

ASSESSMENT PLAN



Planning, Implementing and Reporting
Student Learning and Institutional Learning Outcomes



“Assessment is the ongoing process of:

- *Establishing clear, measurable expected outcomes of student learning*
- *Ensuring that students have sufficient opportunities to achieve those outcomes*
- *Systematically gathering, analyzing and interpreting evidence to determine how well student learning matches our expectations*
- *Using the resulting information to understand and improve student learning.”*

Linda Suskie (2005), *Assessing Student Learning: A Common Sense Guide*

A process of assessment is essential to continuous improvement and therefore a commitment to assessment should be deeply embedded in an institution’s activities. For student learning, a commitment to assessment would mean assessment at the institutional and program level that proceeds from clear goals, involves faculty at all points in the process and analyzes the assessment results.¹

¹ Higher Learning Commission “Criteria for Accreditation – Guiding Values” document

Framework of Assessment at JCCC

The faculty of JCCC has established student learning outcomes for all students for both general education curriculum and institution wide curriculum. These outcomes are the heart of a continuous cycle of inquiry, assessment, and improvement. Regular assessment of student achievement of these outcomes is used to develop improvement strategies and demonstrate our accountability for our students' learning. Assessment produces data we can use to make evidence-based decisions related to curriculum, instruction and resources.

Guiding Principles of the Academic Assessment Process at JCCC:

- 1. Assessment is a vehicle for improvement of student learning, not an end in itself.** As such, assessment is fueled by thoughtful questions posed by faculty that identify data to be collected and analyzed to identify opportunities to develop and implement initiatives in curriculum, instruction and support services. For assessment to fulfill its function, assessment results must be used appropriately to provide direction and guidance for improving curricula and related student experiences.
- 2. Assessment works best when it is ongoing, not episodic, and when it is multi-dimensional, employing multiple methods.** Assessment is a process whose power is cumulative. Improvement in student learning is a long-range process.
- 3. Assessment works best when it has clear, shared, implementable goals.** Assessment activities are goal-oriented and involve comparing student performance with the purposes and expectations of the faculty as expressed in program and course design.
- 4. Academic assessment is a curricular issue and therefore is the responsibility of the faculty.** Faculty-driven assessment is instigated, designed, conducted, analyzed, interpreted and acted upon by the faculty. Regular assessment of student achievement of student learning outcomes is used to develop improvement strategies and demonstrate our accountability for our students' learning.
- 5. The independence of instructors, departments and divisions in approaches to assessment is crucial to the assessment process.** Just as individual faculty value autonomy in assessing course-level objectives, the faculty value independence in assessing curriculum-wide student learning outcomes at JCCC. For assessment to be meaningful, it should be localized in the departments and programs, measure student

success using tools that the faculty in a discipline respect and generate information a department can use to improve student learning or update the curriculum.

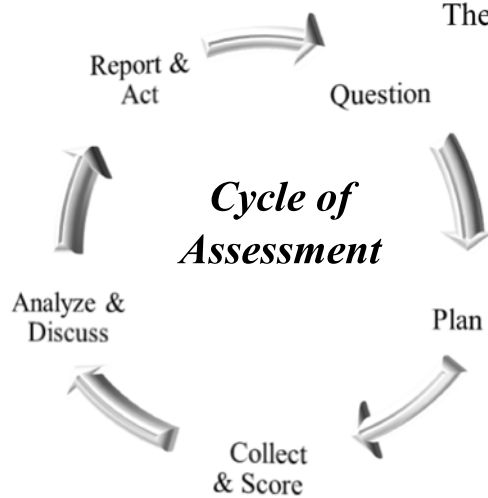
6. Assessment results will not be used for evaluation of individual faculty.

7. Assessment data will not be used to make comparative judgments across departments or divisions. Assessment data is intended to be used to for the facilitation of student, curricular and college development. It is not intended for comparative judgments. For assessing student learning outcomes across the college, results are looked at in the aggregate.

8. Successful assessment requires institutional support and resources. Planning and implementing assessment activities depend on the availability of faculty time, resources and support to produce meaningful results over a sustained period of time. Ongoing assessment efforts within departments and divisions require institutional funding for appropriate staffing, faculty time and materials.

JCCC's Philosophy of Assessment

CYCLE OF ASSESSMENT – AN OVERVIEW



The assessment culture has emerged as a dominant feature of high education over the last twenty years as it has become a primary feature in the criterion of regional and specialized accrediting agencies. During my time working in higher education, roughly 30 plus years, there are two philosophies that have emerged related to assessment practices. There are those assessment practices that seek to “prove” student learning, and those assessment practices that seek to “improve” student learning.

During my career in higher education, I have participated in both types of assessment. Both philosophies of assessment have a place in higher education but competing philosophies have also led to a great deal of confusion about assessment and its role in teaching and learning. If we are establishing thresholds of performance for students in a career or preparing them for post-graduate experiences, then “proving” their learning is important. When I go to see my doctor, I am more than hopeful that at some point in his educational experience someone assessed that he had reached a level of competence in his field. The same goes for my car mechanic.

However, I find that the assessment practices that are focused on *improving* student learning at the course, program and general education level make the best use of faculty and student affairs time and resources. The focus on improving student learning has the most positive effect in the classroom as it relates to improving curriculum, and on co-curricular activities to meet program goals. The focus of this book and the activities that are contained in it are to define a framework of assessment practice that supports improving student learning. We define the framework as the Cycle of Assessment. Below is a brief outline of the process, additional training, resources and materials available in the Office of Assessment.

What was the Question?

The cycle of assessment begins with a “**Question.**” This is often one of the most overlooked parts of the assessment process. Yet it is the most crucial if we want the assessment data to be meaningful. It is the role of the program or department to identify the relevant question to assess learning in the classes, courses, programs or co-curricular programming.

In writing an assessment question, we must be focused on this philosophy of *improving* student learning, so it is important to choose a fundamental concept/skill in the course or program that

students seem to be struggling with. In the case of co-curricular programming, choose a concept that is at the core of the activity, something that supports the program goals identified in designing the activity. Completing an assessment takes time and resources and should be focused in an area where faculty or student services staff want to see improvement in student performance.

Choosing an area of the curriculum or activity where students are not doing well feels counter-intuitive to what folks in higher education really want to assess. I believe the struggle here is that faculty and staff often feel that the assessment is going to be a reflection on their skills, teaching or programming, rather than a reflection on student performance. I have had faculty ask me why they can't focus on all the things their students are doing well! Again, since we are trying to improve student learning, spending time and energy assessing areas where student performance is good doesn't accomplish our goals. The same is true of co-curricular programming. The activity constructed may accomplish three of the programs goals you have for it, but it is the fourth goal that students don't seem to be learning that needs to be assessed.

This issue is one of the reasons that all of the assessment data that my office receives and reports out on is done only in the aggregate, without any faculty identifiers. Because this is about student performance! Faculty have their own data that they can use for comparative purposes, but the reports we generate by division or campus wide don't provide a conduit to evaluate those who gave the assessment.

Basic guidelines for writing a good assessment question are to make the question:

- Meaningful – the assessment question needs to focus on an area that faculty or students services staff need to know the answer. This question can be designed to be answered at the course level, department, program or activity level. Knowing the answer to the assessment question should be planned so that the data gathered allows for *meaningful* changes to the curriculum or programming. Before you administer the assessment – ask the “So what?” question – what will I be able to improve on if I know the answer to this question?
- Relatable – the assessment question needs to be tied to course objectives, program goals or activity goals, and be specific to the institution. The assessment question should also be relatable to at least one of the appropriate campus-wide student learning outcomes.
 - On my campus, we have both general education learning outcomes and institutional learning outcomes. We ask that general education courses choose a primary general learning outcome that their assessments are aligned with. For student affairs and career and technical education, assessments are aligned with the institutional learning outcomes.
 - Some institutions have a separate set of student affairs learning outcomes that are parallel but not identical to institutional learning outcomes.

- Measurable – the question should be formulated so that it can be answered in the course, program or activity. Usually that means specifying the question to an observable student performance. In designing the question, stay away from the *mechanism* for assessment and focus on the desired performance.
 - Too broad – and focused on instrument: What attitudes do students need to possess to pass the problem-solving essay portion on the mid-term exam? (This question is focused on something difficult to measure – attitudes, rather than student’s ability to perform.)
 - Narrower – but focused on instrument: Can students apply problem-solving steps to the essay portion of the mid-term? (Too focused on the instrument which could change over time. Focus should be on the desired outcome.)
 - Better Question: Can students apply problem solving steps? (Is narrowed appropriately to focus on a specific student performance, without focusing on the instrument.) This could potentially be narrowed further to a specific step within a problem-solving technique of the discipline. I encourage faculty to include unique discipline language in writing their assessment question.

- Manageable – the process of collecting data needs to be manageable. Complex assessment systems with multiple variables make for interesting research projects but can be burdensome. If you cannot change or have an impact on a variable, don’t collect the variable. Keep it simple and more importantly, keep it sustainable. Actionable assessment data is based on trends over time, so sustainability is key.

- Actionable – the answer to the assessment question should provide information to make changes at the course or program level of the curriculum, or for co-curricular activities, changes in the design of the activities and requirements. This goes back to your “So what?” question. Now that you know the answer, what steps are you going to take to improve student learning?

Planning Makes Perfect

After the question has been developed, it is important to “Plan” for the collection of the assessment data. Some universal decisions must be made:

- Which program goal, college-wide learning outcome or course objectives are going to be assessed? In academic programming, it is important to create a curriculum map which provides a good starting point to determine what initial assessment initiatives should be addressed.

- A curriculum map can help faculty in a program determine where in the sequences of classes an assessment should take place. In developing the curriculum map, it would be important to note if the concept being assessed is being introduced, reinforced or at this stage in the progression if students should have mastered the concept.
- Based on the assessment question, what tools are best to conduct the assessment? Examples could include portfolios, rubrics, embedded test question(s), surveys, reflections, pre/post-tests, focus groups, etc. You can also determine if you want to collect some indirect data on student performance through surveys, employer feedback, etc. Later in the book, we will discuss these instruments individually. Having determined the assessment question often helps you determine how best to assess it.
- Is it important for faculty to determine what the expectations are of student performance? This is an important conversation to engage in prior to collecting the data. I believe determining the benchmark must take place first, because often the expectations of performance can “sink” to the level of the data collected. Additionally, expectations also provide a roadmap to determine when students have “arrived” at an expected level of performance, and to know that the interventions and improvements have had a positive impact.

I have data, so what? Collecting and Scoring

How the data will be collected, scored and managed overtime are best considered prior to collecting a single data point. Assessment data is always about aggregated results, over time, to see what trends emerge in student performance. Most of the management systems on assessment tend toward collecting data with little emphasis on tracking data over time. The results tend to be reported either on a semester-by-semester bases or by just one academic year. Even if your campus doesn't have a software solution for collecting assessment data, an easy way to get started is to work with Excel and create templates to facilitate recording the data. This may sound very simplistic for those of you who are Excel gurus, but we have discovered on our campus that not all faculty or staff are well versed. I am providing some of the “rules of thumb” that we have developed overtime that are born out of some really bad data reports! Below are the rules of thumb we follow for developing a template to record the data collected:

- Student records always exist on an individual row, the performance data on the student is captured in the columns.
- Each semester that data is collected has its own tab, and when the data is aggregated another tab is created. This practice keeps the original data from being corrupted and is always available to revisit. Whenever I work with assessment data, I create a new tab when building charts and graphs to represent the data.
- The template of how the data is to be captured is best used if it is distributed to everyone participating in the assessment activity. This will help to ensure consistency in data

collection and when the data is aggregated across sections or collectors, it will be easier to aggregate. It also helps cut down on the swearing when you receive data in multiple formats that you have to clean-up!

- It is important to create a tab with the assessment instrument/measurement description included, and to capture any anomalies from the semester. As an example, a few years ago we had a real blizzard and had to close the campus for three days due to the inability of the grounds crew to keep the parking lots clear. These snow days can have an impact on student performance. In adjusting for the lost days, lessons or activities may be truncated or even skipped. There may be last minutes changes in planned activities due to illness or other unplanned emergencies. These occurrences can have an impact on assessment results, and if not recorded in that semester or academic year, these anomalies can be forgotten when examining the data for trends over time. I will not remember that three years ago we had to change lesson plans and I skipped two lectures unless I've captured that anomaly in my worksheet.

Once the data has been collected, deciding what the data is saying about student learning can be challenging. It is important that those collecting the data in the department/division/program are the ones that are grappling with this task since faculty designed the assessment, administered it in the classroom or field, interacted with the students, etc. They must be the ones to make meaning of the results.

There are ways in which we can help. We offer services, training and resources on making sense of data. We also consult with programs to design the assessment “up-front” to ensure that the assessment question is strong, and the assessment will gather the right data to answer the question.

Do something!

The final steps in the assessment cycle, “**Report and Act,**” involve making programmatic, curricular or instructional changes that are informed by the assessment results. In a very broad sense, there are several possible outcomes of assessment data.

First, often in a pilot assessment, which be the first step of any assessment project, the results may indicate that the assessment instrument is ill-suited to measure the intended learning outcome. When this happens, the faculty will need to either modify the instrument or, if the miss-match is severe, change to a different assessment instrument completely. One of my favorite shows was the original Mythbusters. A tagline from the show was “Failure is Always an Option.” That is certainly true in assessment, especially when rolling out a new assessment instrument. That being said, even in failure you will learn something that will benefit the program.

Another common result of analysis is that the findings indicate an area of challenge for students in the course or overall programming. Determining what changes should be made to the curriculum or program to improve student learning is an obvious but challenging next step. Assessment data can provide an opportunity for robust discussion. Changes can be large and dramatic or incremental and measured. Understanding what direction the assessment data is leading the department takes thoughtful time and consideration.

Sometimes results can indicate students are being successful. If programs or departments have consistent assessment data indicating student performance is meeting expectations, it may be time to move on from a current assessment project. Continuing to assess a learning outcome in which students show proficiency may not be the best use of time and energy for departments and programs.

When is it time to wrap up an assessment? Some questions to explore:

- Was there improvement?
 - This may indicate that the intervention was successful.
- Did students meet the benchmark performance? More than once!
 - Improved student performance needs a sustained improvement to really indicate that the interventions have been successful. As a rule of thumb, we say at least three semesters. In co-curricular activities, at least three offerings of the programming.
 - Setting these benchmarks early in the process are important as the unfortunate tendency of setting them later results in expectations “sinking” to the level of performance. So be sure and have the conversations early, before you gather the data.
- Are faculty satisfied with student performance?
- Is there a greater need/question that needs to be asked?
 - Often what emerges from the assessment data that has reached its benchmark is another question.

Finally, an additional benefit of assessment activities can be a direction for faculty development. When discussing assessment of student learning, the assumption is that all data should point to actions that can be taken to improve student outcomes, which is the case most of the time. There are occasions when the assessment process leads not to the students, but to the faculty.

The example that I have is from an experience with a general education assessment project where the data indicated that the faculty were uncomfortable assessing student performances on visual communications in the discipline. The college had distributed a general education curriculum with skills being captured in the major’s curriculum. When the Assessment Committee began work to review the “Visual Communications” component, there was a slew of request to “delist” classes as satisfying that general education requirement.

Upon investigation it was discovered that many of the faculty felt they lacked a basic understanding of good visual communications within their discipline. After much debate, the faculty decided to keep the visual communications requirement, and the College committed to providing professional development opportunities to increase the understanding of good visual communication skills.

Sometimes, assessment projects may indicate that more training on a new textbook, learning management system, assessment technique, program concept, etc. may be beneficial to support the learning for our students.

Write about it

Just for the record, I am not just saying this because I am a Director of Assessment, although it is certainly helpful in doing my job. But it is important to report results that are meaningful to multiple stakeholders, both internal and external. Good reports provide a history of assessment activities, help crystalize what was learned and provide a road map for next steps. But the most important part of reporting is writing a report that is wholly focused on improving student learning.

An assessment report should answer the following questions:

- What was the question that needed to be answered to improve student learning?
- What assessment was completed to answer the question?
- What do the assessment results suggest in terms of actions faculty or student affairs personnel should take?
- What are the next steps?

The worse reports that come across my desk are those that in the narrative note that the department “will continue to monitor” assessment results. At some point monitoring is not enough, and one more semester of data will not influence what the trends, or lack thereof are telling a program. As a rule of thumb, I encourage at least three semesters of data be collected before substantive changes are made, unless it is obvious in the first data collection that the assessment instrument is a miss-match to the assessment question. This is something you should be able to determine in a well-planned pilot.

One of the things that higher education has proved to be quite efficient at is collecting data. Not necessarily acting on data, not necessarily using data to inform improvements, but we are good at collecting data. Collecting data is, without a doubt, an important piece of the assessment cycle. But as you look at the cycle, you will see that collecting the data is far from the end of the cycle. It is important that we move beyond just collecting the data to using the data to inform changes to courses, programs or activities. Otherwise, assessment becomes just another compliance requirement and has little to no impact on improving student learning.

I believe this is the crux of the unrest we read about from faculty who have published articles and editorials challenging the concept that assessment improves student learning. I think they must be at schools where assessment has become part of the institutional compliance requirement, rather than a tool used to identify areas of student learning that are struggling and then working to improve. I understand the draw of making assessment a compliance issue. Indeed, it is a significant challenge facing institutions concerned with assessment practices. Institutions have the dual purpose of engaging faculty in meaningful assessment practices, while addressing the ever-increasing accountability requirements placed on colleges. How do institutions address accountability calls while still engaging in authentic assessment practices that yield robust assessment data with engaged faculty?

The Cycle of Assessment is based on the model of Action Research (Varcel-Craig, 2009; Koshy, 2005; Walvoord, 2004). The focus of action research is on “using available information and experience to improve practice” (Varcel-Craig, 2009, pg. 2). Action Research as a model for assessment does not “generate broad theories” of assessment and learning, but rather focuses to “inform local action” (Walvoord, 2004, pg. 2). In using the Cycle of Assessment as a means of framing assessment, the emphasis on improving practice translates to improvements in student learning. In order to accomplish the goal of improving learning, it is important that assessment results are not only generated but are used by a highly engaged campus invested in a process that is focused on student learning. In addition, assessment practices should be designed and implemented in ways that focus on the benefit to students and the faculty teaching them.

JCCC Learning Outcomes

The College has adopted both General Education Student Learning Outcomes for the general education curriculum requirements. Additionally, the College has overarching Institutional Learning Outcomes for all campus-wide curriculum.

Information regarding the JCCC Statement of General Education can be found in Curriculum and Academic Scheduling office, along with the overall curriculum approval process. Listed below are the General Education Students Learning Outcomes (SLOs) and the Institutional Learning Outcomes (ILOs) adopted by the faculty.

General Education Student Learning Outcomes (SLO)

SLOs should be chosen to assess by those departments/courses **that are designated** as part of the general education curriculum.

1. Demonstrate information literacy by finding, interpreting, evaluating and using sources.
2. Apply problem-solving strategies using appropriate disciplinary or cross-disciplinary methods.
3. Communicate effectively in a variety of contexts.
4. Demonstrate knowledge of the broad diversity of the human experience and the individual's connection to the global society.
5. Process numeric, symbolic and graphic information to draw informed conclusions.
6. Comprehend, analyze, and synthesize written, visual, and aural material.

Broad definitions of each of the General Education SLOs are listed below. These definitions should help provide guidance to discipline and programmatic definitions for reporting assessment results during Program Review.

	Mastery	Progressing	Low/No Mastery
SLO 1 - Demonstrate information literacy by finding, interpreting, evaluating and using sources.	Student uses appropriate methods to find and evaluate information in order to distinguish between credible and non-credible sources and select the most appropriate source(s).	Student is able to differentiate between credible and non-credible sources, but not understanding all aspects of relevant tools or evaluating the source fully.	Student cannot consistently differentiate between credible and non-credible sources.

SLO 2 - Apply problem-solving strategies using appropriate disciplinary or cross-disciplinary methods.	Most of the time, a student is able to identify specific problems to be solved and apply an appropriate process and sequence to achieve the solution. Student consistently presents ideas, information and concepts clearly without error that detracts from communicating accurately with the target audience.	More than half the time, a student is able to identify specific problems to be solved and apply an appropriate process and sequence to achieve the solution. Student generally presents ideas, information and concepts clearly, but with error that decreases accuracy of the message communicated with the target audience.	Student is rarely or never able to identify specific problems to be solved and apply an appropriate process and sequence to achieve the solution. Student presents ideas, information and concepts unclearly, with errors that obscure the message communicated with the target audience.
SLO 3 - Communicate effectively in a variety of contexts.	Student demonstrates evidence of adjustment in attitudes and beliefs. Learning from diversity of communities and cultures.	Student has awareness that attitudes and beliefs are different from those of other cultures and communities.	Student expresses attitudes and beliefs as an individual. Is indifferent or resistant to what can be learned from diversity of communities and cultures.
SLO 4 - Demonstrate knowledge of the broad diversity of the human experience and the individual's connection to the global society.	Student provides accurate explanations/processing of mathematical forms. Makes appropriate inferences based on that information.	Student provides somewhat accurate explanations/processing of mathematical forms, but occasionally makes minor errors related to computations or units.	Student attempts explanations/processing of mathematical forms, but draws incorrect conclusions about what the information means, or commits major computational errors.
SLO 5 - Process numeric symbolic and graphic information to draw informed conclusions.	Student consistently recognizes and can communicate implications of the material for contexts, perspectives or issues.	Student draws basic inferences about context and purpose of the material.	Student exhibits little to no understanding of material.
SLO 6 - Comprehend, analyze, and synthesize written, visual and aural material.			

Institutional Learning Outcomes (ILO)

ILOs should be chosen by those programs and courses that **are not designated** as part of the general education curriculum. This would most likely include CTE programs and course offerings that are not part of the degree requirements.

- **Quantitative Literacy:** Use quantitative skills to analyze and process information.
- **Critical Thinking:** Acquire, interpret and analyze information and apply appropriate problem-solving techniques to determine and evaluate solutions.
- **Communication:** Communicate effectively with clarity and purpose.

- **Social Responsibility:** Be prepared to practice community engagement that reflects democratic citizenship, environmental responsibility, diversity and international awareness.
- **Personal Responsibility:** Be independent lifelong learners who have the skills necessary for economic, physical, social, mental and emotional wellness.

Broad definitions of each of the ILOs are listed below. These definitions should help provide guidance to discipline and programmatic definitions for reporting assessment results during Program Review.

	Mastery	Progressing	Low/No Skills
Quantitative Literacy	Student provides accurate analysis of information presented in mathematical forms. Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Makes appropriate inferences based on that information.	Student provides somewhat accurate analysis of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Student attempts analysis of information presented in mathematical forms but draws incorrect conclusion about what the information means. Calculations are attempted but are both unsuccessful and are not comprehensive.
Critical Thinking	Student takes information from sources with enough interpretation/evaluation to develop a comprehensive analysis.	Student takes information from sources with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis.	Student takes information from sources without any interpretation/evaluation.
Communications	Student demonstrates a thorough knowledge of context, audience and purpose when presenting ideas, information and concepts clearly.	Student demonstrates an awareness of context, audience and purpose when presenting ideas, information and concepts clearly but with errors.	Student demonstrate minimal attention to context, audience and purpose when presenting ideas, information and concepts unclearly.
Social Responsibility	Student connects and extends knowledge from	Student begins to connect knowledge from current	Student begins to identify knowledge from current

	<p>current academic field of study making relevant connections to community engagement. Demonstrates ability and commitment to collaboratively work across and within community contexts and structures to achieve a civic aim.</p>	<p>academic field of study that is relevant to community engagement. Demonstrates experience identifying intentional ways to participate in community contexts and structures.</p>	<p>academic field of study that may be relevant to community engagement. Experiments with ways to participate in community contexts and structures.</p>
<p>Personal Responsibility</p>	<p>Student career/educational interests and pursuits exist and flourish outside classroom requirements. Can recognize ethical issues when presented in a complex, multilayered context, and can recognize cross-relationships among the issues.</p>	<p>Student shows interest in pursuing independent career/educational experiences beyond classroom requirements. Can recognize basic and obvious ethical issues and partially grasp the complexities or interrelationships among the issues.</p>	<p>Student begins to look beyond classroom requirements for career/educational experiences. Can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.</p>

Assessment Philosophy and Process

The Assessment Plan of the College was built on the philosophy of “improving student learning” rather than “proving student learning.” The assessment groundwork was laid by multiple faculty leadership including several special Task Forces charged with various processes and updates of assessment initiatives on campus and the work of the Assessment Council. The current assessment of both ILOs and SLOs at the College includes both direct and indirect forms of assessment taken over multiple courses and programs and over multiple points in time.

Direct Assessment

The direct form of assessment takes place at the course level in the form of embedded assessments. The tools of embedded assessment fall into three broad categories and are tied to specific student learning outcomes: 1) Pre/Posttest of content knowledge; 2) Rubrics designed to measure student artifacts; 3) Questions or Assignments embedded within coursework.

Embedded assessment is a particularly efficient approach to measure student learning because it makes use of tasks instructors already assign in their courses, thereby being reflective of what takes place in the course and allowing the results to be used with confidence to drive improvement in the curriculum. A variety of assessment methods are used by faculty for embedded assessments and vary across disciplines. These can include student artifacts such as writing assignments, exam questions, original artwork, performances and observations of student skills.

In Career and Technical Education programs there is often an additional assessment measure at the end of the program as many careers require students to pass a nationally standardized test before they enter the workforce. These nationally standardize tests can be useful to the program, especially in those areas where sub-scores are provided so that the program can tie results back to elements of the curriculum.

Indirect Assessment

The indirect form of assessment at the Institutional level used for the purposes of student learning outcomes is a series of questions within the Community College Survey of Student Engagement (CCSSE). Survey items from CCSSE represent empirically confirmed "good practices" in undergraduate education. That is, they reflect behaviors by students and institutions that are associated with desired outcomes of college. CCSSE doesn't assess student learning directly, but survey results point to areas where the College is performing well and aspects of the undergraduate experience that could be improved.

CCSSE is administered in the spring semester to mostly returning students and asks them to reflect on institutional practices and student behaviors. Specifically, the College examines student perceptions of their experience related to over-arching education skills and compare these results to national norms for community colleges. The survey questions to be used include the following specific responses from CCSSE:

“How much has your experience at this college contributed to your knowledge, skills and personal development in the following areas?”

- Acquiring a broad general education
- Writing clearly and effectively
- Speaking clearly and effectively
- Thinking critically and analytically
- Solving numerical problems
- Using computing and information technology
- Working effectively with others
- Understanding people of other racial and ethnic backgrounds”

Additional indirect data is often collected by the programs or departments using survey instruments. These surveys can be informative, but do not replace direct assessment data.

Timelines for Assessing the Curriculum and Reporting Findings

Faculty in the departments/programs are tasked with identifying and implementing common assessment instruments in their disciplines to be used across course sections for the purpose of measuring the primary student learning outcome or institutional learning outcomes they are assessing. This method provides the best mechanism to get meaningful and consistent results for assessment courses and programs. For those departments offering a large number of courses, schedules can be established at the department level to rotate assessment of the curriculum over a three-year period.

Date	Action	Outcome
August-November	Faculty members discuss implications of assessment data results captured in the previous academic year.	Submit assessment results and action plan or follow-up assessments in Program Review (annual and comprehensive).
August/May	Faculty assess in the Fall and Spring courses, gathering assessment data.	Departments discuss trends emerging from the data.
February/March	Assessment data is extracted from Program Reviews from the previous cycle and is aggregated across the College and reported out to various constituencies.	Assessment office publishes annual report with aggregated data.

May/June	Data for the academic year aggregated and prepared for faculty to discuss in the Fall semester.	Departments contacts assessment office if assistance is needed.
Cycle repeats		

Setting the Benchmark for Performance

Defining Mastery, Progressing, Low/No Skills for Assessment

For assessment of SLOs and ILOs, each academic department and program reports the level of mastery, progressing and low/no skills in the assessment module each year during the Academic Program Review processes. Each program determines the level of competency that defines these levels for each assessment tool(s).

As the assessment data is reported through program review to the Office of Assessment, Evaluation and Institutional Outcomes, the information reported is aggregated across the college for the purposes of institutional assessment and reporting to external agencies.

Per the request of departments and programs across the campus, this narrative is provided to give some guidance for setting the levels of performance in mastery, progressing and low/no skill (MPL). For further help, please feel free to contact the Assessment Director for assistance.

General things to keep in mind:

1. It is important to remember most students should be at the **progressing** level of performance. This is especially true in general education and transfer programs, especially at the 100 level of coursework. Most frequently, MPL will follow a normal distribution (bell-curve). If the data collected is distinctly different, the department may wish to contact the Assessment Office to discuss what the data may indicate.
2. Because assessment is a narrow piece of data on a single skill, a student can achieve **progressing** or even **low/no skills** and still pass the course. MPL levels do not equate to grades, although there can be correlation.
3. Criteria for MPL can differ from course to course in a program. An introductory course and a higher-level course can have different MPL criteria; however, MPL should be consistent within multiple sections of a single course.
4. Remember in setting the MPL level, this is NOT about faculty performance. This data is not shared at the class level or with faculty information. This is wholly about student performance.

5. Some programs have specialized accrediting or nationally normed exams students must take to practice in the field. A program may choose to set the M and P levels so that students who pass the exam will be assigned M or P, while students who fail will be assigned L.
6. MPL is used to provide standard reporting numbers institution wide. MPL may or may not be useful to a program, so programs are encouraged to use the assessment tool and the greater depth of data analysis applied to the results in any way that provides insights to inform curricular changes.

Setting the level of performance:

- The department might find it helpful to set the level of progressing first. What is the acceptable level of student performance for the ILO or SLO that is being assessed? As noted above, most students will fall in the progressing category.
- It is important to remember since the assessment question is focused on an area that needs student performance improvement, it is probable the first several collections of data will be *below* your benchmark. The planned interventions are designed to increase student's learning and those numbers should increase over time.

Assessment v. Grading

Though there is a great deal of overlap between the tasks of grading and assessment, grades focus on individual students, whereas assessment focuses on entire cohorts of students and how effectively everyone, not just an individual student, is learning. This helps faculty members revise their pedagogy and curriculum. There are additional reasons grades alone are usually insufficient evidence of student learning for assessment purposes:

- **Grades alone do not usually provide meaningful information on exactly what students have and have not learned.** We can conclude from a grade of B in an organic chemistry course, for example, that the student has probably learned a good deal about organic chemistry. But that grade alone cannot pinpoint what aspects of organic chemistry the student has or has not mastered.
- **Grading and assessment criteria may (appropriately) differ.** Some faculty base grades not only on evidence of what students have learned, such as tests, papers, presentations and projects, but also on student behaviors that may or may not be related to course learning goals. Examples include class attendance, participation points or penalties for late assignments.

- **Grading standards may be vague.** Course and assignment grades reflect a synthesis of how students have been meeting a variety of criteria and often do not itemize the elements of what a student has learned. Assessment of student learning on key concepts may require finer criteria to be applied.
- **Grades do not reflect all learning experiences.** Grades provide information on student performance in individual courses or course assignments. They do not provide information on how well students have learned key competencies, such as critical thinking or writing skills.

This material is adapted from Suskie, Linda. (2009). *Assessing student learning: A common sense guide*, 2nd edition. San Francisco, CA: Jossey Bass.

Assessment Instruments

Formative assessment

The goal of formative assessment is to *monitor student learning* to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. More specifically, formative assessments:

- help students identify their strengths and weaknesses and target areas that need work
- help faculty recognize where students are struggling and address problems immediately

Formative assessments are generally *low stakes*, which means they have low or no point value. Examples of formative assessments include asking students to:

- draw a concept map in class to represent their understanding of a topic
- submit one or two sentences identifying the main point of a lecture
- turn in a research proposal for early feedback

A Classroom Assessment Technique (CAT) can be useful in gauging student learning on particular topics. You will find a chart of common CATs on the page following Direct Assessment methods. There are also several copies of the *Classroom Assessment Techniques* by Angelo and Cross available for checkout in the assessment office library.

Summative assessment

The goal of summative assessment is to *evaluate student learning* at the end of an instructional unit by comparing it against some standard or benchmark.

Summative assessments are often *high stakes*, which means they have a high point value. Examples of summative assessments include:

- a midterm exam
- a final project
- a paper
- a performance

Information from summative assessments can be used formatively when students or faculty use it to guide their efforts and activities in subsequent courses.

Examples of Direct Assessment Methods

I Use the Following Instrument in my Class	Assessment Method	Description
	Capstone Projects	<ul style="list-style-type: none"> • Culminating projects that provide information about how students integrate, synthesize and transfer learning • Assesses competence in several areas • May be independent or collaborative • Focus on higher order thinking • Are useful for program-level assessment • Examples: exams, integrative papers, projects, oral reports, performances • Typically discipline-based • Scoring Method: pre-specified rubrics
	Course-Embedded Assessment	<ul style="list-style-type: none"> • Assessment procedures that are embedded in a course or curriculum • May include test items or projects • May be take-home or in-class • Usually developed by the faculty member or department • Can be used to assess discipline-specific knowledge • Scoring methods: raw scores or pre-specified rubrics
	Performance Assessment	<ul style="list-style-type: none"> • Use student activities to assess skills and knowledge • Assess what students can demonstrate or produce • Allow for the evaluation of both process and product • Focus on higher order thinking • Examples: Essay tests, artistic productions, experiments, projects, oral presentations • Scoring Methods: pre-specified rubrics
	Portfolio Assessment	<ul style="list-style-type: none"> • Collection of student work over time that is used to demonstrate growth and achievement • Usually allows student to self-reflect on incorporated work • May include written assignments, works of art, collection of projects, programs, exams, computational exercises, video or other electronic media, etc. • Focus on higher-order thinking • Scoring Methods: pre-specified rubrics
	Standardized Instruments (This includes national tests for certificate programs, or licensure)	<ul style="list-style-type: none"> • Instruments developed outside the institution with standardized administration and scoring procedures, frequently with time restrictions • Psychometrically tested based on norming group • Sometimes allows for national comparisons • Scoring Methods: answer key, scored by testing company
	Localized Instruments	<ul style="list-style-type: none"> • Instruments within the university usually developed within the department for internal use only or potentially to prepare students for national test • Content may be tailored to match outcomes exactly • Scoring Methods: answer key or rubric, scored internally

Classroom Assessment Techniques

(sampling of most common)

Kind of Evaluation	Name	How It's Done	How to Use	Time Needs
Course Knowledge and Skills	One-Minute Paper*	Ask students to post a short paper (less than a page): "Most important thing I learned in this session and what I understood least."	Review before next class meeting and use to clarify, correct or elaborate.	Low
	Muddiest Point*	Similar to One-Minute Paper but just asks students to describe what they didn't understand and what they think might help.	Same as One-Minute Paper. If many had the same problem, try another approach.	Low
	Application Article	Ask students to write a short news article about how a major point applies to a real-world situation. An alternative is to have students write a short article about how the point applies to their major.	Sort articles and pick several to share with the class, illustrating range of applications, depth of understanding and creativity.	Medium
	Student-generated test questions*	Divide the class into groups and assign each group a topic on which they are each to write a question and answer for the next test. Students should be assured of getting at least one question right on the test.	Use as many of the questions as possible, combining those that are similar.	Medium
	Defend a Point (Vote with your Feet)	Pose a case study with two sides. Ask students to choose a side and defend it.	Allows the faculty member to determine level of critical thinking skills as it applies to a specific problem.	Medium
Attitudes, Values and Self-Awareness	Journals	Ask students to keep journals that detail their thoughts about the class. May ask them to be specific, recording only attitudes, values or self-awareness.	Have students turn in the journals several times during the semester so you can chart changes and development.	Medium
Reactions to Instruction Methods	Exam Evaluations*	Select a test that you use regularly and add a few questions at the end which ask students to evaluate how well the test measures their knowledge or skills.	Make changes to the test that are reasonable. Track student responses over time.	Medium

Adapted from Angelo, Thomas A. and K. Patricia Cross, 1993, *Classroom Assessment Techniques: A Handbook for College Teachers*, Second Edition, San Francisco: Jossey-Bass Publishers.

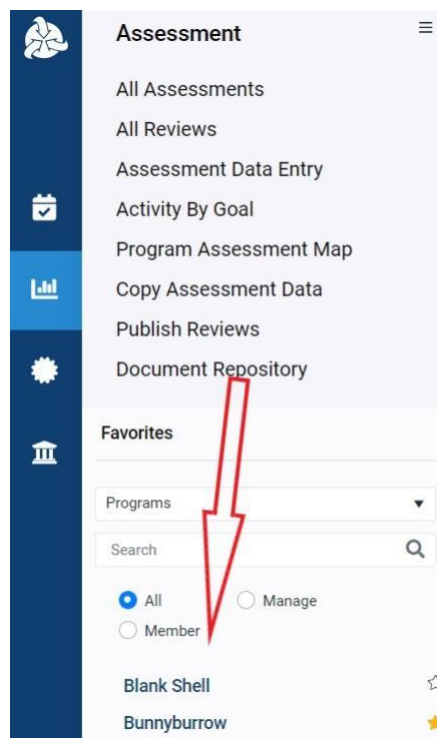
Available for checkout from the Assessment Office lending library.

It is important to remember if you use a CAT you should immediately use the results to report back to the class and provide additional guidance on the topic.

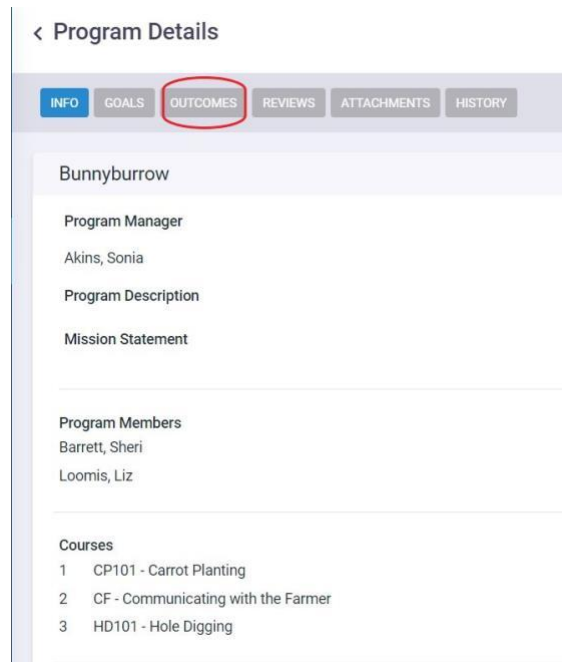
Submitting your Assessment Data in Program Review

The Assessment Module of the software is where all assessment findings are entered: learning outcome assessed, progress report, mastery matrix, significant findings and ongoing assessment plans. The instructions below will walk the user through the process of entering findings. The steps must be followed in order.

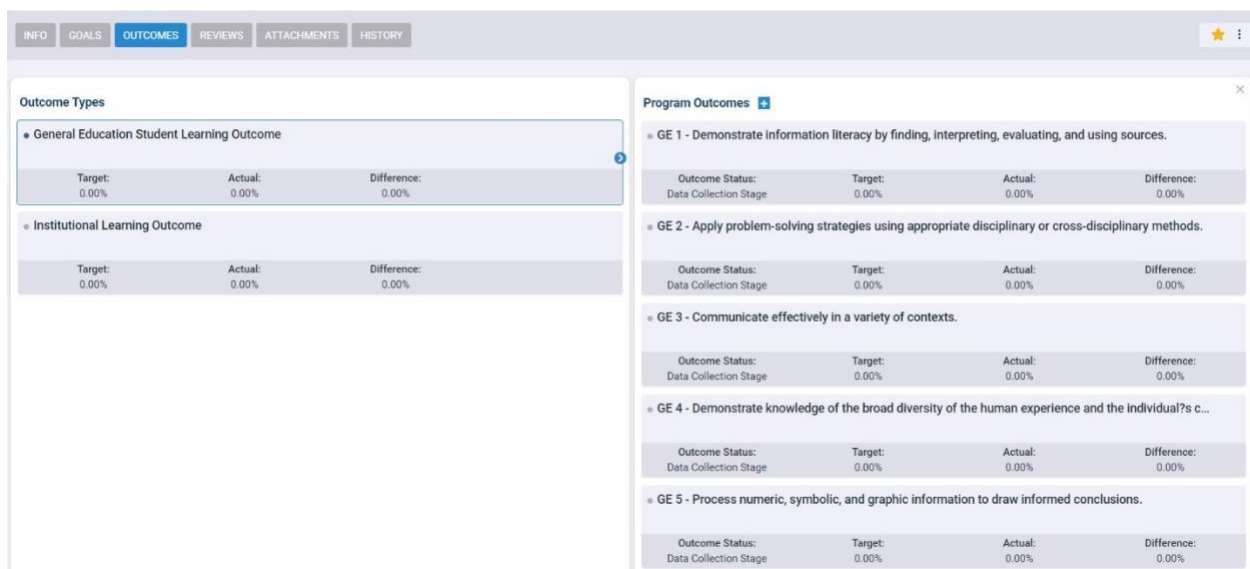
1. Select the graph on the dark blue toolbar to open the Assessment module menu, then choose your program located towards the bottom of the menu.



2. In the Program Details section, select the **Outcomes** tab.



3. Choose General Education Student Learning Outcome or Institutional Learning Outcome (left click anywhere in the shaded areas) and a list of the outcomes will open.



- Select the **Title** of the learning outcome assessed.
- Select **Program Courses** and an editing box opens on the right: choose the course assessed, skill level and **Save**.

The screenshot shows a software interface with a top navigation bar containing tabs: INFO, MEASURE, RESULTS, ASSOCIATIONS, ATTACHMENTS, and HISTORY. The main content area displays details for a learning outcome: "GE 1 - Demonstrate information literacy by finding, interpreting, evaluating, and using sources." It includes fields for Program (Bunnyburrow), Unit Manager (Akins, Sonia), Outcome Type (General Education Student Learning Outcome), and Planning Years (2020-2021, 2021-2022). A "Program Courses" modal is open on the right, showing a table with columns for selection, course name, and skill level. The table lists three courses: "CP101 - Carrot Planting" (selected), "CF - Communicating with the Farmer", and "HD101 - Hole Digging". The skill level for the selected course is "Introduced". The modal has "Cancel" and "Save" buttons.

Sel	Course	Skill Level
<input checked="" type="checkbox"/>	CP101 - Carrot Planting	Introduced
<input type="checkbox"/>	CF - Communicating with the Farmer	
<input type="checkbox"/>	HD101 - Hole Digging	

- Select the **Measure** tab next and choose the title of the assessment instrument used in the assessment.

The screenshot shows the "MEASURE" tab selected in the software interface. The main content area displays a list of measures under the heading "Measures +". There are three measures listed, each with a "Measure Type" and a "Target" value of 0.00%.

Measure Title	Measure Type	Target
1 - Rubric Evaluation	Rubric Evaluation	0.00%
2 - Course Embedded Assessment	Course Embedded Assessment	0.00%
3 - Pre-test/Post-test	Pre-test/Post-test	0.00%

7. Select **Associated Courses**, then select and save the course assessed in the editing box.

The screenshot shows the '2 - Course Embedded Assessment' form. At the top, there are three progress indicators, each showing '0.00%'. The form is divided into sections: 'Planning Years' (2020-2021), 'Measure Type' (Course Embedded Assessment), and 'Description' (Enter Description Here). The 'Associated Courses' section at the bottom is highlighted in blue and contains a plus sign icon.

8. If you want to enter a description of the assessment, select the description and an editing box opens to the right. Enter the description in the narrative box and select save.

The screenshot shows the '2 - Course Embedded Assessment' form with the 'Measure Details' editing box open on the right. The 'Measure Details' box contains fields for 'Measure Number' (2), 'Measure Title' (Course Embedded Assessment), and 'Planning Year' (2020-2021). It also has a checkbox for 'Common Measure Type Used' which is checked. The 'Measure Type' is set to 'Course Embedded Assessment' and 'Direct' is checked. The 'Description' field is open, showing a rich text editor with a toolbar and the text 'Enter Description Here'.

9. Select the **Criteria** tab next and left click on the assessment instrument title.

The screenshot shows the 'Criteria' tab selected in the top navigation bar. Below the navigation bar, there is a section titled 'Criteria' with a plus sign icon. A list item is shown: '2 - Course Embedded Assessment'. Below this list item, the 'Criteria Type' is displayed as 'Analytic'.

10. Left click in the box with Planning Years & Description. This opens the **Edit Criteria** box.

The **ONLY** information to enter on this screen is the **Target** percentage: your target is tied to the Mastery level only. What percentage of students should attain mastery in the assessed course? Then **Save**.

Edit Criteria

Criteria Number: 2 Criteria Title: Course Embedded Assessment

Description: Course Embedded Assessment

Criteria Type: Analytic Target: 0.00%

Proficiency Level

High	Target	Scale	Level
<input checked="" type="radio"/>	<input checked="" type="radio"/>	3	Mastery
<input type="radio"/>	<input type="radio"/>	2	Progressing
<input type="radio"/>	<input type="radio"/>	1	Low or No Skills

11. Select the **Findings** tab next, then the blue plus symbol next to Findings.



12. Choose the Planning Term (semester the data was collected), Class (this is generic), Sample Size (number of students assessed) then the actual numbers achieving Mastery, Progressing and/or Low/no skills. Use the **Notes** box to enter significant findings. Save!

New Finding □ ×

Planning Year: Planning Term: Class:

Date: Target: 50.00% Sample Size: Percent Met:

Proficiency Level: 3. Mastery 90 - 100 2. Progressing 80 - 89 1. Low or No Skills 1 - 79

Specific Criteria	3. Mastery	2. Progressing	1. Low or No Skills	#Met	Total
1. # of Students Attaining	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	0	0
Total:	0	0	0	0	0

Notes:

< Finding Details

2020-2021 🔍 🔔 👤 ⚙️

INFO ATTACHMENTS HISTORY ★ ⋮

90.00% 47.70% -42.30%

Class
2020 Fall-Generic Course-TBA-all day-To be Announced (TBA)

Date 12/30/2020 **Criteria Type** Analytic **Reporting Level** Class **Planning Year** 2020-2021

Proficiency Level: 3. Mastery 2. Progressing 1. Low or No Skills Target: 90.00%

Specific Criteria	3. Mastery	2. Progressing	1. Low or No Skills
1. # of Students Attaining	83	65	26
Total:	83	65	26
Percent:	47.7%	37.36%	14.94%

Note
We did not achieve our target of having 90% of our students master the three questions that we were focusing on. We will continue to develop resources, curriculum, and formative assessment opportunities for our students on graph interpretation, microorganism size comparison, and antibiotic resistance.

Important note – don't hit a road block – call the office and we'll help you get your data entered!

Glossary of Terms

Assessment	A continuous cycle of deliberate activities aimed at monitoring and improving student learning; the intentional collection of data that documents the level of student learning of targeted core learning outcomes.
Direct Assessment	Evidence that is produced directly from students' work that serves to measure a student learning goal. For example: portfolios, performances, papers, lab reports, etc.
JCCC Assessment Plan	An assessment plan for the campus that uses direct and indirect assessments to measure specific general education or institutional learning goals.
General Education Curriculum	A set of courses that all students must successfully complete to graduate. These courses are designed to guide students to essential thinking skills with knowledge from areas such as the arts, communication, humanities, language, mathematics, natural sciences and social sciences.
Indirect Assessment	Techniques used that indirectly measure student learning goals, such as surveys that measure student perception of learning.
Rubric	Expectations of academic work produced by students that demonstrates their ability to fulfill a student learning goal.
Student Artifact	Examples of academic work produced by students that demonstrates their ability to fulfill a learning goal.
Learning Goals (SLOs, ILOs)	SLOs and ILOs are statements that specify what students will know, be able to do or be able to demonstrate when they have completed or participated in a program/activity/course or project.