Institutional Effectiveness

Glossary

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A


Artifact: An assignment (paper, project, test) that demonstrates the students’ abilities and is collected for the purposes of student learning outcome assessment. Ideally, artifacts should not include any student or instructor information, comments, or previous scoring so that ratings are not affected by any teacher or student information.

Assessment Cycle: Used for continuous improvement, this *four step cycle* asks that you *plan* for assessment, *do* the assessment, *check* the assessment results, and *act* on those assessment results to develop strategies for continuous improvement.

Assessment Method: The steps taken to collect and analyze data, which include choosing an artifact, determining sample size, determining the manner by which artifacts will be assessed, and developing a reasonable criterion.

Assessment: The process of collecting and analyzing information of different facets of an institution or program in order to understand and improve those areas.

B

Bloom’s Taxonomy: A classification of cognitive intellectual behavior. For each behavior, Bloom’s taxonomy has several action verbs that can be used for developing and writing outcomes (for further information on these practical action verbs, visit the IE website). The behaviors are divided into six levels from the simplest to most complex.

1) Analysis level: Students break down an item or idea into its components, which could require classification or organization skills.

2) Application level: Students use the learned knowledge in a situation, problem, activity, or setting.

3) Comprehension level: Students explain knowledge learned (information or facts) in their own words.

4) Evaluation level: Students judge, grade, or critique and can explain their evaluations.
5) **Knowledge level:** Students recall information or facts.

6) **Synthesis level:** Students create something new based on the knowledge, comprehension, application, and analysis of information or facts (Anderson & Krathwohl, 2001; Bloom, 1956; Krathwohl, 2002).

**C**

**Capstone Course:** A course offered towards the end of a degree program designed to assess students’ overall learning in that program through assignments in which students must synthesis of all the knowledge and skills learned throughout that degree program.

**Census:** The use of every single student or artifact in the data collection and analysis process.

**Closing the Loop:** A term used to signify the process of using assessment results to create program improvement plans and then implementing those plans during the following assessment cycle.

**Cluster Sampling:** A random sampling method in which clusters or groups are randomly selected and all the artifacts or participants in the selected clusters or groups are evaluated (e.g. 5 classroom sections of a course are taught one academic year, 2 are randomly selected for assessment, and all students within the two sections are assessed).

**Conceptual Knowledge:** Knowledge about the relationships among different aspects or components of a larger structure or design (Krathwohl, 2002).

**Continuous Improvement:** The process of continuously using an assessment cycle to periodically assess outcomes, analyze results, and then make improvements based on those results.

**Course Learning Outcomes (CLO):** Outcomes focused on students’ knowledge and skills at the completion of a specific course. This type of outcome is helpful for curriculum assessment, but should not be used for Student Learning Outcomes assessment that requires program learning outcomes.

**Criterion:** The standard of performance (numeric level or benchmark) as an observable and measurable behavior sought in an artifact and on which the artifact will be evaluated (e.g. students will score a minimum of 3 on a 4 point rubric).

**Curriculum Map:** A strategy to determine how learning outcomes or learning competencies are taught and measured within each course in the curriculum. Curriculum maps are generated by designing a table where the columns are all of the courses taught in a program and the rows are all of the outcomes or competencies the faculty are teaching and assessing. Faculty members use this table to check off which competencies are taught in each of the courses, determine how thoroughly these competencies are addressed, and formulate decisions for curriculum changes.
D

Direct Measures: Assignments (artifacts) that show what students gained knowledge or skills (e.g. papers, projects, exhibitions, tests).

E

Exit Competency Exam: An exam taken at the end of a program or at the end of a capstone course in which students must demonstrate proficiency in the knowledge and skills taught throughout the degree program. This artifact is an excellent example of an easily quantified direct measure.

F

Factual Knowledge: Knowledge about terminology, details, and aspects associated with a discipline, problem, situation, or content area (Krathwohl, 2002).

Faculty Panel: A committee of 2 or more faculty members, discipline related professionals, and/or alumni who gather to assess those artifacts for the program’s assessment and overall continuous improvement. Inter-rater reliability is an important factor in panels. All members should agree on the definition of all criteria and rubrics to measure student learning outcomes (SLO). For the purposes of assessment and reliability, 3 or more members are recommended per panel.

Formative Assessment: Assessment that takes place in all levels of the curriculum (from introductory courses to advanced courses). Data is periodically collected to provide faculty with information on current performance or status. Results generated are used for course level improvement rather than general program level improvement.

I

Indirect Measures: Data collection instruments (e.g. surveys, interview questions) that measure perceptions of courses, degree programs, or services and in which people are asked to reflect on their experiences (i.e. self-reported data and instruments). These are typically used in program outcomes and operational objectives. If used for student learning outcomes, they must be paired with a direct measure.

Instrument: A tool used to measure, score, or record knowledge, behaviors, perceptions, or reflections with the intention of using the data for continuous improvement (e.g. rubric, scoring guide, etc).

Inter-rater Reliability: The degree to which different raters agree on scoring an artifact, instrument, etc. For example, high inter-rater reliability indicates that scores attributed by the raters in a panel are similar.
Metacognitive Knowledge: Knowledge and awareness of one's own cognitive processes, which could be used to regulate learning behavior (Krathwohl, 2002).

Mission Statement: A statement with the values, plans, and goals of the university or individual college, school, program, or unit.

Operational Objectives: Objectives focused on what the academic or administrative support services plan to accomplish each year in relation to daily operations (e.g. implementation of new grading system or software, measuring efficiency of procedures, etc.).

Population: Represents every single student, artifact, or subject involved in the area being researched.

Portfolio: A systematic collection of student work used for the evaluation of student learning outcomes and which can be measured using a rubric.

Procedural Knowledge: Knowledge about how to do something or complete an activity or problem (Krathwohl, 2002).

Program Outcomes (PO): Outcomes focused on what the degree programs should accomplish each year with students in terms of program quality, efficiency, and productivity (e.g. retention and graduation rates), but not in terms of actual student learning; also known as Performance Outcomes.

Qualitative Data: Descriptive data (e.g. focus group or interview transcripts and notes) that can be observed but not measured and which provide an approximation of an attribute, behavior, or characteristic.

Quantitative Data: Measurable numerical data that can be statistically manipulated and which provide a concrete measure of an attribute, behavior, or characteristic.

Reliability: The quality and consistency of the instrument (e.g. survey or exam) or the degree that it measures the unit of analysis each time under the same conditions.

Rubric: A systemic scoring guide that uses predetermined criteria and proficiency or ability levels.
SACS (Southern Association of Colleges and Schools): a private, non-profit accrediting agency for colleges and schools in the Southern States (Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia).

Sample Size: The size of the sample in relation to the population where the smaller the sample size, the less representative of the population it might be.

Sample: A carefully selected portion of the population being assessed or evaluated.

Sampling: The process of choosing a fraction of students from the larger population. It is recommended to use any of the random sampling techniques because they are representative of the total population (e.g. simple random, stratified, or clustered sampling).

Saturation: When a student learning outcome, degree program outcome, core curriculum outcome, or operational objective (academic or administrative support services) is generating the same results for approximately three years or more.

Simple Random Sampling: A sampling method in which artifacts or participants are randomly selected. Randomization can be conducted by selecting numbers from a bowl, using a random numbers table, or using specialized software.

Stratified Sampling: A random sampling method that is typically used for populations where the researcher wants to ensure that minority groups are represented. Artifacts or participants are first sorted into homogenous groups and then a random sample is selected from each homogenous group.

Student Learning Outcomes (SLO): Measurable outcomes focused on students’ knowledge, skills, or professional values after completing a degree program with the graduating student as the unit of analysis. Learning outcomes should be specific, measurable, attainable, and achievable within an assessment cycle. At least one direct measure needs to be assessed.

Summative Assessment: Evaluative assessment that occurs at the end of a course or degree program and provides information on overall performance or status (e.g. dissertation, exit exam, and professional field exams).

Survey: A data collection instrument, commonly called a questionnaire, in which information is gathered in written, oral, or electronic formats. This is an indirect measure for assessment.

Systemic Sampling: A random sampling method in which the artifacts or participants are listed, and then every n\textsuperscript{th} (e.g. 7\textsuperscript{th}, 9\textsuperscript{th}, 10\textsuperscript{th}) artifact or student is selected.
Technology Outcome (TO): A learning outcome focused on the specific learning and use of technology in relation to the degree program or field of study. Currently, one technology outcome is required for each undergraduate level degree program.

Transparency: The process of clearly stating all aspects of the assessment process (data collection, evaluation, and analysis) so that others may understand how the data was collected and analyzed and be able to replicate the data collection process in the future.

Triangulation: The process of collecting data from multiple sources in order to obtain more valid and accurate results and analyze data more appropriately and effectively.

Unit of Analysis: The major element that is being analyzed or evaluated such as a research paper in a capstone course, a dissertation in a doctoral program, or students’ perceptions of a program.

Use of Results: The act step of the assessment cycle that involves the development and implementation of an improvement plan, which would be evaluated in the following assessment cycle.

Validity: The accuracy of the measurement in terms of whether or not you are measuring what you are supposed to measure.