

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/course.

Note: When writing learning outcomes, focus on the end result of your teaching. 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. Examples include:

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

Knowledge - to recall or remember facts without necessarily understanding them
Comprehension – to understand and interpret learned information
Application – to put ideas and concepts to work in solving problems
Analysis – to break information into its components to see interrelationships
Synthesis – to use creativity to compose and design something original
Evaluation – to judge the value of information based on established criteria

Examples of Action Verbs:

articulate, define, indicate, name, order, recognize, relate, recall, reproduce, list, tell, describe, identify, show, label, tabulate, quote
classify, describe, discuss, explain, express, interpret, contrast, associate, differentiate, extend, translate, review, suggest, restate
apply, compute, give examples, investigate, experiment, solve, choose, predict, translate, employ, operate, practice, schedule
analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, distinguish, examine, investigate, interpret
arrange, assemble, collect, compose, construct, create, design, formulate, manage, organize, plan, prepare, propose, set up
appraise, assess, defend, judge, predict, rate, support, evaluate, recommend, convince, conclude, compare, summarize
appreciate, accept, attempt, challenge, defend, dispute, join, judge, praise, question, share, support

Affective Learning

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

Examples of learning outcomes:

Graduates will be able to *collect* and *organize* appropriate clinical data, *apply* principles of evidence-based medicine to determine clinical diagnoses, and *formulate* and *implement* acceptable treatment modalities

Graduates are able to *identify* various aspects of architectural diversity in their design projects

Graduates will be able to critically *analyze* and *evaluate* current research

Adapted from: Bresciani, M.J., Zelna, C.L., and Anderson, J.A. (2002). *Assessing student learning and development: A handbook for practitioners*. NASPA. Washington, D.C.

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 BE ABLE TO <ACTION VERB TO DESCRIBE WHAT IT WILL DO, ACHIEVE OR ACCOMPLISH>...

Program Outcome: The Department of English will increase their diverse applicant pool by 50%.

Program Outcome: The Department of Residence Life will be able to respond to maintenance requests within 24 hours of their walk-in time

Program Outcome: The Student Health Service will be able to admit students for check-ups within 24 hours of their walk-in time.

Program Outcome: The Financial Aid Office will have full award letters out to the on-time complete applicants by April 15th.

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.

Adapted from: Ewell, P.T. (2003). *Specific roles of assessment within this larger vision*. Presentation given at the Assessment Institute at IUPUI. Indiana University-Purdue University-Indianapolis.

Some Examples of Direct Assessment Methods

- Student work samples
- Collections of student work (e.g. Portfolios)
- Capstone projects
- Project-embedded assessment
- Course-embedded assessment
- Observations of student behavior
- Internal juried review of student projects
- External evaluations of student performance
- Document analysis (e.g., meeting minutes, policies, handbooks, speeches)
- External juried review of student projects
- Externally reviewed internship
- Performance on a case study/problem
- Performance on problem and analysis (Student explains how he or she so)
- Performance on national licensure examinations
- Locally developed tests
- Standardized tests
- Pre-and post-tests
- Essay tests blind scored across units

Some Examples of Indirect Assessment Methods

- Alumni, Employer, Student Surveys
- Focus groups (depending on the interview protocol, this could be used as direct evidence)
- Exit Interviews with Graduates
- Graduate Follow-up Studies
- Percentage of students who go on to graduate school
- Retention and Transfer Studies
- Job Placement Statistics
- Faculty/Student ratios
- Percentage of students who study abroad
- Enrollment trends
- Percentage of students who graduate within five-six years
- Diversity of student body
- CAS Standards