



Certificate Program Assessment: Planning & Measurement Strategies

In accordance with Standard 8.2.a of SACSCOC's [Principles of Accreditation](#), Texas A&M University requires that all **stand-alone** and **degree-dependent** certificate programs engage in annual Program Assessment. This process focuses specifically on the assessment of student learning outcomes. Detailed information about the Program Assessment process can be found on the [OIEE website](#) and in the Academic Program Assessment Guidelines manual which is posted there.

As compared to degree programs, some of the distinguishing characteristics of certificate programs pose challenges to intentional and meaningful assessment of student learning. Additionally, because of the variations between how each certificate program is managed and organized, there is not a "one size fits all" strategy for certificate assessment. The goal of this guide is to facilitate discussion about intentional planning of program learning outcome (PLO) assessment and to suggest measurement strategies that may be useful in certificate programs.

QUESTIONS FOR DISCUSSION

Preparing and Organizing

- What knowledge or skills should all graduates of the certificate have (i.e., program learning outcomes)?
- Do instructors of all approved certificate courses know what the certificate PLOs are and how their course addresses one or more of them? Are instructors aware of their assessment responsibilities, if any?
- Are there open lines of communication between instructors who teach approved certificate courses? Is assessment discussed at regularly scheduled intervals?
- How are certificate students tracked (e.g., separate enrollment process at start of certificate, separate application prior to X credit hours, students not identified until they apply for graduation, etc.)? Is the current tracking system allowing for meaningful and intentional assessment of PLOs?
- Who is responsible for recording student learning results year-to-year?
 - If the certificate is consistently low-enrolled (less than five students for graduate and less than ten students for undergraduate), is there a process to record assessment data annually, so it can be aggregated for reporting? (As a reminder, consistently low-enrolled programs are not exempt from annually assessing student learning.)
- Where is the assessment data housed? Can it be easily accessed by those involved in the assessment process?

Collecting and Analyzing Data

- Are there any required core courses from which student work could be collected?
- Are there any required culminating capstone courses or experiences (i.e., internships, study abroad, etc.) from which student learning artifacts could be collected?
- If data is collected from a larger pool of students than just the certificate students, is there a strategy for disaggregating results?
- Are there any formal reviews of student progress, such as mentorship or internship evaluations?
- What student feedback is available regarding their learning experience (*indirect* measures like graduation surveys, reflection essays, student course evaluations)?
- Who or what parties are responsible for scoring student work for assessment?
- If using a survey for indirect evidence of learning, what specific survey questions will be analyzed?
- If the certificate is offered both face-to-face and via distance education (DE) technology (synchronous or asynchronous), are the same measures used across modalities?¹

Using Results for Program Improvement

- How are certificate program improvements discussed and decided? (It may be that course-based improvement efforts are necessary and/or most feasible, so it is important to include instructors in the decision-making process.)
- Who will be responsible for implementing program improvements based on the assessment results? (This may change on an annual basis.)

MEASUREMENT STRATEGIES

Projects, papers, and presentations. For most certificate programs, course-based projects, papers, and presentations make up the bulk of assessment measures. This is especially true of certificate programs which have one or more **core courses and/or a capstone course**. In such a program, faculty can reliably collect data from student work in core courses year after year. Program leadership should plan to disaggregate certificate students from the rest of the students taking these courses (if applicable).

Alternatively, if a list of approved electives with **no core courses** comprises the certificate curricula, this may pose a challenge to reliable data collection when relying on course-based measures. For these certificates, an audit of all approved courses could be conducted to determine when and where it makes most sense for assessment data to be collected. The audit might answer questions like:

- Do all the approved courses address at least one of the PLOs?
- How often are each of the approved courses offered?

¹ Assessment results should be separated by mode of delivery when reporting annual findings. Distance Education programs (including certificates) must also complete documentation for the [DE Program Effectiveness](#) review each year.

- Which approved courses were most popular (i.e., highest enrollment) among certificate students over the last 5 years?
- Which approved courses have significant overlap between course-level and program-level learning outcomes?
- Are there similar assignments in different courses that could be used for assessment (e.g., research papers, presentations, etc.)?

Portfolios. A portfolio is a compilation of student work which can be used to assess learning at the program OR course level. Faculty should guide students to select content that aligns with the PLOs. Reflective essays are often included in portfolios so the student can explain in their own words why each artifact is included and how it demonstrates their achievement of outcomes. Ideally, a rubric is used to assess the *quality* of the learning in the contents of the portfolio.

There are two main types of portfolios, both of which can be used in certificate program assessment

- **Developmental portfolios** include student work from all stages of a program, course, or experience, showing learning progress and growth over time. They may include drafts or iterations of student work, especially if the data collection window is a single course or short course sequence.
- **Showcase portfolios** include a student's best work from their time in the program, course, or experience, spotlighting the final products of their learning. These portfolios often include content from multiple courses or experiences.

Deciding which type of portfolio makes the most sense will depend on various factors, such as when certificate students are first identified, core/approved course requirements, etc. See [this resource](#) from University of Hawai'i at Mānoa for more information about portfolios.

Course-based exam/quiz items. If the program uses an exam or quiz to measure a PLO, the results of the question(s) that align with a specific PLO should be reported instead of the comprehensive score. Very few exams test knowledge of a *single* topic or domain, thus comprehensive scores are usually too broad to provide evidence of a single learning outcome. This is also why it is not recommended that programs report the same comprehensive aggregate score for multiple PLOs. Though the comprehensive score might include information about multiple PLOs, it is difficult to parse out how much of that score aligns with one PLO versus another.

Essay tests or exams with essay questions tend to be the most useful for assessing specific learning outcomes. This is because essay questions responses are produced by the student (rather than selected from one or more options presented by the exam writer) and present enough material to assess (as opposed to a one-word response).

Multiple choice exams may also be used but have limitations. For example, a simple answer selection may not accurately assess a problem-solving PLO described in part as the student's ability to document their thought process. Multiple choice formats may be appropriate for assessing PLOs related to depth of knowledge, but students may simply guess correctly with no preparation or knowledge.

Certification or standardized competency exams. Certificate programs that prepare students for a specific career or train them in a professional skill set may require or recommend that students take a certification or standardized competency exam. Because they cover key knowledge and skill areas, these exams can produce meaningful assessment data. Additionally, many have built-in benchmarks to compare to the performance of certificate students.

Consider the following questions when using certification/standardized competency exam results as evidence of PLOs:

- How are results reported back to the program (e.g., individual student scores or pass/fail rate)?
- How detailed are the reported results (e.g., single comprehensive score, domain scores, results by individual item, etc.)?
- Are there national benchmarks and/or institutional comparisons available?
- If the exam is created and administered by the program/department, does the scoring process allow for disaggregation of results by PLO?

Internship supervisor evaluations. Certificate programs that require students to complete an internship may utilize supervisor evaluations for evidence of various skills and knowledge. Although internship opportunities may vary widely among students in a particular program, the PLOs remain the same and should be observable within the context of the internship. The key to this measure is ensuring there is a standardized evaluation form provided to internship supervisors and an opportunity for them to provide qualitative feedback about the skills/knowledge students demonstrated. Avoid checklists (yes/no; student did this/didn't do this) and focus on quality (e.g., Likert scale items).

Other required assignments/coursework. While course assignments take a variety of forms, they are generally strong assessment measures if there are specific criteria for evaluating PLOs. Typically, assignments that have written, oral, or visual components tend to work best as evidence of learning. Consider the following questions when using assignments as measures of PLOs:

- Is the assignment used each time the course is taught?
- Are there multiple instructors who teach other sections of the course, and do they use the same or similar assignment(s)?
- Are course instructor(s) aware that the assignment is part of the planned assessment strategy?



Surveys, exit interviews, and student course evaluations. Indirect measures of student learning can provide valuable supplemental information about program improvement opportunities. Whereas direct measures evaluate student learning based on the observation of student work, indirect measures address students' *perceptions* of their own learning. As a reminder, PLOs must be assessed with at least one direct measure; indirect measures should be used supplementally.

Surveys that ask questions, for example, how well the certificate courses prepared students to demonstrate key skills and knowledge may be created and administered by the department, and/or the department may request to add a module to the Graduating Senior Survey or the Master Graduation Survey for certificate students. Additionally, Student Course Evaluation (SCE) results can be reviewed for supplemental information about student learning. The ten common SCE items used by Texas A&M are generally worded and may not produce responses that align closely with PLOs; however, items specifically about students' perceptions of how the course impacted their learning can be added to SCEs at the course or department level.

For additional information about adding items to surveys and/or SCEs, contact the Office of Institutional Effectiveness & Evaluation.