The Assessment Handbook

2015-2017 EDITION

UNT | DALLAS
This handbook was prepared by the Office of Institutional Effectiveness at the University of North Texas at Dallas. Contact us at (972) 780-3614 or on the web at www.untdallas.edu/ie.
Introduction
This handbook is intended to provide a brief overview of institutional effectiveness and assessment and their role in demonstrating that the University of North Texas at Dallas is committed to continuous improvement in achieving its mission.

Students, parents, alumni, trustees, governmental agencies, legislators, and accreditors in recent years have begun demanding that institutions of higher education report how effectively they are managing fiscal and human resources. At the heart of the institutional effectiveness movement is an expectation for colleges and universities to show that students are achieving critical learning outcomes and that ancillary services provided by administrative units are also successful in supporting student learning.

In particular, The Southern Association of Colleges and Schools (SACS) requires that each institution

\textit{engages in ongoing, integrated, and institution-wide research-based planning and evaluation processes that (1) incorporate a systematic review of institutional mission, goals, and outcomes; (2) result in continuing improvement in institutional quality; and (3) demonstrate the institution is effectively accomplishing its mission. (Institutional Effectiveness)}^1

Further, SACS states that our institutional effectiveness efforts must be a “systematic, explicit, and documented process of measuring performance against mission...[for] all programs, services, and constituencies.” The process should be “continuous, cyclical...participative, flexible, relevant, and responsive,” according to SACS, and should be “strongly linked to the decision-making process at all levels, including the institution’s budgeting process.”^2

Documenting institutional effectiveness through systematic and ongoing assessment offers guidance for planning and budgeting; it also provides objective evidence to SACS and other constituents that we are committed to continuous improvement. Most importantly, assessment gathers and organizes useful information on what and how our students are learning so that we may take steps to improve their academic experience.

Characteristics of Institutional Effectiveness
The elements of institutional effectiveness that comprise planning and assessment are characterized by distinct design and process components. The institutional effectiveness process is

\textbf{Mission-centered:} The institutional effectiveness system is designed to demonstrate that each institutional component--divisions, schools, departments and offices--is helping to realize the mission of the University while successfully accomplishing its own mission.

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Improvement-oriented: In each unit and throughout the University, it should be clear that outcomes are evaluated and the results used to improve the level of student learning and the effectiveness of offices and programs.

Participative: Planning and assessment are shared responsibilities that extend to faculty and staff involved in the programs and activities to be evaluated.

On-going: Planning and evaluation are not one-time events. Institutional effectiveness is regularly scheduled, regularly reviewed, and regularly documented.

Systematic: Planning and assessment are designed to evaluate and improve all elements of the University through routine goal setting and evaluation of the extent to which both planning and assessment goals are achieved.

Integrated: The various planning and assessment processes are interconnected with budgeting, with one another, and with institutional decision-making to provide the most productive system possible.  

Institutional effectiveness at the University of North Texas at Dallas is overseen and championed by the Institutional Effectiveness Steering Committee. Composed of key leaders from both academic and administrative ranks, the IE Steering Committee is charged by the institution’s Chief Executive Officer with

- promoting coordination among all academic, administrative, and support units in addressing institutional goals and strategies;
- implementing an institutional effectiveness process/cycle, with timelines and milestones, for ensuring that the activities of all units (1) are linked to the institution’s mission and (2) demonstrate continuing improvement;
- acting as liaisons to academic, administrative, and support units to ensure that concepts about the IE process are clearly understood and implemented.

The IE Steering Committee meets regularly throughout the year.

Definition of Assessment

Assessment can be defined as the systematic and ongoing process of collecting, analyzing, and acting upon data related to the goals that support the mission of the institution. Its focus is upon quality improvement through evidence-based decision-making. By comparing actual performance to stated purposes through the assessment process, we hold ourselves accountable for engaging successfully in continuous quality improvement. Assessment also

3 Adapted from Institutional Effectiveness Handbook (Odessa, TX: The University of Texas of the Permian Basin, 2008), 2-3.
enables us to clarify future direction, establish priorities, share decision-making, improve organizational performance, plan for change, and create unity of purpose.  

Although the mechanics of assessment vary from one institution to another, they are similar in their broad outline of primary steps. An institution engages in successful assessment when it

- articulates a meaningful statement of the university's purpose and of the specific ways in which each academic program and administrative or support unit contributes to realization of the university mission;
- develops specific and measurable outcomes or results that each academic program and administrative or support unit is expected to accomplish;
- establishes and uses a variety of effective measurements for determining the extent to which the intended outcomes are being realized;
- uses the information collected to identify and implement program and service improvements that enhance the institution's ability to achieve its intended outcomes and purpose.

In brief, assessment lets us know if our efforts are bringing forth the desired results and enables us to base our decisions on evidence that can be evaluated objectively.

The Annual Assessment Cycle at UNT Dallas

In order to coordinate with the fiscal year, the annual assessment cycle at the University of North Texas at Dallas runs from September through August. In the fall of each year, supervisors of degree programs and administrative/support units will forward to their supervisor a copy of their program or unit's assessment findings for the past year, improvement action plans for the upcoming year, and assessment plan for the upcoming year.

Critical Definitions: Two Types of Expected Outcomes

The term outcome is used differently when assessing degree programs, on the one hand, and administrative/support units on the other.

Student Learning Outcomes (SLOs) represent the knowledge, skills, behaviors, and attitudes that students are expected to exhibit when they have completed an academic degree program. SLOs are specific, objectively measurable demonstrations of what the students have learned.

Unit Expected Outcomes are the programmatic, operational, administrative, and support objectives that academic departments and administrative/support units intend to accomplish. Broader in scope, these outcomes are not directly related to student learning but are indicative of success in activities that support student learning.

Assessment of Student Learning Outcomes

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5 Adapted from G. Weiss, Institutional Effectiveness and Assessment for Academic Majors and Programs at Roanoke College, 2000 (http://www.roanoke.edu/inst-res/assessment/AcadMan.htm).
In implementing an assessment plan for an academic degree program, faculty should generally follow a six-step process.

**Step 1—Define the Mission of the Program**

The mission statement for an academic degree program is a brief description of the purpose of your program and its values, i.e., what the program is trying to accomplish. It should be aligned with and support the institutional mission statement and related institutional goals.

**EXAMPLE:**

The mission of the bachelor’s degree program in chemical engineering is to prepare graduates for chemical engineering positions in industry by providing students with a solid foundation in the basic skills, knowledge, and practice of the profession and by fostering innovative thinking and key skills in problem solving among graduates.

Good mission statements are brief, plainly worded, positive, and reflective of shared principles held in common by the departmental faculty. Mission statements should be reviewed annually and revised if changing circumstances dictate.

**Step 2—Define the Student Learning Outcomes of the Program**

Student learning outcomes are specific statements that describe the abilities, skills, knowledge, and values that you want students in your program to acquire. Generally five to seven in number, student learning outcomes answer the questions of what the students know, can do, or believe upon graduation. They are measurable behaviors that successful graduates will demonstrate and are stated in such a way that it is clear what performance level by a group of students is to be considered successful.

**EXAMPLE:**

Graduates of the bachelor’s degree program in psychology will be able to define and discuss the fundamental assumptions of psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive theories of psychology.

Among the benefits of creating precisely stated SLOs, departments will derive feedback that can be used to determine how their programs can be improved; identify best practices in instruction; acquire valuable information to use for course and curriculum revision; convey instructional intent to students; and develop a common language for communicating among faculty and students about learning and teaching.\(^6\)

A particularly useful paradigm for constructing student learning outcomes is Bloom’s Taxonomy of Educational Objectives, which classifies educational objectives into cognitive, affective, and skill domains.\(^7\)

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\(^6\) *Program Assessment Handbook* (Orlando, FL: University of Central Florida, 2008), 45.

\(^7\) Adapted from Bloom, B. et al. *Taxonomy of Educational Objectives: Cognitive Domain* (New York: David McKay, 1956).
<table>
<thead>
<tr>
<th>Cognitive Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Mastery of subject material; includes observation and recall of information; knowledge of dates, events, places; knowledge of major ideas.</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Ability to predict consequences and future trends; includes understanding information; grasp of meaning; translating knowledge into new contexts; interpreting, comparing and contrasting material; ordering, grouping and inferring causes</td>
</tr>
<tr>
<td>Application</td>
<td>Ability to solve problems using required knowledge/skills; includes using information, material, methods, concepts, theories, etc. in new situations</td>
</tr>
<tr>
<td>Analysis</td>
<td>Ability to break down material and recognize structure of organization; includes seeing patterns; organization of parts, recognition of hidden meanings, identification of components</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Ability to use old ideas to create new ones; includes generalizing from given facts, relating knowledge from several areas, predicting and drawing conclusions</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Ability to judge and assess value of material; includes comparing and discriminating between ideas; assessing value of theories, presentations, etc., making choices based on reasoned argument, verifying value of evidence, recognizing subjectivity</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Affective Domain</th>
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<tbody>
<tr>
<td>Receiving</td>
<td>Awareness; willingness to participate</td>
</tr>
<tr>
<td>Responding</td>
<td>Actual participation in learning activity; demonstrates interest</td>
</tr>
<tr>
<td>Valuing</td>
<td>Attaching value or worth to object, person, activity, phenomenon</td>
</tr>
<tr>
<td>Organization</td>
<td>Prioritizing values; comparing and contrasting values to build a new value system</td>
</tr>
<tr>
<td>Characterization by value</td>
<td>Modifies behavior based on new value system</td>
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<table>
<thead>
<tr>
<th>Skill Domain</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>Use of sensory organs to guide actions</td>
</tr>
<tr>
<td>Set</td>
<td>Readiness to act</td>
</tr>
<tr>
<td>Guided Response</td>
<td>Imitation; knowledge of steps required to complete task</td>
</tr>
<tr>
<td>Mechanism</td>
<td>Ability to repeat complex motor skill</td>
</tr>
<tr>
<td>Complex Overt Response</td>
<td>Display complex movement with skilled performance</td>
</tr>
<tr>
<td>Adaptation</td>
<td>Modifies motor skill to address changed situation</td>
</tr>
<tr>
<td>Origination</td>
<td>Creates new movement pattern in changed situations</td>
</tr>
</tbody>
</table>

When constructing SLOs, action verbs should always be used to describe exactly what and how a student will demonstrate learning. In the cognitive domain, appropriate verbs would include solve, analyze, or synthesize. Learning in the affective domain might be cast with verbs such as identify, discuss, or explain, and learning in the skill domain might employ verbs such as demonstrate, construct, or manipulate.
Step 3—Select Methods of Measuring the Student Learning Outcomes of the Program

Typically, an academic program will want to select at least two separate methods for measuring the extent to which students are achieving each of the learning outcomes of the program. Methods of measurement should usually yield quantitative data about observable student behaviors.

EXAMPLES:
- Capstone Projects
- Case Studies
- Portfolio Assignments
- Assessment of Research Papers/Projects with a Standardized Rubric
- Internships Evaluations
- Licensure Exams
- Standardized Surveys such as National Survey of Student Engagement
- Surveys of Employers, Alumni, Graduating Seniors

Methods of measuring student learning outcomes are often categorized as either direct or indirect. Direct measurements are derived from student academic work, while indirect measurements are based instead on the opinions or attitudes toward what was learned that students, alumni, employers, and others may hold (e.g., graduating senior or alumni surveys) or are comprised of data that implies learning has taken place (e.g., job placement statistics).

An extremely useful way to assess student work such as essay exams or term papers is to use a standardized rubric. A rubric is a scoring guide that offers a panel of faculty members an explicit description of the levels of success achieved in the performance being measured (i.e., “an A paper has qualities 1, 2, and 3, a B paper has qualities 4, 5, and 6...”).

To develop a scoring rubric, the following steps are necessary:

- Identify the skill/knowledge you are assessing.
- Break down each skill/knowledge into its characteristic parts (e.g., if you are assessing the ability to problem solve, determine the ideal steps a student would take to successfully demonstrate the ability to solve a problem).
- Develop a scale that would describe low, intermediate and high levels of performance for each characteristic of the skill/knowledge you are assessing (e.g., Beginning, Developing, Accomplished, Exemplary or Beginning, Competent, Outstanding, etc.).
- Pilot the rubric on student work with several reviewers and students and obtain feedback.
• Develop a process to aggregate results of assessments using standard rubrics.\textsuperscript{8}

If point values are assigned to each level of performance, a total of points can be used as an objective measure of learning.

An important qualification to keep in mind when selecting measures for SLOs is that course grades are usually not effective instruments for this purpose. Course grades often include factors such as attendance or class participation; they usually summarize performance across several elements of a course and thus are not linked to a specific outcome; and they often vary widely as a result of significant differences in instructors’ grading practices.

Similarly, student evaluations of courses are poor choices for measures of SLOs in that they focus more on student perceptions of the quality of teaching than on learning outcomes.

**Step 4—Set Target Levels for Methods of Measurement**

For each method of measuring your student learning outcomes, you should determine a quantitative goal for the desired level of performance on the measurement. This target level or criterion may be a specified percentage of students attaining a given outcome, a mean score on a test, or some other numeric value that reflects what you believe ought to be the ideal outcome. The target level, that is, incorporates a tangible criterion into the method of measurement.

**EXAMPLE:**

80\% of students in the Bachelor of Science in Nursing program will pass the national licensure examination on their first attempt.

A common error to avoid in creating SLOs is failing to specify a criterion. Saying that “students will demonstrate familiarity with major literacy trends in Spain and Latin America,” for example, is poorly constructed because it does not state how many or what percentage of students will “demonstrate familiarity” and it does not define “familiarity” in measurable terms.

**Step 5—Analyze the Assessment Findings**

The findings of your assessment should be analyzed by asking a series of questions. How did your students do compared to your expectations? What potential program changes could be implemented to improved student performance in areas that did not reach target levels?

Linda Suskie recommends a four-step process in analyzing assessment data. First, the findings should be summarized at the course or program level. Second, the validity of the assessment results should be judged. Next, the findings should be categorized according to whether they show strengths or weaknesses. Finally, the results should be arranged in an easily understood format.\textsuperscript{9}

\textsuperscript{8} Adapted from Wargo, M. *Handbook for Program Assessment* (Cullowhee, NC: Western Carolina University, 2006), 35-36.

If the findings consistently suggest that the degree program needs no improvement, then departments should consider setting more demanding target levels for existing methods of measurement or creating new student learning outcomes. Again, the function of assessment is to find areas in need of improvement.

A useful practice to keep in mind when analyzing assessment data is to distinguish between descriptive data and comparative data. Descriptive assessment data includes frequency of certain responses on surveys, average scores on exams, the number of individuals exhibiting a given level of proficiency, and so on. Because student learning varies—from person to person and from year to year—we should always consider the possibility of using comparative assessment data by grouping students (gender, race, age, major, previous academic experience, etc.).

Additional analysis strategies include asking the following questions:

- Do students change over time? Typically at least two comparison groups of students are used: one participating in the educational program or course and the other a control group that has not participated.

- If a pretest measure is not available, do students who participate in the educational experience score or rate higher than students who did not participate?

- What is the relationship or correlation of the outcome measure compared to other measures of student performance or success? For example, are class grades related to competency testing scores? Are program outcomes measures related to measures of later job performance or citizenship?

- Are students performing at expected levels of competency? What differences are there between students who pass and those who do not pass?

*Step 6—Develop Improvement Action Plans*

The final step in the assessment cycle is the most crucial—what are you going to do to make improvements to address areas in which your students did not achieve at the targeted levels?

The assessment findings may actually suggest any of the following three options: (1) take no action at this time; (2) some concerns are indicated, but it is determined that another year of data is needed before an informed decision can be made about the appropriate course of action; (3) an action plan is developed for implementation during the next academic year. With any of these options, a written description of the decision-making process should be included.10

For academic degree programs, improvement action plans typically focus on steps such as

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10 Jones, J. *Guidelines for Planning and Institutional Effectiveness* (Roswell, NM: Eastern New Mexico University, 2006), 15.
modifying the content of courses, re-arranging the sequencing of courses, adding additional practicums or internship experiences, or providing additional academic support for students. The action plans should be evaluated in the next assessment cycle.

When creating an improvement action plan, faculty should always specify how the plan will be assessed, who will be responsible for implementing the plan, and whether additional resources are needed.

EXAMPLE:

Student Learning Outcome #1 for the B.S. Biology program is “85% of students will pass the senior capstone exam with no area score on the exam lower than 80%.” The results for 2008-2009 show that the target level for this SLO was not achieved because a number of students scored lower than expected on the vertebrate anatomy area of the exam. To address this deficiency, the number of weeks devoted to vertebrate anatomy in BIO2304 and BIO3500 will be increased from four to six beginning in Fall 2007. The Lower-Division Curriculum Committee will be charged with planning and implementing this improvement. No additional cost is anticipated. The effectiveness of the increase in number of weeks on vertebrate anatomy will be assessed on the basis of area scores over the next two years.

Summary—Assessing Student Learning Outcomes for Academic Degree Programs

1. Define the mission of the program
2. Define the student learning outcomes of the program
3. Select methods of measuring the student learning outcomes of the program
4. Set target levels or criteria for methods of measurement
5. Analyze the assessment findings
6. Develop improvement action plans

Assessment of Unit Expected Outcomes

In implementing an assessment plan for an administrative or support unit, personnel should follow a six-step process similar to that recommended for academic degree programs.

Step 1—Define the Mission of the Unit and its Core Functions/Services

The mission statement for an administrative/support unit states briefly the purpose or function of the unit and how the unit supports the institutional mission. The core functions or services of an administrative/support unit are a list of the three to five key tasks that enable the unit to meet its mission. Taken together, the mission statement and the list of core functions or services answer the questions “What do we do and how do we support the institutional mission?”

EXAMPLE:

The Department of Career Services counsels students and alumni as they explore career
directions and equips them with the information they need to make good decisions.

Our core functions include
1. Provide resume-writing workshops, mock interviews, and related training to students as they prepare for job searches
2. Coordinate on-campus visits by corporate recruiters and on-campus job fairs
3. Maintain a database of job postings and a library of employment-related books and DVDs for student use
4. Counsel students and alumni in best practices for job searches

In crafting your unit’s mission statement, be sure that it specifies who your stakeholders are—to whom do you provide services? Your mission statement should also be distinctive—if the name of the unit were removed, the statement should not be applicable to any other unit.

Step 2—Define the Expected Unit Outcomes
Each administrative/support unit should establish three to five outcomes that describe the results that it expects to see in the way it performs its core functions and/or delivers its key services over the coming year. Expected Unit Outcomes should be

- related to something under the control of your unit
- worded in terms of what your unit will accomplish or what your clients will think, know, or be able to do following the provision of services ("X will happen")
- measurable, meaningful, manageable

EXAMPLE:
The Office of the Registrar will provide resources to enable students to use online registration successfully.

Outcomes can relate to the operations and processes of the unit and may include a consideration of demand, quality, and efficiency and effectiveness. Outcomes may also relate to intended behaviors that a student having used services provided by the administrative unit should demonstrate.11

Step 3—Select Methods of Measuring the Expected Unit Outcomes
A method of measurement should be selected to determine the extent to which each expected unit outcome is achieved. Frequently used measures include counts, rates, or percentages; questionnaires or surveys; and minutes of meetings and focus groups.

Using the completion of a project as an assessment method is not generally recommended because simply completing the project does not provide any information on how to improve. A more useful outcome might relate to how effectively or efficiently the project was completed.

In all cases, methods of measuring the expected unit outcomes should focus on something that is observable. Multiple measures for each outcome are preferable as well—assessment in education is an inexact process and having more than one source of data for each outcome makes our conclusions about the outcomes more reliable.

**Step 4—Set Target Levels for Methods of Measurement**

For each method of measurement selected, units should set a specific goal for the numeric value that they hope to achieve on the measurement. The target level or criterion should appear reasonably attainable, offer the potential for showing improvement, and take into account the unit’s past performance in the function or service being assessed.

EXAMPLE:

90% of fifty randomly selected financial aid files will be complete and accurate when audited.

When deciding upon criteria, units should consider a “baseline” level from previous years if that information is available. Setting a target level of 90% when the average for the process is already 88% doesn’t leave room for much improvement, for example.

**Step 5—Analyze the Assessment Findings**

To analyze the assessment findings, units should briefly summarize for each expected outcome

- the method of measurement and target level that was set
- the actual level of performance that was attained
- a brief analysis of why the target level was or was not achieved

The analysis of each expected unit outcome is typically expressed in three sentences, as illustrated below.

EXAMPLE:

In the annual survey of faculty/staff satisfaction, 36% of our customers expressed frustration with the wait time for help desk requests. Our target level was no more than 15% for this measure. Analysis of survey data showed that 85% of those respondents expressing frustration with the wait time for help desk requests were located in the Office of Financial Affairs.

In preparing written analyses, units should bear in mind the following guidelines:

- **Keep your audience in mind.** Why did you undertake the assessment in the first place, and for whom? You may have multiple audiences for your assessment report, including combinations of faculty, staff, students, alumni, or other constituents or stakeholders. So be sure to write your findings in a way that will tell an appropriate and informative story for your particular audience(s).
• **Be concise; move from broad to specific findings.** It helps to begin a report with some broad overviews of what was learned through the assessments, perhaps leading to more detailed results.

• **Keep your findings meaningful for the target audience.** This typically means providing an overview of findings that can potentially lead to some form of action. The most useful information will likely apply to these broad questions: In what ways is our unit excelling, and in what ways might we improve?12

And finally, use caution when employing statistics. Simple sums and percentages should suffice in almost all cases.

**Step 6—Develop Improvement Action Plans**
The improvement action plan should be a brief description of what steps will be taken to address any expected outcomes where the unit did not meet its target levels. Units may also wish to review the outcomes in which they met their target levels to see if other improvements or activities are needed in the future. Improvement action plans should be included as expected outcomes in the next assessment cycle.

**EXAMPLE:**
The 20% increase in wait time for level-one response will be addressed by the hiring of four new employees for the help desk during fiscal 2009.

An additional use of assessment data beyond constructing improvement action plans is to publicizing your unit’s successes. If your unit attains its target levels on particular measures, be sure to congratulate your staff and spread the news of your success to the larger institutional community!

**Summary—Assessing Expected Outcomes for Administrative/Support Units**
1. Define the mission of the unit and its core functions/services
2. Define the expected outcomes of the unit
3. Select methods of measuring the expected unit outcomes
4. Set target levels or criteria for methods of measurement
5. Analyze the assessment findings
6. Develop improvement action plans

**A Statement of Assessment Principles**
In closing, we would recommend a careful reading of The American Association for Higher Education’s “Nine Principles of Good Practice for Assessing Student Learning.” Although directed at student learning, the principles are also applicable to administrative/support units as these units indirectly support academic achievement by students. The principles are as

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12 *The Path to Achievement and Excellence in Assessing Student Learning at NAU* (Flagstaff, AZ: Northern Arizona University, 2008), 10.
follows:

1. **The assessment of student learning begins with educational values.** Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.

2. **Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.** Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.

3. **Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.** Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

4. **Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.** Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. **Assessment works best when it is ongoing not episodic.** Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of
student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. **Assessment fosters wider improvement when representatives from across the educational community are involved.** Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. **Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.** Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. **Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.** Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. **Through assessment, educators meet responsibilities to students and to the public.** There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a
corresponding obligation to support such attempts at improvement.\textsuperscript{13}

Assessment is systematic, continuous, and incremental, as each step forward builds on previous accomplishments. We must not only assess our outcomes to meet the expectations of our accreditors; we must also assess our outcomes because it’s the right thing to do for our students.

Appendix: Additional Resources

The most comprehensive online source of information about assessment and institutional effectiveness is the website that is maintained by Dr. Ephraim Schechter at http://www.assessmentcommons.org.

This website contains more than 1,300 links to university assessment sites and other higher education organizations that are concerned with institutional effectiveness.

Each of the following resources is available either through the UNTD Library or the Internet.


