Guidelines for the Assessment of Student Learning Illinois Wesleyan University

To assist departments, schools, interdisciplinary programs, and university-wide programs (hereafter, "academic units") in realizing more effective assessments of their students' learning, the Assessment Committee provides the following guidelines. Our intention is to assist academic units with the sometimes challenging but always informative—and often rewarding—endeavor of discovering to what extent student learning is consistent with an academic unit's learning goals.

This guide covers the University's academic assessment program, including:

- the *philosophy* of assessment;
- the *process* of assessment;
- the designation of Assessment Liaisons;
- the components of the *Strategic Assessment Plan*;
- the components of the *Yearly Update*; and
- the components of the Assessment Report.

Where appropriate, these discussions also include explicit identification of the criteria the Committee uses to offer feedback on assessment planning and reporting.

The Assessment Committee assists academic units in developing meaningful, workable assessment programs that serve their unique interests. If you have questions or concerns at any point in the assessment process, please contact the Chair of the Assessment Committee.

Committee Members, 2018-2019:

Zahia Drici (Spring 2019) Given Harper (Fall 2018) Vadim Mazo Thushara Perera, Chair Jaime Peters Student Senate representative Michael Thompson, Associate Vice President for Institutional Research, Planning, and Evaluation (*ex officio*)

THE PHILOSOPHY

Are our students learning what we expect them to learn? To what extent? What is working in our teaching? What curricular programs might be strengthened, or re-conceptualized? The answers to such questions are too important to leave to intuition and conjecture. Assessment answers these questions, and guides subsequent planning, in ways that are meaningful and systematic. Assessment provides critical feedback that both encourages and challenges us. It

can confirm successes, and it can offer insights that can lead academic units to improve student learning through curricular revision and faculty development initiatives.

The Assessment Committee's role in the assessment process is not to evaluate the *content* of a department's program, but instead focuses on assisting with the assessment *process*. The Committee supports each academic unit to create an environment in which assessment of student learning is done thoughtfully, thoroughly, and regularly. Working with the Associate Vice President for Institutional Research, Planning, and Evaluation, the Assessment Committee gathers assessment information for internal review, as well as review by external agencies.

THE PROCESS

In a nutshell, in assessment academic units use their own statements of purpose and educational objectives to frame statements about the characteristics and competencies that its students should acquire, and then measure the extent to which students actually meet those objectives. By measuring what and how much students actually do learn, faculty can then determine the relation between their intentions and students' achievement. When faculty expectations and student performance are at odds, faculty need to determine the reasons for the discrepancy. Academic units may then chart a reasonable course of action in response, including making curriculum adjustments and/or requesting resources to enhance student learning. Over time, academic units also likely will revise student learning goals and assessment measures.

Faculty, students, and disciplines change over time, and so, in order to keep pursuing academic excellence, the assessment process must be ongoing and regular, but sufficiently flexible. Each academic unit's overarching assessment agenda will be described in a Strategic Assessment Plan, an evolving document that describes and explains the academic unit's long-term assessment program. An academic unit's Strategic Assessment Plan will outline an assessment cycle of between one and three years, during which time the academic unit will engage in the following assessment activities:

- revise aspects of the Strategic Assessment Plan and communicate the revisions to the Assessment Committee (as needed),
- implement and analyze the assessment measures employed,
- develop and submit a Yearly Update, briefly describing the academic unit's assessment activities in years when an Assessment Report is not due,
- digest data and implement appropriate curricular changes, and
- submit an Assessment Report, reporting on the outcome of assessment activities from the recently-completed cycle.

(Please note that the terminology used here is described in detail further on. Additionally, for ease of reference, these and other relevant terms are defined in a glossary in Appendix A.)

Who Needs To Conduct Assessment?

Every major must be assessed. In academic units offering more than one degree, each degree must be assessed. Minors without a similar major also must be assessed.

Each major, degree, and stand-alone minor must have an up-to-date Strategic Assessment Plan on file and submit a Yearly Update on years when an Assessment Report is not due. Each major, degree, and stand-alone minor must also submit an Assessment Report at the close of an assessment cycle.

Calendar of Annual Assessment Activities

Start of the academic year

At the beginning of each academic year, it is the responsibility of each academic unit to ensure that the most up-to-date version of the Strategic Assessment Plan is on file with the Associate Dean of the Curriculum. If a more up-to-date version of the Strategic Assessment Plan needs to be completed, please submit it electronically to <u>assessment@iwu.edu</u>.

The final Monday in September

Either the Yearly Update or the Assessment Report must be submitted electronically to <u>assessment@iwu.edu</u>. Yearly Updates describe assessment work undertaken in the current and previous academic years, while Assessment Reports cover the assessment work undertaken in the previous one-to-three year cycle.

Fall semester

Begin the annual assessment work. For example, academic units may lay the groundwork for assessment by developing surveys, collecting papers, conducting pre-tests, etc.

The Assessment Committee will review Yearly Updates submitted in September and provide feedback about the potential effectiveness of each academic unit's ongoing work by the end of the fall semester. The committee will also start reviewing Annual Reports submitted in September.

The final Monday in January

If submitting a Strategic Assessment Plan with revisions, or if submitting a plan for the first time, they should be submitted electronically to <u>assessment@iwu.edu</u>.

The first Monday in April

Each academic unit must select an Assessment Liaison for the following year, and, via e-mail, make this selection known to the Chair of the Assessment Committee.

Spring semester/May Term

Continue assessment. For example, academic units may implement measures and then meet to analyze, discuss, and develop ways to act upon the gathered data/information.

The Assessment Committee will review Assessment Reports and evaluate and provide feedback about the effectiveness of each academic unit's assessment process by the end of the fall semester. The Committee also will collect, maintain, and make available to appropriate constituencies a repository of Assessment Reports from all academic units.

The Committee also will review revised or newly submitted Strategic Assessment Plans and communicate back to academic units in a timely fashion.

A calendar of academic units' annual assessment activities can be found on the Student Learning Assessment web page, available at http://www.iwu.edu/instres/student-learning.html.

ASSESSMENT LIAISONS

The Assessment Liaison serves as the point person for an academic unit's assessment activities. Each academic unit should select a faculty member to serve as an Assessment Liaison and make that person known (via e-mail message) to the Chair of the Assessment Committee by the first Monday of April of each academic year. While an academic unit's chair or director could serve as the Assessment Liaison, each academic unit should create its own system for assigning this task. Please note that while the Assessment Liaison plays an important role in an academic unit's annual assessment activities by helping to ensure proper organization, operation, and reporting, assessment is the responsibility of all members of an academic unit.

THE STRATEGIC ASSESSMENT PLAN

The Strategic Assessment Plan is due on the last Monday of January if submitting a new or a revised Strategic Assessment Plan. A copy of the most up-to-date version of the Strategic Assessment Plan must be on file with the Assessment Committee. A revised Strategic Assessment Plan must be submitted within two years after an academic unit completes a self-study.

The Strategic Assessment Plan describes an academic unit's overarching assessment agenda—it very likely will guide a unit's assessment activities for years. Formulating a Strategic Assessment Plan helps the academic unit to organize its specific assessment projects. Having the most up-to-date version of the Strategic Assessment Plan on file, and therefore accessible to the Assessment Committee, allows for productive exchange between the Committee and academic units, ensuring that plans are sound, that the work that they detail will be as worthwhile—and that the data they offer will be as informative—as possible.

Please note that an academic unit's Strategic Assessment Plan will not likely change from year to year, to the extent that an academic unit's curriculum does not change considerably across time. However, if substantial changes are made to the Strategic Assessment Plan between self-studies, a new copy must be submitted.

Academic units are asked to respond to four questions (1-4, listed below) in their Strategic Assessment Plan. Below each question is a description of what an answer to that question might entail, and explicit identification of the criteria the Committee uses to guide its response. Though each section is discussed as a discrete entity, throughout the plan there should be a strong interlocking narrative among the parts. In other words, each piece should connect conceptually with every other piece—selected goal(s) and rationale with all goals, measures with selected goals, and planned methods of analysis with measures.

1. What are the student learning goals of your academic unit? How did your academic unit arrive at these goals? How are your academic unit's student learning goals shared with relevant constituencies?

Student learning goals are characteristics and competencies that students in your academic unit should acquire. If your academic unit offers a major, focus on the characteristics and competencies expected from the major. Academic units offering majors and minors may wish to include minors in their assessment work. List and describe your academic unit's student learning goals, including a brief discussion of how your academic unit arrived at these goals (for example, departmental decision-making processes, consideration of feedback from an external review, statements of best practices from relevant professional organizations, etc).

Sharing student learning goals encourages discussion and engagement among all members of an academic unit. It sets expectations, and helps academic units achieve positive student learning outcomes. How are your student learning goals shared with faculty, students, staff, the wider University community, and other relevant constituencies? In the University catalog? On your academic unit's website? In departmental handbooks? On syllabi? On admission's materials?

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE

- Are the academic unit's student learning goals clearly articulated?
- Is there some description of the process(es) by which learning goals were determined?
- Are the academic unit's student learning goals easily accessible to faculty, students, and other relevant constituencies?

2. What measures do you plan to use to assess student learning goals? Why?

You must make clear how you plan to measure each of your student learning goals and explain your reasoning.

There are many ways to assess student learning, and each academic unit should select methods that will address their needs. In the collective assessment of all learning goals, it is expected that

multiple measures be used, including at least one direct measure. Direct measures require students to demonstrate knowledge and competencies as they respond to the instrument itself. Indirect measures require that students reflect on their learning rather than demonstrate it. (Examples of direct and indirect measures are available in Appendix B.) Both kinds of measures, as well as others that might be devised, can be valuable to academic units in terms of providing perspective on student learning.

Generally, academic units should use dependable measurement tools to which they already have access, especially those previously built into the curriculum. However, it is important to ensure that your measures actually measure what you hope they will (that they are *well-targeted*) and that they consistently measure the same thing each time (that they are *dependable*).

The assessment projects of academic units generally are excluded from Institutional Review Board (IRB) review. (Please see the next paragraph for exceptions.) Academic units that collect student work or administer anonymous surveys for the purpose of program assessment do not need student consent, provided that no personal student behaviors are addressed in the assessments, all personally identifiable information is removed, and the results are used for internal university and accreditation purposes. Anonymous surveys, however, do require the use of a "project information page" that summarizes the purpose of the study for all potential subjects. Academic units must maintain student confidentiality in the storage of data, if any. IRB review *is* required under the following conditions:

- an academic unit, or a member of an academic unit, plans to disseminate or publish data beyond the improvement of the academic unit or accreditation purposes; and/or
- an academic unit plans to administer a confidential study, in which a subject's name is linked to a code, number, or other type of identifier (as opposed to an anonymous study, in which information provided by a subject cannot be linked to any type of identifier).

If IRB review is required, please follow IWU IRB guidelines (<u>http://www.iwu.edu/irb/</u>). If you have any questions about IRB policies and procedures as they pertain to the assessment of student learning, please contact the IRB chair.

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE

- Are the measures of the goals clearly defined?
- Have multiple measures been included? Is there at least one direct measure included in the set of measures?
- Has the choice of measures been well-supported, based on the understanding that the Strategic Assessment Plan is an evolving document? That is, is it clear that the measures are well-targeted and dependable?
- Are the proposed assessment activities exempt from IRB review, or do they require IRB review?

3. Timeline: Provide a timeline for your 1- to 3-year assessment cycles. What do you plan to accomplish during each assessment cycle and during each academic year of the cycle?

Academic units can choose to implement a 1-year, 2-year, or 3-year assessment cycle. This flexibility allows units to tailor their assessment activities to best serve their unique concerns, strengths, and challenges. Allowing academic units to determine their own reporting cycle will facilitate the gathering of more and varied data as well as sufficient time for the digestion of assessment data and the implementation of meaningful action.

Provide a timeline, based on the chosen reporting cycle, detailing which student learning goals you plan to assess and when you plan to assess them. For example an academic unit that lists seven student learning goals and chooses a 3-year reporting cycle might state, "we plan to assess learning goals 1 and 2 during every assessment cycle; we will, in addition, assess goals 3 and 4 in one cycle, 5 and 6 in the next cycle, come back to 3 and 4 in the following cycle, and continue to alternate those goals in the same manner for the foreseeable future; learning goal 7 will be assessed over a 2-cycle period (every 6 years)." The assessment committee expects that units choosing a longer reporting cycle will assess a large percentage of their student learning goals (e.g. 4 out of 7) in one cycle while units choosing 1-year cycles may concentrate on one or two goals per cycle. The general expectation is that each learning goal will be assessed at least once between the academic unit's (nominally, septennial) self-studies.

Reflection and flexibility are essential for the success of assessment work. Therefore, occasional modifications to the steps outlined in the Strategic Assessment Plan are appropriate when the circumstances or data clearly indicate the need for changes. If such modifications are made, they must be described and explained in Yearly Updates and Assessment Reports, or in the revised StrAP.

QUESTION ASKED BY THE ASSESSMENT COMMITTEE

- Has the academic unit provided a plan for assessing all of its student learning goals in a timely manner?
- Has the academic unit provided a reasonable timeline for accomplishing its data collection and measurement for its Assessment Report?

4. How does your academic unit plan to process the information gathered through the various measures?

To improve academic and co-curricular programs, gathered information needs to be discussed by faculty within the academic unit and summarized. Describe your feedback process.

QUESTION ASKED BY THE ASSESSMENT COMMITTEE • Is a clear plan for discussing information offered?

THE YEARLY UPDATE

The Yearly Update is due each year an Assessment Report is not being submitted on the final Monday of September. Academic units on a 1-year cycle will not submit Yearly Updates.

Assessment is ongoing—your academic unit likely will choose to focus on a subset of specific student learning goals from its Strategic Assessment Plan to measure in any particular year. The Yearly Update briefly describes and explains the previous academic year's assessment activities.

1. What steps has your academic unit taken this past academic year to make progress in completing its Strategic Assessment Plan?

Provide a brief description/listing of assessment activities undertaken over the past year along with the student learning goals to which they relate.

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE

- Does the academic unit describe the assessment activities in which it has engaged? Does it explain which specific learning goal(s) it has investigated?
 - 2. What does your academic unit plan to accomplish in the upcoming academic year to make progress in completing its Strategic Assessment Plan?

Provide a brief statement on upcoming assessment activities or a reference to the Strategic Assessment Plan (if it will be followed completely as originally planned).

QUESTION ASKED BY THE ASSESSMENT COMMITTEE • Has the academic unit identified its upcoming assessment activities?

3. Has your academic unit made any significant changes to the plan for the current assessment cycle described in the Strategic Assessment Plan?

As noted earlier, flexibility is a key component of successful assessment and the Assessment Committee expects that units will make appropriate modifications to assessment plans if/when new challenges or opportunities arise. This is where an academic unit should describe previously unanticipated changes to the plan and explain the reasons for those changes. Any permanent changes should be included in an updated StrAP.

QUESTION ASKED BY THE ASSESSMENT COMMITTEE

- Has the academic unit identified any significant modifications to the assessment activities described in its StrAP?
- If so, have they clearly described those changes and the reasons behind those changes?

THE ASSESSMENT REPORT

The Assessment Report is due on the final Monday in September at the close of the academic unit's 1-3 year reporting cycle.

The Assessment Report serves many purposes. First and foremost, it is a record of an academic unit's assessment activities in the previous assessment cycle: what your academic unit has assessed, and why, and what your academic unit is doing in response to its findings: what strengths were revealed by or changes were suggested, and then made, based on assessment data? Additionally, the report functions to inform the Assessment Committee of the progress the academic unit has made in carrying out its Strategic Assessment Plan, allowing the Assessment Committee to provide feedback. Sharing the Assessment Report among a unit's faculty is encouraged as a means of promoting further internal discussion about assessment findings and courses of action motivated by them. The Assessment Report, or excerpts from it, would also strengthen cases that the unit makes to the administration for additional personnel/resource support. Finally, these reports serve the crucial function of documenting ongoing assessment activities by academic units for internal use and for external review agencies.

Academic units are asked to address six topics (1-6, listed below) in their Assessment Reports, and to also submit a separate summary of the Assessment Report. Below each topic is a description of what a response might entail and explicit identification of the criteria the Committee uses to guide its own responses to the Reports. Responses to some of these questions, especially 1-2, may be copied from relevant Yearly Updates or the Strategic Assessment Plan.

As with the Strategic Assessment Plan, throughout the report there should be a strong interlocking narrative among the parts. In other words, each piece should connect conceptually with every other piece—goals with mission, measures with goals, and feedback mechanisms with learning outcomes.

1. Recounting the Assessment Cycle.

Assessment Reports address assessment activities that were outlined in the Strategic Assessment Plan and reported on in Yearly Updates. List the relevant years for this assessment cycle and briefly summarize the academic unit's assessment activities during this cycle. Describe any modifications to the original assessment plan described in your Strategic Assessment Plan.

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE

- *Are the relevant academic years for this cycle listed?*
- Are the academic unit's assessment activities briefly summarized? (Or, are the relevant Yearly Updates referenced?)
- What new changes, if any, were made to the assessment plan as described in the most recent *StrAP?* Are the reasons for those modifications explained?

2. Describe assessment measures that were used.

Describe assessment measures that were used, including the specific student learning goals measured, and the classes and number of students, or percentage of majors and minors involved. For example: "Student learning goal 1: critical thinking. Pre-tests were given to 31 students in Introduction to Rocket Surgery 101. These results were compared to results of the same tests

given to 13 students in Advanced Rocket Surgery. Exit surveys were given to all graduating seniors with 12 out of 15 responding." If tests were administered or a rubric was used, please provide a copy in an appendix at the end of your report.

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE

- Are the goals and measures clearly defined?
- Are relevant rubrics/tests attached?
- What direct measure(s) was/were implemented?
- Have multiple measures been included?
- Do the measures assess what the academic unit intended them to measure, and do the measures do so consistently? That is, are the measures well-targeted and dependable?

3. Summarize the data/results from your measures.

Provide a summary of data/results from measures used by your academic unit. Summaries may include quantitative and/or qualitative data. *Please do not send completed papers, exams, surveys, etc.* Your academic unit can keep files of these as it sees fit. Once these instruments have been evaluated and the necessary summary has been made, your academic unit may keep or destroy them, as is deemed appropriate, bearing in mind the need to maintain confidentiality.

QUESTIONS ASKED BY THE ASSESSMENT COMMITTEE • Have data been summarized?

4. Describe the process by which you evaluated your data.

Academic units are urged to reflect on the findings from the measures, and on the methods and standards used to reach conclusions. Once the data were gathered, how did your academic unit go about sharing and analyzing the data? What methods, subjective or objective, did your academic unit use to assess your findings? A common subjective method is conversation among an academic unit's faculty. You might report details about that conversation, such as the following: Was it a retreat or a meeting set aside for this purpose? Who was involved? Were all members of your academic unit involved, and was anybody in addition to members of your academic unit involved? When did it take place? Commonly, objective measures involve statistical analyses of tests administered – some description of the method should be provided. Who performed this analysis? Using what tools?

QUESTION ASKED BY THE ASSESSMENT COMMITTEE • Is the evaluation process clearly defined?

5. Describe what you learned as a result of the evaluation process.

A feedback mechanism is some systematic way for an academic unit as a whole to reflect and act on the results of the assessment measures of student learning. Examples typically include retreats or other meetings in which assessment is addressed in a structured discussion. Developing this report also can be considered a feedback mechanism, and it should be shared with departmental faculty for their information and approval, especially when it includes programmatic changes.

What was the substance of your academic unit's evaluation process? What did your academic unit learn as a result of engaging in the process? It is important to demonstrate that your academic unit has examined thoroughly the data gathered and has thoughtfully analyzed how the data compare to the academic unit's curricular goals. The evaluation should not just state conclusions, but should describe the results of the various study measures as well as the implications of the results—do students meet your academic unit's learning goals?

An academic unit may find gaps or other inadequacies in its assessment methods. It is appropriate to note those conclusions here and make recommendations for future assessment practices. In this way, the Assessment Report will serve as a useful record of how your Strategic Assessment Plan is evolving.

QUESTION ASKED BY THE ASSESSMENT COMMITTEE • Does the academic unit clearly describe what it learned?

6. What does your academic unit plan to do with the information it has evaluated?

Closing the feedback loop is essential. Please describe exactly what it is your academic unit has done to factor what it learned back into the curriculum, including co-curricular programs. Did the results of your academic unit's analysis confirm the achievement of its goals? Or did the results suggest there are ways your academic unit can improve reaching those goals?

In particular, report any necessary changes, the changes (large or small) that have been considered, and any changes that will be implemented as a result of data. If these changes will require resources beyond what your academic unit can provide, indicate what your academic unit anticipates needing and where it will seek these resources. For example, changes may require faculty development opportunities and initiatives, or the procurement of new resources or personnel. If no changes are planned, briefly describe how the data suggest this as an appropriate course of action. This should lead to a thoughtful review of the goals and methods used, keeping in mind that as an institution we strive for continual improvement.

- QUESTION ASKED BY THE ASSESSMENT COMMITTEE
- Has the academic unit considered future actions based on assessment results and/or described any actions resulting from assessment?

Provide a summary of your Assessment Report.

In approximately 200-300 words, summarize your Assessment Report: state the learning goal(s) measured; state the type(s) of measure(s) used; summarize the data; describe the evaluation of the data; describe what was learned from the evaluation process; and describe what your

academic unit has done or plans to do with the information and insights gathered from the assessment activities of the last cycle.

Sharing the results of assessment with appropriate constituencies, including students, is a vital part of closing the assessment feedback loop. Posted on an Assessment Committee website, this summary may serve as a key component of an academic unit's public reporting of assessment activities and outcomes. While the summary must accurately summarize the Assessment Report, it also provides academic units some flexibility in terms of how the Report is presented to relevant constituencies.

QUESTION ASKED BY THE ASSESSMENT COMMITTEE • Has the academic unit provided an accurate summary?

These Guidelines have been modeled upon and/or borrowed language from assessment documents from Denison University, Ohio Wesleyan University, the University of Denver, and the University of Hawaii, Manoa. Our thanks to these institutions for granting us permission to use their documents in these ways.

Appendix A

GLOSSARY

Academic unit: any department, school, interdisciplinary program, and university-wide program.

Assessment Report: due the final Monday in September, it records an academic unit's assessment activities in the previous assessment cycle: what an academic unit has assessed, and why, and what an academic unit is doing in response to its findings: what strengths were revealed or changes were suggested, and then made, based on assessment data?

Anonymous study: a study in which information provided by a subject cannot be linked to any type of identifier. Often requires only the use of a "project information page" that summarizes the purpose of the study for all potential subjects. Does not require review by the Institutional Review Board.

Assessment Liaison: the member of an academic unit (often the chair or director) who ensures that the academic unit completes its annual assessment activities.

Confidential study: a study in which a subject's name is linked to a code, number, or other type of identifier. Often requires informed consent, and therefore requires review by the Institutional Review Board.

Direct Measure: a method of assessment that requires students to demonstrate knowledge and competencies as they respond to the instrument itself. (For examples, please consult Appendix C.)

Feedback mechanism: the systematic way an academic unit discusses, shares, and sometimes acts upon the results of the assessment measures of student learning.

Indirect Measure: a method of assessment that requires students to reflect on their learning rather than demonstrate it. (For examples, please consult Appendix C.)

Measure: a method of assessment.

Non-Measure: a method of assessment that seems to offer information about student academic achievement but that does not in fact provide evidence of learning. (For examples, please consult Appendix C.)

Qualitative measures: methods of assessment that describe meaning rather than draw statistical inferences.

Quantitative measures: methods of assessment that employ statistical, mathematical, and/or computational techniques to focus on numbers and frequencies rather than on meaning and experience.

Rubric: a guide listing specific evaluative criteria.

Strategic Assessment Plan: a description of an academic unit's overarching assessment agenda which helps the academic unit to organize its specific assessment projects, described in Yearly Updates.

Student learning goals: characteristics and competencies students in your academic unit should acquire.

Yearly Updates: a brief summary, due the final Monday in September, that describes and explains the assessment activities of the previous academic year and plans for the current year.

Appendix B

KINDS OF MEASURES

The following discussion draws heavily on "Opportunities for Improvement: Advice from Consultant-Evaluators on Programs to Assess Student Learning" (1997), a helpful article produced by Cecilia López for the North Central Association.

Academic unit assessments evaluate the *value added by the program*. The best methods examine results of pre- and post-testing majors. These are particularly useful benchmarks by which to gauge learning from entry to exit, and thereby to measure "value added." Not all academic units will be able to perform pre- and post-tests because of resources or applicability of the method to a particular content area. Further, pre-testing is not necessary if one is highly confident that students know little or none of the content or skills they are to master through completing the program. In most content areas, however, pre-testing is useful in obtaining baseline data, and faculty should not assume that the new student enters a program knowing little or nothing. But there are ways to gain the benefits of pre- and post-testing, or at least function in the spirit of experimental design, through such methods as student portfolios.

Measures come in a variety of types. We will describe briefly *direct*, *indirect*, and *non-measures* of student learning typically employed.

Direct measures of student learning, whether quantitative or qualitative, are the most appropriate measures of student learning and are understood to include but are not limited to:

- *evaluation of capstone experience*—the structure and content of the capstone experience should be clearly linked with the published statement of the purposes and educational objectives of the academic unit, i.e., the articulation of what its graduates are expected to learn by completion of the program of study.
- *portfolio assessment*—academic units should provide evaluation standards in assessment documents as to how the portfolios are to be reviewed (e.g., what the portfolio will include, how it will be assessed, by whom, and at what time intervals).
- *standardized tests*—though they can be useful, by their very nature, they tend to be generic and not well focused on specific skills or competencies and should be used in combination with other measures. (Tests such as the GRE, LSAT, GMAT, etc. are inappropriate standards to use to evaluate a program; they are used most often for admissions decisions, do not measure specific department learning goals, and a biased sample of majors take them.).
- *performance on national licensure, certification, or professional exams*—evidence from these should be supplemented with substantive evidence that learning goals were achieved.
- *locally developed tests*—these tests, if designed carefully, may yield highly targeted and very useful results.
- essay questions blind scored by faculty across the department.
- qualitative internal and/or external juried review of comprehensive senior projects.
- *externally reviewed exhibitions* and performances in the arts.
- *external evaluation of performance* during internships based on stated program objectives.

Indirect measures can provide information that may enrich or illuminate aspects of what the direct measures tell us about students' academic achievement. However, on their own, some indirect measures are inadequate measures of student learning by themselves. Indirect measures include:

- alumni, employer, and student surveys.
- exit interviews of graduates and focus groups.
- graduate follow-up studies.
- retention and transfer studies.
- length of time to degree.
- SAT scores.
- graduation rates and transfer rates.
- job placement data.

Non-measures offer information assumed to be measures of student academic achievement but that do not in fact provide evidence of learning. One such non-measure is a questionnaire asking students if their personal goals for the course or major or program have been met. A second group of non-measures that are often mistakenly considered to measure student learning are the reports associated with program evaluation, which typically collect data on the quality of curriculum and other aspects of a program. Some other non-measures of student learning include:

- curriculum review reports.
- evaluation reports of individual programs submitted by program-specific and specialized accrediting agencies, visiting committees, or committees of external peer experts.
- faculty publications and recognition.
- the kinds of **courses or majors** students select, including course enrollments and course profiles.
- faculty/student ratios.
- the percentage of students who study abroad.
- enrollment trends.
- the percentage of students who graduate with the baccalaureate in five years.
- the **diversity** of the student body.
- **course grades and GPAs**—experienced evaluators note that grades and GPAs "tell us little of what the student has actually learned in the course" and "very little about what a student actually knows or what that student's competencies or talents really are" (Astin 1991).

Problems with measurement can range from minor to serious, and potentially can undermine an effective assessment and lead to unreliable [or, in the terminology of these "Guidelines," "undependable"] conclusions and programmatic confusion. Academic units are encouraged to reflect on some of the more common methodological problems (a method is a program to gather data):

• Inappropriate sampling: sampling can be an appropriate technique for including students in the assessment process, since the target of the assessment is the department's effectiveness, not individual students. Simply asking for student volunteers to help assess a program is most likely inappropriate because those students who self-select to

participate will be biased in one or multiple ways. Departments should designate which students will participate, whether the entire population of majors or some random subgroup.

- Failure to incorporate at least one direct measure.
- Selecting superficial measures of curricular goal attainment.
- Selecting measures that fail to capture the goal attainment they intend to measure, i.e., the measures fail to be "valid" [or, in the terminology of these "Guidelines," "well-targeted"], they are off target.
- Selecting measures that produce inconsistent outcomes over time, i.e., the measures fail to be "reliable" [or, in the terminology of these Guidelines, "dependable"].
- Having non-measures parading as measures.

Remember that the Assessment Committee exists to assist academic units with assessment activities. Contact the chair of the Assessment Committee if at any stage of the assessment process you have questions or concerns.