

Using Assessment Results

The subsequent use of assessment results for planning and improvement purposes is often called “Closing the Loop”. Using assessment results to review elements such as learning outcomes, assessment measures, standards, criteria, the curriculum, and pedagogy brings the cycle full circle. These applications of assessment results are the culmination of a unit’s prior assessment planning, collection, and analysis and so it is arguably the most important, and difficult, aspect of the assessment cycle. Each unit or department is different and will have varied needs, weaknesses, strengths, and opportunities to improve student learning. This guide will address a few of the key areas of closing the loop with assessment results, and each unit engaging with assessment results will need to consider how these general areas of concern apply to its needs, concerns, and questions.

Closing the Loop: Learning Outcomes

One of the most common concerns emerging from the assessment of learning outcomes is attention to the outcomes themselves. Following the assessment work, a unit or department may decide that it is not satisfied with one or more of its learning outcomes, or that one or more outcomes that should have been articulated is absent. After analyzing the assessment data, consider the following questions about the articulated learning outcomes:

- Do the aggregated program outcomes accurately reflect the learning that is occurring in the program?
- Are there any gaps in the learning outcomes that omit learning that is taking place?
- Are the current outcomes articulated at the appropriate level for the learning in the program? Consider the Bloom’s operant verb, the A, B, C, D format, and S.M.A.R.T. qualities discussed in the learning outcomes guide.
- Do any of the outcome need to be updated to reflect changes that have occurred in the unit’s curriculum or pedagogy?
- Do students understand the outcomes and the learning they should be able to demonstrate at specific points in the curriculum?
- How do our outcomes compare to similar programs elsewhere? What makes the unit distinct from others?
- How effectively do our course learning outcomes map to our program learning outcomes? Do they form a logical sequence of learning for students to eventually master the program learning outcomes?

The end of an assessment cycle is a good time to reconsider the range, scope, and focus of the program’s learning outcomes. Consider whether and to what extent the outcomes are understood by everyone in the unit and department. If one or more of the outcomes, or its elements, are unclear to instructors, they will not be well-understood by students.

Closing the Loop: Course and Curriculum Alignment

Consider the curriculum map once again. Based on the assessment results, how effectively does the course sequence provide students with opportunities to learn and master the learning outcomes in the program? Poor assessment results may be the product of students coming into higher-level courses without having mastered previous material or skills. Consider whether the assessment results are indicating a need to review the alignment of courses in the curriculum and the sequencing of the

courses. A good practice in this regard is to create a progression map of the curriculum, if this has not already been completed. If so, this map can be reviewed based on the assessment results to identify gaps or shortcomings evinced by the student results. If not, use the assessment results to inform a collaborative discussion about how courses are supposed to fit together to provide students with a coherent learning experience across the curriculum. Focus on the knowledge and skills articulated in the course outcomes and consider whether these outcome statements are effective, aligned, and aggregate to the larger learning goals of the unit. Also consider whether any course prerequisites or corequisites should be added or need to be changed or removed.

Closing the Loop: Informing Measures and Performance Indicators

The results of the assessments may also indicate that one or more assessment measures may require revision or replacement. Some questions that might arise following the analysis of results include: Did students understand what they were supposed to be doing? Were the performance criteria and standards clear to students? Does the assessment measure communicate the expectations to students clearly? More fundamentally, why are we asking students to undertake this work in the first place? What is its function? How does this function fit within the larger context of the course and the curriculum?

Identifying a need to update or improve one or more assessment measures, and its accompanying performance metrics or criteria, is a common result of analyzing assessment results. Tests may need to be revised. Assignment prompts may need updated or clarified. New opportunities for field experience may present themselves. Don't be afraid to try something new but try to ensure that the unit has investigated the necessary concerns—see the Assessment Measures entry in the guides—to ensure the new assessment measure is an improvement over the prior method(s). Alternatively, the measure may need no revision but the level of expectation for students was not in alignment with the actual performance of the students. Once issues such as the clarity of the learning outcomes and the alignment of the curriculum have been satisfactorily addressed, concerns will then turn to learning improvement.

Closing the Loop: Improving Teaching and Learning

One of the most important outcomes of collaborative assessment work is the opportunity to create explicit, intentional, and effective connections among instructional activities, learning outcomes, and assessment practices and procedures. This work will help to align standards with classroom and assessment practices. Units and departments frequently discover that these practices are not well-aligned and do not have the degree of synergy that might have been assumed or expected. Consider the following questions:

- Did the course(s) devote substantial time and learning resources to the articulated learning outcomes?
- How many opportunities did students have to practice the outcomes before the summative assessment? What was the nature and quality of these opportunities?
- Were rubrics or other scoring guides used to evaluate the students' work? Were the performance criteria clearly communicated to students before they completed the work?
- Did the assignment(s) clearly and effectively align with the learning outcomes they were meant to address? What level of learning demonstration was required by the assignment and how well did this align with the level of learning articulated in the learning outcome(s)?

- Were students engaged with varied instructional strategies (i.e. lecture, hands-on, group work, discussion, debate, problem-based learning, etc.)? What pedagogical innovation might be needed to better engage students and meet them where they are in their learning?
- What is the feedback from students? What were the major themes of responses in the indirect assessment of those skills and learning experiences by students?
- What classroom resources may need to be leveraged to improve student learning and performance?

Of all the elements of closing the loop with assessment results, this area may be of the greatest importance. It can also be one of the most difficult and demanding outcomes to achieve. However, when a unit or department can see the positive results of their work, and the program is able to demonstrate improved student learning, performance, retention, and completion data, these efforts are well worth the trouble. Remember: work collaboratively and leverage faculty and staff expertise. It is unlikely that there is only one good approach to teaching and learning improvement, and this may be an opportunity for innovation, adaptation, and experimentation among the members of the unit, department, division, or the institution.

Closing the Loop: Planning and Budgeting

The analysis of assessment results can also be an opportunity to plan for the future of the unit. Issues such as the need for new faculty or staff; filling an open position; acquiring new technology, software, or resources; promoting and marketing the program; recruitment and retention initiatives; and other related concerns may be relevant to the results of the assessed outcomes. Consider what the current members of the unit may need for professional growth. Sharing assessment results among the members of the unit, the division, the institution, and external audiences through presentations, publications, and grant applications is a good way to engage in the scholarship of teaching and learning and grow as an educator. Consider how the unit can incorporate these needs into its planning and budgeting processes and be ready with data resulting from good assessment practices to make the case to administrators for institutional support.

Closing the Loop: Developing an Improvement Plan

When assessment data indicates a need for improvement, it is good practice to develop an improvement plan focused on one or more areas of concern revealed by the results. An action plan does not need to be complicated, but the plan should make clear the actions to be taken, the steps involved in those actions, a timeline for implementation, a target date for completion, the responsibilities of those involved, the expected outcome or results, and a means of providing status updates. A simple template for an improvement plan may look like this:

Program Improvement Plan	
Recommended Actions:	
Action Steps:	
Action Timeline:	
Estimated Completion Date:	
Person(s) Responsible:	
Expected Outcome(s):	
Status Update:	

Maintaining an action plan will require participation, coordination, and organization within the unit and among its members. As with most assessment work, collaboration is essential to plan, implement, and complete a program-level improvement plan. This work also provides explicit evidence of program planning and innovation and should become incorporated into the evidence provided in processes such as a program review.

Closing the Loop: Program Review

An effective program review process is an expectation of institutional accreditation. Assessment work, improvement planning, and follow-up assessment to ascertain the efficacy of those efforts are effective additions to program review documentation. While program review is concerned with elements such as costs, productivity, research, and student recruitment, retention, and completion, the assessment of student learning is also a common element of program review. A program providing evidence of a coherent curriculum, quality courses, effective instruction, good student engagement, and high rates of learning outcomes attainment will be well-situated to make a strong argument in favor of the program and its members. Furthermore, learning outcome results obtained from good assessment practices are likely to inform, or at least provide context for, many other elements considered during the program review. Be sure to engage students in their own learning and seek their feedback. This information, via indirect assessment, can provide context for a program's data and incorporate the students' perspective of the program. This assessment data, when paired with direct assessment results, can provide a unit with robust insights into its curriculum structure, instructional practices, and resource allocations.

Closing the Loop: Celebrate Good Results

Considerable time is spent focused on the gaps, weaknesses, and shortcomings evinced by assessment results. Just as important, however, are those results that suggest effective learning attainment and good practices within the unit and among its members. Be sure to take time to celebrate the attainment of assessment goals and communicate the data widely. These instances provide an opportunity for a program's members to come together and share their successes, share anecdotes, and trade ideas about teaching, learning, and program delivery. Be sure to highlight the individual contributions of members during the planning and implementation of the assessment cycle, including the collection of evidence, the analysis of results, and the planning of improvements. It is an opportunity to ensure that the members of the unit feel the satisfaction of recognition for a job well-done and to highlight the impact of their work on students and their learning. Consider sharing the results with other units, divisions, or with the entire institution, if given the opportunity. These actions can energize future work in the unit, including assessment, and form the foundation for future collaborations and innovations. These venues provide opportunities to consider future collaborations and initiatives. Remember: food and celebration bring people together.

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