

Program Assessment Handbook

Provided by the University Office of
Evaluation and Educational
Effectiveness at ASU.

Key Dates

- | | |
|------------------|---|
| July 31st | Assessment plans due to UOEEE for programs seeking establishment |
| Sept 30th | Annual assessment reports due to UOEEE (Delegates) |
| Dec 2nd | Assessment plans due to delegates (subject to individual schools) |

Assessment:

- Reporting
- Process
- Plans
- Mapping
- APR
- Resources
- Navigating the Portal

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Arizona State University's Approach to Program Assessment

The [Arizona State University \(ASU\) Charter](#) serves as the university's mission statement and guides all college, department, and programs level mission statements and goals. It reads:

ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural, and overall health of the communities it serves.

At ASU, program assessment is dependent on faculty cultivating and maintaining a culture of continuous improvement. This is accomplished when faculty are involved in the writing and refining of assessment plans, oversee the collection of data, and provide guidance for continuous improvement. Maintaining these activities ensures students demonstrate the development of skills and knowledge necessary for academic success in the program.

The University Office of Evaluation and Educational Effectiveness (UOEEO) consults with academic programs as they develop strategies to measure student learning. This can include the identification of learning outcomes, the means for measuring student learning of these outcomes, and follow-up activities to review and act on assessment data. The purpose of these efforts is to continually increase the quality of education provided to students at ASU (see Figure 1).

With the pace of information increasing rapidly, the need to continually review and assess student learning becomes increasingly apparent. ASU's assessment program has provided such student learning data to the Arizona Board of Regents (ABOR), the Higher Learning Commission (HLC), and other accrediting and regulatory bodies. As such, it is helpful for faculty and other contributors to remember the information contained in the program assessment portal is accessed by university administration, accrediting bodies, and is available upon request to all stakeholders, journalists, and the public. Therefore, it is crucial for the information contained in plans and reports to be as descriptive and as robust as possible while remaining concise and understandable to readers not in the program's field.

This handbook should serve as a guide and manual for program assessment at ASU. This handbook includes information on the annual assessment cycle at ASU, instructions on how to complete assessment plans and program reports, descriptions of assessment plan elements, and information on the academic program review (APR) process. For information not included in this handbook, programs can contact UOEEO for program, department, or college-level consultation and instruction assessment@asu.edu.

Figure 1
Program Assessment Cycle



Key Processes and Due Dates

New Degree Programs: New programs seeking establishment at ASU will need approval from three administrative bodies in the following order: [The Office of the University Provost at ASU](#), ABOR, and ASU Governance Councils.

After provost approval, and as a part of the ABOR submission process, assessment plans will be required to obtain provisional approval from UOEEE. Provisional approval is obtained by submitting the program's assessment plan to UOEEE through the [UOEEE Assessment Portal](#). Undergraduate and graduate certificates do not go to ABOR for approval but must still receive approval from ASU's Provost Office and Governance Councils. Approved programs will begin to submit assessment reports when the program has enrolled an adequate number of students.

Annual Assessment Reports: It is recommended that programs collect assessment data throughout the academic year and then begin analysis and writing their reports at the end of spring semester through to the beginning of the following fall semester. This timeline allows for data interpretation, analysis, and conclusions to be developed close to the time of data collection and completed before fall teaching duties begin. As such, annual assessment reports are traditionally due to delegates on August 15th, but delegates do have the ability to set their own deadlines. Please check with your program's delegate to confirm the due date of your program's assessment report. Final report submissions are due to UOEEE (from delegates) by September 30th, regardless of school or college.

Annual Plan Reviews: Most programs can submit their assessment plans for their annual plan review (not to be confused with ASU's Academic Program Review) in one of two ways:

- Programs not making any changes to their assessment plan from the previous year, can mark their assessment plan as "**continuing**." No further review or action is required for these plans by the delegate.
- Programs making additions or changes to their assessment plan will need to **submit** these changes to their delegates for approval. We recommend allowing enough time for the delegate to review the edits, request revisions (if necessary), and receive approval by the December 2nd deadline.

Programs can request feedback from UOEEE on their assessment plans at any point in the process. This feedback request should be factored into the program's assessment plan submission timeline. During a program's APR process, assessment plans will be reviewed and approved by UOEEE (not by delegates). All assessment plans (i.e., continuing and non-continuing plans) should also be reviewed by the program itself halfway through the APR process (typically every 3 years) to ensure the plan is up-to-date and demonstrating innovation whenever possible.

Approval Deadlines

July 31st – Assessment plans due to UOEEE for programs seeking establishment within the calendar year

August 15th – Annual assessment reports due to delegates (date may vary by school)

September 30th – Annual assessment reports due to UOEEE

December 2nd – Assessment plans due to delegates (date may vary by school)

Program Assessment

New Program Applications to Arizona Board of Regents

The university process for establishing new programs includes both internal approval through the provost office and external approval from ABOR. UOEEE guides and supports the assessment planning component within this larger establishment process.

UOEEE provides new programs with provisional approval of their assessment plan so they may move their application forward from the provost's office to ABOR. The UOEEE [Canvas site](#) has a blank downloadable assessment plan template for inputting information that will help programs meet the ABOR requirements for the new program application process. Common characteristics of successful assessment plans include plans that are detailed, use valid assessment methods, and have all elements completed. As previously mentioned, assessment plans may be reviewed by accrediting bodies and stakeholders, so when writing a new program assessment plan, programs need to remember these audiences and provide robust detailed descriptions that leave readers with a strong understanding of what each element in the plan is intended to achieve. Well-developed plans give decision-makers confidence to support the program. For additional information about the university process for establishing new programs, please visit the provost office's web page on [curriculum development](#).

Note: Certificates do not go to ABOR for approval, yet the HLC requires all credit-bearing programs, degrees, and certificates receive equal attention and consideration in assessment and all other areas of accreditation.

Academic Program Review

Academic programs undergo a comprehensive review every seven years based on requirements from the ABOR (2-208). Program reviews provide an opportunity for faculty to examine how effectively their program is meeting its mission, goals, and outcomes. The university provost office oversees APR and has a web page with timelines, guides, and other important information. You can visit this site by clicking [here](#).

As part of the APR self-study reporting, programs will write a reflection of their assessment findings based on an examination of their student learning and achievement data (as assessed through program learning outcomes) collected over the past seven years. This information is collected annually through a program's assessment reports submitted through the UOEEE assessment portal. This data is aggregated and available through the assessment portal along with reports from previous years. Programs can access past reports, including UOEEE feedback, through the assessment portal by going to the program archives or through a program's report edit page. For instructions on how to view UOEEE feedback and to access aggregated data within the report edit page, please see the [Editing Assessment Plans and Reports](#) section of the handbook. For instructions on how to access past reports and aggregated data within the program archives section of the portal, see the [Program Archives](#) section of the handbook. UOEEE provides feedback on annual reports which includes comments on specific plan elements along with overall strengths and suggestions. This data should be used for analysis and included in each academic unit's APR report. When interpreting historical data, programs should utilize the reflective questions from the APR Guidebook below.

1. Please discuss the results of your quantitative and qualitative assessment data for each outcome and measure.
2. Are your students achieving at the levels of performance you had expected? How well did they meet your performance criteria?
3. What plans do you have in place for students who are not achieving the desired level of performance?
4. What actions have you taken or will you take based on your assessment data?
5. Describe how the results have been shared with program faculty and students.

Starting in the 2021-2022 cycle, programs must receive UOEEE approval of their assessment plan (through the assessment portal) as part of the APR process. To receive UOEEE approval, programs must review their assessment plan and add all ABOR elements that are currently required, even if they were not a requirement when the assessment plan was first developed. Programs are also asked to review their assessment plan and consider changes in preparation for the next seven years of assessment. Changes may be made based on insight that arises from the previously collected longitudinal data, staffing changes, and/or curricular changes. UOEEE will also review and provide feedback on assessment plans for programs going through APR in the following year. This feedback will thus be available at the start of a program's APR process. UOEEE will also assist programs in updating their assessment plan if requested.

It should be noted that programs going through the APR process and making updates to their assessment plans, will not need to collect nor report on student achievement during the year of their APR. For example, a program going through APR in the academic year 2021-2022, will not need to collect data during the 2021-2022 academic year nor produce a report that would typically be based upon that data, in the spring of 2022.

Assessment Reporting

Each year, established programs at ASU are expected to report on a number of programmatic elements that include the following:

- **Assessment Data** – Direct and indirect data collected based upon the measures listed with a program's most recently approved assessment plan.
- **Faculty** – Which faculty and or committees were involved in the assessment process and what were their roles in this process? Assessment activities can include writing and refining assessment plans, overseeing the collection of data, data analysis and interpretation, and providing continuous improvement guidance to ensure students can demonstrate the development of skills and knowledge necessary for academic success within the program.
- **Process Changes** – Were there any changes made to the assessment process found in the assessment plan? If yes, what changes were made?
- **Program and Assessment Changes** - What areas of programmatic strengths or areas of possible development are revealed by the data and how will they impact your academic program and/or how your program conducts assessment in the coming year?

Data entered into the portal is archived and available to programs for review. As such, consistent completion of a program's annual report is particularly important to its ability to observe trends within their program, an important aspect of the APR process. Reporting on assessment activities is also an opportunity for program faculty to reflect on their level of participation and whether assessment findings are providing information detailed enough for faculty to provide continuous improvement guidance. It is important to note that UOEEE is currently not tracking whether or not program outcomes are met. Instead, UOEEE examines the process and approach taken to ensure that assessment plans provide information with the ability to inform faculty and administrators and to identify specific areas where learning can be continuously improved.

Programs going through APR are exempt from this annual reporting requirement during the year they are in the APR process. For example, a program going through APR in the academic year 2021-2022, will not need to collect data during the 2021-2022 academic year nor produce a report that would typically be based upon that data in the spring of 2022. In addition, programs with special designations may also be exempt from this annual reporting requirement or only required to provide an abbreviated report. For more information about these special designations, see the [Portal Main Page](#) section of the handbook.

UOEEE Assessment Portal

The content related to the UOEEE Assessment Portal found within this handbook is meant to serve as a general guide to navigating the portal. For more detailed explanations of features and basic use of the portal, please see the resources within the “Assessment Portal” module of the UOEEE [Canvas site](#). Resources include blank assessment plan templates, a video walk-through of the portal, and detailed descriptions of assessment plan elements.

Portal Landing Page

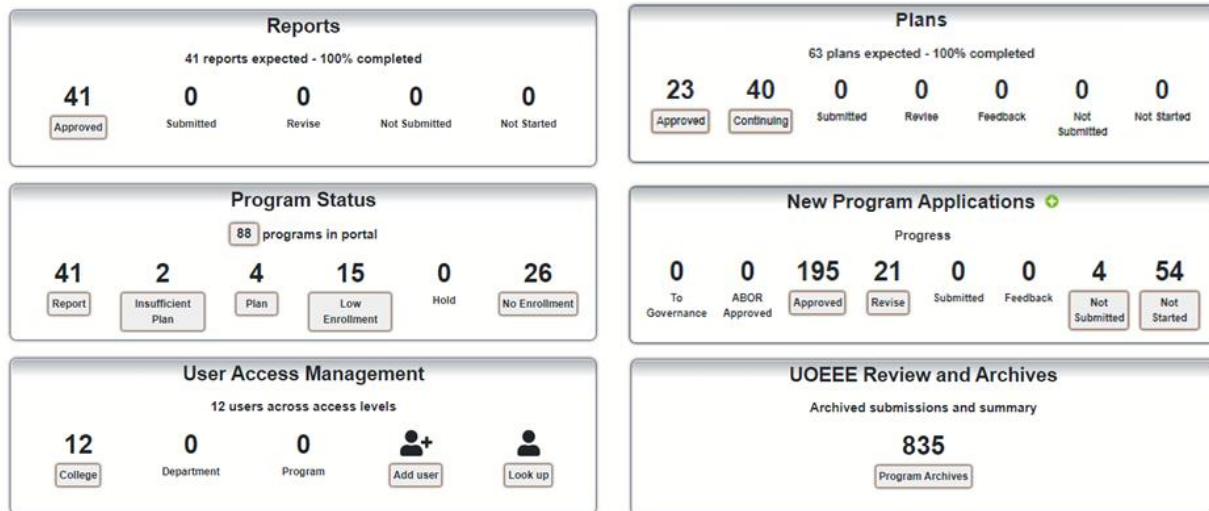
Tabs have been replaced with tiles that also serve as links to reports and plans through their status (i.e., submitted, not submitted, approved, etc.). This allows for a more comprehensive overview of a program’s progress through the various assessment processes. The image below is an example of the portal’s new landing page (see Figure 2). Delegates and their designees will see similar information for the schools and colleges that they have access to. All other users will be privy only to the program plans and reports they have been granted access to. Delegates and users should also be aware of several special program designations and how these affect program assessment and reporting.


- **No Enrollment** – These are established programs with zero enrolled students. These programs can be seen by delegates but will be hidden from most other users. Programs with this designation will not be required to submit an annual report. The only way to remove these programs from the portal is to complete the official disestablishment process with the university. More information about this process can be found [here](#).
- **Low Enrollment** – Established programs with enrollment between 1-20 students are classified as “Low Enrollment.” Starting in 2021, these programs will not have to submit assessment data, but will be required to submit an abbreviated annual report with the following details:
 - Applicable plan components (current activities, programmatic changes, faculty participation, etc.)
 - Confirmation of a program’s “Low Enrollment” status
 - A brief update on the future of the program (i.e., plans for disestablishment, anticipated enrollment numbers going forward, etc.).
- **Insufficient Plan** – Established programs that are missing plan elements that were required during the program’s establishment or at their last APR. Programs will need to remedy their plans before they can continue their assessment efforts.

Clicking on program status within the various tiles, will bring up program tables where users can view and/or edit assessment plans or reports where appropriate. Please note that only delegates and administrators will have access to the user access management tile, where they can view who has portal access to their college, departments, and programs by clicking the “Look up” button. Delegates can also request changes to an individual’s access according to evolving needs of the program by clicking the “Add user” button.

Figure 2

Portal Landing Page



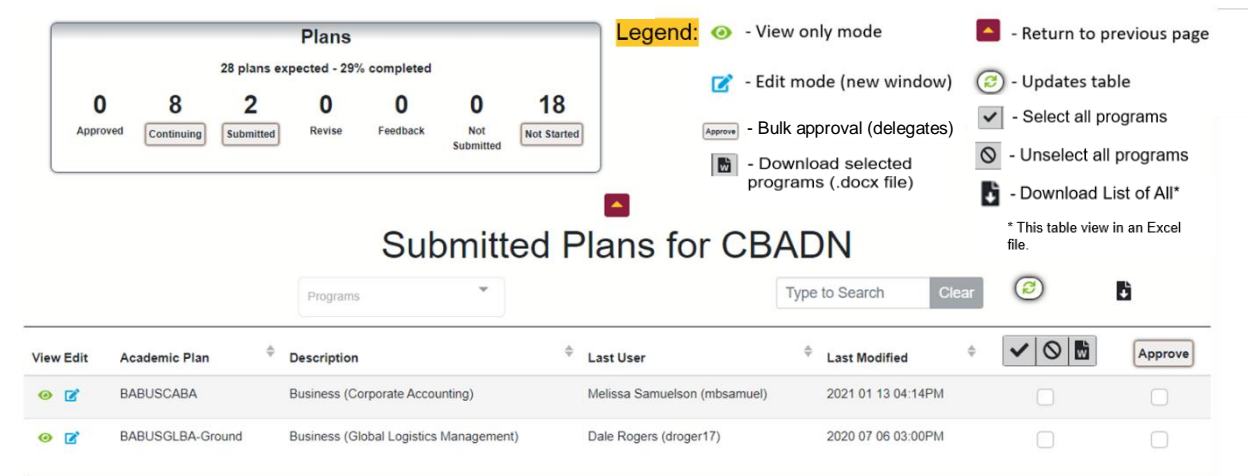
For new program applications, delegates can use the  button within the “New Program Applications” tile to open the new program form. Completing this form creates a new program shell in the UOEEE portal that can then be used by all who have access. After a new shell is created, it can be automatically accessed by all people with college and department level access. Program level users, however, will need to request access by sending an email containing the new program’s title, its academic plan code, and the ASURITE ID of the person needing access to assessment@asu.edu.

Program Status Tables

Within each portal tile are several statuses illustrating how programs are progressing through that process. For a more thorough walk-through of the statuses within each tile, including the sequence of the statuses, please visit the UOEEE [Canvas site](#) and direct your attention to the “Explainer” documents located within the “Assessment Portal” module. Within the UOEEE portal, clicking the statuses within each tile will open a table displaying all programs within that status the user has access to (see Figure 3).

Figure 3

Assessment Plan Status Table

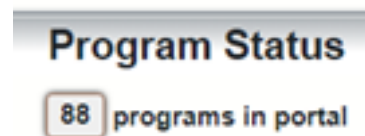


Status tables for each tile will look relatively similar and have many of the same tools and functions as the one depicted above. One important feature within each table to take note of is the search bar. This search bar will search for any matching text for programs within that status. This includes the last modified user, program description, and academic plan code.

Users can also click the number within the “Program Status” tile (see Figure 4) to see all of the programs they have access to in one table, regardless of plan or report status. Users can access their program’s plan and report pages directly from this table, as well as search for programs going through or preparing to go through the APR process. To search for these programs, users can search for “APR” (to find programs currently in APR) or “Next Cycle” (programs going through APR in the next academic year) inside the table’s search bar.

Figure 4

Viewing All Programs a User has Access to



Editing Assessment Plans and Reports





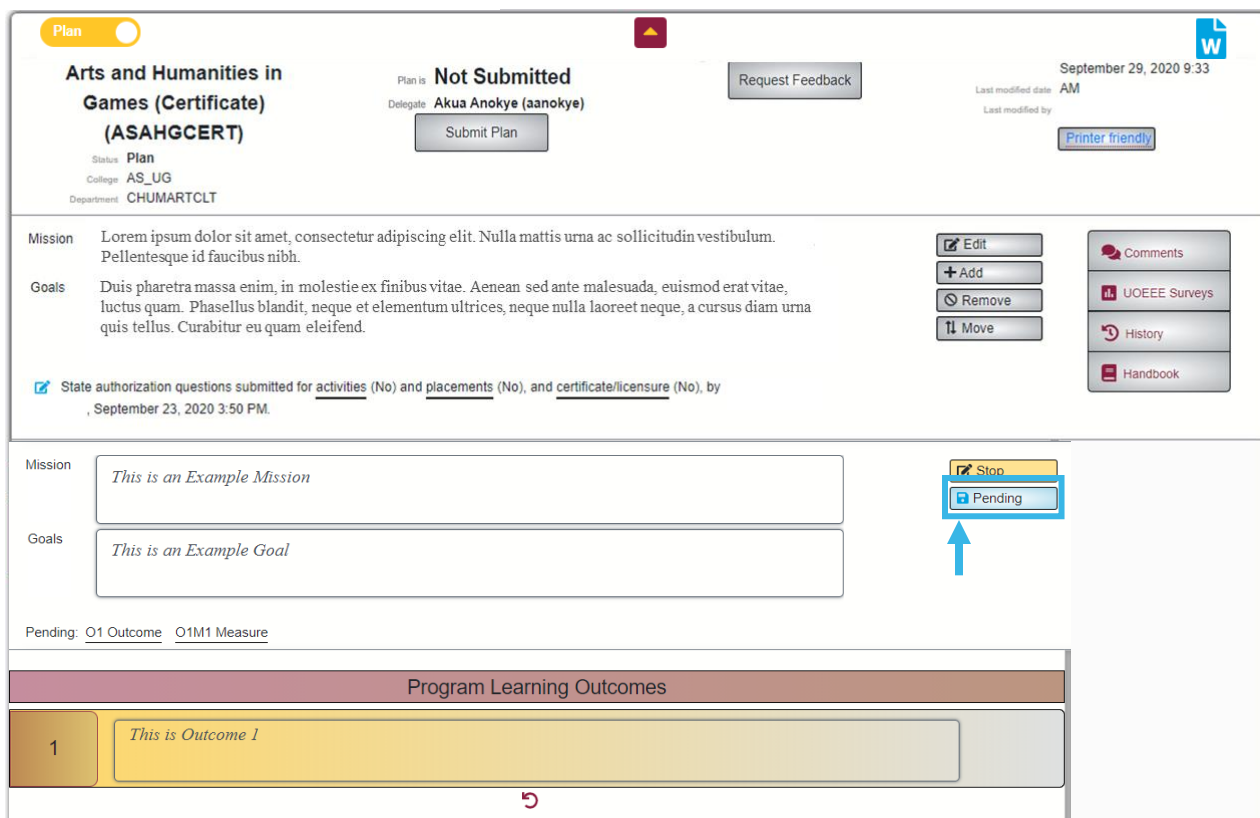
Plan and report edit pages are where new plans/reports are first written and where they are later revised. From a program's mission and goals, through all other elements in a plan, these two forms house all the information related to a program's assessment plan and data collection efforts. One update made to the portal, is the redesign of the report edit page that now more closely mirrors the look and functionality of the plan edit page. Functions such as editing and submitting plans and reports will be similar across both content types. To edit plans/reports, users can click one of two editing buttons ( Edit or ) and enter content into the applicable fields. After all content has been entered, users **MUST** click the  Pending or  buttons to save the entered content (see Figure 5).


Figure 5

Plan Edit Page



The screenshot displays the 'Plan Edit Page' for the 'Arts and Humanities in Games (Certificate) (ASAHGCERT)' program. The page is titled 'Plan' and shows the status 'Not Submitted'. The delegate is 'Akua Anokye (aanokye)'. The last modified date is 'September 29, 2020 9:33 AM'. The page includes a 'Request Feedback' button and a 'Submit Plan' button. The 'Mission' field contains the text 'This is an Example Mission' and the 'Goals' field contains 'This is an Example Goal'. A 'Pending' button is highlighted with a blue arrow. The 'Program Learning Outcomes' section shows one outcome: 'This is Outcome 1'.

Legend:

 Quickly switches between the program's assessment plan and report



Download the assessment plan/report as a Word docx



- Opens every editable text field in the assessment plan.

- Adds outcomes, measures, concepts, competencies, and/or processes.

- Removes outcomes, measures, concepts, competencies, and/or processes.

- Reorder outcomes, measures, concepts, competencies, and/or processes.

- Edits corresponding section.

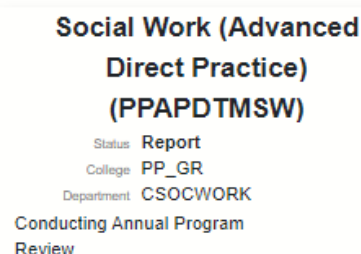
While plans and reports are relatively similar in functionality, some aspects unique to plans include toggling additional instructions to help new programs applying for ABOR approval and streamlining the assessment plan process for previously approved plans. For new program applications, a toggle button labeled **ABOR Submission off** will allow users to display additional space and instructions for completing components specific to ABOR submissions.

Programs that are not making any changes to a previously approved program, can submit their program assessment plan under the “Continuing” designation. Programs that submit under this designation bypass the review and approval process and fulfill their annual requirement to submit an assessment plan. To submit under the continuing status, programs will click the **Continue with Current Plan** button located near the top of the plan edit page.

Programs going through the APR process or that will be going through the APR process the following academic year, will see a special designation under their program name within the plan edit page (see Figure 6). Those currently in the APR process will see “Conducting Academic Program Review” while those going through the APR process the following year will see “Next Cycle.” It should also be noted that plans submitted by programs going through the APR process will be reviewed by UOEEE rather than program delegates.

Figure 6

APR Designation on the Plan Edit Page



Additional Plan/Report Features

The assessment portal has additional features to help programs submit their plans and reports. These features can be accessed via buttons located in the upper right corner of the assessment plan page (see Figure 7 and 8).



- To see UOEEE feedback on the overall **Strengths and Suggestions** of an assessment plan, users can click the  icon to open a pop-up window displaying strengths and suggestions for the assessment plan (see Figure 7). Users can close this window by clicking the  icon. This feature is found within the plan edit page.

Figure 7

Viewing UOEEE Overall Plan Feedback

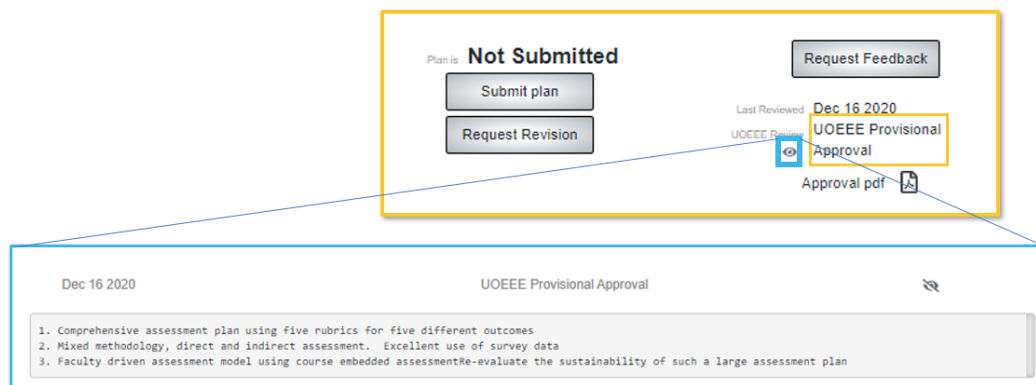
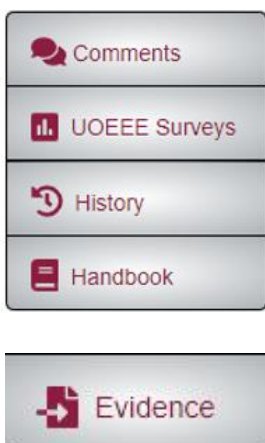


Figure 8

Plan Feature Buttons



- The “**Comments**” (💬) feature allows anyone with access to the plan to record comments for others to read and act upon accordingly. Over time, these comments can be used to record program challenges and developments and help guide future assessment processes. UOEEE uses this feature to provide feedback on specific plan elements. This feature is found on both plans and reports.
- The “**UOEEE Surveys**” (📊) feature allows programs to link measures to individual items from UOEEE administered surveys. Measures that are linked will auto-populate data within the program report edit page after survey data is collected. This feature is managed within the plan edit page.
- The “**History**” feature documents when changes to the plan have been made and saved. This feature is similar to Google’s history feature for Google docs in that users can view previously saved versions of specific plan elements. This information can be useful in showing a plan’s development over time. The number of changes made to each element will be indicated with gray numbers (1). Clicking this number will bring up previous versions of the plan element. This feature is found on the plan edit page.
- The “**Handbook**” (📖) feature allows you to display the UOEEE Program Assessment Handbook section of a particular plan element within a side panel on the plan edit page. This increases ease of use when preparing program assessment plans. This feature is found on the plan edit page.
- The “**Evidence**” feature is an optional ability to upload materials used for assessment and evaluation within a particular program. Programs may want to use this feature to keep all assessment materials in a single location. Uploaded materials need to be combined into a single PDF or .zip file per evidence type (i.e., Rubrics, Sample Data, Artifacts, etc.). This feature is found in the report edits page.
- The “**Program Archive**” feature allows programs to access aggregated data from the past six years as well as access past reports. The aggregated data is particularly helpful for those in APR or wanting to review the long-term progress of their program towards their program learning outcomes (PLOs). Programs can access this data by clicking the 🕒 button located on the top right of the report edit page to bring up past data within the page itself. The summary page can be downloaded by clicking the 📄 button also located in the top right of the page. Programs can also access reports from specific years by clicking the radio buttons with the corresponding academic year of interest.

For more information on how to navigate to and use these features, please see the [Assessment Portal Walk Through video](#) on UOEEE’s Canvas site.

Program Archives

Programs can access past reports as well as aggregated data by clicking the **Program Archives** button within the “UOEEE Review and Archives” tile. Clicking this button will open a familiar program table with all the programs a user has access to. This table is similar in functionality and look as the plan and report tables. Some additional functions that the program archives table has is the ability to download previous program reports as well as a summary of all the previously collected data (see Figure 9).




Clicking the  icon will bring up the archived data for the corresponding program (see Figure 10). The data aggregation summary table will appear first and is particularly helpful for those in APR or wanting to review the long-term progress of their program towards their PLOs. It provides information on how often outcomes were met as well as the percentage of students that met the performance criterion for each individual measure within each year as well as accumulatively. Reports from specific years can be viewed by clicking the corresponding radio buttons.

Figure 9


Program Archive Legend

Table:

 **Summary**: Downloads a summary table of previously collected data.

 **1920**: Downloads the program report from the 19-20 academic yr

Program Archive:

: Downloads a summary of program data spanning the last 6 years.


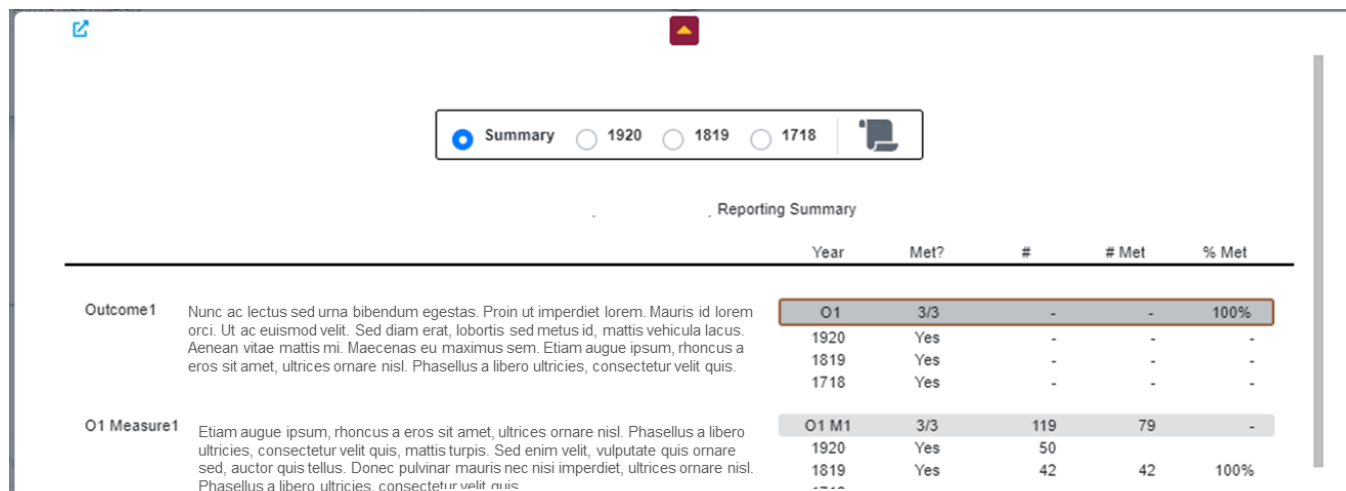
: Downloads report for a specific year in .docx format.

Figure 10

Program Archives



		Year	Met?	#	# Met	% Met
Outcome 1	Nunc ac lectus sed urna bibendum egestas. Proin ut imperdiet lorem. Mauris id lorem orci. Ut ac euismod velit. Sed diam erat, lobortis sed metus id, mattis vehicula lacus. Aenean vitae mattis mi. Maecenas eu maximus sem. Etiam augue ipsum, rhoncus a eros sit amet, ultrices ornare nisl. Phasellus a libero ultricies, consectetur velit quis.	O1	3/3	-	-	100%
		1920	Yes	-	-	-
		1819	Yes	-	-	-
		1718	Yes	-	-	-
O1 Measure 1	Etiam augue ipsum, rhoncus a eros sit amet, ultrices ornare nisl. Phasellus a libero ultricies, consectetur velit quis, mattis turpis. Sed enim velit, vulputate quis ornare sed, auctor quis tellus. Donec pulvinar mauris nec nisi imperdiet, ultrices ornare nisl. Phasellus a libero ultricies, consectetur velit quis.	O1 M1	3/3	119	79	-
		1920	Yes	50		
		1819	Yes	42	42	100%

Glossary:

O1 = Outcome 1

1920 = Academic year 2019-2020

1819 = Academic year 2018-2019

Met? = Did the program meet the established program criteria?

= Number of data points collected

#Met = Number of students collected that met performance criterion

%Met = Percentage of students collected that met performance criterion

Elements of a Program Assessment Plan at ASU

Assessment plans are developed when a program first applies for “new program” status and is then re-evaluated and revised during the APR process. Having up-to-date and valid assessment plans is critical to providing accurate data needed for curricular improvement. The following is a brief description of the plan elements required in ASU assessment plans for both new programs and certificates along with a link to additional resources on the UOEEE Canvas site.

1. **Mission Statement:** A program mission statement explains the purpose and value of the program. It demonstrates the way it serves students and supports the university mission. The statement provides a reference point for program goals and should show a conceptual tie between the program’s goals and PLOs. [Canvas Link](#)
2. **Program Goals:** Program goals are broad statements that extend the mission statement. Program goals can explain the expectations of the curriculum and often operationalize the mission statement. Goals define what makes the program unique as well as how they support the university mission. [Canvas Link](#)
3. **Program Learning Outcomes:** PLOs measure the knowledge and skills students acquire upon completing a degree. Outcomes are written in measurable terms and are focused on student learning. Each PLO has its own set of concepts and competencies. Canvas Links: [Part 1](#) | [Part 2](#)
4. **Concepts:** Concepts are the content areas students need to understand to achieve an outcome and are directly related to the curriculum. Given this, program syllabi and course descriptions are a good place to start when developing concepts. The number of concepts in a higher education program can be abundant, yet not all need to be included in an assessment plan. [Canvas Link](#)
5. **Competencies:** Competencies are measurable components of the learning outcome. Competencies are assessed using measures and predetermined performance criteria. While concepts are knowledge areas, competencies are measurable components of the learning outcome. [Canvas Link](#)
6. **Assessment Mapping:** Assessment mapping is a visual representation of the relationship between the PLOs and the program’s courses/curriculum. Mapping identifies where PLOs are introduced, reinforced, and mastered.
7. **Assessment Process:** This element provides a road map or steps on how the program outcome will be measured. A detailed process allows for future replication. Details that should be included in the process are:
 - a) A description of the sample used for the data collection
 - b) The place/setting which is usually a course
 - c) Time frame which could be a semester or academic year
 - d) Research team or faculty participating
 - e) The type of research instruments being used such as a rubric
 - f) How the data will be analyzed
 - g) How the data will be used for continuous improvement.

[Canvas Link](#)

8. **Measures:** Measures refer to the tools used for assessment. UOEEE recommends using rubrics as direct measures of student learning and surveys or focus groups as indirect measures of student learning. Information to include along with the measurement tool used include the course and the name of the student artifact. [Canvas Link](#)
9. **Performance Criteria:** This is most often described as the percentage of students reaching a mastery level understanding of a given subject area. This criterion is usually established by the faculty (although some disciplines have national performance standards) and confirmed through longitudinal data collection. Performance criteria need to be appropriately rigorous allowing for students to meet the criteria, and in some cases exceed the criteria. If all students successfully meet a criterion, there is little information obtained to make meaningful instructional improvements. Determining a challenging, yet accomplishable criterion for program success is vital to help drive instructional quality forward. [Canvas Link](#)
10. **General Education (Undergraduate Only):** All undergraduate programs and certificates must ensure that their students are developing in the nine areas of knowledge identified by the university. New degree programs and programs going through APR must identify within the UOEEE assessment portal where these general education skills and intellectual habits are addressed either within the program's curriculum or through ASU's general studies coursework.

The following sections in this handbook provide greater detail for each of these elements. Further questions can be directed to the UOEEE program assessment team at assessment@asu.edu.

Mission Statement

[Canvas Link](#)

A program level mission statement should explain the purpose and values of the program as well as demonstrates the way it serves students. The mission statement is intended to provide a reference point for other elements of a program's assessment plan including its goals and PLOs.

When writing a program mission statement, programs should also develop some points of alignment with the university mission statement and goals (see Figure 11). The university mission or charter explains the purpose, values, and intentions of the institution. It serves as the foundation upon which its educational programs are based. Accreditors will evaluate how well an institution executes its mission through its academic programs and other endeavors.

Figure 12 provides guidance on aligning a program's mission with the university's as well as identifying key concepts to include to foster program and university alignment.

Figure 11

Relationship Between Program and University Missions

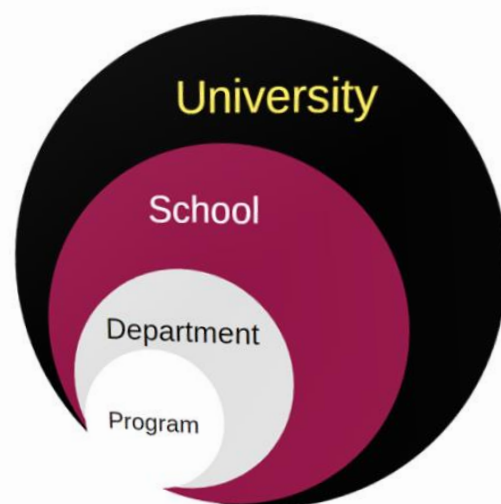
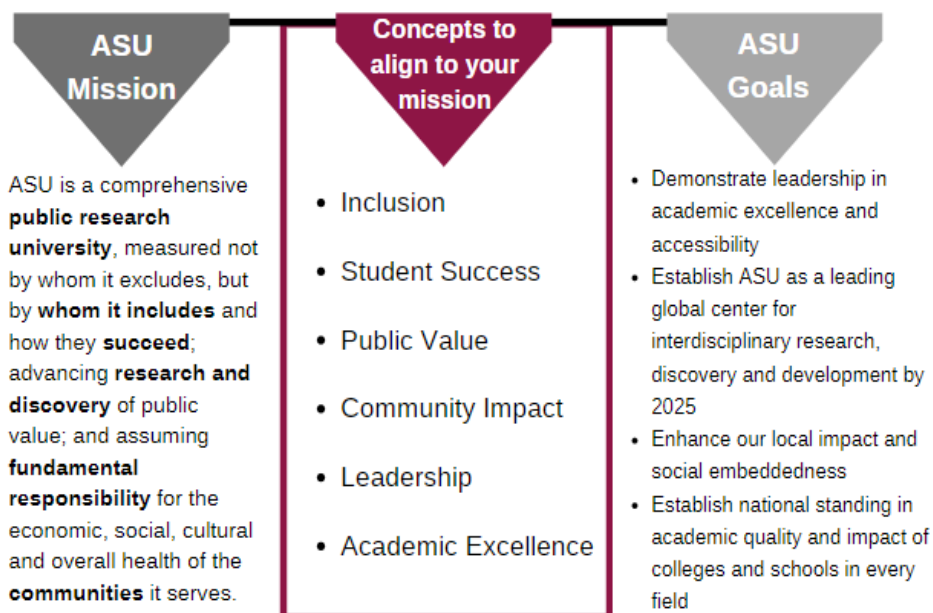


Figure 12

Aligning a Program's Mission with the University Mission







What UOEEE looks for in a mission statement:

1. Does it explain the **purpose and values** of the program and the values?
2. How does the program **serve students** specific to the discipline?
3. Do the program goals and the program learning outcomes directly relate to the mission statement?
4. Is there a relationship between the **University Mission** and the program mission statement?

Figure 13

Mission Statement Breakdown

Decomposing Missions	
CRD (Program)	
<p>The ASU School of Community Resources and Development <u>advances the social, economic, environmental and cultural well-being of our local and global communities through instruction, research and service.</u> We provide nationally recognized interdisciplinary <u>research</u> expertise and innovative academic programs in nonprofit leadership and management, parks and recreation management and tourism development management.</p>	
 Does it explain the purpose of the program?	<ul style="list-style-type: none"> • nonprofit leadership and management, parks and recreation management and tourism development management.
 What are the values of the program?	<ul style="list-style-type: none"> • instruction, research and service
 How are students served? What do they gain from program participation?	<ul style="list-style-type: none"> • expertise and innovative academic programs
 Does it align to the University mission?	<ul style="list-style-type: none"> • advances the social, economic, environmental and cultural well-being of our local and global communities • interdisciplinary research <div style="text-align: right;"> { Inclusion, research, Community Impact } </div>

Program Mission → Program Goals → Program Learning Outcomes → Concepts and Competency → Assessment Process → Measures → Performance Criteria

Program Goals

[Canvas Link](#)

Program goals are broad statements that extend and operationalize the mission statement. They define what makes the program unique as well as support the university mission. Program goals should also be able to describe what skills and knowledge students are expected to demonstrate to be academically successful within the program. The number of program goals is often between three and six per program. Examples of program goals can be found below.

Examples of Program Goals

- The goal of ASU Program X is to teach students how to build community.
- ASU Program X provides students with a high quality and creative experience at the undergraduate, graduate, professional and postgraduate levels.
- Students enrolled in ASU Program X will generate new knowledge through a broad array of scholarly, research and creative endeavors.
- ASU program X provides students with a foundation for dealing with the immediate and long-range needs of society.
- ASU Program X teaches students cultural understanding through study of social, political, economic, and technological change.

Program Mission → **Program Goals** → Program Learning Outcomes → Concepts and Competency → Assessment Process → Measures → Performance Criteria

Program Learning Outcomes

Canvas Links: [Part 1](#) | [Part 2](#)

Outcomes identify what a student will learn or be able to do upon completion of the program. Outcomes are typically measured using tools (e.g., rubrics) paired with student artifacts.

Programs can have as many outcomes as necessary to create accurate program findings and support a faculty-driven culture of continuous improvement but are only required to assess three of these outcomes each year. For reference, most programs tend to have between four and six PLOs. Certificates are required to assess two outcomes each year. Programs are responsible for determining which of their PLOs they will be assessing. Regardless of which outcomes are assessed, each of the program's outcomes should still be publicly available, with most programs displaying them on the program's public facing website.

Each outcome should have at least two related measures. For programs, this produces just **six data points** from which to assess often complex degree programs and four data points for certificate programs. Therefore, programs are encouraged to develop as many learning outcomes as necessary to create accurate program findings and support a faculty-driven culture of continuous improvement.

Things to Consider When Developing Program Learning Outcomes

When developing PLOs, programs should keep in mind that outcomes are to be clearly written, specific, measurable, and discipline specific. Additionally, the language for outcomes should take on a positive tone focusing on what students demonstrate, accomplish, and learn when enrolled in a program.

It is also vital to use the correct level of student learning in describing what students are accomplishing. Outcomes should be rigorous and reflect the highest level of learning expected for degree attainment. For examples and suggestions on appropriate wording for each level of student learning, please reference Bloom's Taxonomy Pyramid and Bloom's Revised Taxonomy of Action Verbs below (see Figure 15 and 16). A good rule of thumb is that PLO's for lower-level undergraduate courses should be at the Bloom Taxonomy level of "remembering" and "understanding," outcomes associated with upper level undergraduate courses should be at the level of "applying" and "analyzing," and graduate level students should be at the level of "evaluating" and "creating." Most undergraduate programs will utilize verbs at the "applying" and "analyzing" levels for their outcomes as programs often focus on students' knowledge at the completion of their undergraduate degree. Upper-level undergraduate courses that only reach the levels of "remembering" and "understanding," or graduate courses that only "analyze" and "apply," are considered not very rigorous or challenging. Such plans may not be eligible for UOEEE plan approval.

Figure 14

Checklist for Developing PLOs

- ☐ PLOs should be S.M.A.R.T.: **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**imebound.
- ☐ Define and write what students will learn from the program. Use discipline specific or specialized knowledge.
- ☐ Ask yourself if you can break the outcome down into measurable components (competencies or rubric dimensions).

Writing Outcomes

After PLO's have been conceptually developed with the appropriate level of specificity and academic rigor, programs can begin constructing PLO wording. UOEEE recommends that programs develop PLO wording using the following 4-step process:

1. Start your outcome by identifying when or where the learning is expected to be mastered (e.g., "Upon graduation...", "In a laboratory setting...", etc.)
2. Insert "...students will be able to..."
3. Identify and insert an appropriate action verb describing the level of student learning by using one of the Bloom Taxonomy figures (e.g., demonstrate, recall, apply, synthesize, create, etc.)
4. Then finish by writing what students will know or be able to do as a result of learning or completing a curriculum

The resulting outcomes should resemble one of the examples below:

- At completion of the kinesiology program, students will be able to differentiate bony landmarks on a human subject and explain their purpose and function.
- In a laboratory setting, students will be able to apply important chemical concepts and principles to draw conclusions about chemical reactions.
- Upon graduation, students will be able to analyze blood samples using equipment at local community hospitals.
- At the completion of the computer science program, students will be able to design a web site using HTML and Javascript.
- Upon graduation, students will be able to build probability models to quantify risks of an insurance system and use data and technology to make appropriate statistical inferences.

Program Mission → Program Goals → **Program Learning Outcomes** → Concepts and Competency → Assessment Process → Measures → Performance Criteria

Figure 15

Bloom's Revised Taxonomy Pyramid

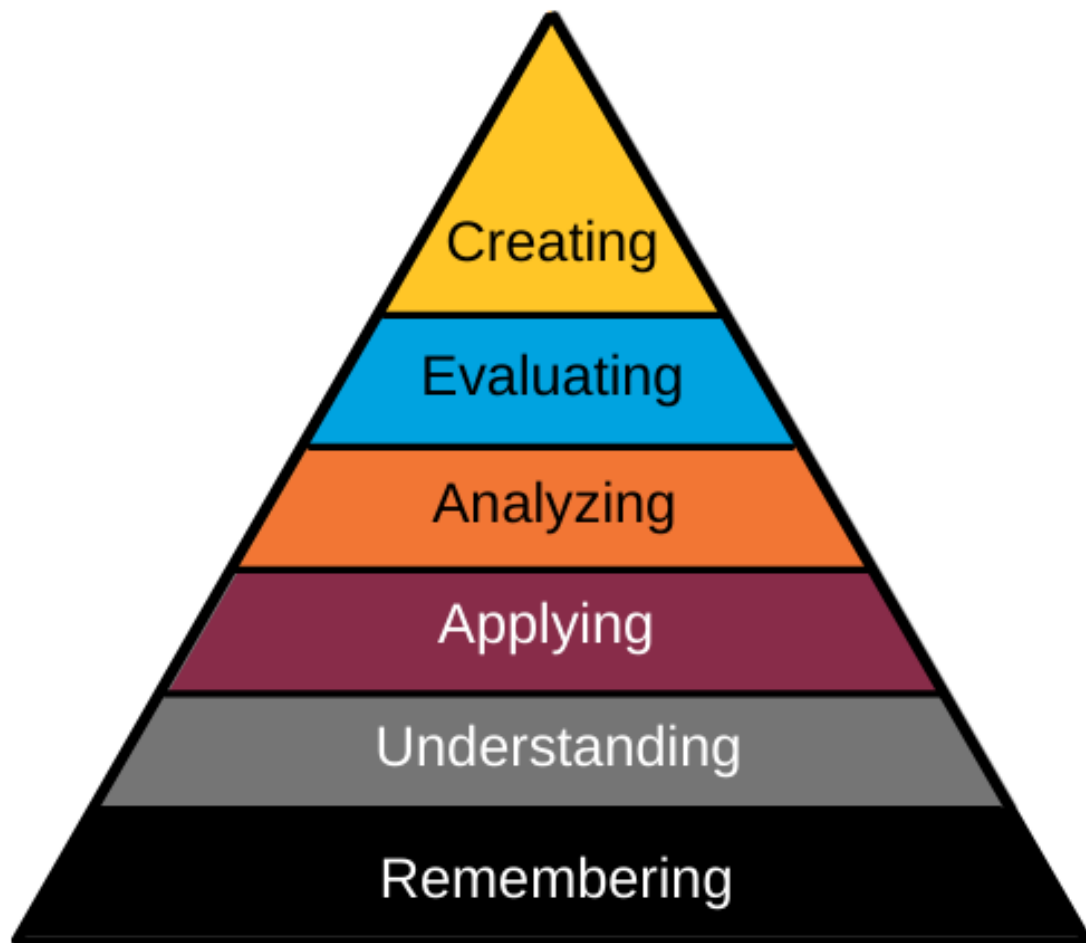


Figure 16

Bloom's Revised Taxonomy Action Verbs

Remembering		Understanding		Applying		Analyzing		Evaluating		Creating	
To find or recall information		To construct meaning from written material or graphics.		To use information in new situations.		To draw connections among ideas.		To value information or ideas		To produce new or original work.	
Define	Name	Associate	Estimate	Calculate	Modify	Break Down	Experiment	Appraise	Measure	Compose	Formulate
Draw	Outline	Classify	Explain	Change	Organize	Categorize	Illustrate	Argue	Rank	Construct	Generate
Duplicate	Recall	Compare	Identify	Classify	Plot	Combine	Inspect	Assess	Rate	Create	Produce
Identify	Recognize	Comprehend	Indicate	Compile	Practice	Compare	Outline	Conclude	Recom- mend	Criticize	Propose
Label	Select	Demonstrate	Interpret	Compute	Present	Connect	Predict	Convince	Score	Design	Revise
List	Show	Describe	Relate	Employ	Produce	Contrast	Question	Estimate	Select	Develop	Rewrite
Match	State	Differentiate	Restate	Execute	Show	Debate	Research	Evaluate	Support	Direct	
		Discuss	Select	Illustrate	Solve	Differentiate	Separate	Grade	Test		
		Distinguish	Summarize	Implement	Use	Distinguish	Simplify	Investigate			
			Translate	Map	Write	Examine	Subdivide	Justify			
				Model							

Concepts and Competencies

Concepts

[Canvas Link](#)

Concepts are high-level descriptions of the theories, ideas, paradigms, and understandings that comprise a given profession or field of study and that students will draw upon in the successful execution of the outcome. These knowledge areas are most often the theories and principles that are mandatory for students to acquire during the program and then demonstrate mastery as they get closer to graduation. The number of concepts in a higher education program can be abundant, yet not all need to be included in an assessment plan.

Competencies

[Canvas Link](#)

Competencies are directly related to PLOs with each PLO having its own set of concepts and competencies. Competencies are the skills, tools, and operational knowledge required to achieve and successfully execute the outcome. Most competencies are summative in nature and are written for students to be able to achieve them upon program completion. For example, the purpose of an accounting program is often to graduate students with the knowledge and skills necessary to become professional accountants. Competencies for such a program would include the ability to assess, analyze, and manage risk using appropriate frameworks. On the other hand, concepts students would master include business law, ethics, process analysis and design, principles of auditing, and monetary unit assumptions.

Competencies differ from general education in that they are unique to a specific program or field, while general education skills are transferable across disciplines. Another differentiating feature is that competencies have measures to determine the degree of learning and performance criteria to establish exact expectations.

Similar to concepts, the number of competencies taught in a higher education program can be abundant, yet not all need to be included in an assessment plan. Programs need to identify the skills and operational knowledge that are summative in nature; in other words, which skills are built from knowing other skills.

Relationships with Other Plan Elements

Both concepts and competencies have significant overlaps with several other plan elements including a program's assessment map, assessment process, and PLOs. As such, properly identifying a PLO's concepts and competencies can aid in the overall development of a program's assessment plan. It is often helpful to conceptualize a program's missions and goals as broad conceptualizations of a program's objective that become increasingly detailed through its PLOs, then concepts and competencies, and even further detailed through a plan's proposed measurements. In other words, each outcome will be explained through concepts and then measured through competencies.

Program Mission → Program Goals → Program Learning Outcomes → **Concepts and Competency** → Assessment Process → Measures → Performance Criteria

Assessment Mapping

Starting in 2021, assessment mapping will be required for new program applications and programs going through APR. Certificate programs are exempt from this requirement. Assessment mapping is a visual representation of the relationship between the PLOs and the courses/curriculum. Mapping identifies where PLOs are introduced, reinforced, and mastered and can be very basic or complex. One particular benefit of assessment mapping is clarity of purpose. Mapping and measuring the development of specific competencies throughout the curriculum allows program leaders, faculty, and administrators to take an objective look at the PLOs (not just to succeed on any one assignment but to develop a set of skills to enable success in the workplace) and help to articulate what students are expected to learn through the program.

UOEEE only asks for a single level assessment map. UOEEE recommends that programs begin to develop their assessment map using the following process:

Step 1: Examine the PLOs and determine where in the curriculum they are introduced, reinforced or developed, and mastered. Most assessment occurs at the point of mastery.

Step 2: Work with faculty in the program and determine assignments that would provide opportunities to measure a students' knowledge and ability to demonstrate achievement of the outcome.

Step 3: Create IRMA map (within the portal) to identify when and where each program outcome is **I**ntroduced, **R**einforced, **M**astered, and **A**ssessed through the core curriculum courses in the program.

Introduced - Students are not expected to be inherently familiar with the content or skill at the collegiate or graduate level. Instruction and learning activities focus on basic knowledge, skills, and/or competencies, and entry level complexity.

Reinforced - Students are expected to possess a strong foundation in the knowledge, skill, or competency at the collegiate or graduate level. Instructional and learning activities continue to build upon previous competencies and increased complexity.

Mastery - Students are expected to possess a mastery level of knowledge, skill, or competency at the collegiate or graduate level. Instructional and learning activities continue to build upon previous competencies and increased complexity.

Assess- Artifacts chosen in an assessment cycle to demonstrate students' learning outcomes.

Figure 17

Editing Assessment Maps in the Assessment Portal

1 Cometus nec, semper sem. Aenean ac arcu vel purus sollicitudin vestibulum. Nunc laoreet dui turpis, vitae pretium lorem ornare sed. Mauris eros erat, bibendum eget rutrum et, volutpat sit amet libero. Mauris malesuada laoreet lorem sit amet mattis. Maecenas.

Concepts:

Competencies:

Outcome map	Course 1	Course 2	Course 3
Introduced	SOC 101		
Reinforced	SOC 250		
Mastered	SOC 404		

Assessment maps can be built within the UOEEE Assessment Portal and within the plan edit page more specifically (see Figure 17). Within this particular plan element, programs are expected to enter in where outcome competencies are introduced, reinforced, and mastered. No other information or materials are required. Courses can be entered in the same way other content for elements are entered, by utilizing one of the two edit buttons within the portal (or). When entering in courses, please observe and use the correct format: enter the subject and catalog number using all caps and a space between the letters and numbers.

After courses are entered for each outcome, you can download a more traditional assessment map (see Figure 18 below) that combines all the courses and learning outcomes into one map, using the icon located in the top right of the plan edit page. This prompts the portal to download the assessment map.

Figure 18

Learning Outcome Map Output

Courses	PLO1	PLO2	PLO3
SOC 101	I	I	
SOC 102	I		
SOC 110		I	
SOC 113		I	
SOC 205		R	
SOC 210		R	
SOC 244	R		
SOC 249		M	
SOC 250	R		
SOC 404	M		

I: Introduced, R: Reinforced, M: Mastered

Assessment Process

[Canvas Link](#)

The assessment process should describe the approach or method developed to measure the PLOs. The assessment process can be broken down into categories or written in a narrative and should include the following:

- The population of students being assessed (e.g., students in a major vs a general population, all seniors in a program or freshman, students on an internship).
- Where the artifacts will come from (e.g., course code and type of artifact).
- Details describing the type of instruments to be used. This includes direct forms assessment (e.g., rubrics, tests, lab practical's) and would ideally also include indirect forms of assessment (e.g., surveys, focus groups, etc.).
- How the assessment will occur. This should include steps in the process so they can be replicated.
- Who is included on the assessment team? More specifically, who will be involved in analyzing the data (students, faculty, external stakeholders)?
- The timeframe in which data will be collected and analyzed.
- How the data will be compiled and analyzed.
- How the data will be used for continuous quality improvement.

If there is any professional certification or accreditation involved, it should be included here. As previously mentioned, it is important that assessment process be as descriptive and robust as possible as program plans are accessible by university administration, accrediting bodies, and is available upon request to all stakeholders, journalists, and the public. The validity of the data reported is often based largely upon the process by which the data was collected. A thoroughly descriptive assessment process allows for replication as well as the proper context in which to interpret the data.

Lastly, a program's assessment process will overlap with other elements of the assessment plan much like concepts and competencies. As such, a well-developed assessment process will aid programs in identifying appropriate "measures" along with their "performance criterion."

Program Mission → Program Goals → Program Learning Outcomes → Concepts and Competency → **Assessment Process** → Measures → Performance Criteria

Measures

[Canvas Link](#)

Measures identify the student artifact and tool that will be used to “measure” the outcome and works in tandem with performance criteria. Information submitted in the measure element, include the artifact and tool used to make a judgment concerning demonstrable student and graduate abilities. Most often, the faculty will be responsible for developing the measure (rubric, internship evaluation), choosing when in the program the assessment will occur, and who will be collecting the student artifact.

Direct and Indirect Measures

Both direct and indirect data are important for evaluating program quality. Direct measures collect data on student learning directly related to knowledge and academic performance as assessed through a program’s learning outcomes. Indirect measures can provide information on attitudes, experiences, and perceptions from stakeholders that can help support and explain findings taken from direct assessment data. Within each assessment plan, there must be a minimum of two measures for each outcome and at least one measure must be a direct measure. The requirement has always been for programs to collect evidence for direct assessment, but best practice would be for direct assessments to be supported with indirect assessments.

A direct measure is based on a student-produced artifact or performance that is assessed for insight into learning, most often using a rubric or similar tool. Grades in courses or for exams are not recommended because they are one dimensional and only provide information on how many points have been earned rather than where the student’s strengths and weaknesses lie. Rubrics, either faculty-developed or externally validated, are now recommended for use wherever circumstances allow. Rubrics are preferred over grades (i.e., class and exam grades) since they can identify trends in the different areas of knowledge, often referred measured by rubric dimensions. Rubrics or score cards can be paired with a number of student artifacts including class assignments, research papers, capstone projects, performances, laboratory activities, or clinical examinations. In special instances, programs can utilize a subset of exam items that specifically assess the associated PLO. At minimum, details regarding the number of items used, the relationship between the items and PLO, and examples of the exam items should be included.

Indirect measures that assess students’ perceptions and attitudes can often help explain results obtained from direct assessments. Indirect data is often collected as qualitative or survey type data and can be collected from multiple populations including current/graduating students, alumni, faculty, and employers. Indirect data can be collected in many ways including focus groups or interviews where faculty can provide feedback and insight to a program’s curriculum, reflective essays asking where and how students learned specific information, and alumni surveys where alumni are asked to reflect on how their educational experiences shaped their current career path.

When a measure uses a tool and information not generated by faculty, such as professional certification data or alumni survey responses, non-faculty staff can collect and process the information as long as faculty use these results when developing assessment findings. Most, of this information is likely to also be included within the assessment process but should still be included within the measure element but with more specificity.

UOEEE recommends when possible that programs use information already being collected for accreditors and regulators in their program assessment plan. Accreditation goals and outcomes can also be used assuming they are sufficiently summative and cumulative in nature.

Formative and Summative Measures

Like direct and indirect measures, including both formative and summative measures within a program's assessment plan can provide a richer and fuller view of student learning. While direct and indirect measures differ in the type of information collected, formative and summative measures differ in when student learning is assessed.

Formative measures are assessments that occur during the learning process to monitor student progress and help identify instructional areas where continuous improvements can be focused. At ASU, bachelor programs can begin assessing students during the students' 200 and 300 level courses if it is important to measure learning gained while progressing through the program. Not all students in the program are expected to be assessed but should be eligible to be sampled if programs are large and reliability is tested to ensure accurate assessment results.

Summative measures are assessments that occur at the point of mastery, often as students graduate from the degree program. They provide insight into a program's bottom line, assessing whether students have achieved the learning outcomes. Data collection after graduation also provides summative data. This data can include licensure exam scores, certification numbers and indirect data such as employment numbers, graduate school admissions, and student surveys asking students for insight on how well prepared they felt they were entering the workforce.

ePortfolios and Digication

ASU has a digital portfolio system with features that include artifact collection and rubric scoring that can be adapted to the course and program level. Programs are encouraged to utilize the digital portfolio system to help students build their academic repertoires as well as aid in program assessment and continuous quality improvement. Incorporating rubrics into digital portfolios makes course expectations transparent, allowing students to understand how levels of performance are determined for a course or program. Furthermore, rubrics utilized within ASU's digital portfolio system allow faculty, programs, departments, and colleges to create a history of assessment and continuous improvement efforts. See [Digication](#).

Program Mission → Program Goals → Program Learning Outcomes → Concepts and Competency → Assessment Process → **Measures** → Performance Criteria

Performance Criteria

[Canvas Link](#)

While measures identify the student artifact and tool that will be used to “measure” the outcome, the performance criteria establish the expected level of performance for the majority of a program’s students for each outcome measure. This level of expected performance can be based on longitudinal data, such as past performance or nationally established criteria where available. When not available, performance criteria can be determined by the faculty based on their expertise in the field and then reinforced through longitudinal data collection.

Challenging Criteria

Most performance criteria expect 70% to 80% of students to attain a set level of proficiency for a measure to be considered met during reporting. Performance criteria differs from grading in this aspect. Quite often, criteria are met by a disproportionately high number of students being assessed because performance criteria have not been researched to determine which levels would be challenging to attain. If 100% of students meet a program’s criteria in all dimensions of a rubric, then the tool is not specific enough or the criteria is too low to be informative. Programs learn the most about their curriculum when they set criteria beyond average performance. Criteria are considered challenging when they may or may not be met by students and graduates and require faculty to consider quality improvements continuously. This would then provide information on both the strengths and weaknesses of the curriculum.

Because ASU wants criteria to be effective, challenging, and informative, UOEEE does not track whether learning outcomes have met a program’s set criteria or not. Outcomes not met are viewed as important data points and opportunities for improvement. Plans are considered effective if they can provide valuable information for making continuous instructional improvements.

Rubric Use and Canvas Benefits

As previously mentioned, UOEEE recommends programs use rubrics to assess student performance. When developing rubrics, faculty should first consider the rubric’s dimensions, the student population, and the number of students expected to attain “mastery” of a subject, skill, or intellectual habit. Performance criteria can change for students as they progress through a degree. Programs may also choose to use a single rubric at all levels of measurement. For example, programs may use a rubric in which sophomore students are likely to earn a 2 out of 4 on some or all dimensions, but then score a 3 out of 4 as they are reassessed with the same rubric as junior or seniors. The number of levels should be enough that each level sufficiently describes the spectrum of student performances for that assignment.

UOEEE recommends that programs utilize rubrics with four levels (1-4) with faculty calibrating their rubrics so that a majority of students, or an “average” student,

Rubrics in Canvas Resources

- Assessments with Rubrics - [Article from ASU Teach Online](#)
- [ASU Teaching and Learning Workshops calendar](#)
- Canvas resource doc - [Maintained by Canvas](#)
- How do I add a rubric to an assignment? - [Canvas Guide](#)
- How do I add a rubric in a course? - [Canvas Guide](#)
- How do I manage rubrics in a course? - [Canvas Guide](#)
- Rubrics overview - [Canvas Tutorial](#)
- How to create rubrics - [ASU Quick Tip](#)

would achieve a rating of 3 out of 4, with 4 being reserved for the exceptional student. Regardless of the number of levels chosen, UOEEE recommends the inclusion of a “0” rating to represent the absence of material or the absence of relevant work submitted. If the rubric does include a “0” rating, then the criteria should be described as “Information Not Present.” Please look at the sample rubric (see Figure 19) and resources in Canvas for more instruction on how to develop rubrics.

Utilizing rubrics has additional benefits such as the ability to automate data collection within Canvas. For support with this process, contact the Learning Experience Integration Group via [ASU's Learning Management System Training Page](#). Rubrics can also cover general education requirements and be applied across subjects. The Association of American Colleges and Universities (AAC&U) has developed a [set of rubrics](#) that can be adapted for use within multiple disciplines.

There are many rubrics in use today including external rubrics specific to a discipline that are already developed and tested for validity and reliability. Furthermore, many programs at ASU develop and use rubrics specific to an assignment. These faculty-developed rubrics are best when addressing an area with no standardized rubric is available. When an externally validated rubric is available, its use is strongly encouraged.

Figure 19

Sample Rubric

Level of Accomplishment: number scale	EXPERT (Graduate or Professional Level Work) OPTIONAL	Outstanding (Above Average)	Meets Expectation (Average Performance Level)	Below Expectation	Information not Present
	4	3	2	1	0
Level of Accomplishment: narrative scale	Rarely but occasionally seen in an undergraduate student	Met the expectation but also extremely well done	*50-70% of Students should score here	(Promising, but not quite there)	This could be due to the responder or poor fit of the assignment
Dimension 1	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)
Dimension 2	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)
Dimension 3	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)

Program Mission → Program Goals → Program Learning Outcomes → Concepts and Competency → Assessment Process → Measures → **Performance Criteria**

General Education—Undergraduate Only

To meet new general education skill and habit expectations, both new programs and certificates as well as programs and certificates going through APR, must now provide information on how general education knowledge areas are addressed within their curriculum. Previously approved assessment plans will not need to include this information until the program's next scheduled APR.

Programs can identify how these knowledge areas are addressed by selecting one of the following input options within the portal (see Figure 20): 1) measure, 2) proxy, 3) narrative, or 4) ASU General Studies.

- A **measure** is a form of assessment that is being utilized within the program's current assessment plan. When this input method is checked, a dropdown will appear that allows the user to choose which measure within the assessment plan is assessing that particular area of knowledge
- A **narrative** is reserved for general education areas of knowledge that are assessed within the program, but not included within the program's current assessment plan. Selecting this option will allow the user to describe where and how students will master skills and knowledge not included in a program's assessment plan.
- A **proxy** is an assessment performed by a legitimate professional or regulatory/ accrediting organization or professional association, as opposed to faculty. Examples of a proxy include 1) testing by state or national regulatory board, 2) internships in the student's area of study, 3) peer-reviewed publications and conference presentations.
- Programs can also indicate when particular knowledge areas will be taught and assessed by **ASU's General Studies Coursework**. This option is reserved for knowledge areas that are not specifically taught within a particular degree program (i.e., the English program not having a mathematics/quantitative reasoning component within its curriculum).

Figure 20

Editing General Education

General Education Knowledge Areas		
Composition, Communication & Rhetoric	✓ Measure	<p>[O3M1] Students will produce persuasive written policy statements based on comparative research from laboratory and fieldwork performed earlier in the program.</p> <p>Communication of findings is critical to the professional success of scientist, including marine biologist</p>
Mathematics/ quantitative reasoning	✓ Measure	<p>[O2M1] In MBI 380 students will properly collect ecological specimens, including water, soil, and organisms using appropriate data collection tools for use in laboratory analysis. These data will be collected from two or more divergent marine ecosystems and analyzed using appropriate sampling and comparative modeling techniques.</p> <p>In this assessment, students master laboratory procedures and use statistics to help draw conclusions and develop findings.</p>
Literature, Fine Arts & Humanities	✓ Narrative	<p>All students will complete general education studies in the</p>

In addition, the following instructions, directly from ABOR Policy 2-210, must be kept in mind while developing undergraduate programs.

ABOR Policy 2-210: <https://public.azregents.edu/Policy%20Manual/2-210%20General%20Education.pdf>

- Evaluation of general education is also part and parcel of the review of the learning objectives of each degree program and those outcomes are reflected in the academic program reviews.
- Effective assessment depends fundamentally upon measurement and does not rely exclusively on a single project or capstone course. It ...will inform curricular refinements and allow faculty & administrators to reconsider programs that do not meet expectations in terms of learned concepts and competencies.
- Each university will utilize rubrics, based on national standards or locally developed, to gauge whether students master the essential learning outcomes and intellectual qualities that are outlined in the policy.

Program Assessment Plan Quality Worktable

There are 11 elements in each program assessment plan that are required to be considered acceptable for use at ASU. If any plan element does not meet minimum requirements, the entire plan is considered unacceptable. If a plan meets minimum requirements or above on all plan elements, or if the plan can be considered innovative, it is acceptable for program assessment use.

The worktable below allows any plan to be scored based on plan descriptions. The UOEEE team will use this worktable and report scores for new plans beginning in the summer of 2020. Program leadership is strongly encouraged to reflect on the worktable when developing new plans and reviewing current plans.

Table 1

Program Assessment Plan Quality Worktable

Plan Elements	Plan is Unacceptable Does not meet minimum requirements	Plan is Acceptable	Plan is Exemplar
Mission	<input type="checkbox"/> None	<input type="checkbox"/> Mission statement addresses 3 of 4 these components: defines program, explains values, defines how it serves students, aligns with University mission	<input type="checkbox"/> Mission statement addresses all of these components: defines program, explains values, defines how it serves students, aligns with University mission
Program Goal	<input type="checkbox"/> None	<input type="checkbox"/> One or two goals related to mission	<input type="checkbox"/> Two to four goals that relate to mission and program outcomes
Outcomes	<input type="checkbox"/> None to two	<input type="checkbox"/> Three, minimum	<input type="checkbox"/> Four or More
	<input type="checkbox"/> Lowest Two Pedagogical Levels, Bloom Taxonomy	<input type="checkbox"/> Three or more outcomes. Active verbs that are appropriately rigorous. Middle Two Pedagogical Levels of Bloom's Taxonomy	<input type="checkbox"/> All outcomes are active verbs that are appropriately rigorous. Aligns with appropriate levels of Bloom's Taxonomy
Concepts	<input type="checkbox"/> None or ones present not focused on theories principles or skills	<input type="checkbox"/> Focused on theories, principles, skills and relates to outcomes	<input type="checkbox"/> Focused on theories, principles and skills and drives to outcomes
Competencies	<input type="checkbox"/> None or not measurable	<input type="checkbox"/> Break down outcomes into measurable components.	<input type="checkbox"/> Break down outcomes into measurable components. Focused on skills and habits related to outcomes.

Assessment Process	<input type="checkbox"/> Two or fewer components (what, how, when)	<input type="checkbox"/> Three or more. Sample population, semester, course, faculty involvement/team, tools, analysis, how results will be used.	<input type="checkbox"/> All components included. Sample population, semester, course, faculty involvement/team, tools, analysis, how results will be used.
Assessment Mapping	<input type="checkbox"/> Outcome introduction, reinforcement, and mastery are not addressed within the assessment map.	<input type="checkbox"/> Each outcome is introduced, reinforced, and mastered within at least one course within the curriculum	<input type="checkbox"/> Outcomes are being assessed in multiple courses.
Measures	<input type="checkbox"/> None or One	<input type="checkbox"/> Two, minimum	<input type="checkbox"/> Three or more
	<input type="checkbox"/> Indirect Only (survey or focus group)	<input type="checkbox"/> One methodology, tool direct or indirect	<input type="checkbox"/> Multimodal methodology using a rubric for direct and survey or focus group for indirect
Performance Criteria	<input type="checkbox"/> Not identified	<input type="checkbox"/> Identified but could be more challenging	<input type="checkbox"/> Established and challenging
General Educ-Undergrad Only	<input type="checkbox"/> Zero - 4 Areas of Knowledge measured	<input type="checkbox"/> Five to 8 of Areas of Knowledge measured	<input type="checkbox"/> All 9 Areas of Knowledge measured
Outcome Level	Any cell that does not meet criteria results in a plan not being accepted.	Plan is still developing yet is acceptable for program assessment purposes.	Plan has a strong methodology and should result in valid data and produce data effective for continuous improvement.

Resource Links

ASU Assessment Links

UOEEE Home Page: <https://uoeee.asu.edu/>

UOEEE Assessment Portal: <https://uoeee.asu.edu/assessment-portal>

UOEEE Assessment Handbook:
<https://uoeee.asu.edu/sites/default/files/docs/Plan%20Handbook%202018.pdf>

UOEEE Survey Reporting Portal: <https://uoeee.asu.edu/survey-reporting>

ASU Academic Program Review Portal: <https://provost.asu.edu/academic-program-review>

Assessment in General

References:

AAC&U VALUE Rubrics: <https://www.aacu.org/value-rubrics>

UC Berkeley: <https://teaching.berkeley.edu/resources/improve/evaluate-course-level-learning/rubrics>

Carnegie Mellon University:
<https://www.cmu.edu/teaching/assessment/assesslearning/rubrics.html>

Higher Learning Commission: Guiding Values

<https://www.hlcommission.org/Publications/guiding-values.html>

Assessment References from ASU Library Resources:-

- [Assessment in arts education](#) / Philip Taylor ISBN: 9780325007953
- [Assessment in Mathematics Education: Large-Scale Assessment and Classroom Assessment](#) (online text)
- [Research Assessment in the Humanities: Towards Criteria and Procedures](#) / Hans - Dieter Daniel; Sven E. Hug; Michael Ochsner. [Springer 2016](#) (online text)
- [Assessment in the Science Curriculum](#) / Marlow. Ediger. S.I. : Distributed by ERIC Clearinghouse 2001
- [Assessment in social work practice](#) Carol H. Meyer 1924-New York: Columbia University Press c1993
- [Assessment: a sourcebook for social work practice](#) Julia B Rauch; Families International (Milwaukee, Wis.) - Milwaukee, Wis. : Families International c1993
- [Assessment in Student Affairs, Second Edition](#) John H. Schuh, J. Patrick Biddix, Laura A. Dean, and Jillian Kinzie (online text)
- [Outcomes assessment for law schools](#) / Gregory S. Munro (Gregory Scott), 1948- Gonzaga University. School of Law. Institute for Law School Teaching. Spokane, Wash. : Institute for Law School Teaching, Gonzaga University School of Law c2000
- [Assessment in higher education: politics, pedagogy, and portfolios](#) Patrick L. Courts, Kathleen H McInerney: Westport, Conn. : Praeger 1993

- [Assessment in Mathematics Education: Large-Scale Assessment and Classroom Assessment](#) Suurtamm, Christine; Thompson, Denisse R.; Kim, Rae Young; Moreno, Leonora Diaz; Sayac, Nathalie; Schukajlow, Stanislaw; Silver, Edward; Ufer, Stefan; Vos, Pauline: Springer International Publishing, Cham 2016 (online text)
- [Assessment in mathematics](#) Kate Bennie :ISBN: 9780636035157
- [Approach to Learning and Assessment in Physics](#) Leslie. Dickie John Abbott Coll., Sainte Anne de Bellevue (Quebec): S.I. : Distributed by ERIC Clearinghouse 1994
- [Marking and assessment in English](#) Pauline. Chater: London; New York: Methuen 1984
- [A measure of success: from assignment to assessment in English language arts](#) Mary Frances. Clagget: Portsmouth, NH: Boynton/Cook Publishers c1996
- [Measuring up: educational assessment challenges and practices for psychology](#) Dana Dunn; Chandra Mehrotra; Jane S Halonen: Washington, DC: American Psychological Association c2004 (online text)
- [Assessment for Learning in Law](#) John O. Mudd: S.I. : Distributed by ERIC Clearinghouse 1986
- [Assessing public journalism](#) Edmund B Lambeth; Philip Meyer; Esther Thorson: Columbia: University of Missouri Press c1998
- [Assessment in Mass Communication](#) Susan Tyler. Eastman: S.I. : Distributed by ERIC Clearinghouse 1993
- [Handbook of measurement and assessment in behavioral sciences](#), Dean K. Whitla: Reading, Mass., Addison-Wesley Pub. Co. 1968
- [Assessment in arts education: a necessary discipline or a loss of happiness?](#) Malcolm Ross 1932- 1st ed. Oxford; New York: Pergamon 1986
- [Media education assessment handbook](#) William G Christ Mahwah, N.J. : L. Erlbaum 1997
- [The problem of assessment in art and design](#) Trevor Rayment Bristol: Intellect 2007
- [Student Assessment in Architecture Schools](#) Sarah M. Dinham: S.I. : Distributed by ERIC Clearinghouse 1988
- [Assessment in Management, Nursing, and Teaching at Alverno College](#) Georgine. Loacker: S.I. : Distributed by ERIC Clearinghouse 1986
- [Assessment in business education](#) Jim D Rucker; Ramona J Schoenrock; National Business Education Association: Reston, Va. : National Business Education Association 2000
- [Assessment in education](#) D. G. Lewis: New York, Wiley c1975
- [Assessment in the History Curriculum](#) Marlow. Ediger : S.I. : Distributed by ERIC Clearinghouse 2000
- [Assessment Clear and simple: a practical guide for institutions, departments, and general education](#) Barbara Walvoord: 1st ed. San Francisco: Jossey-Bass c2004
- [Assessing student learning: a common sense guide](#): Linda A. Suskie 2nd ed. San Francisco: Jossey-Bass c2009

Articles / studies / reports:

- Down and In Assessment Practices at the Program Level (2011) NILOA
<https://www.learningoutcomesassessment.org/documents/NILOAsurveyreport2011.pdf>

Other sources:

- Assessment of student learning in business schools: best practices each step of the way / Kathryn Denise Martell; Thomas G Calder