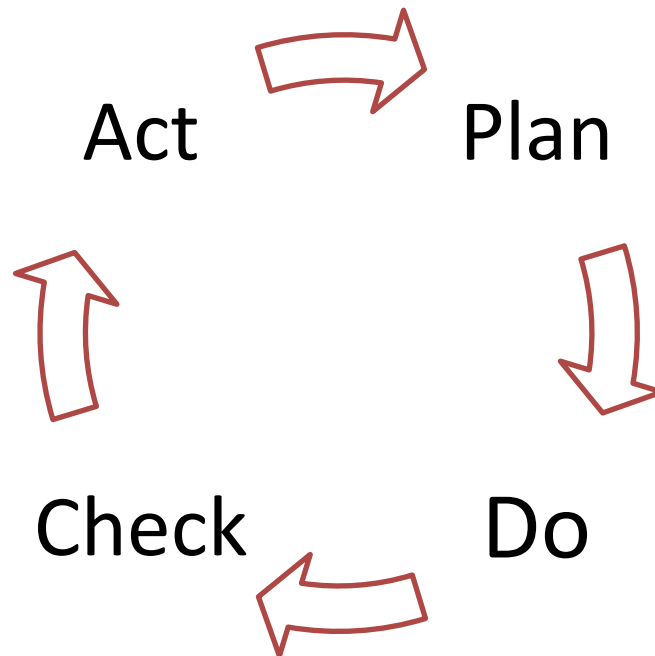


Co-Curricular Student Learning Outcomes Assessment Handbook

A Guide to Co-Curricular Learning Outcomes Assessment at Youngstown State University



YSU Office of Assessment

Adapted with permission from Marymount University

Help us improve!

This handbook is meant to provide guidance on assessment processes and YSU's reporting requirements. However, it is a work in progress. If you have suggestions for improvement please email the [Office of Assessment](#)

Table of Contents

	<i>page</i>
<u>Preface: Overview of Co-Curricular Student Learning Outcomes Assessment at Youngstown State</u>	3
<u>Part 1: Assessment Processes</u>	6
<u>Section I: Developing Student Learning Outcomes</u>	7
<u>Section II: Designing Learning Opportunity Maps</u>	10
<u>Section III: Designing Outcome Measures</u>	12
<u>Section IV: Collecting Data</u>	16
<u>Section V: Analyzing Assessment Data</u>	21
<u>Section VI: Share Results</u>	24
<u>Section VII: Reflect and Being Again</u>	25
<u>Appendix I</u>	27
<u>Appendix IA: Bloom’s Taxonomy</u>	28
<u>Appendix IB: Rubric Toolkit</u>	32
<u>Appendix IC: Glossary</u>	35
<u>Part 2: Reporting Requirements</u>	36
<u>Section VIII: Assessment Reporting Requirements at YSU</u>	37
<u>Appendix IIA: Foundational Documents</u>	39
<u>Connecting Departmental Goals with Student Learning Outcomes Template</u>	40
<u>Co-Curricular Student Learning Outcome Cover Sheet Template</u>	41
<u>Learning Opportunity Map Template</u>	42
<u>Appendix IIB: Assessment Plan</u>	43
<u>Template</u>	44
<u>Tips/Examples</u>	47
<u>Rubric</u>	49
<u>Appendix IIC: Assessment Update</u>	50
<u>Template</u>	51
<u>Tips/Examples</u>	52
<u>Rubric</u>	53
<u>Appendix IID: Assessment Cycle Reflection</u>	54
<u>Template</u>	55
<u>Tips/Examples</u>	56
<u>Scoring Guide</u>	58

Youngstown State University does not discriminate on the basis of race, color, national origin, sex, sexual orientation, gender identity and/or expression, disability, age, religion or veteran/military status in its programs or activities. Please contact our office at ysuassessment@ysu.edu or 330-941-2453 to request any necessary accommodations for this handbook.



Preface: Overview of Co-Curricular Student Learning Outcomes Assessment Processes at Youngstown State University

Learning Outcomes Assessment

Learning outcomes assessment is the systematic examination of student learning during interaction with a co-curricular program. Its primary goal is the continued improvement of quality for the institution. Effective learning outcomes assessment answers three questions:

- What knowledge, skills, and attitudes will successful students have acquired upon interaction with a co-curricular program?
- How well do students perform relative to these learning outcomes?
- How can co-curricular programs improve to provide a stronger experience to students?

YSU Office of Assessment

The YSU Office of Assessment's (OOA) mission is to coordinate and support assessment activities across campus. We support the accreditation standards of the Higher Learning Commission by assisting faculty and staff in systematic, comprehensive assessment and improvement of student learning. The Youngstown State University (YSU) Mission and 2020 Strategic Plan guide our work in building a positive culture of assessment, using data responsibly to improve institutional practice, and using assessment to support and promote student success.

The Office of Assessment supports its mission through numerous services and programs, including workshops, consultations, professional development opportunities, mini-grant programs to build assessment skills, a campus-wide assessment best practices event, and administration and dissemination of campus-wide student assessments (such as the National Survey of Student Engagement). More information on OOA services can be found on our website: cms.ysu.edu/assessment.

Purpose of the Assessment Handbook

The purpose of this Handbook is to assist YSU assessment coordinators (those responsible for assessment reporting in a co-curricular program) in conducting learning outcomes assessment. It is a step-by-step resource that explains the basic concepts and processes, provides examples and strategies for meeting the specific requirements, and offers approaches for making assessment a useful tool in co-curricular programming. It also provides guidance on the reporting schedule and expectations for co-curricular programs.

Benefits of Learning Outcomes Assessment

When conducted properly, learning outcomes assessment has benefits for the entire institution. It benefits students by ensuring they master skills provided by interacting with co-curricular programs that are responsive to their needs. It benefits co-curricular programs by providing the tools necessary to lead renewal and development. Finally, it benefits the entire institution by giving the institution documented evidence of student learning and achievement, thereby validating the institution is faithfully meeting its mission and goals.

Outcomes Assessment and Accreditation

Since the 1990s, issues of accountability in higher education have been increasingly common concerns of federal, regional, and state regulators. Often the standards of learning are discussed during hearings on the reaffirmation of the Higher Education Act, but to date the higher education community has been able to argue convincingly that self-regulation is the most effective method for ensuring academic quality and accountability. To this goal, the Higher

Learning Commission (HLC), YSU’s regional accrediting body, has greatly increased its emphasis on learning outcomes assessment.

While the HLC’s [Criteria for Accreditation](#) clearly emphasize the importance of assessment and evaluation, the standards are written with intentional breadth to allow individual member institutions flexibility in their assessment activity. Institutions and programs are simply required to illustrate that they have defined learning outcomes, that student performance is evaluated to measure their effectiveness relative to those outcomes, and that there is a focus on ongoing, continuous improvement to support student achievement of those learning outcomes. There is also the clear expectation that program staff participate substantially in the assessment process.

Various Roles and Expectations in Learning Outcomes Assessment at YSU

For learning outcomes assessment to be truly effective, it must be a university-wide process. At YSU, there are four primary groups directly involved with co-curricular assessment activity:

- **DIRECTORS** and/or **ASSESSMENT COORDINATORS** develop learning outcomes, manage the assessment process within their programs and submit yearly assessment reports that provide evidence of the activity.
- **CO-CURRICULAR PROGRAM STAFF** assist in developing learning outcomes, assessing student performance, and providing the necessary analysis to understand learning outcomes in their programs.
- The **OFFICE OF ASSESSMENT** coordinates and supports the overall effort and provides methodological and technical support throughout the process. This office also posts the student learning outcomes reports to an online archive annually.
- The **ASSESSMENT COUNCIL (AC)**, consisting of representatives from all the colleges and several divisions in the university, reviews and advises assessment activities to ensure that program-level assessment processes are effective and to keep the university in line with requirements of regional accreditation. The AC, with assistance from faculty and staff reviewers, conducts its work by reviewing all co-curricular and academic program student learning assessment reports from which specific recommendations for improvement are generated to be addressed. Program assessment reports as well as AC findings are used to inform and provide evidence of continuous improvement.

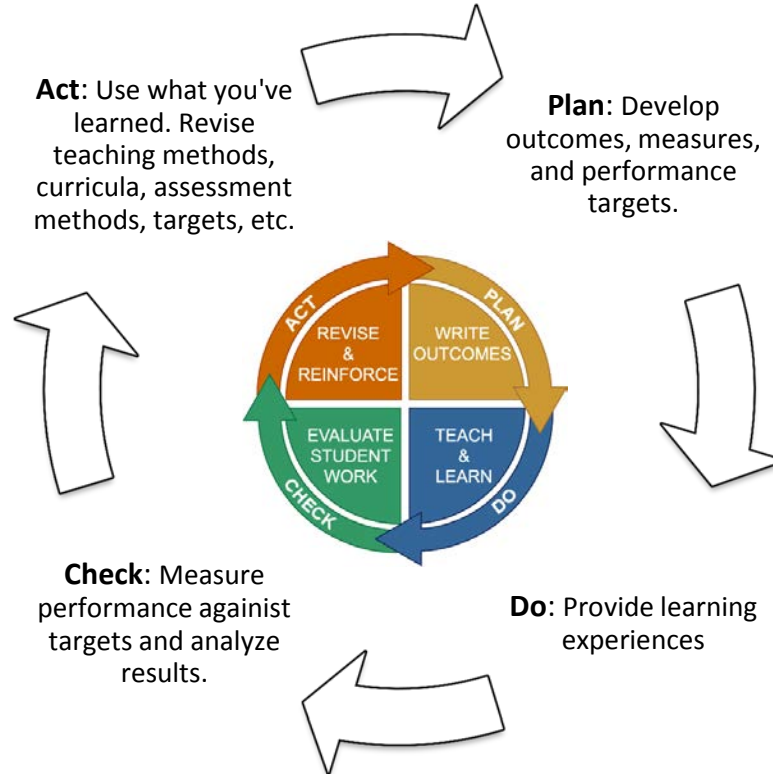
Seven Steps of Student Learning Outcomes Assessment

There are seven steps of learning outcomes assessment: develop learning outcomes, develop a learning opportunity map, design outcome measures, collect data, analyze and evaluate data, share results, and reflect on process and start again. Part 1 of the Assessment Handbook is divided into sections addressing each of these steps. Each section provides a basic overview of the goals and purpose of the step, lists the specific activities for co-curricular programs associated with the step, and offers suggestions and potential strategies for effectively completing the step. Part 2 of the Assessment Handbook focuses on YSU’s assessment reporting requirements and provides templates and instructions for submission.

<p>Seven Steps of Learning Assessment</p> <ol style="list-style-type: none"> 1. Develop learning outcomes 2. Develop a learning opportunity map 3. Design outcome measures 4. Collect data 5. Analyze and evaluate assessment data 6. Share Results 7. Reflect on process and start again

The ideas and suggestions for completing the steps are intended to provide useful information for co-curricular program staff. Since each program differs in terms of size, approach, and outlook, it is important to ensure that the assessment approach matches the needs of the program. Office of Assessment staff is available to discuss any thoughts or ideas to help programs build a learning outcomes assessment program that meets its needs.

Cyclical Nature of Learning Assessment



Assessment process image credit: <http://www.westminster.edu/acad/oaac/cycle.cfm>.

Since the primary goal of learning outcomes program assessment is continuous improvement of the quality of education offered by Youngstown State University, the process is cyclical in nature. Assessment is an ongoing process that should grow and change as programs evolve and develop.

Assessment Reporting Requirements at YSU

The central reason for co-curricular programs to participate in the assessment process is to ensure high quality programs and learning support that develop and prepare students for life after college; however, we are also obligated to provide evidence of these processes and efforts to continuously improve. This handbook outlines the core focus, that of evaluating student learning as best practice, but it is also helpful to understand how the steps relate to reporting. See Part 2, Reporting Requirements at YSU for more detail on reporting requirements and formats. The table below shows the relationship between the assessment process and YSU reporting requirements.

The Assessment Process and Reporting Requirements	
Handbook Part 1 Assessment of Student Learning Steps	Handbook Part 2 Associated Reporting
1. Develop Learning Outcomes	New Program Documents (and review for currency before planning)
2. Develop Learning Opportunity Maps	
3. Design Outcome Measures	Assessment Plan
4. Collect Data	Assessment Update (yearly)
5. Analyze and Evaluate Assessment Data	
6. Share Results	
7. Reflect and Begin Again	Assessment Cycle Reflection

PART 1

Assessment Processes

Section I: Developing Student Learning Outcomes

The first step in student learning outcomes assessment is the creation of outcomes, which reflect the core components of the co-curricular program.

Most co-curricular programs have previously developed SLOs, so this step of the process allows for re-examination and potential revision. The development of SLOs should capitalize on the depth of knowledge of the program staff and thereby help shape the nature and direction of the program. The *“Checklist of Need Activity for Developing SLOs”* provides an overview of the key activities when developing outcomes. This section describes characteristics of strong SLOs, provides suggestions on how to develop SLOs, and discusses a process by which programs can scrutinize SLOs to ensure their strength.

SLO = Student Learning Outcome

Goals versus Outcomes

Goals are an important part of planning in programs, but they differ from learning outcomes. Goals tend to be intangible and focused on the activities of the program, and/or outline on what program staff may do in the program. They differ from SLOs, as SLOs focus on what the student will take away from participation with the program.

Checklist of Needed Activity for Developing SLOs:

- A comprehensive but manageable number of SLOs (typically between 3-5 depending on program activities)
- Program staff participation in developing learning outcomes
- Verification that outcomes are: appropriate for program, important, observable, and measurable.

Effective Student Learning Outcomes

SLOs are statements that specify what students will know or be able to do as a result of interacting with a co-curricular program. **Effective SLOs are usually expressed as knowledge, skills, or abilities that students will possess upon interaction with a program.** They provide guidance for program staff regarding content and evaluation, and serve as the basis for ensuring program effectiveness. Because we evaluate student performance in terms of specific actions, the strongest learning outcomes are measurable and observable.

Strategies for Developing Effective Student Learning Outcomes

Prior to beginning the program’s initial learning outcomes assessment activity, the program’s director and/or program staff may wish to meet with an OOA staff consultant. This person can discuss the entire process, explain potential university resources, and answer questions about the process.

To start the process, program staff may want to compile a list of the key knowledge, skills, and abilities that students acquire interacting with the program. The program director may call a meeting of program staff or seek suggestions via e-mail. *“Tool 1: Key Questions to Consider When Drafting SLOs”* may be useful to generate the list of core components.

Tool 1: Key Questions to Consider When Drafting SLOs

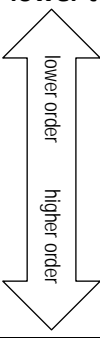
- What is the most essential knowledge students need to have acquired upon interacting with the program?
- Are there specific skills or abilities students need? What are they?
- How does interacting with the program attempt to shape students’ attitudes or views?
- How do these skills, abilities, or habits of mind relate to the university’s mission and core competencies?

After identifying the knowledge, skills and abilities that the program staff wants to assess, actual SLOs are drafted. Drafting outcomes is an iterative process that may require several versions to capture the true essence of core ideas. One way to help simplify the process is use an opening such as **“Upon interaction with this program, students will be able to…”** and then focus on the actual essence of the outcome. The goal is to develop a comprehensive set of learning outcomes and examine them on a regular cycle.

Bloom's Taxonomy

In developing SLOs, it is helpful to consider the level of learning expected of students. In co-curricular programs, outcomes vary based on the type of program, so it is important that learning outcomes accurately reflect the level of expectation.

SLOs are often organized around Bloom's taxonomy (Bloom, 1956), which is a classification of different ways of learning, from lower- to higher-order levels. In a non-academic setting, we most often write learning outcomes in the cognitive (knowledge) domain. Bloom also developed taxonomies around psychomotor (physical skills) and affective (attitudes) domains, which may be of use in some programs. These taxonomies organize learning from the less sophisticated to the more sophisticated. [Appendix IA](#) outlines these levels of learning using a revised Bloom's Taxonomy, and provides examples of verbs that can help program staff articulate and frame outcomes at the appropriate level of sophistication for their co-curricular program.

Tool 2: Common Learning Outcome Action Verbs (from lower to higher order)				
	Define	Identify	Describe	
	Explain	Select	Apply	
	Interpret	Solve	Analyze	
	Compare	Correlate	Criticize	
	Create	Categorize	Compose	
	Design	Formulate	Illustrate	
	Integrate	Plan	Conclude	
	Estimate	Evaluate	Summarize	
	<i>Source: Bloom's Taxonomy; also see Appendix 1A</i>			

Selecting the Right Verb

Given that SLOs focus on observable and measurable actions performed by students, the selection of an action verb for each outcome is crucial. Determining the best verb to use in a learning outcome can be challenging because of its need to accurately reflect the knowledge, skills, and abilities being demonstrated. In addition to [Appendix IA](#), "*Tool 2: Common Learning Outcome Action Verbs*" provides a brief list of verbs that are used in writing learning outcomes at the collegiate level.

Certain verbs are unclear and subject to different interpretations in terms of what action they are specifying. Verbs/verb phrases such as "know," "become aware of," "appreciate," "learn," "understand," and "become familiar with" should be avoided; they frequently denote behavior that is not easily observed or measured.

Strengthening Weak SLOs

The process for strengthening SLOs re-examines the original characteristics used of strong outcomes. By asking the four questions in "*Tool 3: Evaluating Learning Outcomes*," weaknesses in learning outcomes emerge.

Revising SLOs

The process of writing SLOs is not simple. Determining the outcomes a co-curricular program wants to examine can pose the first challenge. In addition, drafting the outcome may take several revisions to develop a strong outcome that reflects the intentions of the program staff. However, the effort put into drafting strong outcomes will be returned through an easier time developing measures, collecting data, analyzing the results, and ultimately making recommendations for improvement. Strong outcomes will help to focus the entire process and allow for the most useful results from the assessment process.

Tool 3: Evaluating SLOs

- Is the action done by the students?
- Is the specified action observable?
- Can the specified action be measured?
- Is it important?

In addition, strong outcomes communicate to students what they will gain from interacting with a co-curricular program.

EXAMPLE: Making a learning outcome stronger

The following illustration shows how the questions in “*Tool 3: Evaluating Learning Outcomes*” can be used to strengthen learning outcomes. This example is carried throughout the Assessment Handbook to show how to make the whole process easier.

The original learning outcome reads:

❖ ***Students engaged in student organizations will be*** exposed to skills through co-curricular involvement.

We evaluate this learning outcome by asking the questions found in “*Tool 3: Evaluating Learning Outcomes*.”

- “Is the action done by the students?” **No**, the action is not done by students, but by the staff who present the skills.
- “Is the specified action observable?” **Yes**, the action is observable, as students could be observed as they are exposed to the skills.
- “Can the specified action be measured?” **Yes**, the action can be measured by counting the number of skills presented to students.

The revised learning outcome is:

❖ ***Students engaged in student organizations will be able to*** understand the skills they have developed through their co-curricular involvement.

By asking the same three questions as before we can evaluate the learning outcome.

- “Is the action done by the students?” **Yes**, the action is done by students.
- “Is the specified action observable?” **No**, the action is difficult to directly observe.
- “Can the specified action be measured?” **Yes**, it can be measured indirectly by asking students to comment on the extent to which they understand the skills they have developed.

The department revises the learning outcome to:

❖ ***Students engaged in student organizations will be able to*** appreciate the value of the skills they have developed through their co-curricular involvement.

Again, we evaluate the learning outcome by using the same three questions.

- “Is the action done by the students?” **Yes**, the action is done by students.
- “Is the specified action observable?” **Yes**, the action is somewhat observable by viewing the student’s actions/behaviors.
- “Can the specified action be measured?” **Yes and No. Yes**, because it may be measured indirectly by asking students to comment on the extent to which they appreciate the value of the skills they have developed. **No**, because it is challenging to measure directly because appreciation is difficult to define or operationalize.

Finally, the department develops the learning outcome:

❖ ***Students engaged in student organizations will be able to*** articulate the skills they have developed through their co-curricular involvement.

By revisiting the three questions, the strengths of this outcome emerge.

- “Is the action done by the students?” **Yes**, the action is done by students.
- “Is the specified action observable?” **Yes**, the action is observable. The student can be brought together in a staff meeting, focus group, interview, or informal conversation to discuss the skills they have developed through their co-curricular involvement.
- “Can the specified action be measured?” **Yes**, it is measurable. The expectations can be defined and the student’s performance measured against those standards.

Section II: Designing Learning Opportunity Maps

The learning opportunity map is a tool that can help diagnose student learning and improve co-curricular program offerings. Sharing it with program staff and with students can enhance understanding of the program and offer an important guide for student learning. It can be updated periodically and added to the program's website. It is vital to understand where students have opportunity to learn concepts defined in a program's SLOs. Mapping learning outcomes to places where students interact with a program is the first step in understanding where students have exposure to the material they need to master.

Creating a Learning Opportunity Map

The basic construction of a learning opportunity map includes a program placing their student learning outcomes along one axis of a matrix or table, and then placing instances where a student interacts with an office and has opportunity to learn on the other axis. This creates a table where each learning outcome may intersect with each learning opportunity listed. See "*Tool 1: Sample Learning Opportunity Map*" as a guide to develop a learning opportunity map. [Appendix IIA](#) includes a template for creating learning opportunity maps.

Once this table is created, a program may consider if the student has opportunity to learn a particular outcome during the course of that interaction. Some program opportunities may provide opportunity to learn multiple SLOs, while other opportunities may focus on only one or two. For example, if a learning outcome for the Office of Career Services is to "demonstrate professional interviewing skills," there may be opportunity to learn that in a mock interview session, but not in an interest inventory to help choose a major.

Intersections between an SLO and a learning opportunity may simply be indicated by an "X" for occurrence, or program staff may wish to create a taxonomy/structure/hierarchy to the interactions, such as introduce/reinforce/master, or even Bloom's taxonomy (often grouped into three levels: K=knowledge/comprehension, A=apply/analyze, E=evaluate/create). The decision regarding occurrence or hierarchy often depends on the level of learning required by SLOs and the depth of the learning opportunities that a program decides are appropriate. Programs with less frequent or more casual interactions may have learning outcomes that lend themselves to a simpler structure than those that have prolonged or rigorous learning opportunities. The program staff must decide the best structure for their own programs' SLOs and learning interactions.

Using a Learning Opportunity Map to Identify Gaps

Once constructed, a learning opportunity map provides an overview of the program's offerings as a whole, as well as the distribution and opportunities programs provide for students to achieve SLOs. The learning opportunity map allows program staff to ask, "Are our SLOs supported by the learning opportunities our program provides?" The map may also reveal gaps or areas that do not provide sufficient opportunity to learn or where offerings may be adjusted to maximize learning opportunities. Four common gaps are listed below.

Examining Learning Opportunity Sufficiency: Sometimes a SLO does not appear to have any learning opportunities. In those cases program staff should revisit the learning opportunities and consider if the learning outcome is truly needed. If the SLO is important, then consider if additional learning opportunities are needed to achieve that SLO.

Examining Student Learning Outcome Sufficiency: Sometimes a learning opportunity does not appear to cover any SLOs. In cases like this, the program staff should consider if there is essential learning contained in that activity that may not be reflected in the program SLOs. There may be the need to modify or add to the program's SLOs.

Examining Concept Reinforcement: Often programs will discover that students are introduced to a concept, but planned experiences and interactions are not sufficient to help students master those concepts. This may lead

program staff to consider modifications in programming to reinforce concepts with students. Program staff may also discover that a new activity needs to be created to sufficiently address a learning outcome

Examining Activity Sequencing: Sometimes program staff will discover that an activity provides sufficient support for the student to master the material, but activity sequencing should be adjusted so that students are introduced to concepts that build on and complement each other. The student learning assessment process can be used as an audit of a co-curricular program’s complete experience.

Using a Learning Opportunity Map to Plan Assessment

Once a program has finished their learning opportunity map and used it to diagnose and correct any learning gaps, the map becomes a useful tool to identify the best locations to evaluate student learning and most efficiently collect data on student learning. Program staff may identify learning opportunities that cover multiple SLOs, so that data collection points may provide the most information with the least amount of effort.

Tool 1: Sample Learning Opportunity Map

How Students Interact With Your Program	Learning Outcome 1	Learning Outcome 2	Learning Outcome 3	Learning Outcome 4	Learning Outcome X
Activity 1					
Activity 2					
Activity 3					
...					
...					
...					
...					
Activity X					

Archived examples of YSU programs’ learning opportunity maps can be found on the [Office of Assessment’s website](#).

Section III: Designing Outcome Measures

After developing learning outcomes and a learning opportunity map, the next step in the assessment process is to select outcome measures. While learning outcomes describe the knowledge, skills, and abilities that students should possess after interaction with a co-curricular program, outcome measures are the specific tools and methods that generate data and information about students' performance relative to learning outcomes.

There are three types of outcome measures: direct measures, indirect measures, and proxy measures. Each serves an important function in assessment, and when used together they provide a richer perspective on student learning by providing direct evidence and context to understand student performance.

- **Direct measures** are methods for assessing actual samples of student work to provide evidence of student performance relative to the learning outcomes.
- **Indirect measures** are methods for assessing secondary information on student learning that do not rely on actual samples of student work.
- **Proxy measures** provide data that can corroborate the data found in direct and indirect measures, but do not directly provide evidence of student learning. They should only be used in combination with other data.

Each type of outcome measure serves a particular purpose. Direct measures assess the extent to which students' work meets the learning outcome performance criteria. Indirect measures provide additional evidence, information, and student perspective. Proxy evidence can help triangulate and substantiate other forms of evidence. Proxy evidence should only be used to support other direct/indirect measures; proxy data alone typically does not provide sufficient evidence of learning. Together they provide a richer perspective on student learning by providing evidence and context to understand student performance. It is suggested that each SLO have at least two measures.

Outcome Measures Should Meet Three Criteria

Regardless of the type of measure used, strong measures share three basic qualities:

1. Provide sufficient data and information to measure the learning outcome
2. Are not overly burdensome for departments to collect
3. Have established performance criteria and expected results to help guide the analyses

Checklist of Needed Activity for Developing Outcome Measures:

- At least two measures for each learning outcomes
- Evidence of staff participation in the development of measures
- Established performance criteria for each measure being used
- Expected results for each measure being used

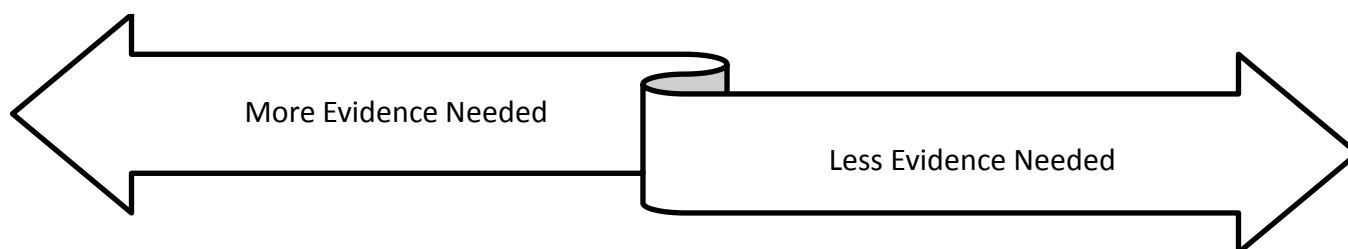


Table 1: Examples of Measures

Proxy	Indirect	Direct
<i>Might provide some supporting evidence, but not on its own.</i>	<i>Self-reported achievement of SLOs.</i>	<i>Direct evidence or observation of learning outcome performance.</i>
<u>Examples include:</u> <ul style="list-style-type: none"> • Usage data • Program effectiveness/outcomes • Satisfaction • Employment rates • Twitter hashtags 	<u>Examples include:</u> <ul style="list-style-type: none"> • Surveys • Group discussions • Focus groups • Exit Interviews • Reflection essays 	<u>Examples include:</u> <ul style="list-style-type: none"> • Artifacts (work samples) • Observations • Performances • Simulations • Supervisor Evaluations

Selecting Direct Measures

There are many issues to consider when selecting direct measures of learning. Programs should determine the most useful way to measure student performance and ensure that the methods allow for appropriate interpretation of results. "Table 1: Examples of Measures" provides a list of some of the more common methods within higher education and can help foster ideas for developing measures. While direct measures are appropriate for co-curricular assessment, they are less commonly used than indirect measures. "Table 2: Methods as Indirect or Direct" also provides examples of adapting currently used methods and how simple adjustments allow collection of different types of co-curricular evidence.

Table 2: Methods as Indirect or Direct

<i>Tools may be direct or indirect, depending upon how they are used and their purposes. See the following examples:</i>		
Method	Indirect	Direct
Minute paper after a workshop on diversity	Perceptions of moral dilemmas regarding diversity	Factual question on the definition of diversity
Survey after a training	Teacher and learner satisfaction	Factual question on knowledge of workshop content
Telephone calls to a department's "help desk"	Students' satisfactions with department services	Qualitative analysis of question sophistication regarding a department's major area of outreach and emphasis

Selecting Indirect Measures

Similar to selecting direct measures, there are many issues to consider when selecting indirect measures of learning. Programs should determine the most useful way to measure student performance and ensure that the methods allow for appropriate interpretation of results. "Table 1: Examples of Measures" provides a list of some of the more common methods within higher education and can help cultivate ideas for developing indirect measures.

The Office of Assessment conducts two campus-wide surveys that may be analyzed as indirect measures of student learning. The National Survey of Student Engagement (NSSE) asks students about their educational experiences and perceived learning gains. The Noel Levitz Survey of Student Satisfaction asks students about the importance of, and their satisfaction with, different aspects of their educational and co-curricular experience.

While university surveys may provide some insights into students' learning experience, they sometimes lack the specificity needed by co-curricular programs in their assessment activity. Accordingly the programs may need to conduct their own primary research to investigate relevant areas further; these methods may be quantitative or qualitative in nature.

Selecting Proxy Measures

While proxy measures should not be the only source of evidence for a learning outcome, they do provide supporting evidence to compliment direct and/or indirect measures. Many co-curricular programs are already collecting data around usage, student satisfaction, and program effectiveness. Ensure that the proxy data connects with the appropriate learning outcome. For example, average number of times a student visits the Office of Career Services can complement a direct measure of observation sheets filled out by career advisors when assessing the impact of the Office of Career Services appointments on students articulating career competencies. This quantitative or qualitative data can be used to support learning outcomes, but make sure to not have it stand alone as the only source of evidence.

Establishing Performance Criteria

When interpreting assessment results, it is useful to set a performance criterion that specifies the acceptable level of student response. For each learning outcome the program should ask, "What is an acceptable performance level for this learning outcome?" This performance level may be any indicator of the quality of student learning.

Establishing Expected Results

By setting expected results for the percentage of students meeting or exceeding a performance level before data collection begins, the program can gauge its effectiveness in helping students meet the learning outcomes. For example: 75% of students met the performance criterion set by the Office of Admissions for the outcome measure on successfully applying to the university. This can be compared to the expected result of 85% meeting the performance criterion, which reveals an area for improvement.

Evaluating Measures

It is possible to evaluate outcome measures by asking the three questions found in "*Tool 1: Questions for Evaluating Outcome Measures.*" If program staff is able to answer "yes" to all of three questions, it is likely that a strong set of measures has been developed.

Tool 1: Questions for Evaluating Outcome Measures

- Does the measure provide sufficient data and information to analyze the learning outcome?
- Does the measure require a reasonable amount of work to collect?
- Does the measure establish a performance level to help guide the analysis?

Useful Links:

- Overview of the Process of Conducting a Focus Group (Center for the Study of Student Life, The Ohio State University): <http://cssl.osu.edu/posts/documents/overview-of-focus-group-resources.pdf>
- Susan Hatfield's Rubrics - <http://course1.winona.edu/shatfield/air/rubrics.htm>
- Susan Hatfield's Assessment Resources - <http://course1.winona.edu/shatfield/air/resources.htm>

EXAMPLE: Improving Outcome Measures

The following example shows how the questions in “*Tool 1: Questions for Evaluating Outcome Measures*” can be used to evaluate outcome measures. This example builds on the learning outcome developed in section one.

- ❖ ***Students engaged in student organizations will be able to*** articulate the skills they have developed through their co-curricular involvement.

A department decides to use the outcome measure:

Two questions from a student survey:

For each of the following skills, please indicate how well you believe your participation in co-curricular activities prepared you to:

1. Determine the most appropriate response to a situation.
2. Work together with others to accomplish a task.

Students respond to these questions by indicating their choice on a four-point scale ranging from “None” to “Very Much.”

We will evaluate this outcome measure by asking the questions found in *Tool 3: Questions for evaluating outcome measures*.

- “Does the measure provide sufficient data and information to analyze the learning outcome?” **Yes**, because this evidence is the student’s opinion. **Note:** While indirect measures are valid and appropriate for co-curricular assessment reporting, it is important to have at least two measures of student learning.
- “Does the measure require a reasonable amount of work to collect?” **Yes**, the amount of work required is reasonable.
- “Does the measure establish performance criteria to help guide the analysis?” **No**, it does not provide a performance criterion to help guide the analysis though one could be developed regarding the student opinion. For example, adding a desired performance level such as students rating a 3 or 4 on a scale of 1 (none) to 4 (very much) could be developed. To improve the measure, develop a performance criterion, i.e. an expectation that students will rate a 3.

Section IV: Collecting Data

Data collection is the next step in the assessment process. This section will cover the process of collecting and analyzing student data. The collection process may seem like a daunting task, but with planning, it can move more smoothly and provide quality data and information about the co-curricular program’s learning outcomes.

The data collection process consists of three basic steps:

1. **gathering** necessary information
2. **evaluating** the results
3. **storing** the data electronically

The **Gathering, Evaluating, and Storing** process is used for both direct and indirect measures; however some of the specific steps will vary. The key to simplifying the data collection process is planning. “*Tool 1: Questions to Ask in Planning Data Collection*” provides a number of questions to think about before gathering data.

Step 1: Gathering

The process of gathering materials for direct measures varies greatly depending on the measures used. When using indirect measures, the gathering phase consists of conducting the necessary research (survey, focus group, or other measures). Programs should set a schedule that outlines the materials needed to simplify follow up and ensure all data is collected.

Tool 1: Questions to ask in Planning Data Collection	
Direct Measures	Indirect Measures
<ul style="list-style-type: none"> • From where is the student work coming? • Does the student work represent all participants involved in the program? • How will the student work be organized and stored for evaluation? • When will it be evaluated? • Who will be responsible for evaluation? • How will the performance data be stored? How will it be secured? • Are there FERPA issues to consider? 	<ul style="list-style-type: none"> • Who will conduct the research for the measure? • When will research be done? • Does the research represent all participants involved in the program (or a reasonable sample)? • How will the results be tabulated or categorized? • If you are using institutional data, will special data analysis needs to be done?

Step 2: Evaluating

Direct Measures

The evaluation phase for direct measures includes the examination of students’ work by program staff to determine the level to which it meets the learning outcome. Evaluation, and supporting tools, can take multiple forms; they can be as simple as a checklist of criteria or expectations to as complex as a multi-level, multi-dimensional rubric. Because assessment looks to evaluate specific aspects of the student work, rubrics are often used as guidelines in the process. We will discuss the elements of an effective rubric.

Tool 2: Steps for Using a Rubric to Evaluate Student Work

- Review the rubric with all evaluators to ensure it is consistently understood
- Use the descriptors in each performance level to guide ratings
- Assign the rating that best represents the student’s work

Effective rubrics are standardized evaluation forms used to assess student work toward meeting learning outcomes. Rubrics can be developed in many different ways to assist the evaluation process. They can describe qualitative as well as quantitative differences, and are often used to assess assignments, projects, portfolios, internships, and performances. They allow multiple evaluators to assess student work effectively by increasing the consistency of ratings and decreasing the time required for assessment. The development of rubrics is covered in [Appendix IB: Rubric Toolkit](#).

Regardless of the type or style of rubric used, there are a few general principles to ensure they are effective. “*Tool 2: Steps for Using a Rubric to Evaluate Student Work*” outlines the basic process of using rubrics. The key to achieving consistency between evaluators is conducting a “norming” session to allow evaluators to reach consensus on the levels of student work at each level of the performance criterion. “*Tool 3: Steps to ‘Norming’ a Rubric*” provides the basic process of a norming session.

Indirect Measures

For indirect measures that the program is conducting, the evaluation phase consists of the compiling of the results into a form that is meaningful to those doing the assessment. For survey data, this will generally include entering the data into a data set for analysis and generating the descriptive statistics. For more qualitative work such as focus groups, this part of the process may be the extraction of any themes or ideas. More information on these processes is in future sections.

Tool 3: Steps In “Norming” A Rubric

- Explain to the raters how to use the rubric
- Provide a few samples of student work
- Discuss each sample and determine how raters determine scores
- Reach a general consensus on each level of the performance criterion

Step 3: Storing

There are two different storage issues which co-curricular programs need to address. The first is an electronic storage system of all the data that are compiled from students’ work and results from indirect measures. Whatever methods are used, it is generally a good idea to use a YSU shared drive to store the data. This makes submitting and accessing the data convenient as well as ensures that the data is backed up by YSU’s data servers.

For tracking direct (and some indirect) measures programs may create an electronic database/Excel spreadsheet to store all of their assessment data for later analysis. The database will typically list all students and their performance on the measure. “*Tool 2: Example of a Program Database*” illustrates how to compile the database of assessment data.

Tool 2: Example of a Program Database					
Last Name	First Name	Year	LO 1: Questionnaire	LO1:Exit Interview	LO2: Focus Group
Allan	Jane	Senior	Complete	More interaction needed	Positive Overall Experience
Miller	Larry	Senior	Complete	Not Present	Positive Overall Experience
Smith	Bob	Senior	Did Not Submit	Satisfactory	
Bloom	Desmond	Junior			Negative Overall Experience
Jones	Robin	Junior			Positive Overall Experience
Smith	Troy	Junior			Negative Overall Experience

Because this database will have individual student information, it is very important to ensure it remains secure and that only program staff involved in the assessment activity has access to the contents. Many times indirect measures may not be trackable by specific students. These types of measures are frequently shared in a descriptive report of aggregated results. The second storage issue facing the co-curricular program revolves around copies of individual responses to surveys or questionnaires. It is generally advisable to retain copies of or access to the measures until the report feedback has been returned. It is best practice to not include students’ names or student ID numbers on copies of any student data.

Additionally, it is recommended that raw data be stored to document the assessment process. Electronic copies of student data can reduce space required for storage. These documents can be scanned and stored as PDF files to help limit the amount of storage space necessary. Best practices suggest that these records should be archived for 10 years to ensure that any records for accreditation would be available if requested.

Student Awareness of Assessment Activity and Privacy Issues

Students should be aware that their responses may be used in the assessment purposes. As noted in the section about keeping data work secure, student work is protected by The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). To comply with FERPA regulations, student work should either be maintained in a secure system with access limited to those involved in assessment or should have all personally identifiable information removed. Even without a name, some student work is considered identifiable if it contains sufficient information about the student to enable the author to be identified.

Strategies for Collecting Data

By reviewing the original planning questions in *“Tool 1: Questions to Ask in Planning Data Collection”* before collecting data, programs can avoid many potential roadblocks in the data collection process. *“Tool 4: Common Data Collection Roadblocks”* outlines the most common problems encountered. They are: data are not collected for stated outcome measures; copies of student work are collected, but cannot be found at the time of evaluation; and there is no clear system for the evaluation of student work resulting in no data for analysis. The following examples list the three common roadblocks that can occur during this process and illustrates an effective plan for data collection.

Tool 4: Common Data Collection Roadblocks

1. Data are not collected for stated outcome measures
2. Copies of student work are collected, but cannot be found at the time of evaluation
3. There is no clear system for the evaluation of student work resulting in no data for analysis

EXAMPLE: Collecting Assessment Data from Direct Measures Effectively

There are three common roadblocks that can stifle the collection of assessment data.

1. Data are not collected for stated outcome measures
2. Copies of student work are collected, but cannot be found at the time of evaluation
3. There is no clear system for the evaluation of student work resulting in no data for analysis

The following example illustrates how to avoid these roadblocks and plan for effective data collection. By answering the questions in “*Tool 1: Questions to Ask in Planning Data Collection*” before data is to be collected, an effective plan can be developed. The example uses the learning outcome and outcome measures found in previous sections. The learning outcome chosen by the program is:

❖ ***Students engaged in student organizations will be able to*** articulate the skills they have developed through their co-curricular involvement.

It will be measured by a direct measure:

Direct Measure: A reflective essay written by students at the end of their co-curricular participation.

The first common roadblock, *data are not collected*, can be avoided by identifying where the student work is coming from. The program director decides that the leaders of student organizations will collect copies of student work from group meetings. The leader will remove the students’ names from student work and affix unique numeric assessment codes to the essays.

The second roadblock, *copies of student work cannot be found for evaluation*, is discussed by the program staff and a system for organizing and evaluating the student work is developed. The organization leader will submit electronic copies of the students’ essays to the program director. The program director will store essays on the secure network drive. This will ensure the data are available for evaluation.

The third common roadblock, *no clear system for evaluating student work*, is avoided by developing a schedule for evaluation of student work. The program staff agree to serve as evaluators for a sample of student essays on a rotating schedule to divide the work equally. Each essay will be reviewed by two program staff members using the rubric developed for this outcome measure. If the reviewers’ ratings do not agree, a third program staff member will review the essay and assign a final rating. Ratings will be recorded on a 1 to 5 scale.

Ratings of student work will be stored in an Excel database located on the secure YSU shared drive and maintained by the program director. Examples of student work for each level of student performance will be stored as PDF files on the network drive and maintained by the program director. By keeping the data on the YSU shared drive, the data are automatically backed up in case of computer failure.

EXAMPLE: Collecting Assessment Data from Indirect Measures Effectively

There are three common roadblocks that can stifle the collection of assessment data.

1. Data are not collected for stated outcome measures
2. Copies of student data are collected, but cannot be found at the time of evaluation
3. There is no clear system for the evaluation of student data, resulting in no data for analysis

The following example illustrates how to avoid these roadblocks and plan for effective data collection. By answering the questions in Tool 1 before data is to be collected, an effective plan can be developed. The example uses the learning outcome and outcome measures found in previous sections. The learning outcome chosen by the program is:

- ❖ ***Students engaged in student organizations will be able to*** articulate the skills they have developed through their co-curricular involvement.

It will be measured by an indirect measure:

Indirect Measure: Two questions from a Student Survey

For each of the following skills, please indicate how well you believe your participation in co-curricular activities prepared you to:

1. Determine the most appropriate response to a situation.
2. Work together with others to accomplish a task.

Students respond to these questions by indicating their choice on a four-point scale ranging from “None” to “Very Much”

The first common roadblock, *data are not collected*, can be avoided by identifying where the information is coming from. For this indirect measure, survey data will be obtained from the Office of Assessment. The survey data is collected across the institution annually, and the first roadblock is avoided.

The second roadblock, *copies of student data cannot be found for evaluation*, is discussed by the program staff and a system for obtaining the data on the program’s students is developed. The program director volunteers to request the survey data for students. This requires a special extraction of the responses for the program’s students from the main survey database.

The third common roadblock, *no clear system for evaluating student work*, is avoided by developing a schedule for evaluation of student data. The data will be analyzed by a designated staff member to determine the percentage of students responding at each level of the measurement scale for each question. The results of this analysis will be stored in the secure Excel database on the program’s secure YSU shared drive. This avoids roadblocks two and three in this example.

Section V: Analyzing Assessment Data

Analysis of data is the next step in the assessment process. Analysis is a process that provides better understanding of data and allows inferences to be made. It summarizes the data, enhances the value of information gathered, and provides direction for decisions regarding co-curricular program improvement. While data analysis can be complex, for the purpose of assessment it is usually straightforward.

This section discusses the core elements of data analysis and provides strategies for and examples of analysis. The underlying theme of this section is to illustrate how to link data to the learning outcomes and provide a basis for using data to improve student learning.

Before Analyzing Data

Two important steps should be completed before analyzing data. The first step is to review the data visually. Reviewing data has two benefits, it allows for the identification of outliers and possible mistakes, and it enables basic patterns or trends to emerge. For example, it may be clear that all students who participated in an activity had difficulty with a particular outcome.

Checklist of Needed Activity for Analyzing Assessment Data:

- An indication of the number students participating in the assessment activity for each outcome measure
- The percentage of students who met or exceeded the performance criterion for each outcome measure.

The second step of the process is to determine the appropriate method for analyzing the data. This can range from simply counting the number of successful students to high-level statistical analysis. The two key factors to data analysis are to first make sure the analysis method fits the data, and then to ensure that the method aligns with the co-curricular program's needs. There are two types of data used in assessment, each with different methods of analysis.

1. **Categorical data** are based on groupings or categories for the evaluation of student performance. For example a simple yes/no answer on a survey is categorical because there are two groups into which students can be placed.
2. **Numerical data** are based on scales that reflect student performance. For example, a survey question that asks students how satisfied they are on a satisfaction scale.

Direct measures can generate either categorical or numerical data. Students' reflection essays rated on an assessment rubric may be categorized as "meeting standard" or "failing to meet standard". However, the essays may alternatively be scored using a rubric with a numerical scale indicating the overall quality of the paper with respect to the learning outcome.

Indirect measures can also generate either categorical or numerical data. By asking students on a questionnaire, "Did you have sufficient skill development in the program?" a program would compile categorical data based on those saying "yes" and those saying "no." However, by asking students to indicate how strongly they agree with a statement such as, "there was sufficient skill development offered through this program," numeric data could be generated by applying an agreement scale (5 – Strongly Agree, 4 – Agree, 3 – Neither, 2 – Disagree, 1 – Strongly Disagree).

Analyzing Assessment Data

After reviewing data and determining the type of analysis, the process of analyzing data follows. "*Tool 1: Methods For Analyzing Data*" provides a brief overview of the basic methods used to analyze assessment data. Assessment's focus on student achievement of learning outcomes typically requires the determination of counts and percentages. Together they clearly show the number of students involved in the activity and the rate of successful display of the outcome. All data, regardless of type, can be analyzed using counts and percentages.

Numeric data has the additional benefit of being able to be analyzed using descriptive statistics. Mean, median, and

mode provide useful information to interpret data by allowing for easier comparison between groups.

The Impact of Dispersion

By examining how data points are distributed around measures of central tendency, particularly the mean and median, a richer understanding of the data can emerge. The standard deviation represents the average deviation of scores around the mean. Small standard deviations in student performance indicate that performance levels varied little across students in the sample. Large standard deviations indicate a greater variability in levels of student performance. Standard deviations are commonly reported with the mean. Percentiles represent the percentage of a distribution of scores that are at or below a specified value. They are calculated by the formula $Percentile = S_b/n$

$\times 100$, where S_b is the number of scores below the score of interest, and n is the total number of scores. They are often reported with the median, which by definition is the 50th percentile. For example: a median score of 75 on a final exam would be the 50th percentile indicating 50% of students scored above 75 and 50% scored below. By examining the 25th, 50th, and 75th percentiles one can gain a sense of a student's performance relative to the group.

Tool 1: Methods for Analyzing Data

- **Percentage:** Proportion of total cases falling into a category
- **Mean:** Average of a set of scores
- **Median:** Middle value in an ascending list of scores
- **Mode:** Most frequent score
- **Standard Deviation:** Average distance of scores from the mean
- **Percentile:** Percentage of a distribution of scores that is equal to or below a specified value

Missing Data and Valid Responses

Working with assessment data, there are many instances when data will not be available for every student. As a general rule, missing data should be excluded from calculations of percentages and descriptive statistics. If a program has ten (10) students, and eight (8) submit a survey for the assessment of an outcome, then eight (8) submitters become the basis of the analysis. Extending the example, if six (6) of the submitted surveys meet or exceed the performance criterion, then a program would indicate 75% of students submitting papers showed mastery of the outcome rather than 60% of all students in the program showed mastery of the outcome.

Analyzing Data in Small Programs

In co-curricular programs with a small number of participants, or a small sample of data, it may be appropriate to aggregate multiple collections of data for analysis in order to be able to use findings for program improvements. For example, data may be collected from a culminating activity yearly to evaluate an outcome, but would only be analyzed once in an assessment cycle using three years' worth of data.

Presenting Analysis

Tables and graphs are useful in presenting analysis because they focus attention to specific results. Tables are useful for reporting multiple percentages and frequencies, comparison of student performance with stated performance criteria, and descriptive statistics. Tables provide an ordered way for readers to see results quickly for each outcome measure without having to search through text to find a particular result. Graphs can further enhance the visual impact of assessment results. Graphical representations of results show differences in variables, which makes graphs highly effective in showcasing assessment results.

When sharing the results of co-curricular program assessment, it may be useful to report each learning outcome and outcome measure paired with the corresponding results of the analyses; joining the multiple outcome measures (direct, indirect, and proxy) for each learning outcome. Next, compare the results with the specified performance criterion and discuss the implications of the data as they relate to the co-curricular program. Both strengths and areas for improvement are discussed, because showcasing program success is just as important as identifying areas for improvement when it comes to making data based decisions about the program.

Tool 2: Example of Table of Counts and Percentages				
	# of students evaluated	% of students		
		Below Performance Criterion	Meeting Performance Criterion	Above Performance Criterion
Articulate career readiness competencies	20	30	50	20
Discuss career fields that are in-demand in the State of Ohio	18	6	6	88

When comparing student performance to specified performance criteria, a table with the counts and percentages may be useful to summarize the data. The example in *“Tool 2: Example of Table of Counts and Percentages”* shows data collected from 20 students participating in a student assessment related to two Office of Career Services’ learning outcomes. It indicates the number of students completing the component and the percentage who were below, met, and above the performance criterion. While 70% of students in the example first-outcome achieved or exceeded the standard, 30% were below the performance criterion.

EXAMPLE: Conducting Analysis of Student Performance

Once the student survey data has been evaluated by program staff, the data is recorded and analyzed for interpretation. Analysis provides summaries of the data in a form that is more easily understood than raw data. In order to do this the program assessment coordinator reports the number of students who meet or exceed the standard for this learning outcome measure. This count might be displayed in the chart below:

Students Meeting or Exceeding the Performance Criterion for Co-Curricular Skills	
35	

While this gives a count of the number of students meeting the performance criterion; it is also valuable to further classify their students’ abilities.

Students Meeting or Exceeding the Performance Criterion for Co-Curricular Skills	
Below Standard	Met Standard
5	35

This table shows that thirty-five (35) students in the program met the standard, but numbers by themselves are sometimes difficult to interpret. To facilitate greater understanding, reporting the percentage of students below the standard and those meeting the standard aid in interpretation of the data. The table below shows this.

Percentage of Students Meeting or Exceeding the Performance Criterion for Co-Curricular Skills	
Below Standard	Met Standard
12% (5)	88% (35)

Choosing how much information to provide from any data analysis should be guided by the type of data gathered and the needs of the readers that will be interpreting the results. The analyses may vary for each learning outcome measured.

The Role of Advanced Statistical Analysis

As a program’s assessment activity and data increase, more advanced analysis may be useful in understanding student learning. It is possible to:

- Study differences in performance to examine the effects of curricular change

- Conduct pre- and post- assessments to evaluate effect of specific learning experiences
- Compare program participants to national performance benchmarks

The Office of Assessment can work with programs looking to incorporate these and other types of analysis into their assessment activity.

Useful Link:

- Analyzing Assessment Data - <https://www.youtube.com/watch?v=BgYEWVTiu80>

Section VI: Share Results

The next step of the cycle is sharing results of program assessment. This phase focuses on interpreting strengths and challenges/areas for improvement, and identifying recommendations and action steps to enhance student learning. Included in the “*Checklist of Needed Activity for Sharing Results*,” are three steps for sharing assessment results.

Work With Program Staff to Understand Assessment Results

Including program staff in all steps of the assessment process is important to ensure its meaningfulness and effectiveness. The inclusion of program staff insights is probably most important in interpreting results and identifying strategies/action steps for improving student learning. In addition, **it is a specific expectation of our accrediting body that program staff substantially participate in assessment; at a minimum all should participate in interpreting results, identifying action steps, and implementing improvements.**

The methods used for sharing results is driven by the staffing structure of the co-curricular program, with some program staff pouring over all the data generated and others simply reviewing a summary analysis. Using summary reports of assessment results and the university Assessment Council's review of the previous year's report will typically facilitate rich discussion and generate useful interpretation for the assessment report.

Checklist of Needed Activity for Sharing Results:

1. Work with program staff to understand assessment results
2. Decide stakeholders with whom to share the results
3. Create appropriate materials for stakeholder groups

Decide Who Needs to See the Results

In addition to staff within the program, there are potentially other audiences that wish to see the work co-curricular programs are doing to improve student learning. The first and most important group to share results with is the students themselves. Sharing results with students is both a strong message of the quality programming provided for students and can also inform students on how best to be successful. For example, if students who participate in a key activity tend to excel in other areas, then sharing that with new students could help them plan their schedules to include that activity. Similarly, sharing results with graduating seniors could provide rich information regarding context of results and/or suggestions for improvement.

In addition to students, sharing results with alumni, other departments, or the division provides opportunity to demonstrate co-curricular program continuous improvement through student learning assessment, as well as get feedback from colleagues who might be able to make suggestions and/or assist in making program improvements.

Finally, because we are expected by our accrediting body, the Higher Learning Commission (HLC), to demonstrate program quality through student learning outcomes assessment, it is critical that programs share results with the Office of Assessment. By reporting results to the OOA, it both provides evidence of assessment processes and opportunity for the OOA to provide resources, suggestions, and feedback to improve program assessment processes and outcomes. Part 2 of the Assessment Handbook outlines the types of reports that programs must submit on a yearly basis.

Create Appropriate Materials for Your Audience

With many stakeholder groups, it may be appropriate to just share a small portion of the data. For example, the Office of Career Services might share just the results from the evaluation of career readiness at the division level as it may be of interest to others in related co-curricular programs. In other cases, a co-curricular program may just wish to focus on the action steps taken as a result of assessment data, such as in a newsletter.

With reports to the Office of Assessment, it depends on where the program is in the assessment cycle. Plans should provide detail on how programs plan to collect and evaluate data. In yearly updates the focus should be on the evaluation/interpretation of the data, and what action steps were identified and implemented as a result. Finally, the assessment cycle reflection should provide a more holistic analysis of the assessment cycle and how program improvements have impacted learning. More detail on the specific reporting requirements is in Part 2 of the Handbook.

Section VII: Reflect and Begin Again

Assessment is a cyclical process that builds on previous work and activity. The “assessment loop” is closed once a program takes findings from its assessment results and implements changes based on those findings. Though not always, assessment findings often indicate a need to modify the assessment process or programming. Making any change also requires consideration of resources and developing a plan of action. The following section provides a framework for thinking about taking action to close the assessment loop.

When and Where “Closing the Loop” Occurs

Change for improvement happens all the time in co-curricular programs; for example, events respond to trends, or program staff make adjustments to their activities based on student participation and their professional judgement. However, in assessment processes specifically there tend to be two key places in which changes are mainly concentrated.

Changes in the Assessment Process

When reviewing the assessment results, it is also important to evaluate the assessment process. This involves considering all aspects involved in creating the assessment report. Reviewing learning outcomes as well as approaches to gathering data will provide direction on improving the assessment process. **Changes in the assessment process are generally done during the development of an assessment plan**, though sometimes may happen during data collection and evaluation.

Tool 1: Re-Assessing Learning Outcomes	
Results From Assessment Activity	Likely Use of Outcome During Next Cycle
Students not performing adequately relative to outcome	<ul style="list-style-type: none"> • Consider making outcome a priority focus in next cycle. Consider potential action steps for improvement. Re-assess more than once in next cycle. • Evaluate any action steps taken during last cycle: <ul style="list-style-type: none"> ○ If action steps impact student learning immediately, re-assess outcome using same measure early in plan. ○ If recommendations impact student learning over an extended timeframe, schedule re-assessment for further out in plan.
Students performing adequately relative to outcome	<ul style="list-style-type: none"> • If same results for the past 3 years, consider scheduling re-assessment at an appropriate interval (e.g. only once in cycle).

<p>Students' performance relative to outcome yields unclear current results</p>	<ul style="list-style-type: none"> • If difficulty in determining appropriate level relates to outcome, re-write outcome and reassess during next cycle. • If difficulty relates to measures, retain outcome, revise measure, and re-assess during next cycle.
---	--

Learning Outcomes

“Tool 1: Re-Assessing Learning Outcomes” provides a structure for reviewing student learning outcomes. Based on findings from the student learning outcome assessment results, a program may want to retain, modify, or eliminate an outcome.

Measures

In addition to changing outcomes, there might be a need to change the type of data collected. If results obtained were not as expected, it is also important to know if better information could be collected to demonstrate student learning. This change could vary from modifying items on a survey to creating a new metric.

Data Collection Procedures

In addition to having the correct measures, it is also important to consider how data were collected in previous assessment cycles. Knowing who was included in the assessment data and when data were collected are important to understanding if changes need to be made in data collection procedures.

Changes in the Co-Curricular Program

Results from the student learning assessment process may indicate that programming needs to be reviewed and adjusted. These are the types of changes as a result of the yearly practice of measuring and evaluating student learning outcome data. Changes tend to be very specific to the results of the assessment data. For example, a program may determine that an outcome in the co-curricular program is not achieved by a specific intervention, and a program may appropriately decide on several possible action steps, such as developing intervention guidelines, requiring an additional intervention, or evaluating development of the outcome across the program. Any or all of those action steps could serve to improve the outcome in the program.

Consider Resources

Closing the assessment loop for the assessment process or program may require the use of additional resources. Discovering the need for additional activities or programming may require resources beyond current budgets. In addition to fiscal resources, there are other resources such as time to consider. Modifying materials or programming requires time, which is a valuable resource.

Taking Action

Opportunities to improve the assessment process and programming may emerge from assessment results, but will not be realized without planning and implementation. The assessment loop is only closed if actions are taken to make modifications where necessary. Answering who, what, when, and where questions about assessment modifications are helpful to planning and implementing any changes. “Tool 3: Questions for Planning Change” provides a few questions to assist with mapping and implementing changes.

<p>Tool 3: Questions for Planning Change</p> <ul style="list-style-type: none"> • Who will implement the changes? • Who needs to be involved to make these changes successful? • What will be changed? • What needs to occur in order for things to change? • When will the changes be put in place? • Where will they be implemented? • How will they be implemented?
--

Appendix I

Appendix IA: Bloom’s Taxonomy

Action verbs are abundant in the English language, but how do we know which ones are right to include in our SLO statements?

Benjamin Bloom, an American educational psychologist, created what is now known as “Bloom’s Taxonomy” and this taxonomy is frequently used to assist program staff in creating SLOs that properly address student learning. Bloom’s Taxonomy is a taxonomy of learning behaviors and is organized into three domains: the cognitive (knowledge/mental skills), the affective (emotional skills), and the psychomotor (physical skills). While the cognitive domain is the most well-known of the three domains, the affective and psychomotor domains also contain important learning behaviors identified by Bloom (Bloom, 1956; Krathwohl, Bloom, & Masia, 1965).

Revisions to the taxonomy structure have been made since Bloom’s original work and currently each level of learning in each domain contains action verbs to describe that type and level of learning (Anderson & Krathwohl, 2001; Krathwohl, 2002).

The categories below and the actions verbs that are related to each category should assist program staff in choosing the appropriate action verbs for a co-curricular program SLOs. Choose an action verb from one of the three domains for each SLO.

Cognitive Domain: Definitions and Action Verbs

The cognitive domain involves knowledge and the development of intellectual skills (Bloom, 1956). This table includes information from the revised cognitive domain, beginning with the lowest level of learning and ending with the highest. The categories can be thought of as degrees of difficulty.

Category and Definition	Action Verbs for SLOs
<u>Remembering</u> : The learner is able to recall, restate, and remember learned information.	choose, cite, enumerate, group, label, listen, locate, match, memorize, name, outline, quote, read, recall, recite, record, relate, repeat, reproduce, review, select, show, sort, underline, write
<u>Understanding</u> : Comprehending the meaning, translation, and interpretation of instructions or problems.	account for, annotate, associate, classify, convert, define, discuss, estimate, explain, express, identify, indicate, interpret, observe, outline, recognize, reorganize, report, research, restate, retell, review, translate
<u>Applying</u> : (critical thinking) The learner grasps the meaning of information by interpreting and translating what has been learned.	adapt, apply, calculate, change, collect, compute, construct, demonstrate, dramatize, generalize, illustrate, interpret, make, manipulate, show, solve, translate

<p>Analyzing: (critical thinking) The learner breaks information into its parts to best understand that information in an attempt to identify evidence for a conclusion.</p>	<p>analyze, appraise, arrange, calculate, categorize, compare, contrast, debate, detect, discriminate, dissect, distinguish, examine, experiment, infer, relate, research, scrutinize, sequence, sift, summarize, test</p>
<p>Evaluating: (critical thinking) The learner makes decisions based on in-depth reflection, criticism, and assessment.</p>	<p>appraise, argue, assess, choose, compare, conclude, criticize, critique, debate, decide, deduce, defend, determine, differentiate, discriminate, evaluate, infer, judge, justify, measure, predict, prioritize, probe, rank, rate, recommend, revise, select, validate</p>
<p>Creating: (critical thinking) The learner creates new ideas and information using what has previously been learned.</p>	<p>act, blend, compile, combine, compose, concoct, construct, create, design, develop, devise, formulate, forecast, generate, hypothesize, imagine, invent, organize, originate, predict, plan, prepare, propose, produce, set up</p>

The Affective Domain: Definitions and Action Verbs

The categories in the affective domain relate to learners' attitudes, behaviors and values. Like the cognitive domain, the affective domain has hierarchal categories. As a learner moves up in the categories, they become more involved, committed and self-reliant. In the lower levels, learners are considered externally motivated and in the higher ones they are internally motivated. The information in this table begins with the lowest level of affective learning and ends with the highest level (Bloomsburg, 2011).

Category and Definition	Action Verbs for SLOs
<p>Receiving: (awareness; external motivation) The learner is willing and open to listening to certain stimuli or phenomena.</p>	<p>accept, acknowledge, ask, attend, describe, explain, follow, focus, listen, locate, observe, receive, recognize, retain</p>
<p>Responding: (react; external motivation) Learners actively participate and attend or react to particular phenomena. However, learners may be doing so because they are required or expected to participate, respond, or obey when asked or directed to do something.</p>	<p>behave, clarify, comply, contribute, cooperate, discuss, examine, follow, interpret, model, perform, present, question, react, respond, show, study</p>
<p>Valuing: (comprehend and act; external motivation) The worth or value a learner places on a specific object, phenomenon, or behavior. Valuing is based on the internalization of a set of specific values and the learner expresses these values in his/her overt behavior.</p>	<p>accept, adapt, choose, differentiate, initiate, invite, justify, prefer, propose, recognize, value</p>

<p><u>Organizing</u>: (personal value system; internal motivation) A learner commits to a certain set of values. During this process, the learner organizes his/her values, prioritizes some over others, reorganizes internal conflicts between them, and creates a unique value system. The learner then can make appropriate choices between things that are and are not valued.</p>	<p>adapt, adjust, alter, arrange, build, change, compare, contrast, customize, develop, formulate, improve, manipulate, modify, practice, prioritize, reconcile, relate, revise</p>
<p><u>Internalizing</u>: (adopt behavior; internal motivation) All behaviors a learner displays are consistent with the learner's value system. The resulting behaviors are consistent, predictable, and represent the characteristics of the learner. These behaviors could be categorized into social, emotional, and personal patterns of learner adjustment.</p>	<p>act, authenticate, characterize, defend, display, embody, habituate, influence, internalize, produce, qualify, questions, solve, validate, verify</p>

The Psychomotor Domain: Definitions and Action Verbs

The categories in the psychomotor domain relate to the development of physical skills and manual tasks. These skills demand certain levels of physical dexterity. Unfortunately, Bloom never published his manuscript on the psychomotor domain. Several scholars have published works with hierarchal categories for the psychomotor domain. For the purposes of student learning outcomes, the psychomotor taxonomy created by Simpson in 1972 will be explained here (Bloomsburg, 2011). The information in this table begins with the lowest level of psychomotor skills and ends with the highest level.

Category and Definition	Action Verbs for SLOs
<p><u>Perception</u>: The learner's ability to use his/her senses to absorb data for guiding movement.</p>	<p>describe, detect, differentiate, distinguish, hear, identify, recognize, select</p>
<p><u>Set</u>: The learner's readiness to act. This could be considered a person's mental, physical, and emotional mindsets.</p>	<p>arrange, begin, display, explain, move, proceed, react, show, state, and volunteer</p>
<p><u>Guided Response</u>: The early stage in learning a complex skill. This stage includes learner trial and error.</p>	<p>copies, traces, follows, reacts, reproduces, responds.</p>
<p><u>Mechanism</u>: The intermediate stage in learning a complex skill. Learned responses are now habitual and movements can be performed with basic proficiency.</p>	<p>assembles, calibrates, constructs, dismantles, displays, fastens, fixes, manipulates, measures, mends, mixes, organizes, sketches</p>

<p><u>Complex Overt Response:</u> The expert stage in learning a complex skill. The learner can perform motor acts that involve complex movement patterns that are quick, accurate, and highly coordinated. The learner performs without hesitation.</p>	<p>assembles, calibrates, constructs, dismantles, displays, fastens, fixes, manipulates, measures, mends, mixes, organizes, sketches</p> <p>*Note: while these are the same action verbs as in the mechanism stage, here an adverb or adjective should be placed before the verb to indicate that the performance is quicker and more accurate.</p>
<p><u>Adaptation:</u> Skills are well developed and the learner can modify movement patterns to fit special requirements.</p>	<p>adapts, alters, changes, rearranges, reorganizes, revises, solves</p>
<p><u>Origination:</u> The learner creates new movement patterns to fit a particular problem or situation. The learner is creative with his or her highly developed skills.</p>	<p>arranges, builds, combines, composes, constructs, creates, designs, initiates, makes, modifies, originates</p>

References

- Bloom, B. S. (Ed.). Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: Handbook I: Cognitive domain*. New York, NY: David McKay.
- Bloomsburg Univeristy. (2011). *Outcomes assessment essentials: Articulate goals, objectives, and outcomes*. Retrieved from http://orgs.bloomu.edu/tale/documents/OAE1_ArticulateGoals_.pdf
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212-218.
- Krathwohl, D.R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives: The classification of educational goals. Handbook II: The affective domain*. New York, NY: David McKay.

Appendix IB: Rubric Toolkit

Rubrics are sets of guidelines that aid in the assessment of student work or activities. Rubrics are often derived from careful analysis of varying qualities of student work. By examining the student work and defining the characteristics of “below performance criterion” work, work that “meets the performance criterion,” and work that “exceeds the performance criterion,” program staff can start developing a rubric that will categorize the students’ papers based on quality. Rubrics increase the reliability of assessment by making the process of scoring student work more consistent. This helps eliminate bias by ensuring student work is rated on the same criterion.

Types of Rubrics

There are three basic types of rubrics: **checklists**, **holistic rubrics** and **analytic rubrics**. **Checklists** are the simplest type of rubric and list accomplishments that are evident in the students’ work. **Holistic rubrics** describe levels of performance with regards to the overall quality of the paper or project as a whole, without considering the components of student work separately. **Analytic rubrics**, guide the scoring of student work on multiple traits first, and then sum the individual scores to arrive at a total score. “*Tool 1: Description of Types of Rubrics*” illustrates the differences among rubrics.

Tool 1: Description of Types of Rubrics	
Type of Rubric	Description
Checklists	Provide a check-off list of accomplishments completed and/or present
Holistic Rubrics	Contain narrative descriptions to focus on the quality of the entire document/performance/project rather than the components of specific traits
Analytic Rubrics	Contain descriptions of each level of performance for each component/criterion/trait

Checklists give a list of content that should be included in students’ work. The content may be listed sequentially indicating the order in which it should occur. The evaluator marks each item on the checklist that the student has completed or included in their work.

Holistic rubrics assess the overall quality of student work by providing descriptions of student work at different levels of performance. These descriptions define the overall characteristics of student work at each level of performance. Holistic rubrics provide an overview of student performance and have the advantage of quick scoring. However, holistic rubrics do not differentiate between multiple traits and therefore may not provide as detailed a picture of student performance as an analytic rubric. They are most useful when a single trait is sufficient to define the quality of student work.

Developing Holistic Rubrics

The first step in developing a **holistic rubric** is to identify the components in the student work that are related to the learning outcome. These components should be linked to the student learning outcomes developed as part of the co-curricular program’s assessment plan. After the components are identified, the next step is to decide how many levels are necessary to classify the quality of students’ work. The descriptors chosen for the mid-point level of the rubric should describe the primary characteristics of the students’ work that meet the minimum acceptable program standard.

Analytic rubrics provide separate evaluation of student work on multiple traits. They can pinpoint particular areas where students need improvement, which can be used during planning to suggest opportunities to improve instruction. One drawback to the use of analytic rubrics is that they require more time to use than holistic rubrics.

Developing Analytic Rubrics

The first step in developing an **analytic rubric** is to identify the trait or traits (knowledge, skills, or abilities) to be

measured. Traits should be linked to the student learning outcomes and developed as part of the co-curricular program assessment plan. The number of traits to include in the **analytic rubric** should be guided by the learning outcome.

The next step is to decide how many levels are necessary to classify the quality in student work for each trait being measured. The descriptors chosen for each level of the rubric should describe the primary characteristics of students’ work for each of the selected traits. Sometimes it can be difficult to find meaningful descriptors for several levels of performance. Remember, all of the characteristics listed must be reflected in the students’ work in order to be scored as meeting that level of the rubric. *“Tool 2: Internet Resources for Developing Rubrics”* provides links that may useful in developing rubrics.

Tool 2: Internet Resources for Developing Rubrics

<http://rubistar.4teachers.org/index.php>
http://www.teach-nology.com/web_tools/rubrics/general
<http://www.rcampus.com/indexrubric.cfm>
<http://teacher.scholastic.com/tools/rubric.htm>
<http://www.learner.org/workshops/hswriting/interactives/rubric/>

Example Checklist:

Checklist for Articulating Skills Learned in Co-Curricular Organizations

The paper:	Yes	No
Identifies co-curricular level of participation	<input type="checkbox"/>	<input type="checkbox"/>
Discusses two skills learned through participation	<input type="checkbox"/>	<input type="checkbox"/>
Shares example of ways to apply skills in personal and/or professional life	<input type="checkbox"/>	<input type="checkbox"/>

Example Holistic Rubric:		
Below Standard	Meets Standard	Exceeds Standard
The essay: identifies little to no information about levels of co-curricular participation discusses one or no skills learned through co-curricular participation does not share examples of how to apply skills in personal and/or professional life	The essay: identifies co-curricular level of participation discusses two skills learned through co-curricular participation shares examples of ways to apply skills in personal and/or professional life	The essay: identifies co-curricular level of participation referencing specific organizations, activities, and experiences discusses two skills learned through co-curricular participation linking them to the activities where they were learned shares examples of ways to apply skills in both personal and professional life

Example Analytic Rubric:			
Characteristics/Traits	Below Standard	Meets Standard	Exceeds Standard
Identifies level of co-curricular participation	Identifies little to no information about participation	Identifies co-curricular level of participation	Identifies co-curricular level of participation referencing specific organizations, activities, and experiences
Discusses skills learned through co-curricular participation	Discusses one or no skills learned through co-curricular participation	Discusses two skills learned through co-curricular participation	Discusses two skills learned through co-curricular participation linking them to the activities where they were learned
Shares examples of how to apply skills in real world settings	Fails to share examples of how to apply skills in real world settings	Shares examples of ways to apply skills in personal and/or professional life	Shares examples of ways to apply skills in both personal and professional life

Appendix IC: Glossary

- **Action Verb:** A verb that reflects overt behavior that can be observed
- **Analysis:** Process of summarizing information to make inferences about student learning and program effectiveness
- **Assessment Council (AC):** interdisciplinary group composed of faculty, staff, students, and administrators who, with the Office of Assessment, works together with the aim of improving learning on campus
- **Assessment Cycle Reflection:** A program's comprehensive look at the past assessment cycle
- **Assessment Plan:** A program's plan (usually 3-5 years) for student learning outcomes assessment
- **Assessment Update:** A program's yearly submission of progress on student learning outcomes assessment
- **Categorical:** Data that are grouped by performance
- **Closing the Assessment Loop:** Implementing changes based on assessment findings
- **Co-Curricular:** Programs on campus that provide opportunities for student learning, but are not an academic program
- **Data:** Quantitative or qualitative scores attributed to student work or responses to indirect measure data collections
- **Database:** Electronic collection of data relating to student performance or responses
- **Descriptive Statistics:** Standard formulas that generate numeric indicators of data allowing easier interpretation and comparison of data
- **Direct Measures:** Assessments that evaluate actual samples of student work
- **Evaluator:** Person responsible for evaluating students' work using rubrics and other standardized forms
- **Expected Results:** Pre-specified percentage of students expected to meet or exceed the performance criterion
- **Graph:** A pictorial display used to help analyze and interpret data.
- **Indirect Measures:** Assessments that analyze supportive evidence, information, and student perspective of learning
- **Learning Outcome Map :** Identifying where learning outcomes are supported in the programming
- **Measurable Outcomes:** Outcomes that can differentiate the quality of student performance
- **Numerical:** Data that are measured on scales that reflect student performance
- **Observable Outcomes:** Outcomes that can be evidenced by student work or other data
- **Office of Assessment (OOA):** Office at YSU that coordinates and supports assessment activities across campus
- **Outcome Measures:** Methods for assessing student mastery of learning outcomes
- **Outliers:** Extreme values outside the expected range that should be reviewed for data entry or other errors
- **Performance Criterion:** Pre-specified level of acceptable of student performance (direct measures) or response (indirect measures)
- **Rubrics:** Standardized evaluation forms used to assess student work toward meeting learning outcomes
- **Student Learning Outcomes (SLOs):** Statements that specify what students will know or be able to do as a result of earning their degrees
- **Success Rate:** Percentage of students meeting the program standard
- **Table:** A listing of data in a systemic format to facilitate comparison and analysis.

PART 2

Reporting Requirements

Section VIII: Co-Curricular Assessment Reporting Requirements at YSU

The following information is designed to provide a timeline for co-curricular program assessment over a specific time period (typically between 3 and 5 years, but selected by a program). **Table 1** below can be used as an example to guide the suggested assessment activities for each year in the Assessment Cycle for co-curricular programs. Templates for suggested activities are located in the Appendix.

The Assessment Cycle begins with an Assessment Plan and ends with a Cycle Reflection at the end of a cycle for co-curricular program assessment.

Types of Reporting Requirements

Assessment Foundation Documents: Program Student Learning Outcomes and a Learning Opportunity Map are created at a program's inception and reviewed for currency when developing or revising assessment plans. These submissions help provide the goals of the program translated into outcomes and also provide a holistic overview of where and how learning is developed throughout learning opportunities.

Assessment Plan: A program's Assessment Plan is designed to be completed at the start of the assessment cycle. Assessment Plans detail the measurement of all student learning outcomes in the program over the next several years.

Assessment Update: After completing an Assessment Plan, programs will report on the progress of the Plan for the next consecutive years using the Assessment Update template. Updates will focus on the student learning outcomes the program focused on the prior year, how the program measured the outcome, what the program learned from the data, and how the program will make modifications to improve student learning. The following year's Update will focus on a different student learning outcome(s). Between the consecutive years of Updates, a program will touch on all student learning outcomes at least once.

Assessment Cycle Reflection: The Assessment Cycle Reflection is meant to be a summative look at the past years of assessment (including planning, outcome measuring, analysis of student learning, and action steps for improvement). The Cycle Reflection is completed in the last year of the assessment cycle. Cycle Reflections are meant to gauge the health and status of student learning and assessment processes in a program.

Review Process

The review process of any assessment submission is focused on providing support and enabling a program to effectively and efficiently evaluate learning in the program. There is evaluation of assessment processes in order to ensure that programs are maintaining high standards in assessing learning, but it is the vitality of the program's assessment processes, not results, the Office of Assessment will evaluate in its review.

Once submitted, a small group of co-curricular departments meet as a team to review the plans and provide feedback in a group setting. The Office of Assessment will compile suggestions and may provide additional feedback. The report is returned to the program with feedback and suggestions for improvement meant to inform assessment moving forward. Occasionally reports are returned for revision or a consult is scheduled to gather more information or work toward process improvements.

Reporting Schedule

With integration of assessment reporting into a cycle (years depending on program needs), the needs and types of assessment reporting will follow a more set schedule. See below for more information. If you are unsure of what report to submit after reviewing the reporting schedule, please [contact our office](#) for additional guidance.

Table 1: Sample Assessment Activities for Co-Curricular Programs Based on a 5 Year Cycle
(modify Years 2 through 4 based on length of cycle and number of outcomes)

CO-CURRICULAR PROGRAM ASSESSMENT CYCLE	
Year 1	<ul style="list-style-type: none"> • Review and/or modify a complete set of Student Learning Outcomes for your program (these will be broken down and analyzed separately in each year and then comprehensively in Year 5) • Review and/or modify the learning opportunity map to reflect any updates • Complete and submit all parts of Assessment Plan (found in Appendix); June deadline • Use Assessment Plan to determine subset of Year 1 Student Learning Outcomes • Collect data on Year 1 SLOs
Year 2	<ul style="list-style-type: none"> • Analyze data on Year 1 SLOs • Submit Assessment Update detailing what you learned from analyzing Year 1 SLOs; June deadline • Suggest Action Steps to improve student learning on selected SLO's (if necessary) • Implement Action Steps from Year 1 update (if necessary) • Use plan to determine subset of Student Learning Outcomes to be focused on for Year 2 • Collect data on Year 2 SLOs
Year 3	<ul style="list-style-type: none"> • Analyze data on Year 2 SLOs • Submit Assessment Update detailing what you learned from analyzing Year 2 SLOs; June deadline • Suggest Action Steps to improve student learning on selected SLO's (if necessary) • Implement Action Steps from Year 2 update (if necessary) • Use plan to determine subset of Student Learning Outcomes to be focused on for Year 3 • Collect data on Year 3 SLOs
Year 4	<ul style="list-style-type: none"> • Analyze data on Year 3 SLOs • Submit Assessment Update detailing what you learned from analyzing Year 3 SLOs; June deadline • Suggest Action Steps to improve student learning on selected SLO's (if necessary) • Implement Action Steps from Year 3 update (if necessary) • Use plan to determine subset of Student Learning Outcomes to be focused on for Year 4 • Collect data on Year 4 SLOs
Year 5	<ul style="list-style-type: none"> • Analyze data/reporting/Action Steps from past 4 years on all SLOs included in the program's Assessment Plan • Complete comprehensive Assessment Cycle Reflection detailing how you use the assessment process to improve learning for students in the program; June deadline
End of Cycle; begin again at Year 1 next year	

Appendix IIA: Foundational Documents

Connecting Departmental Goals with Student Learning Outcomes Template

This document may be used as a tool for programs new to assessment to begin translating their department or program goals into learning outcomes:

Mission/Goals of Department (especially as related to YSU Mission)	What do you hope students learn or value as a result of these goals?	What skills do you hope students take with them as a result of these goals?	Reframe these goals/hopes as student learning outcomes (Students will be able to...)
	and/or		

YSU Co-Curricular Student Learning Outcome Cover Sheet Template

Name of Department:	
Person Submitting:	
Email Address:	
Campus Phone:	
Department Chair:	
Date Submitted:	

Instructions: Programs creating or revising outcomes should submit this form as formal submission of program learning outcomes.

Learning Outcomes:

As assessment is an ongoing activity, please briefly describe (no more than one paragraph) your assessment activities over the past academic year.

Learning Opportunity Map Template

Please refer to the *Co-Curricular Assessment Handbook, Part 1, Section II: Designing Learning Opportunity Maps* for completion instructions.

Department: _____

Person Submitting: _____

How Students Interact w/ your Department														
Departmental Learning Outcomes														

*Mapping can specify whether or not the outcome is addressed (i.e. "X") or can specify how much the outcome is being addressed. Examples of this could include two levels (Surface vs. Deep; Low vs. Deep) or three levels (Introduced, Developed, Mastered; Occasionally, Usually, Always; or a collapsed blooms: K=knowledge/comprehension, A=apply/analyze, E=evaluate/create)

Appendix IIB: Assessment Plan

YSU Student Learning Assessment Plan Template

Due: **June 30** in **Year One** of Assessment Cycle

To Complete the Plan:

For the purposes of this plan, we ask that you describe how you plan to report all student learning outcomes during the assessment cycle. This planning will facilitate the ability for programs to focus on using data to provide evidence that students are achieving the learning outcomes expected in the program. **Note that co-curricular programs must assess learning in all the program learning outcomes in the course of the cycle. Visit the Office of Assessment Templates page to download a Word version of the form and the online submission link:**

<http://cms.ysu.edu/administrative-offices/assessment/co-curricular-assessment-reporting>.

Note: Save time and don't fill out this section until you are completing the online form!

Program:	
Person Completing:	
Email Address:	
Campus Phone:	

Questions	Instructions	Student Learning Outcome 1	Student Learning Outcome 2	Student Learning Outcome 3	Student Learning Outcome 4
1. What is the student learning outcome (SLO) to be assessed?	State the SLO here; you may also include specific behaviors or criteria if you wish. If you have more than four SLOs, you may add additional rows (the online form will support additional SLOs)				
2. How does your department facilitate the development of knowledge and	What are the opportunities that students have, through interacting with your department, to achieve these SLOs? Note: your curriculum				

skills in this area?	map likely has this information outlined, though you may identify additional opportunities.				
3. What year will you evaluate the SLO?	<p>What year in your cycle will you assess this SLO? e.g., 2016-2017,</p> <p>Note: The length of your cycle depends on the number of department SLOs (e.g., 3 SLOs=3 year cycle) Note that a full cycle should be no more than 4-5 years; if you have more than 5 SLOs, then the department may need to report on more than one SLO some years.</p>				
4. What methods will you use to measure each student learning outcome? (minimum of two for each SLO)	<p>How will you measure this SLO? Please include a minimum of two methods. The more direct the method, the fewer sources needed to provide evidence of learning.</p> <p><u>Note that this is a central step in creating a plan; planning methods carefully will create a more easily implemented assessment plan.</u></p>				

5. Where will you collect the data from?	From what programs, services, locations, and/or populations will you collect the data? Your curriculum map can help identify potential targets. It could be helpful to indicate primary and secondary locations, if there are many potential places to collect data.				
6. Are there any targets or benchmarks for the data? (optional)	In some cases, departments may be seeking a certain level of performance; if so, indicate here. It is optional or may be added later.				
7. What were the results from your assessments? (e.g., strengths, challenges, action steps)					
8. How and with whom did you share your results?	It is important to consider these questions in the planning stage, even if answers will not be requested until the SLO reporting year.	To be evaluated in SLO reporting year	To be evaluated in SLO reporting year	To be evaluated in SLO reporting year	To be evaluated in SLO reporting year
9. When will this learning outcome be evaluated again? How will you evaluate the impact of any action steps taken?					

Tips & Examples: Assessment Plan

Below you will find further explanation of the information the Office of Assessment seeks, as well as some fictional examples of the types of answers that could be included in a plan (though certainly not an exhaustive collection). For the purposes of the example, we have created a fictional YSU Office who is focused on student community involvement; this is an area in which multiple units on campus are engaged.

Note that plans that would be considered exemplary do not need to be examples of a textbook assessment process; rather, they show honest exploration of learning outcomes and earnest intent to use data to make decisions and share information. They will not necessarily have “black and white” examples of data, analyses, or conclusions. Indeed, our example is meant to not be “textbook” perfect, but rather to give you some idea of what responses might look like

Name of Department or Unit:	Office of Community Involvement
Name of Person Preparing This Plan:	Joe Smith
Title:	Assistant Director
Email Address:	jesmith@ysu.edu
Campus Phone:	941-0000

Questions	Instructions	Example	Tips
1. What is the student learning outcome (SLO) to be assessed?	State the SLO here; you may also include specific behaviors or criteria if you wish. If you have more than four SLOs, you may add additional rows (the online form will support additional SLOs)	Students will recognize the importance of community involvement to their education.	<ul style="list-style-type: none"> Should align with mission and goals of department, division, and university List all SLOs for your department May include criteria or specific behaviors expected <p>Check-in: Could your learning outcomes stand alone to describe what your office does with students?</p>
2. How does your department facilitate the development of knowledge and skills in this area?	What are the opportunities that students have, through interacting with your department, to achieve these SLOs?	University Wide Day of Service; Volunteer Week; Presentations to Student Organizations	Your learning opportunity map likely has this information outlined, though you may identify additional opportunities.

3. What year will you evaluate the SLO?	What year in your cycle will you assess this SLO? e.g., 2016-2017,	2017-2018	<ul style="list-style-type: none"> • Year listed should be “measure/evaluate” year • Measure/evaluate is main focus for year, but you should also: <ul style="list-style-type: none"> ○ Consider SLO in planning year, and ○ Check-in the next year to make sure action steps are in process • At the end of your cycle will be a holistic reflection and planning year
4. What methods will you use to measure each student learning outcome? (minimum of two for each SLO)	How will you measure this SLO? Please include a minimum of two methods. The more direct the method, the fewer sources needed to provide evidence of learning. <u>Note that this is a central step in creating a plan; planning methods carefully will create a more easily implemented assessment plan.</u>	In spring 2017 we will repeat the survey (see attachment) ¹ given in fall 2012 asking students about their awareness and participation in community service activities as an indirect measure after our fall 2016 awareness campaign. The fall 2012 can serve as “baseline data”, and we can look for any changes after the awareness campaign.	While you must have a minimum of one tool/measure, we recommend two measures per outcome. You can use perceptions or attitudes to look at the impact of your unit’s activities on student learning. Measuring perceptions is an indirect measure. It is also possible to measure students’ factual knowledge about information they learned during a workshop, as a result of completing community service, or participating in a learning community (etc.). This would be considered a direct measure. Note that an exemplary rating on this item would be for a unit that includes a direct measure in its tools.
5. Where will you collect the data from?	From what programs, services, locations, and/or populations will you collect the data?	Survey will be sent to all active students who participated in a volunteer activity in the past 3 years	<ul style="list-style-type: none"> • A continuation from #4, because identifying location provides: <ul style="list-style-type: none"> ○ More detailed planning ○ Ensure all major student groups and populations are included (traditional, non-traditional., online, etc.) ○ Identify back-up collection points, or primary/secondary • Use learning opportunity map to identify collection points
6. Are there any targets or benchmarks for the data? (optional)	In some cases, departments may be seeking a certain level of performance; if so, indicate here. It is optional or may be added later.	This data will be used as baseline data to set benchmarks for future cycles.	<ul style="list-style-type: none"> • Optional, especially this planning cycle • Can be helpful in providing aspirational goals and identifying areas needing improvement
7. What were the results from your assessments? (e.g., strengths, challenges, action steps)	It is important to consider these questions in the planning stage, even if answers will not be requested until the SLO reporting year.	To be evaluated in SLO reporting year	

¹ Note: there are no actual “fictional” attachments; this is meant only to point out that additional evidence can be attached to a report when needed.

Rubric: Assessment Plan

Reviewers (Team #):	Unit:	Program Rubric Designation:
---------------------	-------	-----------------------------

Question (with #)	Best Practice	Proficient	Developing	Revision Needed
4. Measures or tools selected	Clear description and choice of at least two measures to effectively evaluate achievement of each learning outcome. The department explains how the number and types of measures will allow the program to evaluate and improve upon learning	Effective choice of at least two measures for each learning outcome. Uses only indirect measures.	Effort to choose at least one measure, but may not be aligned with learning outcome or measure student learning. May not include sufficient numbers of methods for all years in the cycle.	No clear measures identified or attempt to measure student learning.
8. Data collection plan	It is clear that the department has a developed plan for collecting SLO data throughout their cycle. Specific places and/or times for collecting data are identified. The plan is realistic and integrated with department activities.	The department has a developed plan for collecting SLO data throughout their cycle. While later years may be less developed, the next reporting year has detailed information for collecting data. The plan would reasonably integrate with department activities.	Evidence of effort to develop a plan for collecting data. May not be sufficiently developed to show detail of times and places for collection. Plans may be unrealistic or so far outside of regular department activities that sustainability may be a concern. May also be lacking one or more years of the collection plan.	No clear plan for collection of data across cycle. May leave multiple years out of plan or plan is very unrealistic to implement.
Holistic score: The unit has successfully and clearly completed the report, with particular attention to questions 1, 2, 3, & 6 (plus 15-16 data question)	Unit strives to completely and accurately answer all other questions in the plan. Clear intent to provide full and accurate information, as well as context relevant to reviewer's understanding.	A good faith effort was used to complete all questions. Some lack of context acceptable.	The unit did not put forth effort to completely answer questions; some incomplete or confusing answers make clear understanding difficult.	Many/most other questions were incomplete or incomprehensible. May have some answers left blank.

Plans may be designated as proficient, developing, or in need of revision. Best practice is intended to show the elements of a mature and well-developed plan.

Comments/Recommendations made by the assessment team:

Strengths of the Report:

Feedback/Recommendations:

Appendix IIC: Assessment Update

YSU Student Learning Assessment Update Template

Due: **June 30** in **Middle Years** of Assessment Cycle

Department: _____ Program: _____ Contact Name: _____ Email: _____

Directions:

1. Outline the status of action steps identified in previous years and/or since the last program review.
2. List student learning outcome(s) focus during the past year.
3. Summarize methods used to assess each SLO. Detailed data is not needed, only methods and groups evaluated.
4. Summarize the student learning evidence and findings—what were student learning strengths and challenges based on the data?
5. Indicate specifically how this evidence was used to improve student learning in the program.
6. Submit a completed form via online submission form at:
<http://cms.ysu.edu/administrative-offices/assessment/co-curricular-assessment-reporting> .
7. Please attach copies of any surveys, rubrics, or other assessment tools as appropriate.

Previous Action Steps Status	
Prior Year Student Learning Outcomes	
Assessment Methods for each reported SLO	
Evidence & Findings Regarding Student Learning	
Use of Results	

Tip & Examples: Assessment Update

Due: **June 30** in **Middle Years** of Assessment Cycle

Previous Action Steps Status	<p>(Note: Focus on action steps from the previous assessment year)</p> <p><i>Two years ago we updated our website to ensure a better flow for students looking for information on finding and applying for a job. We did this in response to data from SLO 4 on students feeling they were under-prepared for the job search process. SLO 4 will be formally evaluated next year. We hope to see a positive change in the data for this SLO 4 as a result of updating the information the website.</i></p>
Prior Year Student Learning Outcomes	<p><i>SLO 1: Students will be able to discuss career fields that are in-demand in the State of Ohio.</i></p>
Assessment Methods for each reported SLO	<p><i>These methods assessed the learning outcomes:</i></p> <ol style="list-style-type: none"> <i>1. Appointment Summary Sheet, completed by Career Advisors after every student visit to Career Services.</i> <i>2. Graduating Senior Survey, given to graduating seniors when they register to graduate. 150 responses were collected this past year.</i>
Evidence & Findings Regarding Student Learning	<p>Summary Sheet: <i>Generally, students were able to discuss careers that were in demand in the State of Ohio, but a significant portion struggled making connections between their education/experience and the skills needed for those careers. It appears that Seniors with a STEM focus were able to best make connections with their education and in-demand careers in the State of Ohio.</i></p> <p>Senior Survey: <i>Question number 3 asked for students to list careers they were interested in that were in high-demand in the state of Ohio and why they were interested. 50% of respondents were able to identify at least one high-demand career.</i></p>
Use of Results	<p><i>Based primarily on the theses data, we will:</i></p> <p><i>Begin to provide professional and faculty advisors across disciplines with resources on the high-demand careers in Ohio that relate to their specific discipline. Build training that equips advisors to present this information to students on a regular basis, rather than just in the First-Year Experience course and Career Service visits. Career Services hopes to develop these resources and training over the next year and then implement the following with several pilot disciplines.</i></p>

Rubric: Assessment Update

Peer Review Team:	Program:
Date:	Program Rubric Designation:

Please circle the box that best describes the unit response for each selected question. A designation may be based on the update matching most, but not necessarily all, the criteria at a score level.

Question	Proficient	Developing	Revision Needed
1. Prior Action Steps Status	<ul style="list-style-type: none"> • Action steps explained and current status outlined • Action steps may be listed as completed • If not complete, some next steps included 	<ul style="list-style-type: none"> • Action steps may not be fully explained or current status is lacking 	No action steps or status provided
3. Assessment Methods	<ul style="list-style-type: none"> • 1 or 2 measures for each student learning outcome (SLO) (overlap in methods is acceptable) • Methods are appropriate and measure the target SLO • Reference to where and when measure taken 	<ul style="list-style-type: none"> • Some/all methods may not be aligned with SLO or may not measure student learning. • Some SLOs are not measured • May have incomplete information about those being assessed 	No measures identified and no information about those being assessed
4. Evidence and Findings of Student Learning	<ul style="list-style-type: none"> • Successes and/or challenges in student learning identified • Findings based in data collected, though other sources/professional judgment also may be used to support conclusions 	<ul style="list-style-type: none"> • Identifies strength and challenge, but may not be related to the SLO or may not be based on data. • Findings focus on program, rather than student learning, strengths and challenges. 	No strength and/or challenge identified, not related to student learning.
5. Use of Results	<ul style="list-style-type: none"> • Action step (no action, if supported by data) rooted in the student learning findings • Action step is appropriate to the learning outcomes and can reasonably be carried out • In some cases, further study or confirmation of results by re-assessment is appropriate 	<ul style="list-style-type: none"> • Action step is mentioned, but is not grounded in the analysis of SLO data (i.e., strengths and challenges analysis). • Action step may not impact learning outcome • Action step may be unattainable 	Action step is not provided, or is not related to student learning.

Comments/Recommendations made by the Assessment Team:

Strengths of the Report:

Feedback/Recommendations:

Appendix IID: Assessment Cycle Reflection

YSU Assessment Cycle Reflection Template

Due: **June 30** in **Last Year** of Assessment Cycle*

Program:

Person submitting:

Date:

Email:

Online template at: <http://cms.ysu.edu/administrative-offices/assessment/co-curricular-assessment-reporting>.

Please address the following questions; you may attach evidence as needed.

1. What are your student learning outcomes for the program (entire set over the past assessment cycle)?
2. In the cycle, what were major strengths or challenges in student learning?
3. Were there action steps identified in the past assessment cycle?
4. Where those changes made? What is the evidence of these changes?
5. What is the impact of those changes on student learning in the program?
6. If there is no evidence of impact, what data do you need to collect to evaluate change? What is your timeline for evaluation, starting in the next academic year?
7. How well does your assessment process adequately evaluate student learning in the program?
8. What are current concerns regarding student achievement of program learning outcomes?
9. What are your goals for the next assessment cycle?

Assessment Cycle Reflection Worksheet Tips and Hints

The basic question categories included in the worksheet are:

- Questions 1-6—reflection on the entire past assessment cycle
- Questions 7-9—consideration for the next assessment cycle

Please address the following questions; you may attach evidence as needed.

1. What are your student learning outcomes for the program?

List all the student learning outcomes (SLOs) for the program. This is typically 3-5 statements of what students should know and be able to do upon completion of your program. In some cases there may be more or fewer SLOs, depending on the the program.

2. In the cycle, what were major strengths or challenges in student learning?

Provide an analysis, based on all reports in the last assessment cycle, of major strengths or challenges in student learning. Focus on the larger, more significant findings, rather than just listing every single finding in the last cycle. Programs should include at a minimum several of each (as long as they were previously identified).

3. Were there action steps identified in the past assessment cycle?

If there were challenges in student learning, what action steps were identified in order to improve student learning?

4. Where those changes made? What is the evidence of these changes?

If the program decided that an action step was needed, was that action step completed and what is the evidence for completion?

5. What is the impact of those changes on student learning in the program?

In order to “close the loop” in outcomes assessment, a program must first go through the process of assessing student learning and evaluating the data. If changes are made in order to improve student learning, how does the program know if they were effective? In order to evaluate the efficacy of a change, the program must consider if the change made had the intended impact.

6. If there is no evidence of impact, what data do you need to collect to evaluate change? What is your timeline for evaluation, starting in the next academic year?

If there is no current evidence for action step impact on student learning, how could you evaluate it within the next year? If there are multiple action steps to evaluate, then a timeline for assessment should be outlined. It is not necessary to have evidence of impact of every single improvement, but every program should be able to show evidence of completing the assessment loop.

7. How well does your assessment process adequately evaluate student learning in the program?

How adequate is the assessment process in your program? Do you have sufficient participation, continuity, and structure? Do the methods and sampling adequately evaluate learning by the end of the program, or adequately respond to further investigate learning challenges? Does the sample include all types of students involved with your program?

This question requests that staff self-reflect on the structure of the assessment processes in the program.

8. What are current concerns regarding student achievement of program learning outcomes?

Are there any larger concern areas that you have regarding student learning? Do staff conversations about student learning veer towards the same areas over and over? Is there an area in which staff would like to focus concentrated effort and/or see improvements?

9. What are your goals for the next assessment cycle?

Explain what your program plans to do for the next assessment cycle. Will you revise outcomes? Develop a new plan? Continue doing what you're doing?

Scoring Guide: Assessment Cycle Reflection

Each question on the Assessment Cycle Reflection will be rated as either “*Meets Expectations*” or “*Needs More Information*.” This guide provides specific feedback on that scoring. If your program received “*Needs More Information*” on any of the questions, please review the guide below for recommendations. The Office of Assessment is available for [consult](#).

SECTION	QUESTIONS	IF RATED AS “NEEDS MORE INFORMATION,” QUESTION-SPECIFIC RECOMMENDATIONS	IF RATED AS “NEEDS MORE INFORMATION,” SECTION-SPECIFIC RECOMMENDATIONS
Evaluation of all SLO assessment in program	1. What are your student learning outcomes (SLOs) for the program?	All programs should be able to list the SLOs for their program	<p>High Priority/Concern: If multiple questions were rated as “Needs More Information,” then it is of critical importance that the program ensure data collection and evaluation are taking place in the program. It is an expectation that all programs are collecting, analyzing, and making improvements based on student learning data.</p>
	2. In the cycle, what were major strengths or challenges in student learning?	This information should be easily gathered from yearly assessment reports.	
	3. Were there action steps identified in the past assessment cycle?	Action steps are based on data reflecting SLO challenges, also identified in yearly assessment reports.	
	4. Were those changes made? What is the evidence of these changes?	This information is based on program follow up on action steps and source may vary.	
	5. What is the impact of those changes on student learning in the program?	Programs should follow up on action steps to see if positively impact student learning	
	6. If there is no evidence of impact, what data do you need to collect to evaluate change? What is your timeline for evaluation, starting with the next academic year?	If follow up has not yet happened, then programs should consider how they will evaluate if changes are positively impacting learning.	
Assessment process evaluation	7. How well does your assessment process adequately evaluate student learning in the program?	Are there adjustments to the process that would provide better information on student learning?	<p>Low Concern: While it is less important on this cycle review, it should serve as a prompt for programs to consider how well their current assessment process allows for adequate evaluation of learning. These reflections will be useful if the program wishes to adjust their assessment process now and/or in planning for their next assessment cycle.</p>
	8. What are the current concerns regarding student achievement or program learning outcomes?	Is there an area of focus, a particular student learning challenge, in which program faculty are concerned?	
	9. What are your goals for the next assessment cycle?	If specific or major concerns are identified, would the program prefer to modify their plan to focus on a specific learning concern area?	