



TEXAS A&M UNIVERSITY

COMMERCE

## Department of Institutional Effectiveness and Research

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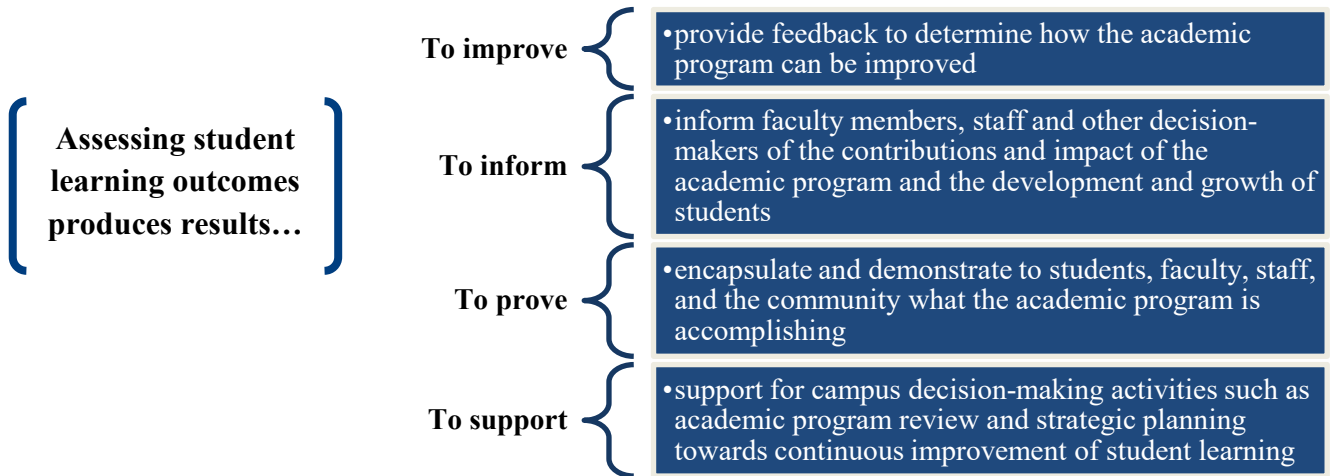
### *Assessment Methods for Academic Programs*

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*The examples and tools included in this resource are intended to serve only as a reference and guide, not as an exclusive representation of all possible examples, tools, or best practices*

## Introduction to Assessments

Part of the effectiveness process at Texas A&M University-Commerce is not only to develop student learning outcomes at the program level, but also to measure the achievement of each outcome. This measurement provides results in the form of actionable data that can then be used to drive decisions.



### Effective program assessment should answer these questions:

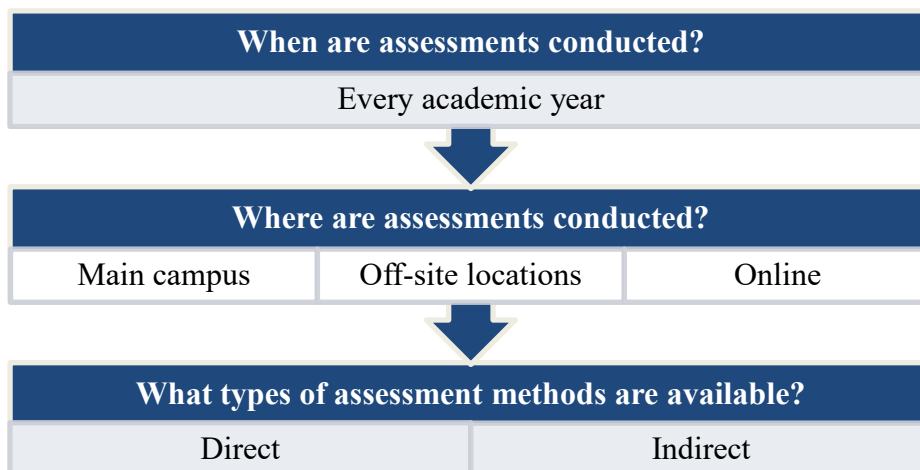
What are you trying to do? How well are you doing it?

Using the answers to the first two questions, how can you improve what you are doing?

Program assessment helps us look at what a program does to contribute to the development and growth of its students and identify how well it does those things.

The key question of program assessment is  
*How can student learning be improved?*

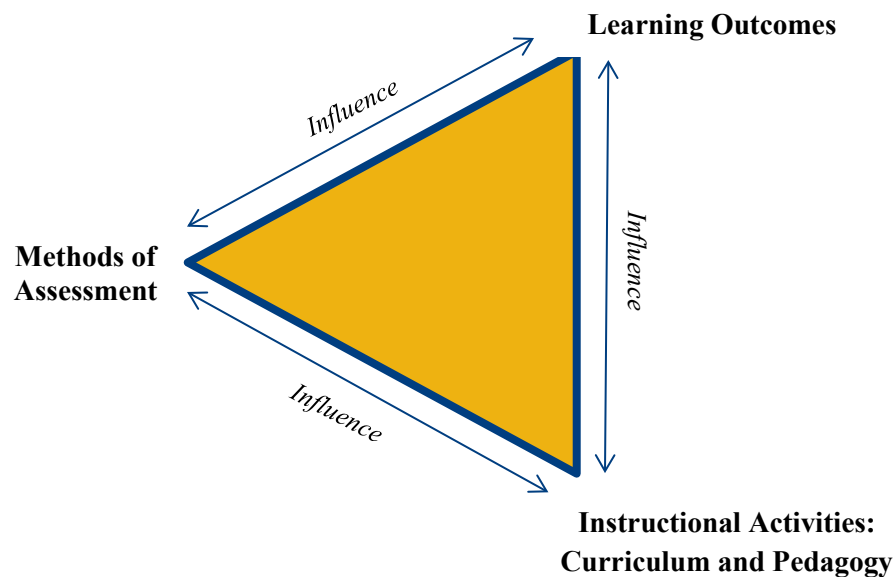
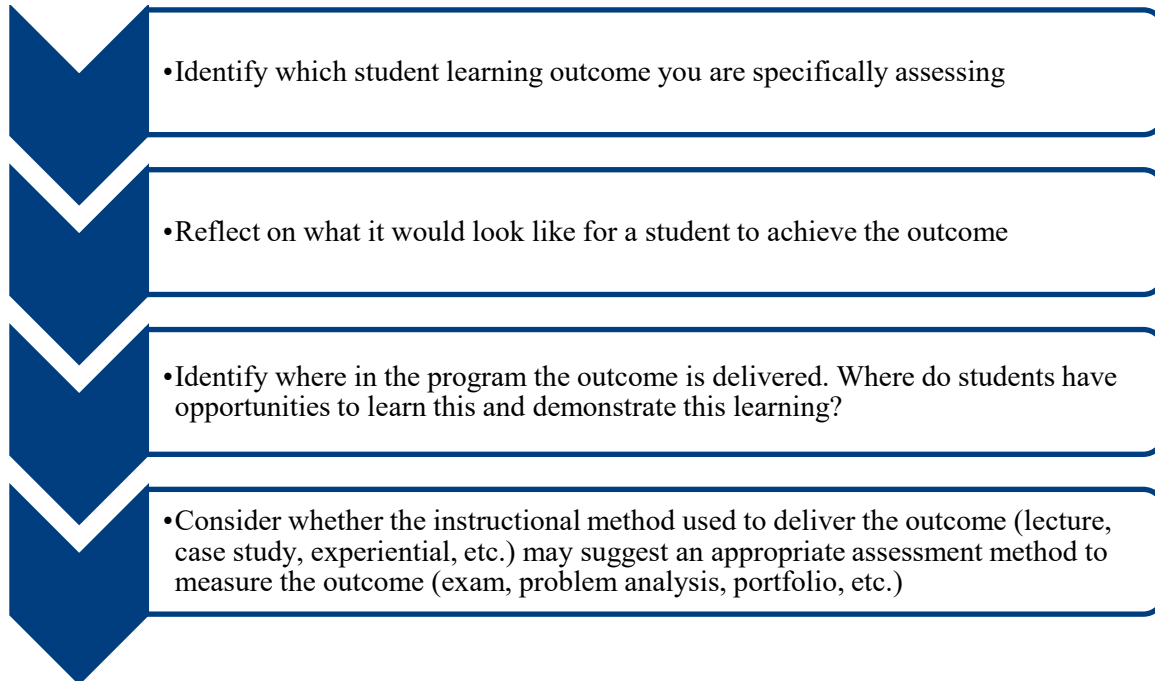
**How to get started:** Begin by reviewing these questions and answers.



## Outcome - Method of Assessment Alignment

Before selecting an assessment method, first consider what student learning outcome is being assessed and how the program supports the development of that outcome.

### Alignment



## Selecting an Assessment Method

### Direct vs. Indirect Methods of Assessment

When selecting an assessment method, best practices indicate that a combination of both direct and indirect assessment measures provides the most comprehensive evaluation of student learning outcomes.

Direct Methods	Indirect Methods
Require students to demonstrate their learning	Look at perceptions or opinions about learning
Performance of learning is directly assessed by observers	Inferences about learning are made
Examples: performance, portfolio, comprehensive exam	Examples: survey, self-assessment, focus group

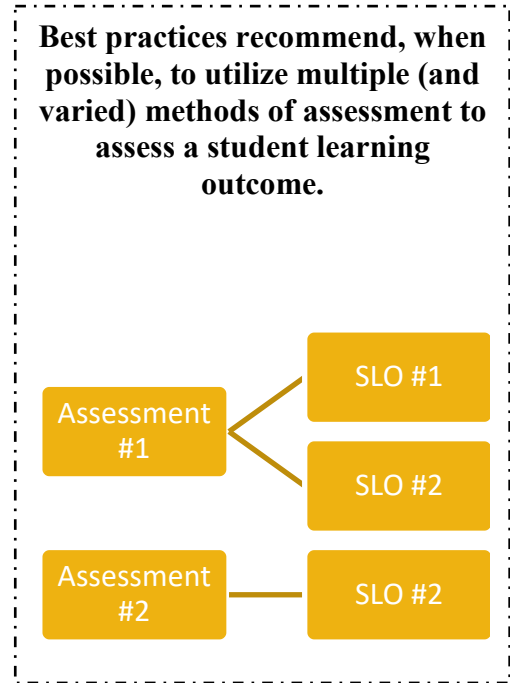
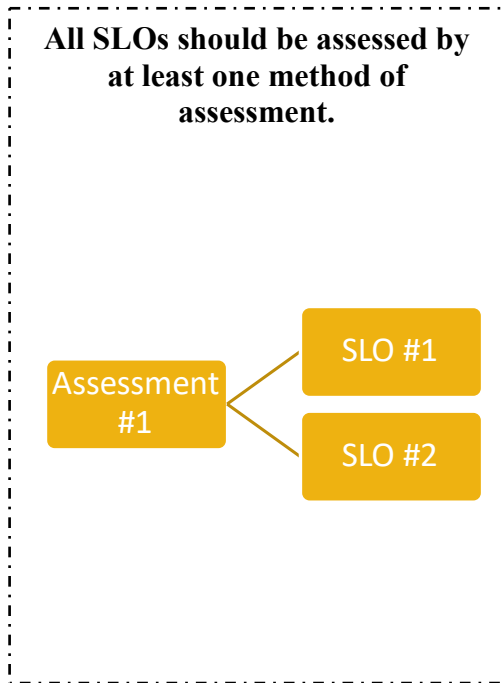
### Local vs. External Methods of Assessment

When selecting an assessment, consider whether the program plans to create the assessment itself (local or in-house assessment) or whether the program will use an assessment created or administered by another source (external assessment).

*Local assessments* include examples such as in-house developed comprehensive exams, a rubric created by the department to evaluate an essay, or a performance judged by a panel of faculty members. In most cases these assessments are non-standardized.

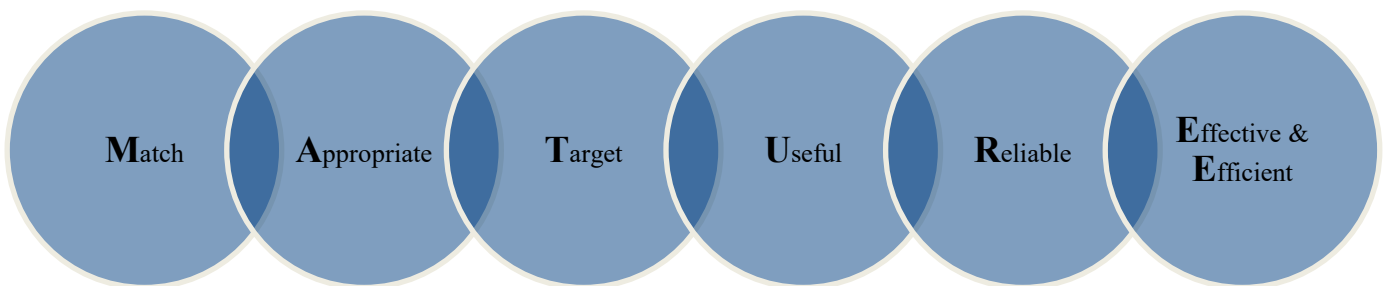
*External assessments* include examples such as a national exam or a rubric developed by an external agency. In many cases these assessments are standardized.

Commonly Used Assessments	
Direct Methods	Indirect Methods
Comprehensive or Exit Exams	Student Surveys
Essay, Research Paper or Thesis	Employer Surveys
Capstone Project	Alumni Surveys
Student Portfolios	Internship Evaluation
Juried Performance	Exit Interviews with graduates
Juried Project Evaluation	Focus Groups
Oral Presentation	Institutional Data
Observations	Enrollment Data
Course-Embedded Assessment	Graduation Rate and Retention Statistics
Case Study or Problem Analysis	Job Placement Statistics
Pre- and Post-Tests	Graduate School Placement Statistics
Licensing or Certification Exams	Advisory Board Consultations
Major Field Tests	



When choosing an assessment method, consider the characteristics that encompass an effective assessment measure. The M.A.T.U.R.E acronym is one tool that can be used to assist in understanding these characteristics.

**Use the M.A.T.U.R.E. graphic below to select an assessment method**



## Match

Match the student learning outcome with the appropriate assessment method. Successful and useful assessment cannot be achieved if you do not align the assessment method with the student learning outcome that you are trying to assess.

## Appropriate

Choose methods that are appropriate. They can be direct or indirect. Direct measures include assessments that evaluate a quality indicator, or student ability or achievement. Indirect measures can be survey responses to targeted questions or ancillary parts of a direct measure. There are times when one assessment can measure more than one student learning outcome. (For example, a survey or a portfolio may target several outcomes.) Consider measures that provide you with information that is easily interpreted, unambiguous, and valuable.

## Target

Each measure should be directed. It should specify, when possible, the desired level of performance (establish a standard of learning achievement). This may influence the standard of success.

## Useful

Choose assessment methods that will provide you with useful and actionable information. The measure that you are trying to assess should be one that would allow you to make inferences about the progress toward the student learning outcome.

## Reliable

The measure is based on tested, known methods. The method selected should be one that provides dependable, consistent results time after time. The instrument should be clearly worded and not ambiguous. The time available to complete the instrument should be consistent with its length.

## Effective & Efficient

Each approach accurately and concisely measures the student learning. The benefits of using more than one method include: (i) different components can be assessed, and (ii) a high level of accuracy and authority can be achieved. When possible, utilize a combination of direct and indirect assessment methods to effectively assess outcomes. The selection of assessment methods should reflect the nature of the discipline and should include methods that provide faculty with useful information about student learning.

## Evaluating Assessments and Setting a Standard of Success

**Can student grades be used as an assessment method for the purposes of Institutional Effectiveness?** The program assessment conducted as a part of the university's institutional effectiveness processes is intended to assess the performance of an academic program rather than the performance of individual students. Specifically, the program is inquiring to see if its identified student learning outcomes have been achieved by a cohort of students. To that end, assessment methods should precisely target those learning outcomes while grades often will incorporate other factors (format, adherence to directions, etc.) or learning components.

### Examples for Use of Graded Assignments in Program Assessment

#### Example 1: Exam

*Exam Grade for use in Course* = composite score of performance on multiple questions addressing multiple learning concepts; reported individually

vs.

*Assessment Data for use in Program Assessment* = specific score of performance on targeted questions addressing a single learning outcome; reported in the aggregate

#### Example 2: Essay

*Essay Grade for use in Course* = overall score of accomplishment which may reflect format as well as substance; reported individually

vs.

*Assessment Data for use in Program Assessment* = rubric scoring of performance strength on specific learning outcomes; reported in the aggregate

## Rubrics

Rubrics are a common assessment tool used to evaluate student work for the assessment of student learning outcomes. Rubrics easily allow for the evaluation of different SLOs or for the breakdown of a single SLO into several component parts.

### Choosing a rubric

Rubrics can be **developed internally by program faculty** or **borrowed and adapted from existing/external rubrics**.

Consult sources such as the following to locate existing rubrics:

- *VALUE rubrics - Association of American Colleges and Universities*
- *Professional associations for academic disciplines*
- *Other universities and educational organizations*

### Selecting the Raters

Rubrics can be scored by **internal raters** or **external raters**. Internal raters are university program faculty and often individuals who may be familiar with the students being assessed. External raters are either university faculty from other programs or other external industry professionals. These individuals would be unfamiliar with the students being assessed.

Rubrics can be scored by a **single rater** or by **multiple raters**. Single raters are used in cases where there is a low volume of assessments or where time or resources are limited. This format benefits from providing a consistent approach to scoring. Multiple raters are used in cases where either a high volume of assessments need evaluated or where a consensus on performance is desired. This format will benefit from time spent collaboratively interpreting responses using the rubric and comparing ratings to establish inter-rater reliability – accurate and consistent scoring.

## Standard of Success

**How do I determine if the program has sufficiently achieved its student learning outcomes?** In the assessment plan, in addition to identifying the assessment method that will be used to assess each learning outcome, it is also necessary to identify the standard of success by which the program will evaluate performance. This standard will reflect the level of achievement sufficient to demonstrate that the program is currently accomplishing its learning outcomes.

The formula below serves as an example in structuring the writing of a standard of success statement:

**[A percentage of students]** will receive a rating of **[description of target achievement level]** out of **[description of the scale of evaluation]** on **[identification of the student learning outcome addressed/description of assessment]**.

### Example Standard of Success Statements

- *85% of students will receive a rating of at least 5 out of 7 points on SLO 1 when assessed on a rubric.*
- *90% of students will “meet expectations” or “exceed expectations” on SLO 5, when rated on a five point likert scale (unsatisfactory = 1 to exceeds expectations = 5)*
- *All students will receive a score of 75% or better on section b of the comprehensive exam with questions addressing SLO 3 (at least 9 out of 12 questions answered correctly).*

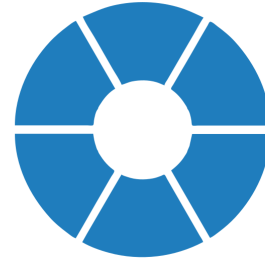
A helpful tip for evaluating the strength of your standard of success statement is to flip it –

For example, if your standard is set at 75% of graduating students achieving the level of performance, does that mean your program is comfortable with 25% of students graduating not having achieved the learning outcome?



## Simplifying Assessments

**Don't reinvent the wheel.** In many cases, there may already be demonstrations of student learning taking place in a program which can be re-purposed for the use of program assessment. For example, a research paper that students are already required to complete in a senior-level course could be evaluated on a rubric for program SLOs. Sections pertaining to program SLOs on a certification exam that all graduating students are required by the state to take could be reported. If a rubric or an assessment already exists, there is no need to create a new one as long as the tool aligns directly with the program learning outcomes.



**Establish routine processes and practical timing.** As much as possible, build assessment into the program's normal processes so that it becomes a routine activity. Embed assessments into specific courses so that the data will be there when needed instead of realizing at the end of the semester that an assessment has not been conducted.

**Be clear about the audience of your assessments.** When choosing an assessment, think about for whom the assessment is intended and how the program will identify eligible students. If the assessment occurs outside of an existing course, think through how to determine which students should be included in the assessment and how their participation will be captured.

Also consider carefully when during the life cycle of the program an assessment should occur. In many cases, program assessment will apply to students in their final year/semester to best capture their ultimate learning outcomes; however, in some cases it may also be advantageous to assess students at other intervals or stages of learning.

**Share the responsibility.** Assessment is meant to be shared by multiple stakeholders rather than centralized by one individual. Although the IE Author has the responsibility of documenting the assessment plan and results, best practices suggest that multiple faculty members be involved in the planning, administration, and results collection and analysis.

Communicate clearly with all faculty who bear responsibility for administering assessments to establish clear procedures and agreement on methods. For example, if an oral presentation embedded in a course is used as an assessment but two faculty members and three different adjuncts all teach sections of that course, make sure they all receive common instructions for the task and any related materials (assignment directions, evaluation rubrics, etc.). Involve faculty and leadership in the analysis of results so that diverse perspectives for recommendations of continuous improvement can be heard.

Program Assessment is most effective when it represents an ongoing and collaborative dialogue.

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## References

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Maki, P. (2004). *Assessing for Learning: Building a Sustainable Commitment Across the Institution*. Sterling, Va: Stylus Publishing.