cannot be measured—you would have to know how a student will demonstrate appreciation and define what is meant by appreciation)
The fix: Students will summarize in writing their feelings about cultural diversity in the workplace.

-Students will gain knowledge of architectural
(Too broad: what knowledge will be gained and which architectural skills?)
The fix: Students will create variations of two and three dimensional designs

-Develop an understanding of current payroll methods and procedures
(How will understanding be measured and which payroll methods and procedures will be learned?)
The fix: Students will be able to calculate wages.
Students will maintain employees' earning records
Students will process a four-month payroll period using manual and computerized methods.

WHAT ARE THE CHARACTERISTICS OF A GOOD SLO?

Contains an **action** verb that describes an **observable** or **identifiable** action

- Is **learner-centered**; **focus is on the student as the performer** (or as the learner/alignment to institutional goal of student-centered education: what students are able to know, do, think/feel)?

- Is **specific** (to institutional and/or program level)?

- Is **easy to measure?**

- Is **written in a clear, concise, explicit manner** and is easily understood by multiple audiences **(free of ambiguities)?**

- Is in **alignment** with the course description, industry standards, and ILOs?

- **Emphasis is on critical thinking skills** and/or obvious progression to higher order thinking skills is evident (alignment to institutional goal of providing quality education)?
- Is **receptive to feedback** or comments on the quality and utility of the information provided?

- Is **constructively aligned** (with instructional/learning activities and method (s) of assessment)?

- Is **updated regularly** to ensure currency and responsiveness?

SLO CHECKLIST

Once you create your SLO, use this checklist to verify its effectiveness and to determine whether revision is needed

1. Are the outcomes aligned with the vision, mission, values, and goals? [Y] [N]
2. Does the outcome describe what the program intends for students to know (cognitive), think (affective/attitudinal), and do (behavioral/performance)? [Y] [N]
3. Is the outcome important/worthwhile? [Y] [N]
4. Is the outcome
    a. Specific? [Y] [N]
    b. Clear/easy to understand? [Y] [N]
    c. Written using an action verb? [Y] [N]
    d. Measurable? [Y] [N]
    e. A result of student learning? [Y] [N]
5. Do you have or can you create a learning activity that will facilitate students to learn the desired outcome? [Y] [N]
6. Taken together, would the indicators associated with the outcomes accurately reflect the key results of the programs, operations, or service offered by your unit or program? [Y] [N]
7. Are the outcomes stated which makes it possible to use a single method of assessment? [Y] [N]
8. Does the language describe student rather than teacher behaviors? [Y] [N]
9. Does the language describe a learning outcome and not a process? [Y] [N]

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Student Learning Outcomes Handbook

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