



THE UNIVERSITY *of* NORTH CAROLINA
GREENSBORO

Academic Assessment Handbook
2022-2023 Academic Year

The University of North Carolina at Greensboro has an established process for academic assessment. All academic programs assess student learning and implement action plans to improve them based on that assessment. These guidelines are meant to provide background information as faculty members revisit their assessment processes. They align with the Academic Assessment Reporting Feedback Rubric developed by the Student Learning Enhancement Committee.

At the start of each section of this handbook, a summary of the salient points is given. The summary is followed by background and context to help understand more fully the assessment processes and approaches at UNCG. At the end of each section, you see the application of the points to the Rubric.

Why do we do assessment?

Summary

- Assessment is a catalyst for discussion about where a program is succeeding in helping students learn, and where changes may need to be made.
- Assessment does not identify what changes should be made. Faculty make those decisions.
- The value of assessment is to
 - gather evidence of what students are learning;
 - identify areas for learning improvement;
 - be accountable to our stakeholders, and;
 - provide evidence to support accreditation.

The most important reason to do assessment is to create a regular process for faculty to review the success of their educational programs to help students learn. It should be, first and foremost, a **catalyst for discussion**.

Assessment is the process of identifying what faculty want students to “get out of” a program in terms of learning outcomes, and finding opportunities for students in their careers at UNC Greensboro to demonstrate that learning. Faculty then review the results of those opportunities and discuss what the results communicate about how well a curriculum is working. The final step in the process is taking specific steps to improve student learning, even if the program seems strong overall. There is always room for improvement!

It’s important to note that just “doing” assessment does not identify what changes should be made. Faculty make those decisions. Assessment data should drive discussion about where a program is succeeding in helping students learn, and where changes may need to be made. When constructed well, the assessment process should point faculty to where improvements should be focused and, in some cases, what could be changed (curriculum, assignments) in order for students to better acquire and demonstrate learning.

Assessment does serve more than the faculty’s need to understand their programs, though.

Formal assessment allows UNCG to deliver important information about learning to many stakeholders, like the UNC Board of Governors, parents, and especially the faculty and students in the program.

Assessment can be useful to promote a program's successes for any number of reasons.

- To recruit students: a department can herald the learning accomplishments of current students in order to attract future students.
- To promote the work of program faculty, as evidence for research funding or to attract other faculty
- To encourage budgetary funding of teaching and learning
- To demonstrating how the program contributes to the overall success of the institution

By having evidence that the program's students are achieving stated outcomes, and that they continue to improve, departments can use assessment to publicize the strengths of their programs.

Assessment also helps us to be accountable to our constituents. In 2006, the Commission on the Future of Higher Education reported "results" are the determining factor of how higher education institutions are judged.¹ In the process of assessment, faculty determine expectations for student learning, how those expectations are demonstrated in student work, and what "proficiency" looks like. Results demonstrate how close we are to achieving the goals and outcomes we identify. Assessment helps faculty and staff show prospective students, current students, parents, General Administration, and anyone who is interested what outcomes guide learning in the program and what the results of those learning efforts are.

Finally, assessment provides evidence for the University to maintain its accreditation. Accreditation is an affirmation of quality by an organization recognized by the Department of Education. The accrediting body to which UNC Greensboro reports is the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In addition, many academic programs have their own accrediting bodies, such as the Accreditation Board for Engineering and Technology (ABET), the Council for the Accreditation of Educator Preparation (CAEP), and the Association to Advance Collegiate Schools of Business (AACSB). These organizations also expect that student learning outcomes have been set, that programs are measuring how well students are learning those outcomes, and that programs are both improving those areas where students are not performing and are growing the program in pace with their peers. Assessment is the foundation of accreditation, since it provides evidence to the accrediting body that the program or institution is meeting its mission to educate.

¹ Spellings, M., & United States. Department of Education. (2006). *A test of leadership : Charting the future of U.S. higher education*. Washington, D.C.: U.S. Dept. of Education. (2006). Retrieved September 18, 2019, from the US Department of Education website www2.ed.gov.

What is program assessment?

Summary

- Program assessment is “the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development.”
- Faculty are responsible for academic assessment of student learning.
- Gathering data about student learning is useless if the data are not *used*.
- At The University of North Carolina at Greensboro, assessment consists of an assessment plan (program mission/purpose, student learning outcomes, measures, and targets), and an assessment report (findings, an action plan, and action plan results).

Assessment has been a part of education for as long as there has been teaching. Fundamentally, assessment is the evaluation of student achievement. It is done both formally and informally in many classes on a daily basis, where a teacher might give a pop quiz (formal) or read students’ body language – like puzzled looks – to know that a topic is not sinking in (informal). At the end of a semester, many faculty reflect on a course, keeping or changing lessons or assignments based on how they contributed to students’ understanding of the subject. However, program assessment is taking the evaluation to the next level to understand how the parts and processes of a curriculum are working together to result in student learning.

Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development.²

Assessment can be defined differently on different campuses, but the fundamentals do not change. Assessment involves, first, faculty identifying a set of learning outcomes and measures that makes sense for understanding student learning in any particular program. Second, faculty must implement the measures to collect data about student learning. Third, program faculty review the data and decide upon its meaning. Fourth, faculty decide what action(s) needs to be in place to improve learning. Finally, faculty implement those actions. The cycle is repeated to confirm that programs provide better opportunity for student success (a.k.a continuous improvement).

Two important points are related to the assessment process. First, **assessment is a faculty-driven activity**. In any given program there is not just one faculty member teaching, and there should not be just one faculty member evaluating that learning or completing an assessment report. All faculty who contribute to an academic program should be given the opportunity to have a voice in its assessment. By opening up the discussion about what students should be learning, how faculty are teaching their subjects, and what students actually learn, a clearer picture to improve the program can develop.

² Palomba, C.A. and Banta, T.W. (1999). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco: Jossey-Bass Publishers.

The second point is that gathering data about student learning is useless if the data gathered are not *used*. An assessment plan put together with idealistic student learning outcomes, nationally recognized standardized tests, and sophisticated statistical analysis are not valuable if the program faculty do not use the results for decision making.

Assessment plans should reflect realistic outcomes in the program, measures that faculty trust to indicate student learning, and evaluation processes that faculty find meaningful. Data that are meaningful to faculty are more likely to lead to substantive improvement in the program.

At the University of North Carolina at Greensboro, assessment is reported through assessment plans and assessment reports. Programs that have shown consistent commitment to assessment are evaluated every 2 years; other programs are assessed annually. An assessment plan is made up of the program mission/purpose, student learning outcomes, measures, and targets. Assessment plans need to be in place at the start of the academic year. A full assessment report is the findings for the academic year, an action plan, and the results of the most recent action plan. Programs on a 2-year cycle provide an interim report that includes only assessment findings after the first year of their plan. Reports (full and interim) are completed after the academic year has ended and are due in early fall.

Plans and reports at UNCG are reviewed by the Student Learning Enhancement Committee (SLEC). SLEC is authorized by the Faculty Senate and is held accountable to them. Academic assessment at UNCG is the responsibility of the faculty.

Faculty are responsible for student learning. They are also responsible for the success of their programs. These two parts come together in annual academic assessment planning and reporting.

When do we do assessment?

Summary

- Assessment occurs annually, in sync with the Academic Calendar that runs from July to June, for most programs.
- Reports are due Sept. 30 of each year.

The calendar for assessment at The University of North Carolina at Greensboro follows the academic calendar. That is, we prepare our assessment plans at the start of the academic year and we report our findings and analysis at the conclusion of the year. To provide time for faculty to analyze and discuss assessment results, and develop an action plan for improvement, assessment reports are due Sept. 30 each year.

Mission or Purpose Statement

Summary

- Each program at UNCG must have a mission or purpose statement.
- The program's mission is not the same as the department's mission, as it focuses on student learning and the curriculum.

A mission or purpose statement is a clear statement of the broad aspects covered within a program. This statement addresses student learning in the program but may also include the guiding principles or philosophy of the program. This statement should be succinct (75 - 100 words), but should still convey how the unit or program supports the mission of the institution and the mission of the College or School.

Mission Example: The mission of the Baccalaureate program in Ethnohistory is to provide students with the educational experiences and environment that support the mastery of knowledge in history and archeology, provide hands-on experience in archeological sites, develop mentoring relationships between students and both historians and archeologists, introduce students to the use of primary resources for original research, and develop strong communication skills, all while putting hands-on learning in a historical context. The program is committed to introducing students to cultural diversity, ethical treatment of relics and resources, and appreciation of the integration of world history.

Each program at UNCG must have a mission statement that communicates clearly what it does and how it is unique from other programs. An alternative to the mission statement is the program's purpose statement contained in the university's bulletin. This statement is acceptable if it contains the student learning outcomes identified for the program. Each program should have one or the other of these statements.

Rubric Application

- ┌ Mission or purpose statement is broad description of the program, not the department.
- ┌ This statement addresses the student learning in the program.
- ┌ Mission statement is aligned with the University mission.

Student Learning Outcomes (SLOs)

Summary

- Student learning outcomes reflect what a program's faculty have identified as the primary knowledge, skills, or values their students will demonstrate upon completion of the program.
- Accredited programs should refer to their accrediting body for guides for defining student learning outcomes. If the program is not accredited, other institutions' assessment plans or professional organizations can suggest student learning outcomes.
- Student learning outcomes should be SMART: Specific, Measurable, Attainable, Results- oriented, Time-bound.
- SLOs are posted on the UNC Greensboro web site for each program.

Student learning outcomes (SLOs) at The University of North Carolina at Greensboro describe what a program's faculty have identified as some of the primary knowledge, skills, or values that students graduating from the program will demonstrate. They are aligned with the program's mission or purpose statement. SLOs often remain in place for several years since they reflect the program's mission. They are not permanent, however, and a program should monitor SLOs as a program evolves to reflect changes in the University, academic field, or priorities among the faculty. At UNCG, each bachelor's, master's, and doctoral program should have no fewer than 3 SLOs. Certificates have different expectations.

Defining Student Learning Outcomes

All faculty who teach in the program should be involved in developing or revising student learning outcomes. Staff in the Office of Assessment, Accreditation, and Academic Program Planning can help program faculty phrase or rephrase their programs' outcomes, but the SLOs come from the program's faculty. It is often a matter of referring to the mission or purpose statement to see what students should expect to know or do upon graduation. There are other resources, too, which include peer programs or professional organizations.

If your program is not accredited, you can research student learning in the web sites of your professional organizations or other, similar programs across the US. There is no need to recreate the wheel! If you find a SLO that has the essence of the learning in your program, you should be able to revise it to suit your program.

For accredited programs, faculty should consult the standards set by their accrediting bodies. The intention of assessment at UNCG is not to duplicate assessment efforts. If a program needs to respond to student learning outcomes set by an external accreditor, their internal assessment plan should reflect those same standards. The Office of Assessment, Accreditation, and Academic Program Planning can help structure the assessment plan to meet both needs.

Writing SLOs

Student learning in the program is the interaction of all parts of the curriculum coming together for the student. Therefore, everyone involved in that process should be part of the

discussions. Faculty should agree on what is expected in the program and teach those outcomes in all appropriate courses. Student Learning Outcomes should be written to share the program's intended learning among faculty and with students, and to guide the curriculum.

Verbs

The wording of student learning outcomes should be chosen to concisely communicate what the students will know, do, or value. Concrete action verbs should indicate specific behaviors students will perform. The verb that is selected to describe the outcome also communicates a level of proficiency, and should be selected with care. For example, "understand" does not describe student learning as clearly as "analyze" or "justify" does. Bloom's Taxonomy or a similar tool can be useful for guidance, but it is **not** required that you choose a word included in Bloom's Taxonomy examples. SLOs should describe *your* program.

Also note that one SLO should not describe multiple learning outcomes. "Students solve math problems and describe them effectively in writing" expresses two different outcomes, mathematical problem solving and writing. Those should be two separate SLOs. Some verbs go together in learning, like analyze and interpret or compare and contrast, but those are unusual.

Objects

The other component of an SLO is the object of the learning. This can be broad. For example, you may want students to explain major concepts, theoretical perspectives, and historical trends. They can also be specific. Students might need to compare and contrast descriptive and inferential statistics. Each program is unique, so faculty will need to decide on the specificity of the learning that should be expressed in the program's student learning outcomes.

Modifiers

It's not unusual for student learning outcomes to include some specific details about when (during clinical rotation) or where (in a 50-page research paper) learning will be demonstrated. While modifiers are not seen in every SLO, they are relevant to describe some learning.

Student Learning Outcome Example: Students interpret current research and its application to clinical practice in chronic disease.

Students (subject) interpret (verb) current research and its practice (object) in clinical practice in chronic disease (modifiers).

Other SLO examples:

Students will apply advanced skills in contemporary dance technique.

Geography majors will analyze social, cultural, economic, or political conditions and institutions in their geographic context utilizing empirical data.

Students will design software and computer solutions based on concepts and theories of computer science.

Students will demonstrate an advanced critical understanding of the literary, cultural, and/or rhetorical theories that inform the study of discourse in English.

Students will develop a unique program, product, or approach that informs their professional practice.

Note: SLOs should not have more than one learning outcome (i.e. not be compound).
E.g. Students compute complex math equations **and** are able to explain them to non-math peers.

Rubric Application

- ┌ SLOs reflect the program's mission.
- ┌ At least 3 SLOs are presented.
- ┌ All SLOs use concrete action verbs to indicate the knowledge or skills that will be demonstrated
- ┌ A single SLO statement should not have more than one learning outcome.

Measures

Summary

- Measures are descriptions of what faculty will use to evaluate the student learning outcomes in the program.
- There are two types of measures, direct and indirect. Direct measures provide evidence of learning, while indirect measures provide perception or third-party assessments of learning.
- Each student learning outcome must have at least one direct measure, although more than one is preferred.
- Assessment and grading are different. A grade does not allow for analysis of a program's strengths and weaknesses. Assessment provides data about each SLO, so that faculty can evaluate how effective each learning component of the program is for students.

Measures are descriptions of what faculty will use to evaluate the student learning outcomes in the program. They are often student work or assignments embedded in a class. Measures answer the question, "how will students demonstrate that they have attained this learning?" It can also be thought of as what faculty will value as evidence that students have learned the program outcomes.

Descriptions of measures often include information about samples that were employed and evaluation tools like rubrics that will be applied to the work.

Measures can be direct, where the students actually produce something to show what they have learned. Measures can also be indirect, where students do something related to learning that suggest they have learned the outcome. Indirect measures are harder to correlate with learning than direct measures are. What is important is that, whether it is direct or indirect, the measure gather evidence about student achievement of the program's student learning outcomes, to inform faculty discussions about how well the program's curriculum is helping students learn.

Direct and Indirect Measures

Direct measures are more credible than indirect measures because they require a student to demonstrate the skill identified in the outcome. The activity is clearly aligned with the learning that is being assessed and prove students have learned. Each student learning outcome must have at least one direct measure, although more than one is preferred.

Direct measures include student work products like research papers, portfolios, theses, specific exam questions, and performances.

Faculty may use rubrics to evaluate the essential dimensions of student work.

Direct Measure Example: Students taking KIN 468 present the results of their practicum in a 20-minute oral presentation, describing the exercise program they designed during the practicum, the issues that arose during the program, their problem-solving approach to the issues, and the adjustments made to the program based on the issues.

Indirect measures are weak evidence because the student does not directly demonstrate they have learned the student learning outcome. Learning is implied. Indirect measures ask for someone's opinion or perception about student learning outcomes that are otherwise measurable by the faculty.

Student surveys, alumni surveys, employer or internship surveys, and job placements are examples of indirect measures.

Indirect Measure Example: Supervisors who oversee students on their internships will be asked in a survey at the end of the internship if the student demonstrated proficient critical thinking skills for the workplace, responding on a 5-point Likert scale. A random selection of 50% of surveys will be used.

Triangulation

Triangulation is the use of more than one measure to evaluate a single student learning outcome, and it is a best practice in assessment. When only one measure is used, room for questioning results exists. If a test shows students do not know how to write a business plan **and** a course project shows the same results, the conclusion that writing business plans is a program weakness is established. When multiple measures are used, results of assessment can be compared and confirmed. Using more than 1 assessment measure is preferred.

Grades as a Measure

Assessment and grading are different, and the main difference lies in what is being assessed. When a grade is given, it is usually allocated to the entire body of work. For example, a paper grade aggregates a student's knowledge, writing, and research skills as one score. The grade does not allow analysis of any one of the components. A rubric, which facilitates the breakdown of a student's performance on an assignment into several categories and several scores, permits the use of an assignment to show a student's learning on multiple outcomes. Assessment is the evaluation of a single component or skill (writing ability, content knowledge, etc.). Grades, therefore, are not used for assessment.³

³ There may be rare circumstances in which a grade on an assignment in a course aligns directly with a single student learning outcome for the program. Only in this case could a grade be used for program assessment.

This chart was taken from Southern Illinois University – Edwardsville some years ago. It provides a neat summary of the difference between assessment and grades.

Assessment	Grades
Formative	Summative
Diagnostic	Final
Non-Judgmental	Evaluative
Private	Administrative
Often Anonymous	Identified
Partial	Integrative
Specific	Holistic
Mainly Subtext	Mostly Text
Suggestive	Rigorous
Usually Goal-Directed	Usually Content-Driven

Data Collection Process

It is helpful to define the data collection process (DCP) for each measure, so that the assessment data collection process is clear to everyone in the program. The DCP describes who is assessed, how they are assessed, and by whom they are assessed.

The set of students evaluated (“who”) can represent the entire program or a part of it. The decision to use the students in one class may alter the measure’s results, and thus the information faculty can learn about their program. However, a random sample of students can adequately represent all seniors if it is selected carefully. It is therefore important that the explanation of who is evaluated be provided, to show that faculty in the program understand the representative quality of the population that is assessed and consider this in the analysis.

“How” students are assessed refers to the scoring or evaluation of the student’s work. If a rubric or a rating scale is used, this is the place to describe it. An evaluation using the VALUE rubrics from AAC&U shows that a valid instrument is being used, and assures anyone looking at the assessment plan that results have the potential to be strong (<https://www.aacu.org/value/rubrics>). Even a rubric designed by the faculty offers validity. This is the place to describe how the work is evaluated.

Finally, “by whom” will indicate the reliability of the results. For example, one reader will provide less reliability to the results than 3 faculty readers. A process in which faculty are trained on a rubric and inter-rater reliability is recalibrated indicates the evaluations are

comparable among raters. When multiple raters review the same work and agree on the results, it is a more reliable process. Faculty often find these results more useful in understanding the learning results of a program.

Writing Measures

Measure Example 1: Students taking KIN 468 present the results of their practicum in a 20-minute oral presentation, describing the exercise program they designed during the practicum, the issues that arose during the program, their problem-solving approach to the issues, and the adjustments made to the program based on the issues. All graduating seniors in the course are evaluated by the faculty member teaching the class and a second faculty member. Their ratings are averaged. A 4-point departmentally-developed rubric is used, evaluating students as Excellent, Good, Fair, or Poor. The rubric is attached. Each year, the faculty members who will be doing the evaluation are retrained to ensure inter-rater reliability.

Measures Example 2: In the capstone course, students perform a recital of varied repertoire of no less than 50 minutes of music on their principal instrument or voice. This performance encompasses all student learning outcomes required for the program. The performance is evaluated by a jury of at least two faculty members, one month prior to the event and then again at the actual event. The evaluation is based on the 4-point rubric found on the department's web site.

Rubric Application

- ┌ There is at least one direct measure for each Student Learning Objective (SLO).
- ┌ Content assessed by the measures matches the SLOs (content validity).
- ┌ Data collection process (DCP) is clearly explained.
- ┌ DCP utilizes two or more trained raters for assessment.
- ┌ DCP measures the gain in performance via pre/post.
- ┌ Multiple measures are present, allowing for triangulation.

Targets

Summary

- Every measure in an assessment report must have a target.
- Targets succinctly communicate a quantifiable level of accomplishment for a particular measure.
- Targets must have specific numbers in them which indicate the level of accomplishment for the measure. (e.g. 90%, 3 out of 5 or higher, 18 out of 25 points)
- Targets must define levels of achievement so that anyone can understand them. Words like “satisfactory” or “successful” must be defined.

While measures explain what student work will be reviewed, targets explain what level of achievement faculty expect for each measure in the program. Targets succinctly communicate a quantifiable level of accomplishment for a particular measure. They indicate what is expected to be achieved in this single, current academic year.

Targets must be directly related to the measure.

Targets must have specific numbers in them which indicate the level of accomplishment for the measure. They can indicate a number or percentage of students who will perform at the designated level, or they can indicate a designated level of proficiency, or both.

Examples of Targets

In this example the target is the percentage of students who will earn a specific score on the measure:

Measure: Students will create arrays of data and appropriate graphs of the data for completion of problem sets using MathCad in their final exam.

Target: 90% of students completing the program will earn a score of 80 or above on exam questions where they must use MathCad to create arrays of data and appropriate graphs of the data for completion of problem sets.

In this example, a master’s thesis is used to evaluate multiple outcomes, including this one for knowledge of architecture:

Measure: Master’s theses from all students who submit and defend a thesis will be evaluated for their knowledge of 5 examples of post-modern architecture by the Thesis Committee members, using a 3-point rubric with levels of Mastery (3 points), Proficient (2 points), and Not Proficient (0 or 1 point).

Target: 100% of students who defend a master’s thesis will earn a “proficient” or “mastery” level of knowledge for this outcome.

In this example, two targets indicate the percentage of students and an expected level of proficiency:

Measure: Students submit a final project in their capstone course. The project is evaluated for multiple SLOs, including critical thinking skills, using a rubric. The project is evaluated by faculty on the department's Undergraduate Committee.

Target Example: 80% of students will earn an average of 7 out of 10 points on the critical thinking portion of the final project rubric.

Defining Targets

There is no easy rule for determining what the targets should be for any learning outcome. Targets relate to faculty expectations for students in the program, and how they will measure that a program is functioning as intended. However, faculty should have a rationale for defining a target, based on baseline data, national norms, previous student performance, external expectations (from the UNC System or elsewhere), etc. Targets may also change from year to year.

The question to consider when identifying targets is, what is the level of learning we need to see to know that our program is succeeding in delivering this outcome?

Writing Targets

Targets consist of essentially 3 parts: the number or percentage of people evaluated at the intended level, a reference to the measure, and the level of achievement intended.

First indicate the number or percentage of people expected to hit the target. This is often determined in conjunction with establishing what an acceptable or proficient score or rating is. For example, if your measure is a test score, faculty might want 100% of students to earn a 70 or above, but they might also expect that 80% of students earn a 80 or above. It is up to the faculty to identify the right target.

The next part of the target refers to the measure. If the measure was a final exam score, include that in summary format. It does not need to repeat the measure.

The third part of the target is the score or level of achievement expected. In the above example, the score was a 100 for one target and 80 for another.

Target example

85% (percentage intended) of students' capstone projects will earn a (measure reference) 4 or above on a 5-point rubric (object) for knowledge of design thinking (modifiers).

Avoid Vague Language

The words you use in your target are important. “Satisfactory” and “successful” are positive, but they are vague and not commonly understood. A better way to define these concepts is to share the rating scale if one exists. For example, “satisfactory” may mean 3 out of 5 points on a scale, so your target could say “100% of students earn a 3 out of 5 on the rating scale.”

“Successful” may mean fewer than 5 mistakes in their final musical performance, so it should be explained as such in the target. A target needs terms that are defined so that the meaning is understood by everyone reading it.

Note also that you can define terms like satisfactory or successful in your measure. See example 2 above, where “Proficient” is explained in the measure.

Rubric Application

- ┌ Target performance level for each measure is stated.
- ┌ Vague terms like satisfactory or successful are avoided or defined.

Findings

Summary

- Findings are the quantifiable data that result from completing the measures identified in the assessment plan.
- Findings should be phrased as the measures are, to show the direct relationship.
- Faculty must analyze the data to give it meaning.

At the end of the academic year, each unit must write an assessment report which consists of the findings and action plan(s). The first step is to collect the findings (or results) associated with each measure. Findings in UNC Greensboro assessment reports are the quantifiable data that result when the measures listed in the assessment plan are completed and the meaning or analysis that faculty give to those data.

Results

Findings should be clearly presented so that they reflect the statement indicated in the target. They in turn should align with the measure. Specifically, if your measure is survey responses, and your target indicates that 80% of students should respond with a 3 or higher on a specific question, your Findings should be reported in those terms. They should also indicate if the target was met or not met. It would look like this if data show 84% of students responded that way:

84% of students responded indicated a 3 or higher on Question X. (51 out of 90 students responded) The target was met.

It provides the relevant data and ties it to the measure, and it explicitly acknowledges if the target was met. As with the targets, specific numbers are essential for findings. It is also helpful, as in this example, to include the sample size for context. (E.g. $n = 21$, n is the number of seniors in a capstone course).

Analysis

The other part of reporting findings is the analysis. As noted earlier, *assessment is a catalyst for discussion* among faculty. For that reason, analysis should be conducted by faculty involved in delivering the program to students. This should not be a one-person job. And, faculty should discuss the program at the student learning outcome level and also in a holistic way.

Faculty should discuss what the data mean. When a target is not met, there should be discussion about both the outcome and the measure. Questions to consider include but are not limited to:

- Where in the curriculum was the outcome introduced and reinforced?
- Is the sequence of courses in the program appropriate for learning?
- Who are the students that succeed in this outcome, and what do we know about them? What courses did they take that others didn't, for example? When did they take prerequisites?
- Are there appropriate student support structures in place?
- Was the measure appropriate? Was it administered as expected?

- Do we need a rubric or other tool to help assess student work?
- Are there resources on campus we need to utilize?

When targets are met, faculty should discuss the roots of that success as well, and where that might be duplicated or enhanced for even more students.

Writing Findings

Findings should include the data statements as indicated above and analysis of those results.

Examples of Findings

Findings Example 1: 62% of students earned a 7 out of 10 points on the rating scale, which did not meet the 80% target defined.

Students were not able to identify health behaviors and educational needs of diverse populations in their reflective papers at the target level we established. The department's undergraduate curriculum committee realized that students were not introduced to this concept until they heard it in the course in which they are assessed. This concept will be introduced in the program's required 200-level course so students have a foundation sooner.

Findings Example 2: 81% (21) of students in earned a "Good" (3) or above on the rubric used to evaluate oral presentations. (n = 26) This met our target of 80%.

81% of our students met expectations. We believe this is because of the sequencing of courses that is in place, and we have been diligent about advising students into that sequence and not waiving the prerequisites. However, we know that some students who followed the sequence still struggled with the speaking aspects of these classes, which is so important for our graduates. We plan to look at adding additional inter-group speaking opportunities in the pre-requisites that could reinforce some of the fundamental speaking skills they need later on.

When findings act as a catalyst for discussion among faculty, a better understanding of students' learning success in the program is shared. Those discussions should also lead to analysis about how the entire program operates, and where actions can be identified to improve outcomes.

Rubric Application

- ┌ Findings are clearly presented.
- ┌ Status of the finding is indicated as met or not met.
- ┌ Analysis of the data is included.

Action Plans and Action Plan Follow-Ups

Summary

- It is necessary to define at least one intentional improvement for each academic program on the program's established cycle (1-2 years).
- Action plans must be based on assessment of learning findings.
- The action plan should result from discussions among the program's faculty.
- Action plans are the crucial step where data about students are *used* to improve learning.
- Follow-ups explain how action plans were executed and what the results were.

It is necessary to define at least one intentional improvement for each academic program annually. An action plan can address a weakness in only one student learning outcome, or it can address larger issues that may have been identified in the curriculum or assessment process. It is essential that the action plan results from discussions among the program's faculty, and that the plan applies change to bring about improved student learning.

Action plans must be based on assessment of learning findings. The questions you want to consider are

- What data are pointing to an outcome that can be improved?
- What could we do in our program to help more students succeed in that outcome?

Faculty teaching in the program should convene to look at the data. They should discuss what the data tell them about the program and its students. They should critically think about what the data say about strengths and weaknesses in student learning. That discussion can lead to discussions about the curriculum, prerequisites, course sequences, additional help for students, revisions in assignments, needs for additional data about particular student work, etc.

An action plan is the follow-up steps to the assessment just conducted, and it should explain the rationale for the decision which generally relates to a finding. Actions should also be as specific as possible, and should show that faculty have thought through the results. When possible, a responsible person or persons should be identified to ensure the action takes place, and a target date given.

Example of an Action Plan

Based on the finding that students in the BA degree do not perform as well in critical thinking as students in the BS degree (72% met the target as compared to 83%), the curriculum for the BA program will be revised to include an additional lab. The lab environment is the primary place where students identify and solve problems and describe them in lab reports. This additional practice will not affect progress toward degree. The department curriculum committee will be tasked with initiating the process for this change, to be effective fall 2012 if possible.

Rubric Application

- ┌ At least one action plan exists that focuses on improving student learning.
- ┌ Action plan is clearly developed directly from the findings.
- ┌ Actions are directed at improvements in program, teaching methods, and/or curriculum.

Action Plan Follow-Ups

In the UNC Greensboro assessment report template, Follow-ups to action plans are the first item to complete. This is done because action plans follow-ups are the conclusion to the last assessment cycle, when you reported findings and action plans. We ask you to essentially close those out before moving on to consider the most recent assessment data.

We need these follow-up reports because it is not good enough just to plan steps to improve learning. We need to implement the plans, and report, or follow up, on the results of those action plans. The follow-up explains how the plan was executed -- in whole, in part or in a revised form. It also explains what the results of the assessment were after the plan was implemented.

In follow-up responses, specific assessment data should be included and the action plan analyzed to determine if the action plan was successful. If results were good, could they be implemented elsewhere or expanded to a larger group of students? This is the crucial step where data about students are *used* to improve learning.

Follow-up responses include the most recent set of data results related to the outcome that you sought to improve, and an analysis of those results indicating whether the action plan should be considered a success and why.

Follow-Ups Example

The curriculum for the BA program was revised to include an additional lab. After 1 year, we found that some students were able to better identify and solve problems and describe them in lab reports. The BA student results improved to 78% of students meeting the target. We do want to watch this for more cycles. There is still room for improvement, however, so we are revising the lab report format for all undergraduates to include a specific section about applying results to current issues in science. We hope to then see even more improvement for both BA and BS students.

Rubric Application

- ┌ Follow-up reports for previously-defined action plans are provided.
- ┌ Follow-ups explain how the action plan was executed and the assessment results that followed.
- ┌ Follow-ups analyze the overall success of the action plan.

Conclusion

At UNC Greensboro, assessing student learning is essential to help us serve our students and our stakeholders. There is a set process for assessment that each educational program follows. Faculty in the program first identify student learning outcomes that are appropriate, and they find (often within the curriculum) measures that help them determine if the program is helping students learn what is intended. Those measures are used to collect data on an annual basis, and those findings and analysis are reviewed by program faculty. That review initiates a discussion among faculty teaching in the program about learning.

Faculty then determine what outcomes need to be improved, and they find ways based on assessment data to make those improvements. Finally, they implement those action plans for improvement, and reevaluate learning outcomes afterward to see if student learning seems to be benefiting from those changes.

Assessment does not provide black and white answers to improve learning outcomes, but it acts as a catalyst for discussion so that faculty see how well their program is doing in terms of learning and can help students best succeed in the program.