THE UNIVERSITY OF TENNESSEE
CHATTANOOGA
Accreditation and Assessment

Outcomes Assessment Guidebook

A guide for academic programs, student support offices, and administrative units in support of institutional outcomes assessment processes and requirements

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"Assessment is thinking about what you're doing and doing it better." – Professor John Riker, Colorado College

What is Assessment?

Assessment is a data-informed decision-making process that involves collecting, analyzing, and acting on information and evidence with the goal of improving students' outcomes and experiences. The assessment process is applied to both academic programs and student support services.

Why do we Assess?

The assessment of academic programs and student services, which is a critical component of SACSCOC accreditation, provides an opportunity for us to reflect on our mission, goals, and desired outcomes. The assessment process empowers us to determine how well we are achieving our goals, where we would like to make improvements, and what improvements we can make in order to ensure the best outcomes for our students. It also enables us to formally track how implemented improvements impact our students, which informs future plans and provides an opportunity for targets and timely actions that ultimately lead to continuous improvement.

What do we Assess?

- Student learning outcomes (SLOs)
- Service outcomes (SOs)
- Program outcomes (POs)

For academic programs, assessment is the ongoing process of:

- establishing clear, demonstrable, observable, and measurable expected outcomes of student learning
- ensuring that students have sufficient opportunities to achieve these outcomes through teaching the relevant skills and/or knowledge
- systematically gathering, analyzing and interpreting evidence to determine how well student learning matches our expectations; and
- using the resulting information to understand and improve student learning as well as to celebrate current successes.

Assessment involves deciding what you want your students to learn and determining the extent to which they have learned it. Successful assessment helps you answer the following three questions: *What do your students know? What can they do? How do you know?*

For student support offices and programs and administrative units, service outcomes are specific and measurable statements of what students or others will know, appreciate, or be able to do as a direct result of engaging with the department's services. Service outcomes could also include specific outcomes for tasks or projects being completed within the department.

The key considerations when writing outcomes for support service departments are that they are:

- Clearly stated, precise, and concisely written
- Expressed in terms of the student or customer
- Realistic and achievable
- Aligned clearly to departmental goals
- Measurable (an observable behavior)
- Using action verbs to clearly identify what students (or customer) will specifically know, appreciate, or be able to do as a direct result of engaging with the department's services
- Publicly available, known, and easy to find

Establishing an Effective Outcomes Assessment Process

Incorporate outcomes into what you are already doing, regardless of whether they are SLOs or SOs. In order to establish an effective outcomes assessment process in your area, consider the following:

Design and select your assessment methodology. Identify appropriate studies, assessment methods, and data collection tools.

Create and prioritize your timelines. Your timeline should fit within the institutional outcomes assessment process timeline and align with set due dates.

Collect your data and collate. Identify how you will collect data (mechanisms) and the process for organizing your data.

Analyze data and design your reports. Prepare report insights and recommendations in a useful format for review by relevant groups.

Disseminate your information. Engage relevant parties for further action and to support proper storage and documentation.

Utilize your information to make data-informed decisions. Make data accessible for easy use and action-planning.

Celebrate accomplishments and build community. Take the time to recognize progress.

Reassess the plan as needed. Maintain a sustainable process which can be revisited and implemented.

How do you execute these steps? No matter the size of your program, department, office, college, or unit, there are five key components that need to be part of your comprehensive assessment plan: a culture of quality, a flexible approach to storytelling, facilitation and guidance, clearly defined outcomes and paths toward achievement, and accessible, digestible data.

1

A Culture of Quality

It is critical to emphasize a need for data integrity, integration, and understanding in order for our institution to truly leverage the power of assessment. Encouraging faculty, staff, leadership – even students – to use assessment as a

conduit to growth and building momentum on the importance of using data to support learning, establishes a culture of quality.

In order for stakeholders to serve as stewards of academic quality, it is essential they have a clear understanding of how to improve student learning outcomes. This means ensuring your data is not only integrated into the *development of your assessment plan*, but also its *execution*. This brings the relevance of data into stakeholders' day-to-day decision-making.

Types of data to be collected:

- Evidence-based measures (quantitative and qualitative)
- Formative and summative measures (midpoints and final)
- Implementation (process) and impact (outcomes) measures
- Peer comparisons
- Trend data

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A Flexible Approach to Telling Your Story

Every institution is different and requires a unique approach to assessment when it comes to both design and function. UTC's culture, people, history, and more create factors distinct from other colleges and universities.

It's also important to not "reinvent the wheel" when it comes to assessment. For programs that are already accredited, share your best practices rather than duplicating efforts. If there are a mix of assessment methods, let program directors share what they've been doing and explain how it supports overarching assessment requirements. Leverage already-existing milestones when creating your assessment schedule to align with your existing calendar.

Consider annual data collections, as well. While program reviews and reaccreditations typically exist on 5- to 7-year cycles, collecting data yearly not only keeps information up-to-date and relevant, it also allows your program, department, office, college, unit, or institution to identify student needs more efficiently and on an annual basis so you can act on the results quickly.

"Taking the time to understand where you are and where you're headed enables you to see things that you may have overlooked previously. This is time well spent because it will help you design a plan for sustainability that is practical and inclusive of the stakeholders who are involved in upholding the mission and vision of your institution." – Dr. Christopher Davis, VP of Academic Services and Quality, University of Maryland Global Campus

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Facilitation and Guidance

Those who serve as the facilitators of your institution's assessment processes make all the difference. While everyone on campus has a vested interest in the outcomes of assessment, certain parties are best suited to help guide and facilitate the collection and assessment process.

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Assessment directors and coordinators should serve in a supportive role. It is essential to create clear, open channels of communication to those responsible for assessment across the institution, in all programs, offices, departments, colleges, and units. Assessment directors should be available for questions, suggestions, support, and other resources throughout the process.

4

Clearly Defined Outcomes and a Path to Achieving Them

Student learning outcomes (SLOs) are at the center of identifying a quality academic experience at our institution. How can you ensure you've aligned the assessment of SLOs with your strategic planning and mission? How can you be certain your students are achieving them? Curriculum mapping is an essential part of tying your assessment plan and program review processes together.

Your assessment plan should integrate into, and inform, your program review process – and vice versa. This not only ensures that your programs are meeting SLOs, but it also ascertains programmatic return on investment.

Once outcomes have been identified, methods have been selected, and data have been collected, it's vital to analyze, report, and intentionally use the results. The results, and their accompanying recommendations, should reflect the program or department's data analysis. Further, all of this should be highlighted in terms of continuous improvement. How are you making continuous improvements in support of student success?

What kind of questions can your data analysis findings help answer?

- What do the data say about students' proficiency of subject matter, of research skills, or of writing and speaking?
- What do the data say about students' preparation for taking the next step in their careers?
- Are there areas where students are outstanding? Are there areas where students are consistently weak?
- Are program graduates obtaining quality jobs, being accepted into reputable graduate schools, and/or reporting satisfaction with their education?
- Are there indicators in student performance that point to weaknesses in any particular skills, such as research, writing, or critical thinking?
- Are there areas where performance is acceptable, but not outstanding, where you would like to see a higher level of mastery?

5

Accessible and Digestible Data

In order for data to be useful, it can't solely exist in its raw form. Making data accessible means that it's available for use, it is understandable, and it has context. Useful, accessible data can easily support narratives, provide clear connections, and ensure next steps are logical.

There are a number of ways to ensure your data is accessible and digestible. A proper flow of data enables transparency, holistic visibility, and trust in decision-making when all data points exist from a singular source of truth.

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Training is also a vital part of creating accessible, digestible data – whether through new technology or updated processes – in order to ensure stakeholders can not only navigate the newly available data, but also make the most of their access and capability.
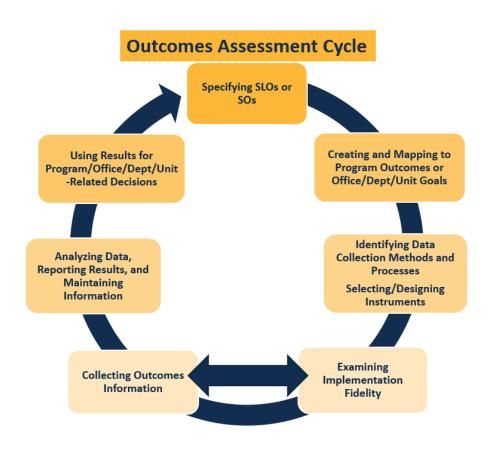
Making Your Assessment Plan a Reality

Each of these five components are integral to creating and executing UTC's assessment plan. Most importantly, it's crucial to remember that designing and implementing a truly impactful, successful assessment plan is just as much a cultural change as it is a technical one. Identifying the "why" for all stake holders will take our institution further than simply teaching step-by-step procedural instructions.

The assessment process is a continuous one – and each new cycle brings new feedback, information, and insights that, if collected, processed, and reported properly, can elevate our institution to new heights. Successfully navigating the assessment process is no simple matter and the team in UTC's Office of Accreditation and Assessment is here to help!

The Assessment Process

Assessment involves a multistep process that includes a series of components. The processes for academic programs, student support services, and administrative offices may not be exactly the same, but they are very similar. The types of outcomes differ, and the data collected differs, but the core process remains the same, regardless of what is being assessed.

Outcomes Assessment Cycle

- Specifying SLOs or SOs
- Creating and Mapping to Program Outcomes or Office/Dept/Unit Goals
- Identifying Data Collection Methods and Processes / Selecting/Designing Instruments
- Examining Implementation Fidelity
- Collecting Outcomes Information
- Analyzing Data, Reporting Results, and Maintaining Information
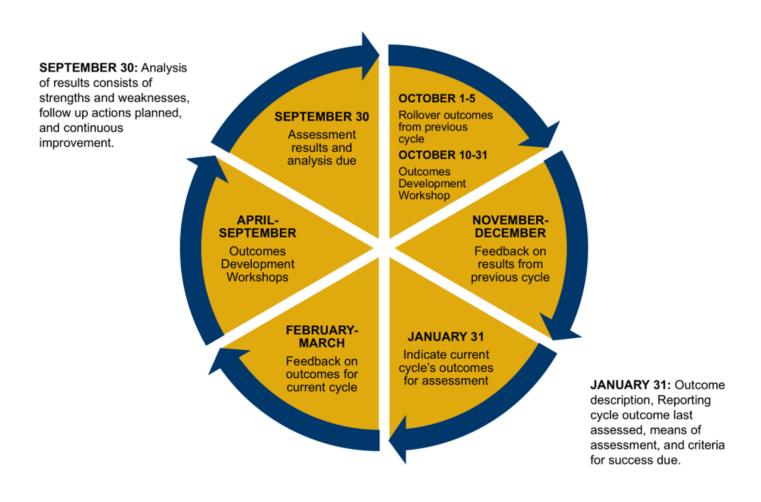- Using Results for Program/Office/Dept/Unit -Related Decisions

Academic Programs

Curricular (program) goals establish, in a general way, what you want students to get out of your degree program (major) and *(student) learning outcomes* specify precisely what you want students to know and be able to do at the end of a course or degree program (major). You use a *curriculum map* to make sure the learning outcomes you care about are being taught in required courses so that students will know and be able to do what you intend. *Demonstrations of student learning (direct assessments)* are examples of student work (assignments or deliverables) that are reviewed to determine whether the student did, partially did, or did not learn the knowledge and skills desired by the department or program. This is what we commonly refer to as the actual assessment. *Rubrics* are criterion-based rating scales that simplify and standardize the demonstration of student learning (knowledge, skills, or both) for easier and more precise review.

Student Support and Administrative Offices

Departmental goals establish, in a general way, what you want your department or office to achieve and *service outcomes* are more specific, and potentially task oriented, shorter term goals. You can use direct or indirect measurements to assess service outcomes, while direct assessment is a requirement of academic programs.

UTC Outcomes Assessment Timeline – Cycle Begins October 1

SEPTEMBER 30: Analysis of results consists of strengths and weaknesses, follow up actions planned, and continuous improvement.

SEPTEMBER 30 Assessment results and analysis due

OCTOBER 1-5 Rollover outcomes from previous cycle

OCTOBER 10-31 Outcomes Development Workshop

APRIL-SEPTEMBER Outcomes Development Workshops

NOVEMBER-DECEMBER Feedback on results from previous cycle

FEBRUARY-MARCH Feedback on outcomes for current cycle

JANUARY 31 Indicate current cycle's outcomes for assessment

JANUARY 31: Outcome description, Reporting cycle outcome last assessed, means of assessment, and criteria for success due.

<u>**Developing SLOs and SOs**</u>

Your outcomes should be **SMART**:

- **S**pecific
- **M**easurable
- **A**chievable/**A**ttainable
- **R**elevant
- **T**imed

The SMART Approach

The SMART approach originated in business management and was used to set business and performance goals (Doran (1981). This approach has been adapted for use in the articulation of learning outcomes in education. To generate learning outcomes that are effective, the SMART approach is used.

Specific: Outcomes (SLOs and SOs) should describe what is to be learned or completed. Providing specific descriptions limits room for interpretation and makes goals of the office, department, unit, college, program, or course clear. To meet the "specific" component of the SMART approach, use a formula (Table 1) to help articulate specifically who will learn what, where, how, and to what extent.

Table 1. Formula for writing "specific" outcomes

Who is expected to learn or complete the task? Who does the outcome pertain to?	When is learning or completion expected? Where is learning or completion expected? Under what conditions or circumstances will learned be demonstrated or task completed?	What do you expect students/staff to know/be able to do? (reference Bloom's or other taxonomies)	How much will be accomplished? How well will the behavior need to be performed or the task completed and to what level?
Audience	Condition	Behavior	Degree
All Music majors	…upon completion of MUS3150…	…will be able to demonstrate…	…basic knowledge of music history and repertoires through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.
All Biology majors	…upon completion of BIOL1130 and BIOL3350…	…will be able to summarize…	…biological information, including the literature base, established methodologies and technologies, laboratory and field equipment, and/or computational tools.
Accounting services staff	…by the end of fiscal year 2024…	…will have supported…	…all efforts towards implementation of DASH, the new HR and financial software platform.
Advisors in CASA	…during academic year 2023-24…	…will explain…	…General Education categories and courses that meet General Education requirements to students during advising interactions.

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Measurable: Ensuring outcomes are based on observable actions is essential to conducting assessment. To meet the "measurable" component of the SMART approach, be sure to use clear action verbs in outcomes and avoid vagueness.

Academic programs typically expect students who complete the program to have gained both knowledge and skills. By using actions verbs and specific language, programs can better reflect on what the student has gained in the program.

Consider the two following learning outcomes:

> *Learning Outcome A: Students who complete this program will have an understanding of our discipline.*

> *Learning Outcome B: Students who complete this program will be able to explain the major theories of the two main subfields of our discipline.*

The first learning outcome is vague and does not specify what it means to understand the discipline or how a student might demonstrate their understanding. The second example is more specific and indicates that some assignments require students to specifically demonstrate their knowledge of the major theories of the discipline.

Table 2 provides some examples of action verbs related to Bloom's taxonomy that help to better specify learning outcomes.

Table 2. Bloom's taxonomy of action verbs

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Count	Associate	Apply	Analyze	Combine	Appraise
Define	Compute	Calculate	Arrange	Compile	Assess
Describe	Convert	Change	Categorize	Compose	Compare
Identify	Defend	Classify	Combine	Create	Conclude
Label	Discuss	Complete	Deconstruct	Design	Contrast
List	Distinguish	Compute	Design	Devise	Criticize
Match	Estimate	Construct	Detect	Explain	Critique
Name	Explain	Demonstrate	Develop	Formulate	Determine
Outline	Extrapolate	Divide	Diagram	Generate	Interpret
Point	Generalize	Examine	Differentiate	Group	Judge
Quote	Infer	Graph	Illustrate	Integrate	Justify
Recall	Paraphrase	Interpolate	Infer	Modify	Measure
Recite	Restate	Interpret	Outline	Order	Rank
Recognize	Summarize	Manipulate	Relate	Organize	Rate
Repeat		Modify	Select	Plan	Revise
Select		Operate	Separate	Propose	Support
State		Practice	Subdivide	Rearrange	Test
		Show	Utilize	Reconstruct	
		Sketch		Relate	
		Solve		Summarize	
		Subtract		Transform	
		Translate			
		Use			

Achievable/Attainable: Outcomes should be achievable by students or those in charge of completing tasks related to the outcome. If outcomes cannot be met, the results of assessment are not helpful for program or department management. To meet the "achievable" component of the SMART approach, it is important to think about how the outcomes relate to the entire program, office, department, college, or unit. Do the outcomes allow for variation in levels of performance at

different points in your academic program? Do some outcomes only apply to certain stages of your program and not others? Answers to these questions will guide your assessment planning and ensure that you are measuring learning or completion in a manner that allows assessment information to be used effectively for program management.

Relevant: Aligning your student learning or service outcomes with your program/department/office/college/unit goals will help your program or office use assessment results to manage different components related to your goals. To meet the "relevant" component of the SMART approach, ensure that your program or department has identified the goals that drive it. For example, a program that highly values students' ability to conduct applied research as a program goal should ensure that the skills and knowledge needed to conduct applied research in the discipline are clearly articulated in a student learning outcome. If your program's learning outcomes are not aligned with your program's stated goals, it may be worth considering adjusting your learning outcomes or re-examining the goals of your program.

Timed: Timing matters in assessment because assessment requires faculty and staff time and resources. Ensuring your outcomes are timed is helpful to using limited faculty/staff time and resources efficiently. To meet the "timed" component of the SMART approach, think about the key milestones of your program or office. What do you expect students to know and when? What tasks do you expect to be completed and when? Goals should be focused on the time when skill or knowledge are acquired or when certain tasks/requirements should be completed. Outcomes should reflect the "when" by stating whether learning or completion is expected at completion of a specific course/program or at a specific point in time/calendar date.

Direct and Indirect Measurements

Direct: actual samples of student work such as projects, papers, theses, exhibits, and performances

Indirect: gathering information through means other than looking at actual samples of student work such as surveys, exit interviews, and focus groups

Grading versus Assessment

Grading is the "process by which a teacher assesses student learning through classroom tests and assignments, the context in which good teachers establish that process, and the dialogue that surrounds grades and defines their meaning to various audiences" (Walvoord & Anderson, 2011). Grading serves four roles:

1. It *Evaluates* the quality of a student's work
2. It *Communicates* with the student, as well as employers, graduate schools, and others
3. It *Motivates* how the students study, what they focus on, and their involvement in the course
4. It *Organizes* to mark transitions, bring closure, and focus effort for both students and teachers

This is the reason grading is so important for the assessment process – principally in the minds of faculty. However, grades in themselves, particularly final course grades, may be "isolated artifacts" which are neither useful nor appropriate for institutional assessment needs. It is therefore not the actual grade that is useful for assessment but the grading processes (Walvoord & Anderson, 2011).

Generally, the goal of *grading* is to evaluate individual students' learning and performance. Although grades are sometimes treated as a proxy for student learning, they are not always a reliable measure; they may incorporate criteria – such as attendance, participation, and effort – that are not direct measures of learning. The goal of *assessment* is to improve student learning. Although grading can play a role in assessment, assessment also involves many ungraded measures of student learning. Assessment goes beyond grading by systematically examining patterns of student learning

across courses and programs and using this information to improve educational practices (Carnegie Mellon University, 2024).

Anthology – Planning (What's Required)

UTC assesses SLOs and SOs on an annual basis in all degree programs and in all offices and areas. Faculty, staff, program coordinators, directors, and department heads play a central role in all aspects of the assessment process: the establishment of outcomes, development of assessment plans, assessment, reporting, review of assessment reports, and the use of assessment findings to make program improvements.

UTC uses the Anthology - Planning platform to maintain assessment plans and associated data. The assessment cycle encompasses the entire academic year with a reporting deadline of September 30 of the next year. While every component of the outcome is expected to be entered by the final deadline, there are scaffolding due dates and reminders through the year to ensure the process is efficient and effective.

In order to understand what's being assessed and how it's being assessed, OAA asks that specific information about outcomes be provided in Anthology – Planning. Information to be entered into Anthology – Planning includes:

For SLOs:	For SOs:
Student Learning Outcome Title	Title
Student Learning Outcome Description	Department Goal
Reporting Cycle Outcome Last Assessed	Outcomes Expected
Means of Assessment	Reporting Cycle Outcome Last Assessed
Courses Associated with the SLO	Strategies
Relation of Means of Assessment to the Outcome	Means of Assessment
Criteria for Success	Relation of Means of Assessment to the Outcome
Assessment Data	Assessment Data
Strengths and Weaknesses Seen Based on Results	Strengths and Weaknesses Seen Based on Results
Follow Up Actions Planned	Follow Up Actions Planned
Continuous Improvement	Continuous Improvement

Additional information regarding Anthology – Planning along with the User Guide can be found on OAA's website.

Frequently Asked Questions

Lots of questions arise during the development of outcomes and the associated assessment process. OAA has a webpage dedicated to FAQs, and OAA staff are always happy to help. If you have questions, need help, or want to schedule a time to meet, please do not hesitate to email!

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Resources

There are a multitude of assessment resources available online. Here are a few we recommend:

NILOA:

- https://www.learningoutcomesassessment.org/ourwork/transparency-framework/components/assessment-resources/

AALHE:

- https://www.aalhe.org/assessment-resources

Outcomes:

- Guiding Question for Writing Effective Learning Outcomes (file in folder)
- https://sapro.moderncampus.com/blog/a-brief-guide-to-writing-learning-outcomes
- https://manoa.hawaii.edu/assessment/howto/outcomes.htm

Academic Assessment:

- https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/AAHE-Principles.pdf
- https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/BraskampGuidelines.pdf

Student Affairs Assessment:

- OccasionalPaper45.pdf (learningoutcomesassessment.org)
- Outcomes Assessment in Student Affairs: Moving Beyond Satisfaction to Student Learning and Development (file in folder)
- https://www.wcupa.edu/_services/STU/documents/Types%20of%20Student%20Affairs%20Assessment.pdf
- https://www.mec.cuny.edu/wp-content/uploads/2018/01/Developing-a-Culture-of-Assessment-in-Student-Affairs-John-Schuh.pdf

Administrative Unit Assessment:

- https://www.tnstate.edu/assessment/Using%20Assessment%20to%20Drive%20Quality%20Improvement%20in%20Administrative%20Units.%20Atkins.pdf
- https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:d00fee42-fc2b-32a4-8cc5-94323bea3683

Additional resources can be found on OAA's website.

Carnegie Mellon University. (2024). *What is the difference between assessment and grading?* Retrieved April 30, 2024 from https://www.cmu.edu/teaching/assessment/basics/grading-assessment.html

Doran, G. T. (1981). There's a SMART way to write managements's goals and objectives. *Management review*, *70*(11).

Walvoord, B. E., & Anderson, V. J. (2011). *Effective grading: A tool for learning and assessment in college*. John Wiley & Sons.