Writing Student Learning Outcomes

Outcomes: Detailed, specific, measurable or identifiable, and personally meaningful statements that are derived from the goals and articulate what the end result of a unit, program, course, activity, or process is.

Outcomes should be:
- Measurable (not necessarily countable) or observable,
- Manageable, and
- Meaningful.

Learning Outcomes: An easily identified action that a student is expected to demonstrate in terms of knowledge, skills, and attitudes upon completion of a program/activity/experience.

Note: When writing learning outcomes, focus on the end result of the learning. How will you know that the students have learned what you want them to learn? What does it look like? How will you identify it? Use simple, specific action verbs to describe what the students are expected to demonstrate upon completion of a program.

Students will be able to <action verbs to describe knowledge, skills, or attitude>…

ACTION VERBS

Concrete verbs such as "define," "apply," or "analyze" are more helpful for assessment than verbs such as "be exposed to," "understand," "know," "be familiar with."

Cognitive Learning	Examples of Action Verbs:
Knowledge - to recall or remember facts without necessarily understanding them	articulate, define, indicate, name, order, recognize, relate, recall, reproduce, list, tell, describe, identify, show, label, tabulate, quote
Comprehension – to understand and interpret learned information	classify, describe, discuss, explain, express, interpret, contrast, associate, differentiate, extend, translate, review, suggest, restate
Application – to put ideas and concepts to work in solving problems	apply, compute, give examples, investigate, experiment, solve, choose, predict, translate, employ, operate, practice, schedule
Analysis – to break information into its components to see interrelationships	analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, distinguish, examine, investigate, interpret
Synthesis – to use creativity to compose and design something original	arrange, assemble, collect, compose, construct, create, design, formulate, manage, organize, plan, prepare, propose, set up
Evaluation – to judge the value of information based on established criteria	appraise, assess, defend, judge, predict, rate, support, evaluate, recommend, convince, conclude, compare, summarize
Affective Learning	appreciate, accept, attempt, challenge, defend, dispute, join, judge, praise, question, share, support

Adapted from: Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain*. New York, NY: Longmans, Green.

Examples of learning outcomes (Texas A&M University Student Leader Learning Outcomes Project)**:**
- Students will be able to articulate the series of steps/processes to achieve the end results of the program (project management)
- Students will be able to set procedures for subsequent years of the event or program they planned (project management).
- Students will be able to effectively adjust their presentation styles to appropriately address the audience (oral communication).
- Students will differentiate between individual differences, cultural differences, and universal similarities (valuing individual difference)
- Students will predict and evaluate implications, consequences and conclusions (critical thinking).

Writing Program, Process, and Performance Outcomes

Program/process outcomes – The end result of what a program or process is to do, achieve, or accomplish.

Note: Program outcomes can be as simple as completion of a task or activity, although this is not as meaningful as it could be and does not provide information for improvement. To accomplish the latter, you should try to assess the effectiveness of what you want your program to accomplish. Program outcomes, just like learning outcomes should be measurable, manageable, and meaningful.

THE PROGRAM WILL <ACTION VERB TO DESCRIBE WHAT IT WILL DO, ACHIEVE OR ACCOMPLISH>…

<u>Performance outcome:</u> Increase the size of the Rec Center's Weight & Fitness Room and purchase additional equipment to increase access for Rec Center members

<u>Process outcome:</u> The Department of Residence Life will be able to respond to maintenance requests within 24 hours of their walk-in time

<u>Program outcome:</u> Develop and expand the Student Health Services web page in order to increase student access to health information, information regarding patient services and educational programming available from Student Health Services

<u>Program outcome:</u> Students will procure and optimize all resources (human, material and financial) needed for a particular project

Select appropriate assessment methods: Means of assessment describes the process employed to gather data that will measure each stated outcome. Try to use a variety of methods, direct and indirect, quantitative and qualitative, to gather adequate information to determine the extent the outcome has been achieved.

> **Direct Methods -** Any process employed to gather data which requires subjects to display their knowledge, behavior, or thought processes.
> **Indirect Methods -** Any process employed to gather data which asks subjects to reflect upon their knowledge, behaviors, or thought processes.

Some Examples of Direct Assessment Methods
- Student work samples
- Collections of student work (e.g., portfolios)
- Capstone projects
- Project-embedded assessment
- Observations of student behavior
- External evaluations of student performance
- Performance on a case study/problem
- Performance on problem and analysis
- Locally developed tests
- Standardized tests
- Pre-and post-tests
- Essay tests blind scored across units
- Supervisor/advisor evaluations
- Certificates of completion/compliance
- Reflective journals

Some Examples of Other Assessment Methods
- Alumni, employer, student surveys
- Focus groups and interviews
- Exit interviews with graduates
- Graduate follow-up studies
- Retention and transfer studies
- Job placement statistics
- Percentage of students who study abroad
- Enrollment trends
- Percentage of students who graduate within five-six years
- Diversity of student body
- Program review using CAS Standards
- Benchmarking
- Student leadership transcripts
- Timelines and budgets
- Tracking use of services (attendance, ticket sales, clients, etc.)
- Tracking program participation by desired demographics
- Document analysis (e.g., meeting minutes, policies, handbooks)