Assessment Manual COCONINO COMMUNITY COLLEGE APRIL 4, 2018

Introduction

Through the analysis of how we teach, we improve learning. This requires engaged students, faculty, and staff who together evaluate what is being taught and learned. Determining if a student is on track to accomplish expected outcomes requires the attention of the entire Coconino Community College community. Assessment is that process of learning how to improve, be better teachers, and ensure Coconino students are progressing, gaining knowledge, and preparing for their next steps.



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- B. Assessment Committee Charter
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- E. Bloom's Taxonomy Reference Sheet
- F. Course to Program Outcomes Map
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- I. 2017-2018 Academic Program Review
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PART I - Assessment of Student Learning Outcome Rationale

Coconino Community College (CCC) values institutional effectiveness. Since offering the first course in 1991, various departments and faculty have engaged in numerous assessment practices for strengthening the teaching and learning processes.

The College recognizes its responsibility for assessing student learning outcomes. To achieve this, it is important to have both consistency and flexibility. The consistency is needed to create baseline and subsequent data for continual assessment decision making. Flexibility is required as newly developed programs and courses are added and as established programs and courses adapt to new technologies. Flexibility is also needed to adjust to findings determined in evaluating learning outcomes. Assessment of student learning helps the College achieve the highest quality education available to its students. In addition, the College recognizes the need for long-term commitment to assessment through leadership and strategic fiscal planning.

All faculty, whether they realize it or not, evaluate themselves in one way or another because when teaching, they care about learning. Assessment allows us to share what faculty are learning about teaching with others. Quantifying and qualifying what we know about learning helps colleagues see what is of value and what needs to change.

It is critical that CCC has an organized and systematic method of assessment that adequately maintains the assessment plans over time and does not depend on any one individual in any particular position. Therefore, we strive to implement our learning outcomes assessment plan with broad-based participation to assure that assessment at CCC is an integral part of all college activities (Banta and Palomba).

CCC has developed a formal policy to help ensure continuity in its assessment of student learning. DGB Policy 302-00 provides one such step towards valuing learning assessment over time. The policy reads:

302-00 ASSESSMENT OF STUDENT LEARNING - POLICY (Approved by DGB Feb. 21, 2018)

Assessment of student learning is an ongoing, systematic approach to establishing clear and measurable goals of learning. Coconino Community College supports student learning assessment as a means of understanding and improving student learning. Information on student learning will be gathered, analyzed, and interpreted for continuous improvement of teaching and learning. The assessment of student learning may be at the course, program, or institutional level. Assessment fosters effective student learning, curriculum enhancement, and program development, and contributes to resource allocation decisions. While assessment of student learning is a college-wide responsibility, the College is committed to the central role of Academic Affairs in the assessment processes.

PART II - Guiding Philosophy

Coconino Community College (CCC) is a multi-campus public institution of higher education serving primarily the residents of Coconino County. College faculty and staff aspire to challenge students academically, encourage pride in self and heritage, and promote an appreciation of other cultures. The College is dedicated to the ideals of life-long learning by addressing the whole person through its commitment to those who seek to improve their skills, enrich their lives, and enhance their futures. The faculty and staff strive to advance democratic ideals of equal opportunity for success, individual worth, and informed responsible citizenship.

The College's mission statement informs all of CCC's assessment practices:

COCONINO COMMUNITY COLLEGE MISSION STATEMENT

As a learning-centered college, we enrich lives by embracing diversity and transforming the future through quality education.

To accomplish its mission, the College provides access to educational opportunities for a diverse student population. The College promotes cultural, intellectual, physical, and social development, technical competence, and serves as a resource for community development. As a degree-granting institution, the College assesses its programs, services, and student academic achievement for the purpose of continuous improvement and to guide strategic planning and decision-making.

Assessment is a term currently used for "evaluating student learning outcomes." Assessment is designed to improve learning. Data and "artifacts" are gathered to learn how to better evaluate instruction and learning. All effort is undertaken with the goal of how to improve teaching and learning in our courses.

The Higher Learning Commission (HLC) (2017) that accredits CCC has much to say on assessment. Section 4 of the *HLC Guiding Values* provides a context as to why we value assessment at Coconino Community College. In the section on "A culture of continuous improvement," it states:

Continuous improvement is the alternative to stagnation. Minimum standards are necessary but far from sufficient to achieve acceptable quality in higher education, and the strongest institutions will stay strong through ongoing aspiration. HLC includes improvement as one of two major strands in all its pathways, the other being assurance that member institutions meet the Criteria and the Federal Requirements.

A process of assessment is essential to continuous improvement, and therefore a commitment to assessment should be deeply embedded in an institution's activities. Assessment applies not only to student learning and educational outcomes but to an institution's approach to improvement of institutional effectiveness.

For student learning, a commitment to assessment would mean assessment at the program level that proceeds from clear goals, involves faculty at all points in the process, and analyzes the assessment results; it would also mean that the institution improves its

programs or ancillary services or other operations on the basis of those analyses. Institutions committed to improvement review their programs regularly and seek external judgment, advice, or benchmarks in their assessments. Because in recent years the issues of persistence and completion have become central to public concern about higher education, the current Criteria direct attention to them as possible indicators of quality and foci for improvement, without prescribing either the measures or outcomes.

Innovation is an aspect of improvement and essential in a time of rapid change and challenge; through its Criteria and processes HLC seeks to support innovation for improvement in all facets of institutional practice. (p. 6)

As noted, there is reference to meeting Federal Requirements. This reference is to the Department of Education (DOE), which puts forward this dictum through the Office of Educational Technology (2015): "At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning." Most of the Department of Education's efforts have been geared towards K-12 assessment, but efforts at the lower levels inform many of the efforts at the post-secondary level.

PART III - Historical Background of Assessment at Coconino Community College

It is important to provide a historical context of our assessment process, informing where we were and where we need to go. Assessment planning in 1991 began at the grass roots level with the full support of the faculty and staff. In the first developed assessment manual and documents, it was contended that the purpose of assessment was designed to:

- 1) Enroll students in courses/programs in which they will most likely succeed;
- 2) Promote continuous, constructive, and critical review of all CCC programs and courses;
- 3) Assess the college's effectiveness in fulfilling its mission.

Through the assessment process we can enhance student learning outcomes and improve the quality of instruction and programs, administrative and support services, and resource allocation.

From 1991 to the present, our concept of the meaning of assessment has evolved. Currently, we have set out to make a dynamic process that considers the best of practices in assessing student learning.

PART IV - What is Assessment?

Coconino Community College desires to have a meaningful assessment program that reflects its values and academic culture. To that end, a clear understanding of what assessment means is needed. Definitions can be concise, others wordy; they can be influenced by personality, experience, expertise and expectation. There are multiple approaches to defining assessment, but the underlying purpose of each is to improve student learning.

Consider the following brief survey of definitions from other colleges and universities:

"The word **assess** comes from the Latin **assidere**, which means **to sit beside**. Literally then, **to assess** means to **sit beside the learner**." (Stefanakis 2002).

"Assessment is a set of processes designed to improve, demonstrate, and inquire about student learning" (Marchese 1987).

"Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving learning and development" (Palomba and Banta 1999: 4).

"The process of documenting knowledge, skills, attitudes and beliefs, usually in measurable terms. The goal of assessment is to make improvements, as opposed to simply being judged. In an educational context, assessment is the process of describing, collecting, recording, scoring, and interpreting information about learning" (Pennsylvania State University 2018).

Assessment, as the term is used at MSU-Bozeman, is the systematic process of gathering, interpreting, and acting upon data related to student learning and experience for the purposes of course and program improvement. The connection between teaching and learning is a complex one, and it is necessary to use multiple measures to develop a comprehensive understanding of how curriculum design and delivery relate to student learning. Assessment is an iterative and adaptive process in which results inform changes to instructional and assessment practices. The critical element is the use of results in decision-making. Finally, the basis of good assessment practice is a shared understanding of program goals to ensure that all those involved in curriculum delivery are working toward the same ends (Montana State University 2004:1).

Accrediting agencies in the United States all have their own definition for assessment. The Higher Learning Commission (2017) that accredits Coconino Community College states, "Assessment and evaluation are used as ordinary language synonyms. When a narrower referent is intended, the terms are modified, as in "assessment of student learning" or "evaluation of academic services." (p. 13) In the assumed practices, HLC prescribes that data and artifacts "are accurate and address the full range of students who enroll." (p. 14) This means assessment should be consistent across all instructors, instructional methods, and instructional sites.

Coconino Community College's Definition of Assessment

Using HLC's broad definitions as a guide, Coconino Community College (2018) has created its own definition of assessment. The definition states:

Assessment is an ongoing, systematic process that involves: establishing clear, measurable expected goals of student learning; gathering, analyzing, and interpreting information; and applying information and using the results for continuous improvement of teaching and learning.

Student Learning Outcomes represent the measurable knowledge and skills that serve as the foundation for success in society and one's discipline, vocation, and life. Student Learning Outcomes are designed at the course level and program level, posted on the College website within course-level and program-level outlines, and included in course syllabi. Classroom and co-curricular data are collected and analyzed by faculty and staff from across the campus to determine whether students are meeting the expectations described by these outcomes.

PART V - Purpose of Assessment

To answer the question, "Why do we need assessment?" the College has developed a list of purposes for the assessment process:

- 1) To enhance the learning and teaching processes,
- 2) To satisfy student needs,
- 3) To compare with other institutions,
- 4) To provide continuous quality improvement,
- 5) To promote effective and efficient resources allocation,
- 6) To enhance faculty pedagogy/andragogy,
- 7) To improve college governance,
- 8) To provide information to stakeholders,
- 9) To promote staff development;
- 10) To improve strategic planning,
- 11) And to demonstrate institutional effectiveness to internal and external stakeholders.

To accomplish our purpose in assessment, we must have the following in place:

- 1) Establish a culture of assessment.
- 2) The assessment program must have the long-term commitment of administrative support and leadership.
- 3) Trust needs to exist between all players at the institution for there to be collaborative effort.
- 4) Faculty need to maintain assessment of student learning plans.
- 5) Programs are required to conduct regular program review.
- 6) Regular communication of assessment should occur through established processes.
- 7) Assessment results are not used for personnel evaluations.

Ultimately, all college personnel have responsibility in ensuring the education of our students. In order to accomplish the purpose of assessment, Coconino Community College has developed specific roles and responsibilities to ensure its continuity.

PART VI - Roles and Responsibilities

Faculty -

- Own and are responsible for the assessment of student learning.
- Participate in assessment activities such as developing learning outcomes, collecting samples of student work, participating in norming sessions, discussing desired outcomes or how to use results, directing students to appropriate co-curricular activities.
- Complete Course Assessment Reports regularly.

<u>Programs – The councils (Executive, Academic, Student Development, and Business & Administrative) are responsible for establishing programs based on curricular or structural components or college needs. A list of current CCC programs for assessment purposes can be found in Appendix A.</u>

- Engage program colleagues in shared conversations about student learning and assessment.
- Develop program goals and student learning objectives.
- Maintain assessment maps: a program curriculum map, Knowledge-Application-Synthesis map, and assessment activities map.
- Develop and implement direct and indirect assessment methods appropriate for the program.
- Routinely collect, assess, and reflect on data and artifacts about the program and student learning based on assessment.
- Work with other faculty to close the loop between findings and instruction.
- Report the use of assessment and specific changes to the Assessment, Program, and Training Coordinator.
- Relay assessment information to all program faculty.
- Act on assessment results.

Assessment, Program, and Training Coordinator -

- Assists the Assessment Committee and faculty to prioritize, develop, implement, and coordinate the assessment of student learning outcomes and academic program reviews.
- Completes assessment reports and collects and analyzes data for improving student learning.
- Ensures validity and reliability of data used in internal and external correspondences and reports.
- Maintains a repository for final assessment and program review resources and student learning outcome assessment materials.
- Provides information and advice on current instructional and assessment strategies.

- Prepares and disseminates materials to assist faculty and programs in the development of effective, meaningful, and manageable strategies for the assessment of student learning.
- Works with faculty to create an understanding of how assessment informs instruction and guides classroom teaching.
- Assists programs undertaking program review by providing strategies and processes for assessment of student learning.
- Works with the Institutional Research to facilitate support of faculty in assessment of student learning.
- Provides workshops or related activities to disseminate information about effective instructional practices and/or assessment practices as related to improving student learning.
- Ensures alignment of campus assessment initiatives with the reaccreditation standards and their emphasis on assessment of student learning.

Associate Dean of Curriculum and Assessment -

- Provides positive leadership in the coordination of campus-wide efforts related to improving student learning and educational effectiveness.
- Works with the Assessment Coordinator to ensure the assessment program functions at a high level.
- Acts as the co-chair of the Assessment Committee.

<u>Assessment Committee</u> – The charter for the Assessment Committee can be found in Appendix B.

- Acts as a resource to academic and non-academic programs, individual faculty, and committees for assessing student learning outcomes and program evaluation.
- Receives evaluation reports from all programs.
- Helps each program formulate an assessment plan.
- Verifies implementation of assessment plans.
- Helps conduct general education assessment.
- Proposes recommendations facilitating ongoing assessment practices which enhance institutional effectiveness.
- Provides training and educational opportunities for faculty and staff to facilitate awareness of assessment issues and practices.
- Remains current and knowledgeable about the latest assessment tools, practices, and guidelines.

<u>General Education Committee</u> - The charter for the General Education can be found in Appendix C.

- Coordinates assessment of the General Education program and student learning outcomes for general education.
- Assesses the quality of the General Education Program.
- Facilities and supports assessment efforts of the Assessment Committee.

 Works with the Assessment Coordinator and the Dean of Curriculum and Assessment to ensure the design, implementation, analysis, documentation, and funding of general education assessment.

Institutional Research -

- Provides support in developing, implementing, and analyzing appropriate methods as requested for program- and institutional-level assessment efforts.
- Provides findings from university-wide assessment methods.

Deans -

- Encourage and support faculty and programs to engage in assessing student learning at the classroom and program level.
- Make funding available to support program assessment efforts.
- Provide leadership and work with programs and the Assessment Coordinator to ensure completion of the assessment reports, including assessment updates.
- Act on assessment results.

Provost -

- Communicates the value of assessment and publicly promotes its importance.
- Identifies, establishes, and makes available support and resources that initiate, build, and sustain the commitment to assessment.
- Acts on assessment results.

PART VII - Assessment Plan

The assessment process for student academic achievement at CCC has been developed to respond effectively to the specific needs of our students and communities.

To make anything work, we need a map of where we are going and when we intend to get there. There are multiple ways to organize an assessment plan, but commitment to communication and excellence is the foundation. Agreement on determining the direction of an effective plan involves listening as part of the foundation-building process. Agreement means understanding multiple points of view so that we can improve our teaching. Time consideration in planning is a critical component of the process. Since students are only at the college for a short while, the assessment plan must advance at a pace that enables us to grow and learn to benefit students while they are here with us in the college. We owe it to our students to improve learning in a timely way so that their education is relevant to the world they enter when they leave Coconino Community College. It is critical to know where we are going and how to improve student learning. Knowing that students are engaged and progressing requires effort.

It is essential to have an assessment plan in place that evolves and changes within a structured framework. An assessment plan is:

"a document that outlines what empirical data will be collected, by whom, for the assessment each of the learning outcomes...." When this data is collected depends on the needs of the college, but typically it is collected in a multi-year cycle that allows for reflection and processing of the information. The process "for reviewing the data, policies and procedures to guide discussion and feedback of the results; and the process for modifying the course, program or curriculum to improve student learning "is a key component of the plan (California State University Northridge 2018).

Assessment planning is like any learning endeavor; it proceeds step by step. Assessment should be the process of sharing what we know about teaching and learning, and in this manual, we lay out steps to consider and the theoretical underpinning for what Coconino Community College is trying to accomplish through its assessment plans.

The current Coconino Community College Draft Procedure for Assessment (Appendix D) aligns us with the development of an assessment plan and the steps outlined below. As stated in the purpose of the draft Procedure, the goal is:

To create an organized and systematic method of assessment at CCC. As a degreegranting institution, the College assesses its programs, services, and student academic achievement for the purpose of continuous improvement and to guide strategic planning and decision-making. We strive to implement this procedure with broad-based participation to assure that assessment at CCC is an integral part of all college activities.

Assessment Steps

Assessment steps include:

- Develop learning outcomes.
- Check for alignment between the curriculum and the outcomes.
- Develop an assessment plan (must use direct measures).
- Collect assessment data.
- Use results to improve the program.
- Routinely examine the assessment process and correct, as needed (California State University Northridge 2018; Allen 2003).

PART VIII - Developing Outcomes

Course Content versus Outcomes

Course content should be supportive of the intended course outcomes and consistent with the course description. Course content is not textbook specific and should be reflective of the required topics for the course. Course content should be the day-to-day class objectives that are introduced throughout the course. Content should be described in noun-based terms and written in outline form.

Example of course content:

"Will include:

- 1. The nature of religious experience, philosophy, and the problems/challenges of comparing religions
- 2. Conceptions of God: polytheism; henotheism, pantheism, monotheism, theism, deism; the questions of God's existence: cosmological, teleological, and ontological arguments"

"Will include:

- 1. Scientific method
- 2. Characteristics of Life"

"Will include:

- 1. Review:
 - a. evaluating formulas;
 - b. ratio, proportions, and variation;
 - c. using radicals to solve equations;
 - d. exponentials and logarithms;
 - e. graphing functions;
 - f. solving quadratic equations with the quadratic formula;
 - g. the Pythagorean Theorem;
- 2. Finance, growth, probability, statistics"

Course outcomes describe what students are expected to know and able to do by the end of the course. These relate to skills, knowledge, and behaviors that students acquire as they progress through the program.

Examples of course outcomes:

"Students will be able to:

- 1. identify the characteristics common to all life.
- 2. apply the scientific method to previous research and in their lab studies."

"Student will be able to:

1. demonstrate how social structure is interconnected to social groups, status and roles."

"Student will be able to:

- 1. solve various types of growth problems.
- 2. use various developmental algebraic techniques to solve problems."

Program outcomes identify what the student will learn as a result of successfully completing the multiple courses that constitute a program.

Examples of program outcomes:

"Students will be able to:

- 1. demonstrate safe performance of nursing skills of a registered nurse.
- 2. exhibit legal and ethical behaviors of a registered nurse."

"Students will be able to:

- 1. understand the structure of the criminal justice system and the functions of its constituents.
- 2. communicate knowledgeably about the AJS field."

Writing Outcomes

It is important for faculty to review the definitions for program- and course-level learning outcomes, which are essentially what the program or course prepares the student to do. Complex and convoluted outcomes are difficult to define and are nearly impossible to measure.

The ultimate goal will be to simplify the outcomes to state: "The student will <<verb>> <<something>>." Each outcome should have only one verb, and it should be the highest learning order verb from Bloom's Taxonomy. The goal of the simplified outcomes is for the students to really understand what skills and/or knowledge they should have once they complete their course and their program and for faculty to be able to measure them.

Bloom's Taxonomy

Bloom's Taxonomy is an educational philosophy used to classify learning outcomes for students. It is a component of how we evaluate student learning at Coconino Community College.

In the cognitive model of the taxonomy, learning is divided into six levels. This model includes classification levels that travel from basic to complex thinking. These levels are: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. A brief look at these classifications illustrate the method by which learning advances in this taxonomy:

- *Knowledge to know specific facts, terms, concepts, principles, or theories;*
- Comprehension to be able to understand, interpret, compare, and contrast, explain;
- Application to apply knowledge to new situations, to solve problems;
- Analysis to identify the organizational structure of something; to identify parts, relationship and organizing principles;
- Synthesis to create something, to integrate ideas into a solution, to propose an action plan, to propose a new classification scheme;
- Evaluation to judge the quality of something based on its adequacy, value, logic, or use (Dominican University of California 2018)

This classification system is a powerful tool to use to develop and evaluate outcomes as it explains the process of learning:

- Before a student can **understand** a concept, a student must **remember** it.
- To apply a concept, a student must first understand it.
- In order to **evaluate** a process, a student must have **analyzed** it.
- To create an accurate conclusion, a student must have completed a thorough evaluation.

As a student progresses through the curriculum to the completion of their program, the student should pass through the levels of Bloom's Taxonomy, establishing knowledge and understanding towards the beginning to evaluating and/or creating at the end of the program. Creating a learning process map to see where students first gain knowledge, then apply, and finally evaluate provides a good picture of where the program outcomes are being taught and applied.

Course and program outcomes should be leveled and tied to Bloom's Taxonomy as much as possible.

- K = Knowledge (gain, knowledge, comprehend information)
- A = Application (apply knowledge gained to real situations, analyze questions and issues)
- S = Synthesis (Prepare a work product exam, paper, presentation, etc. that presents knowledge gained, application, and synthesis or evaluation of knowledge and ideas).

Bloom's Taxonomy has key verbs that are used with each level of learning. Additionally, these learning levels can be used in conjunction with levels of questions and types of assessments. A resource has been compiled to be used when considering creating new outcomes or revising current ones. This worksheet can be found in Appendix E.

Curriculum Maps

Curriculum mapping is a way to determine alignment within a program and between courses. It can even be used within a single course and the lessons that are offered. Mapping identifies where and how a particular outcome is expected, explicitly taught for, and assessed. It is a method to understand the nature and role of prerequisites as well as electives within a program. Ultimately, mapping is a way of seeing organizational structure.

At a program level, a curriculum map can provide an overview of the structure of the curriculum and the contribution of individual courses to the outcomes of the program. It can identify program strengths by determining where and how learning outcomes are being addressed, or it can identify gaps with those learning outcomes that are only addressed by a few courses. Additionally, a map can show the optimal sequence for taking courses in a program and why some courses should be taken in a particular order.

Questions that can be answered with a curriculum map:

- In core courses, are all outcomes addressed, and in a logical order?
- Do all core courses address at least one outcome?
- Do multiple offerings of the same course address the same outcomes, at the same levels?
- Do some outcomes get more coverage than others?
- Are all outcomes first introduced and then reinforced?
- Are students expected to show high levels of learning too early?
- Do students practice all outcomes before being assessed, e.g., in the capstone?
- Do all students, regardless of which electives they choose, experience a coherent progression and coverage of all outcomes?
- What do the electives, individually and collectively, contribute to the achievement of the student learning outcomes?

There are many different types of curriculum maps:

- Course outcomes to program outcomes (Appendix F)
- K-A-S (Knowledge-Application-Synthesis) maps (Appendix G)
- Assessment tool maps (Appendix H)

PART IX - Types of Assessment

The College is committed to an institution-wide, ongoing assessment process and recognizes that the ultimate purpose of assessment is to enhance student development opportunities; thus, assessment activities must be diverse and occur at various levels.

Levels of Assessment

Institution: At this level, assessment activities will measure institutional success in meeting the goals of the College as stated in the Mission Statement. At the time of the development of this manual, CCC is still developing institutional-level outcomes, and the college currently considers the General Education program outcomes the institutional-level outcomes.

Programs: Assessment of CCC programs will address, on a division and department level, goals that are comprehensive but clearly defined. In addition, program assessment will evaluate the effectiveness and relevance of courses by continuing to measure student goals, program and degree requirements, and student demand for courses.

Courses: Assessment on this level occurs in the classroom where instructors clearly measure course outcomes.

Formative and Summative Assessment

Formative assessment is taken as students progress through a course and is intended to identify areas of learning that need to be improved before the end of the course.

Newcastle University (2017) in England contends that "Formative assessment provides a useful way of giving students feedback and assessing their existing knowledge without affecting their eventual grades." Monroe County Intermediate School (2018) holds that formative assessment "occurs in the short term, as learners are in the process of making meaning of new content and of integrating it into what they already know. Feedback to the learner is immediate (or nearly so), to enable the learner to change his/her behavior and understandings right away. Formative assessment also enables the teacher to "turn on a dime" and rethink instructional strategies, activities, and content based on student understanding and performance." While Carnegie Mellon University (2016) points out: "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."

Summative Assessment measures student achievement of course outcomes documenting student learning at the end of the course.

Carnegie Mellon University (2016) points out, "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 that they have a high point value. Examples of summative assessments include a midterm exam or a final project." Summative Assessment can show "strengths and weaknesses of curriculum and instruction, with improvements affecting the next year's/term's students" (Monroe County Intermediate School District 2018).

Indirect and Direct Assessment

Indirect assessment of student learning measures students' perceptions of their knowledge or skill gains. Indirect assessment reporting methods include student surveys, self-evaluations, and other self-reporting methods. In other words, "An indirect assessment method is based upon a report of perceived student learning. Indirect measures of assessment provide opportunities for students to reflect on their learning and inform the reviewers their perceptions of their learning experience" (Palomba & Banta, 1999).

Examples of Indirect Assessment Tools*

- Written surveys and questionnaires
- Exit and other interviews
- Focus groups

Direct assessment of student learning is an evaluation of student work designed to test attainment of learning outcomes. Direct assessment reporting methods include pre-/posttests, rubrics, exams, and similar professional evaluations. Another definition of direct assessment methods requires "students to demonstrate knowledge and skills and provide data that directly measure achievement of expected outcomes. That is, students must actively do something observable or measurable using the knowledge and skills" they acquired in their course or program (Lincoln Land Community College 2018). One contention is: "The strength of direct measurement is that

faculty members are capturing a sample of what students can do, which can be very strong evidence of student learning. A possible weakness of direct measurement is that not everything can be demonstrated in a direct way, such as values, perceptions, feelings, and attitudes" (Santa Rosa Junior College 2006).

Examples of Direct Assessment Tools*

- Exit and other interviews
- Standardized exams
- Locally developed assessments
- Portfolios
- Performance appraisals
- External examiner
- Oral exams

*Whether or not a particular assessment method is direct or indirect depends on the nature of what is being measured and how the method is being used.

PART X - Course Assessment

Why Course Assessment?

Each instructor is responsible to ensure their students are not only taught the course content but that the students learn it as well. Course assessment is done by creating assessment tools that measure the course outcomes. The course outcomes are the overarching, measurable, and essential mastered content or knowledge that should reflect the skills, competencies, and knowledge the students have achieved and can demonstrate upon successful completion of the course. Reporting on course assessments has dual purposes. First, it provides evidence for accreditation that the College's courses are indeed assessing student learning at the course level. Secondly, it provides an opportunity for the instructors to reflect on their teaching and make improvements for future courses. The knowledge of how students learn and process their learning is a powerful teaching tool.

Course assessment can happen in many ways, and it is up to the instructors of that course to decide exactly what outcome and assessment tool they would like to report. There are two suggested approaches that can be taken to conducting course assessment:

- 1) Individual instructor assessment An individual instructor could assess a new technique used in the class to accomplish a particular course outcome, such as a specific lesson and activity used that leads up to the outcome.
- A shared assessment conducted by a set of the same course A group of instructors who
 teach the same course can conduct a shared assessment like a pre- and post-test, a
 shared rubric, or shared questions on an exam.

Course Assessment Timeline

Each semester, each instructor will report on the assessment of one course-level outcome in one of their classes. The report will be due the same day that grades are due for that semester.

DEADLINE	TASK
Same day as semester grades are due (December and May)	Instructor will fill out a Course Assessment Report within Canvas.

Course Assessment Report

The course assessment report is a record of the assessment of student learning at the course level. The Course Assessment Report contains the following information:

- Term and Year;
- Course Information (Subject-Number-Section) and current CRN;
- Course Learning Outcome --- Write out the course learning outcome evaluated for this Course Assessment Report (NOTE – It should be a course outcome stated in the syllabus and that contributes to the General Education program-level outcome of "Critical Thinking.");
- Assignment used (Submitted as an attachment);
- Assessment results (# Meets, #Not Meets, #Did Not Complete Assignment);
- The criteria used in the assignment to determine whether a student met the course outcome:
- Description and justification of any actions taken to adjust student learning for the class, future changes if taught again, or explanation why no action was necessary.

Course Assessment Meetings

The Assessment Coordinator will organize meetings, as needed, to present a how-to on the Course Assessment Report and its purpose. The meetings will allow answers to any outstanding questions from instructors and will gather feedback on the form and process itself.

Course Assessment Evaluation Process

Once the course assessment reports have been submitted, the Assessment Coordinator will begin to report aggregated data to the appropriate committees, such as the Assessment Committee and the General Education Committee. Additionally, the course assessment reports will be available to the individual instructors who submitted them to act as a record of assessment conducted by that individual instructor.

A report of the instructors' participation in completing a course assessment report will be given to the appropriate dean at the beginning of the following semester.

PART XI - Co-Curricular Assessment

Why Co-Curricular Assessment?

In 1994, the American College Personnel Association (ACPA) developed the Student Learning Imperative which called for higher education institutions to create "conditions that motivate and inspire student to devote time and energy to educationally-purposeful activities." This means that colleges should be helping students connect their in-class experiences with out-of-class experiences focusing on the institution-level outcomes. The HLC also has criteria addressing co-curricular activities, 3.E.1. States, "Co-curricular programs ... contribute to the educational experience of its students," then in 4.B.2, "The institution assesses achievement of learning outcomes that it claims for its...co-curricular programs."

At the time of the development of this manual, CCC is still developing institutional-level outcomes, and the college currently considers the General Education program outcomes the institutional-level outcomes:

- Communication Skills Conveying of ideas using one or more methods of expression (written, oral, signed);
- Thinking Skills Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning;
- Diversity and Global Awareness An understanding and appreciation of diverse cultures, values, beliefs, and historical perspectives;
- Ethical and Civil Values A better understanding of oneself and others in order to clarify individual and societal responsibilities, needs and values.

Co-curricular assessment is important as, unlike the controlled educational environment of the classroom, it can provide essential data that students can and are applying the learning outcomes to their lives, better demonstrating our college's dedication to lifelong learning.

Co-Curricular Assessment Timeline

At the beginning of the academic year, the Assessment Committee will consult with Student Development on which scheduled events could be assessed for the General Education learning outcomes.

Before each of these events, the Assessment, Program, and Training Coordinator will work with the Student Life Coordinator in order to develop proper assessment tools for each event as the events have varying formats and intended audiences.

Co-Curricular Assessment Reporting

The Student Life Coordinator will be responsible for administering the assessment tools to the attendees of the co-curricular events. The Student Life Coordinator will then share the assessment results with the Assessment, Program, and Training Coordinator.

The Assessment, Program, and Training Coordinator will aggregate the co-curricular results and record the results in the yearly assessment update and provide them to the appropriate Student Development programs for the program review and bi-annual assessment reporting.

PART XII - Program Assessment

Why Program Review?

Per HLC Criterion 4.A.1, "the institution maintains a practice of regular program reviews," and while accreditation is the driving force behind program review, it is not the document's ultimate purpose. It is an opportunity to review the history of the program to determine how the program is performing and if the program needs to change its direction due to market or educational trends. The review should be conducted knowing that it will be used to inform budget and financial decisions, increase agility to respond to market and educational trends, and to provide an avenue for discourse within the program and the institution at large.

Program Review Timeline

Each program, as determined by the appropriate council, should conduct a review once every five years or when the program is considering a substantial change to its services.

The timeline will be:

DEADLINE	TASK	
Aug-Nov of Review Year	Program will gather data and information - Program Review Data Meeting with Assessment Coordinator and IR	
Feb-May of Review Year	Program will write the Program Review document	
Jun-Jul of Review Year	Appropriate Dean will review the Program Review document	
Sept-Oct of Following Year	Assessment Committee will evaluate program Review	

Nov of Following Year	Provost will evaluate program Review
December of Following Year	Program Review will be submitted to Executive Council during budget
Feb-May of non-Review Years	Program will meet to review goals and budget requests - Annual Review Day with Assessment Coordinator
Years 2 and 4 of the Program Review Process	Program will complete a Bi-Annual Review.

Program Review Document

As the purpose of program review is many fold, it also has multiple audiences and will be made publicly available. Currently, a website is being constructed to house the program review documents and the feedback gathered during each review.

There are two program review documents: one has an academic focus and the other has a learning support focus (Appendix I and J respectively). These documents are not static and will change and are adaptable to the needs of the individual program. All feedback can be submitted to the Associate Dean of Curriculum and Assessment or the Assessment Coordinator.

<u>Program Review and Assessment Meetings</u>

Program Review Data Meeting

This meeting is designed to present the data the program has generated for the previous five academic years. The Assessment Coordinator generates the established data sets. The sets contain the following:

- Overview of program including all of the degrees and the program outcomes;
- A review of required courses and elective courses for each degree and certificate;
- The AZ Transfer table displaying which courses transfer to in-state universities and which do not:
- A list of the instructors for the previous five years and their credentials;
- A breakdown of the FT faculty to PT faculty ratios by year, by section, and by credits,
- The course success rates of individual courses within the program: an overall success summary of the courses with a breakdown of each course by campus, instructional method, session, and session instructional method;
- The information of the sections, enrollment, tuition generated, and fees generated by course and by year;

- An overview of the student majors taking the degree courses with a chart of the average of the top ten majors;
- A chart and table of the age of students taking the degree required courses;
- A chart and table of the ethnicity of the students taking the degree required courses;
- Assessment charts (will be subject to change as programs refine their assessment tools);
- A table overview of how each course contributes to the program outcomes;
- And additional tables of how individual course outcomes measure program outcomes.

These data sets establish the "what" that happened throughout the five years. It is an opportunity for the program to review established data sets, ask for any new data sets they want to review, and begin to brainstorm the "why" of what happened.

Program Outcomes or Performance Measure Review

The purpose behind Program Outcomes/Performance Measures Review is to dedicate time for the faculty of the program to evaluate the following items:

- Disseminate any updates or changes regarding assessment from the Higher Learning Commission (HLC)
- Review and evaluate program outcomes
- Establish performance measures, if necessary
- Create curriculum maps Knowledge-Application-Synthesis map for program, Course Outcomes to Program Outcomes map
- Determine shared summative assessment for each of the program outcomes/measures

The program faculty should leave with a clear picture of how the courses work together to build the students' knowledge and skills throughout the program. It should also provide them a course(s) that have been identified to contain the highest level of learning for the students. Within this course, a program assessment tool will be used to gather data to determine how the students are learning in the program.

Bi-annual Assessment & Goal Review

As a program has yet to participate in an Bi-annual Assessment & Goal Review meeting, the agenda has not been tested or evaluated for effectiveness. It will be first used in AY19.

Bi-annual Assessment & Goal Review is an opportunity for the programs to meet and review the following items:

- Program assessment gathered to this point and
- Annual goals.

The annual goals should be developed during the program review writing process. The Assessment Coordinator will assist the program in gathering and compiling their program assessment data. This opportunity will give programs time to make any adjustments to assessment or goals for the upcoming years.

Program Review Evaluation Process

Once a program review document has been created, it will go through a review process. This review process will provide multiple opportunities for feedback.

First, the appropriate dean will evaluate the program review document. The dean's role is to evaluate the document for any areas that could be improved and to assent he/ or she agrees with the information presented. If the dean wishes to have changes made, the dean and program will do so in collaboration. Once the dean approves of the document, he or she will give it to the Assessment Coordinator.

Second, the Assessment Coordinator brings the program review document to the Assessment Committee. The Assessment Committee will break into sub-groups dependent on the number of program review documents submitted. Each group will evaluate the document with the "Program Review Checklist" and review the document for any grammatical issues that may be present. Once the checklist and grammatical edit has been completed, these will be returned to the dean to share with the program. After the dean and program have reviewed the checklist and made any necessary changes, the dean will submit the program review document to the Provost for evaluation and the Assessment Coordinator for documentation purposes.

The Provost will evaluate the program's action plan to ensure alignment throughout the Academic Affairs division. If the Provost wishes to have changes made, the Provost and the dean will do so in collaboration. Once the Provost approves of the document, he or she will submit the program review document to the Executive Council for strategic planning and budget consideration. The Provost will also notify the Assessment Coordinator of the approval, and the Assessment Coordinator will post the approved program review document on the website along with any correlating feedback.

PART XIII - Conclusion

This assessment handbook is intended to be a living document, subject to change and adjustment at regular intervals. It is not intended as an end, rather as a beginning for undertaking the challenges set before the College as the institution moves forward.

As established, the College is committed to the assessment of student learning for continually improving institutional effectiveness and the quality of instruction at CCC. Assessment results will invariably lead to curriculum and program review, staff development, and institutional improvement activities.

There remain many opportunities for improvement, as with any plan, and there will indeed be modification. However, this handbook sets the tone for the best possible design and most effective implementation for Coconino Community College.

Student Learning Assessment Glossary

Add-on Assessment: Additional tasks that go beyond the course requirements and are usually given outside of the classroom. Because they are not normally part of the course grading structure, students are often less motivated to perform well (Stanford).

Assessment: The systematic process of determining educational objectives, gathering, using, and analyzing information about student learning outcomes to make decisions about programs, individual student progress, or accountability. Methods used to analyze student learning outcomes or achievement of program objectives.

Assessment Plan: A document used to summarize the relationship between program outcomes and courses, course assignments, or course syllabus objectives to examine congruence and to ensure that all outcomes have been sufficiently structured into the curriculum.

Benchmark: A criterion-referenced objective performance datum that is used for comparative purposes. A program can use its own data as a baseline benchmark against which to compare future performance. It can also use data from another program as a benchmark. In the latter case, the other program often is chosen because it is exemplary, and its data are used as a target to strive for, rather than as a baseline (James Madison University).

Bloom's Taxonomy: The extent and rigor of learning as defined by six levels by Benjamin Bloom: (1- Knowledge; 2- Recall and Comprehension; 3- Application; 4- Analysis; 5- Synthesis; 6- Evaluation); characterized by action verbs.

K-A-S (Knowledge-Application-Synthesis): A condensed version of Bloom's Taxonomy using one level to represent two levels: K (Levels 1 and 2), A (Levels 3 and 4), and S (Levels 5 and 6). Often used in developing curriculum maps to show progression of student knowledge.

Capstone Course: A course that encompasses educational experience and provides a summative demonstration of competencies.

Closing the Loop: Evaluative steps in the assessment process that lead to program improvement. This is accomplished by reviewing the data collected in course assessment and discussing possible methods of course or program educational improvement or revision.

Co-curricular: Activities, programs, and learning experiences that complement, in some way, what students are learning in school – i.e. experiences that are connected to or mirror the academic curriculum (EdGlossary).

Competency: The demonstration of the ability to perform a specific task or achieve a specified criterion.

Course- level Assessment: Assessment of student- learning outcomes in a specific course. Faculty members engage in course assessment by evaluating student performance on assignments, projects, and exams, and then using that information to improve student learning. The focus is on understanding the performance of an entire class or the effectiveness of the course across multiple sections.

Course Learning Outcomes: A demonstrable competency at a certain level of proficiency (what does the student know; what can the student do); outcomes must be measurable for the sake of assessment. Measurement can be both objective (quantifiable) and/or subjective (qualitative).

Course Objectives: Detailed aspects of the course that are accomplished by the successful completion of the course outcomes. Refers to the specific knowledge, skills, or attitudes that students are expected to achieve through their college experience.

Curriculum Mapping: Curriculum mapping is a process for collecting and recording curriculum-related data to identify core skills and content taught, processes employed, and assessments used for each course and level in a degree program. The purpose of a curriculum map is to document the relationship among the components in the curriculum, and ultimately, to create a more coherent curriculum. A curriculum map can be used for analysis, communication, and planning.

Direct Assessment Methods: Direct measures of student leaning require student to display their knowledge and skills as they respond to the instrument itself. Objective tests, essays, presentations, and classroom assignments all meet this criterion (James Madison University).

Embedded Assessment: Tasks that are integrated into the course curriculum. They usually involve classroom assessment techniques but are designed to collect specific information on program learning outcomes. These assessments are typically graded by course instructors and then pooled across sections to evaluate student learning at the discipline or program level. Embedded assessments are tied to the grading structure in the course (Stanford).

Evaluation: One or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained. Evaluation results in decisions and actions regarding program improvement.

Formative Assessment: The gathering of information about student learning—during the progression of a course or program which is usually repeated—to improve the learning of those students. Example: reading the first lab reports of a class to assess whether some or all students in the group need a lesson on how to make them succinct and informative (Leskes 2002).

General Education: A philosophy of education that empowers individuals with broad knowledge, transferrable skills, and a strong sense of values, ethics, and civic engagement. The specific choice of major matters far less than the knowledge and skills gained through all studies and experiences in college (AAC&U).

Higher Learning Commission: The review commission for accreditation within NCA (North Central Association of Colleges and Schools).

Indirect Assessment Methods: Methods such as surveys and interviews that ask students to reflect on their learning rather than to demonstrate it (James Madison University). Reflection by students and others on learning experiences, adequacy of a program, etc.; may be administered by surveys, course embedded activities (such as minute papers), focus groups, job placement rates, transfer studies success, etc.

Information Literacy: The ability to acquire, evaluate, organize, maintain, interpret, and communicate knowledge.

Institutional Assessment: A process of assessing institutional outcomes in relationship to mission, values, and strategic planning.

Institutional Learning Outcomes: Broad- based learning outcomes reflecting common educational knowledge and skills from all programs that all graduates of the institution will acquire. Outcomes should align with the institution's mission.

Inter-rater reliability: The degree to which different raters/observers give consistent estimates of the same phenomenon.

Outcomes-Based Assessment: Measures of performance against defined, measurable outcomes. Faculty and administrators purposefully plan the program to support student achievement of the outcomes, implement methods to systematically identify whether the end results have been achieved, and use the results to plan improvements or make recommendations for resource reallocation or requests. Assessment often conveys the same meaning.

Performance Measures: Specific, measurable statements identifying student performance(s) required to meet the outcome; confirmable through evidence.

Portfolios: A portfolio is a collection of work developed across varied contexts over time. The portfolio can advance learning by providing students and/or faculty with a way to organize, archive and display pieces of work (Regis University). An e-portfolio is an electronic format of a collection of work developed across varied contexts over time. The electronic format allows faculty and other professionals to evaluate student portfolios using technology, which may include the Internet, CD- ROM, video, animation, or audio.

Program Learning Outcomes: The knowledge, skills, and abilities students should possess when they complete a program. Educational or degree programs are more than a collection of random courses. Educational programs prepare students for a range of particular outcomes that can be stated in measurable terms. Program assessment seeks to determine the extent to which students in the program can demonstrate these outcomes.

Program Review: The administrative and peer review of academic programs conducted on a six- year cycle, the results of which are reported to the CMU Board of Trustees. This review includes a comprehensive analysis of the structure, processes, and outcomes of the program. The outcomes reported in the program reviews include program outcomes (e.g. costs, degrees awarded) as well as student learning outcomes (i.e. what students know and can do at the completion of the program) (Northern Illinois University).

Qualitative Data: Data in which the values of a variable differ in kind (quality) rather than in amount.

Quantitative Data: Data in which the values of a variable differ in amount rather than in kind.

Reliability: The characteristic of a measuring instrument to obtain similar results with repeated administrations.

Rubrics: Specific sets of criteria that clearly define for both student and teacher what a range of acceptable and unacceptable performance look like. Criteria define descriptors of ability at each level of performance and assign values to each level. Levels referred to are proficiency levels which describe a continuum from excellent to unacceptable product. (SABES) A scoring tool that lists the criteria for a piece of work, or "what counts" (for example, purpose, organization, and mechanics are often what count in a piece of writing); it also articulates gradations of quality for each criterion, from excellent to poor.

Analytic Rubrics: Two-dimensional rubrics with defined levels of achievements as columns and assessment criteria as rows. Allows instructors to assess students' achievements based on multiple criteria using a single rubric. It appears in table form. (Queen's; Depaul)

Holistic Rubrics: One-dimensional rubrics used to assess students' overall achievement on an activity or item based on the predefined achievements levels. The performance descriptions are written in paragraphs and in full sentences. (Queen's; Depaul)

Standardized Assessment: A standard- based assessment of learner achievement in relation to set standards.

Student Artifacts: A collection of papers, projects, documents, etc., which represent your knowledge, competency, understanding, and achievement of identified goals and learning incomes.

Student Learning Outcomes: Demonstration of what students will be able to know, do, and value at the end of their degree program. An expression of what a student will demonstrate on the successful completion of a module, course, or program of study.

Summative Assessment: Evaluation at the end of a unit or units of instruction or an activity or plan to determine or judge student skills and knowledge or effectiveness of a plan or activity (Leskes 2002). The gathering of learning information at the conclusion of a course or program. When used for improvement, impacts the next cohort of students taking the course or program. Example: examining student final exams in a course to see if certain specific areas of the curriculum were understood less well than others.

Validity: The degree to which a test or other assessment measure measures what it is designed to measure. The extent to which inferences and actions made based on test scores are appropriate and accurate.



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Appendix A – List of current CCC Programs

ACADEMIC AFFAIRS DIVISION

СТЕ		
Program Proposed	Degrees/Certs to be Reviewed	Core Courses
Admin of Justice	AA- Admin of Justice AAS- Admin of Justice CERT-Basic Detention Academy CERT- Forensics Investigations	AJS, BIO, FOR, ENG
Business	AA- Business AAS- Business ABUS - Associate of Business CERT - Accounting	ACC, BUS, ECN, MAT, CIS, ENG, LDR
HRM	AAS- Hospitality Management AA- Hotel & Restaurant Management	ACC, CIS, HRM, BUS, LDR, SPC
Construction Tech Management	AA- Construction Technology Management AA - Vocational Technology Education AAS - Construction Technology AAS - Environmental Technology AAS - Sustainable Green Building CERT - Construction Technology CERT - Environmental Technology	CTM, MAT, ACC, ECN, ENV
CIS	AAS - Computer Software Technology AAS - Network Engineering CERT - Computer Technician CERT - Graphics and Web Design CERT - Network Engineering	BUS, CIS, LDR, ART
Fire Science	AAS - Fire Science CERT - Fire Science	FS
Allied Health	AAS - Medical Office Management CERT - Medical Assistant CERT - Phlebotomy	AHS, CIS, BIO
Nursing	AAS - Nursing	NUR
CN.A	AAS - Pre-Health Careers CERT - Pre-Health Careers	NUR, NTR, AHS, BIO, CHM
EMS	AAS - Paramedic Studies	EMS

Liberal Arts & Sciences		
Program Proposed	Degrees/Certs to be Reviewed	Core Courses

ASL	AAS - ASL CERT- ASL Interpreting	ASL
Anthropology	AA-Anthropology	ANT
Colorado Plateau Studies	AA- Colorado Plateau Studies	ANT, CPS, GLG
Environmental Studies	AA-Environmental Studies	ANT, CPS, GLG, BIO, CTM, ENV, GEO
Psychology	AA- Psychology	PSY
Sociology	AA - Sociology	SOC
Fine Arts	AFA - Visual Arts	ART
GEN ED - English	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	ENG
GEN ED - Intensive Writing	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	ENG, HUM, ANT, POS, PSY, SOC, BIO, BUS
GEN ED - Math	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	MAT
GEN ED - Arts & Humanities	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	ANT, ART, COL, CPS, DAN, ENG, HUM, MUS, PHI, REL, THR
GEN ED - Social & Behavioral Sciences	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	AJS, ANT, ASL, BUS, CPS, ECN, GEO, HIS, POS, PSY, SOC
GEN ED - Physical & Biological Sciences	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	ANT, BIO, CHM, GEO, GLG, PHY
GEN ED - Options	AA - General Studies AGS - Associate of General Studies AS - General Studies CERT - AGEC A, B, S	ASL, BUS, CIS, FRE, GER, ITA, JPN, NAV, SPA, SPC

STUDENT DEVELOPMENT
Advising & Career Advising
Tutoring, Disability Resources, TRiO, Early Alert

Recru	ıitm	ent
11001	41 CI I	CIIC

Student Activities & Community Engagement

Testing, New Student Orientation, START

BUSINESS & ADMINISTRATION

Finance

Auxiliary Services

Purchasing

Facilities

Security

ITS

Financial Aid

Registration



Appendix B – Assessment Committee Charter

Date Originated: October 2015 (Updated May 2017)

Title of Group: Assessment Committee / STANDING COMMITTEE

Titles of Members: 1-Director, Institutional Research and Assessment,

1- Assessment Program and Faculty Development Coordinator

1-Student Development and Community Engagement Representative (2

year commitment) *

1-Staff Representative (2 year commitment) *
2- Full-time faculty Members: (1 year commitment) *
2- Full-time faculty Members: (2 year commitment) *
2- Full-time faculty Members: (3 year commitment) *
2-Part-time Faculty Members (1 year commitment)*

* Identify successors by May of the rotation year

Chair/Co-chair: A chairperson will be nominated and elected at the end of the academic

year. (2 year commitment) *

Purpose: To support the College's commitment to educational achievement and

improvement through ongoing assessment of student learning. To review

Program Review documents for the College.

Goals of Group: To provide leadership regarding CCC assessment practices and

coordination; to share information and provide feedback; to oversee faculty assessment of student learning outcomes and monitor progress; to organize and implement HLC and strategic planning assessment process; to conduct annual review of assessment plan; to appraise, revise and/or

edit annual Program Review documents.

Term Limit of Group: Ongoing

Product from Group's Work: Manages and documents assessment activities and practices in regard to

HLC Standards. Provides direction, oversight of curricular assessment activities, training, Information sharing, and recommendations. Editorial

board for Program Review documents.

Sponsor or Budget: Academic Affairs

Frequency of Meetings: Semi-Monthly (To be determined with additional meetings as needed) with

an annual hiatus in June and July, unless otherwise needed.

Meeting Norms: Show up on time, informed and prepared to discuss agenda items. Don't

text during the meeting. Discussions are respectful, ethical, truthful, well-

reasoned, and positive.

Communication/Information

Dissemination Vehicle:

Agenda and minutes are posted electronically

Evaluation: Annual written report to College Council, Deans, faculty and staff.

Appendix C – General Education Committee Charter

Date Originated: March 2011 (updated May 2017)

Title of Group: General Education Committee / STANDING COMMITTEE

Titles of Members: Six (6) Faculty Representatives

Dean of Learning Services (3)

Assistant Registrar and Curriculum and Articulation Services Coordinator

Student Representative

Assessment Program and Faculty Development Coordinator

Chair/Co-chair: A chairperson may be nominated and elected at the end of each academic

year.

Purpose: The purpose of the General Education Committee is to review, discuss,

and evaluate all issues affecting General Education Curriculum at CCC.

Goals of Group: The Committee is tasked with maintaining the integrity of the General

Education Curriculum while ensuring it remains aligned with the mission of the College and conforms to all applicable standards in accordance with

College policy and procedure.

Term Limit of Group: Ongoing

Product from Group's Work: Develop/review assessment plan for General Education, update and

continually review General Education criteria and special requirements, develop General Education statements, and maintain currency regarding

updates to General Education Curriculum at the state level.

Sponsor or Budget: Academic Affairs

Frequency of Meetings: Twice per academic month

Meeting Norms: Show up on time and come prepared as well-informed, accountable

participants.

Engage in reasoned, respectful, and efficient debate and discussion.

Make decisions with best interest of College in mind. Be open to diverse outcomes, but not attached to outcome.

Function as a team.

Respect different learning styles.

Do what you agree to do.

Communication/Information

Dissemination Vehicle:

Agenda and minutes are posted on Intranet.

Evaluation: Annual written report to College Council, deans, and faculty.

Appendix D - Coconino Community College's Draft Procedure for Assessment

<u>302-01 ASSESSMENT OF STUDENT LEARNING PROCEDURE</u>

1. PURPOSE

To create an organized and systematic method of assessment at CCC, the College assesses its programs, services, and student academic achievement for the purpose of continuous improvement and to guide strategic planning and decision making. We strive to implement this procedure with broad-based participation to assure that assessment at CCC is an integral part of all college activities.

2. PROCEDURE

This procedure contains three components: the assessment of student learning, the maintenance of an assessment handbook, and the creation of assessment plans and reports.

- 1. Assessment of Student Learning
 - Student learning outcomes represent the measurable knowledge and skills that serve as the foundation for success in society and one's discipline, vocation, and life. Student learning outcomes are designed at the course-level and program-level and posted on the College website. The course-level outcomes are included in course syllabi. Classroom and co-curricular data are collected and analyzed across the college to determine whether or not students are meeting the expectations described by these outcomes.
 - a. Validation of Student Learning Outcomes in Academic Affairs Student learning outcomes on course outlines are reviewed and updated by designated faculty as needed and is ensured during the Program Review process. Changes to student learning outcomes at the courseand program-level must follow Curriculum Development Procedure 301-01.
 - b. Assessment of Credit Education
 All credit programs are required to assess their student learning
 outcomes. Assessment of student learning outcomes is conducted by the
 program/department faculty and then documented during the program
 review process. The entire assessment process can be found in the
 College's Student Learning Assessment Handbook.
 - c. Assessment of Non-Credit Education Non-credit courses/workshops may be offered for continuing education units, professional development, or personal enrichment. Assessment of these courses/workshops is dictated by the funding source and will be followed by the program coordinator, staff, and faculty.
 - d. Assessment of Co-Curricular Activities
 Co-Curricular activities are defined as learning activities that occur outside the regular learning environment. Co-curricular assessment is developed

in coordination with Student Development and faculty with student learning outcomes in mind.

2. Student Learning Assessment Handbook

This handbook provides a comprehensive outline of the college assessment of student learning processes and procedures. This handbook reflects the collaborative work of faculty and staff across all divisions. Changes to the handbook will be completed by the Assessment Committee in consultation with college faculty, staff, and leadership. The Assessment, Program, and Training Coordinator will maintain an updated version of the handbook on the Assessment website.

3. Assessment Plans and Reports

College assessment plans and reports of student learning processes are explained in detail in the College's Student Learning Assessment Handbook. Assessment reports include

- a. Course Assessment Reporting: The course assessment reporting is a record of the assessment of student learning at the course-level. Faculty and/or disciplines are required to report course assessment each semester. The reported data is aggregated and sent to relevant stakeholders.
- b. Program Review: Programs are required to conduct program review to examine the history of the program, to determine how the program is performing, and to evaluate whether changes are necessary due to market or educational trends. Program reviews are conducted on a five-year cycle, as detailed in the Student Learning Assessment Handbook. Program reviews are created by the appropriate program. The Assessment, Program, and Training Coordinator assists the program in gathering and compiling program assessment data. Program reviews are evaluated according to the reporting structure within the program, the Assessment Committee, and the Provost/division Vice President. Recommendations are then reviewed by the appropriate councils and the decisions/recommendations are communicated back to the programs for implementation.

As part of the program review process, programs are required to conduct a bi-annual assessment & goal review to review program assessment gathered to that point and update or create new program goals/recommendations. Bi-annual reviews will be shared with the supervisor of the program. The Assessment, Program, and Training Coordinator assists the program in gathering and compiling their program assessment data.

3. BACKGROUND

- 1. References: Policy 300-00 Academic Processes, Policy 302-00 Assessment of Student Learning, and Assessment Manual
- 2. Revision history: 03/2018
- 3. Legal review: none
- 4. Sponsor: Academic Affairs

Adopted by College Council: XX/XX/XXXX (added after College Council approves the policy)

COCONINO COMMUNITY COLLEGE

Appendix E – Bloom's Taxonomy Reference Sheet

The Student Will... The Student Will...

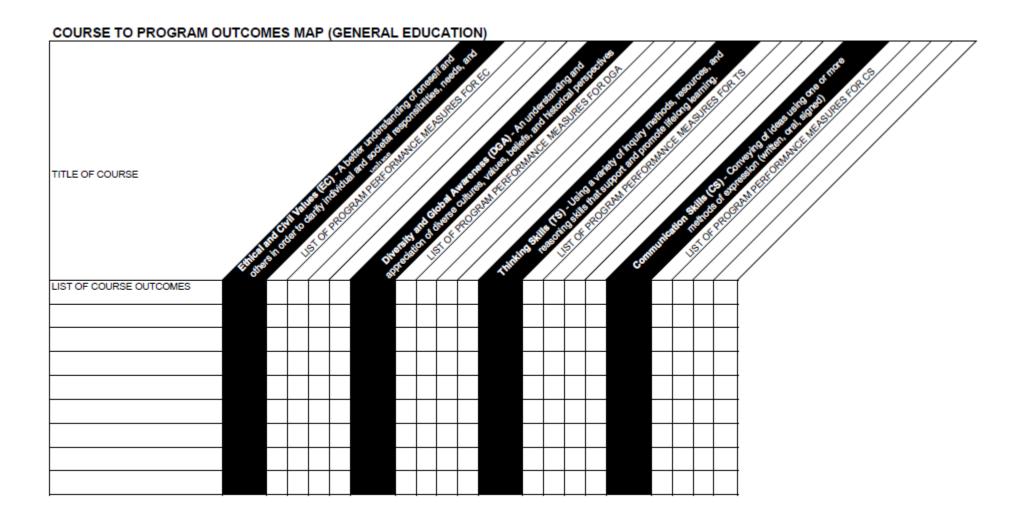
The Student Will		The Student Will
KNOWLEDGE	COMPREHENSION	APPLICATION
(Remembering)	(Understanding)	(Applying)
Learn specific facts, ideas vocabulary;	Ability to grasp the meaning of material;	Ability to use learned material in new
remembering/recalling information or	communicate knowledge;	and concrete situations;
specific facts	understanding information without	use learned knowledge and interpret
	relating it to other material	previous situations
Introduction	Practice know	
by doing		by doing
collect, copy,	alter, associate,	acquire, adopt, apply, assemble,
define, describe,	calculate, categorize, change,	capitalize, construct, consume,
examine,	communicate, convert,	demonstrate, develop, discuss,
find,	distinguish,	experiment,
group,	expand, explain,	formulate,
identify, indicate,	inform,	manipulate,
label, list, locate,	name alternatives,	organize,
match,	outline,	relate, report,
name,	paraphrase,	search, show, solve novel problems,
omit, observe,	rearrange, reconstruct, relate, restate	tell consequences, try,
point, provide,	(own words),	use, utilize
quote,	summarize,	
read, recall, recite, recognize, repeat,	tell meaning of,	
reproduce,	translate,	
say, select, sort, spell, state,	understand,	
tabulate, tell, touch,	verbalize,	
underline,	write	
who, when, where, what		
Skills Demonstrated:		Skills Demonstrated:
Observation and recall of information	al Indocetanding information	alles information
- Observation and recall of information	 Understanding information 	Use information
Knowledge of dates, events, places	Grasp meaning	Use methods, concepts, theories in
•Knowledge of dates, events, places	Grasp meaning	•Use methods, concepts, theories in
Knowledge of dates, events, places Knowledge of major ideas	Grasp meaning Translate knowledge into new context	•Use methods, concepts, theories in new situations
Knowledge of dates, events, places Knowledge of major ideas	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast	•Use methods, concepts, theories in new situations •Solve problems using required skills or
Knowledge of dates, events, places Knowledge of major ideas	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes,	•Use methods, concepts, theories in new situations •Solve problems using required skills or
 Knowledge of dates, events, places Knowledge of major ideas Master of subject matter 	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences	 Use methods, concepts, theories in new situations Solve problems using required skills or knowledge
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use?
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to?
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned?
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned?
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show?
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did? Why did?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your
Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did? Why did? How would you describe?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to?
Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to?
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Knowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? How would you show?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop?
Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? How is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? Can you select?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant? What can you say about?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop? What other way would you plan to?
Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? Where is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? How would you show? Can you select? Who were the main?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant? What can you say about?	Use methods, concepts, theories in new situations Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop? What other way would you plan to? What would result if?
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Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? How would you show? Can you select? Who were the main? Can you list three?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant? What can you say about?	•Use methods, concepts, theories in new situations •Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop? What other way would you plan to? What would result if? Can you make use of the facts to? What elements would you choose to change?
Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? How would you show? Can you select? Who were the main? Can you list three?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant? What can you say about?	•Use methods, concepts, theories in new situations •Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop? What other way would you plan to? What would result if? Can you make use of the facts to? What elements would you choose to change?
Nowledge of dates, events, places Knowledge of major ideas Master of subject matter What is? Where is? When did happen? How did? Why did? How would you describe? When did? Can you recall? How would you show? Can you select? Who were the main? Can you list three?	Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes, Predict consequences How would you classify the type of? How would you compare/contrast? Will you state or interpret in your own words? How would you rephrase the meaning? What facts or ideas show? What is the main idea of? Which statements support? Can you explain what is happeningwhat is meant? What can you say about?	•Use methods, concepts, theories in new situations •Solve problems using required skills or knowledge How would you use? What examples can you find to? How would you solve using what you have learned? How would you organize to show? How would you show your understanding? What approach would you use to? How would you apply what you have learned to develop? What other way would you plan to? What would result if? Can you make use of the facts to? What elements would you choose to change? What facts would you select to show? What questions would you ask in an

KNOWLEDGE	COMPREHENSION	APPLICATION				
(Remembering)	(Understanding)	(Applying)				
Learn specific facts, ideas vocabulary;	Ability to grasp the meaning of material;	Ability to use learned material in new				
remembering/recalling information or	communicate knowledge;	and concrete situations;				
specific facts	understanding information without	use learned knowledge and interpret				
	relating it to other material	previous situations				
Assessment		Assessment				
Events	Drama	Map				
People	Skit	Project				
Recordings	Cartoon	Forecast				
Newspapers	Story	Diagram				
Magazine articles	Tape recording	Illustration				
Television shows	Speech	Paper which follows an outline				
Radio	Photograph	Solution				
Text readings	Diagram	Question				
Films/videos	Graph	List				
Plays	Own statement	Project				
Film strips	Model	Drama				
	Conclusion	Painting				
	Implication based on idea	Sculpture				
	Casual relationships					
	Summary					
	Analogy					
	Outline					
	Compare					
Multiple-choice question	tutorials	Multiple choice				
Fill-in blank	Q&A (oral, one-minute papers)	Short answer				
True/false	Student presentations or demonstrations	Essay				
Matching	within small groups (peer reviews)	Tutorials				
Short answer	Exam - Describe, explain, summarize,	Simulations				
Flashcards	identify or select	Case Studies				
Quizzes		Text problems				
Student recitations		Student presentation				
Exams - Define, label, list, reproduce		Exam - Apply, use, solve, demonstrate,				
		employ				
		Problems sets				
I	I	I .				

	The Student Will								
ANALYSIS	SYNTHESIS	EVALUATION							
(Analyzing)	(Creating)	(Evaluating)							
Ability to break down material into its	Ability to put parts together to form a	Ability to judge the value of material							
component parts and perceive	new whole; use elements in new	(statement, novel, poem, report, etc.) for							
interrelationships	patterns and relationships	a given purpose;							
		judgement is based on given criteria.							
rledge learned	Demonstrates mastery of knowledge learned								
	by doing								
analyze, arrange,	alter,	appraise, argue, assess,							
break down,	build,	challenge, choose, conclude, criticize,							
categorize, classify, compare, contrast,	compose, construct, create,	critique,							
deduce, determine, diagram,	develop,	debate, decide, defend, discriminate,							
differentiate, discuss causes, dissect,	estimate,	discuss, document, draw conclusions,							
distinguish,	form a new,	editorialize, evaluate,							
give reasons,	generate, hypothesize.	grade,							
order, separate, sequence, survey,	imagine, improve, infer, invent,	interpret, judge, justify,							
take apart, test for,	modify,	prioritize,							
why	plan, predict, produce, propose,	rank, rate, recommend, reject,							
wy	reorganize, rewrite, revise,	support,							
	simplify, synthesize	validate,							
	simpiny, synthesize	weigh							
		weigh							
	Skills Demonstrated:								
Seeing patterns	•Use old ideas to create new ones	Compare and discriminate between							
Organization of parts	Generalize from given facts	ideas							
• Recognition of hidden meanings	•Relate knowledge from several areas	• Assess value of theories, presentations							
• Identification of components	Predict, draw conclusions	Make choices based on reasoned							
		arguments							
What are the parts of?	Do you agree with the actions? With	Do you agree with the actions? With							
How is related to?	the outcomes?	the outcomes?							
Why do you think?	What is your opinion of?	What is your opinion of?							
What is the theme?	How would you prove? Disprove?	How would you prove? Disprove?							
What motive is there?	Can you assess the value or importance	Can you assess the value or importance							
Can you list the parts?	of?	of?							
What inference can you make?	Would it be better if?	Would it be better if?							
What conclusions can you draw?	What would you recommend	Why did they (the character) choose? What would you recommend?							
How would you classify? How would you categorize?	What would you recommend? How would you rate the?	How would you evaluate?							
Can you identify the different parts?	What would you cite to defend the	How could you determine?							
What evidence can you find?	actions?	What choice would you have made?							
What is the relationship between?	How would you evaluate?	What would you select?							
Can you make a distinction between?	How could you determine?	How would you prioritize?							
What is the function of?	What choice would you have?	What judgment would you make							
What ideas justify?									
How would you estimate the results		about?							
product the same part against the results									
for?		about? Based on what you know, how would you explain?							
· ·		Based on what you know, how would							
for?		Based on what you know, how would you explain?							
for? What facts can you compile?		Based on what you know, how would you explain? What information would you use to							
for? What facts can you compile? Can you construct a model that would		Based on what you know, how would you explain? What information would you use to support the view?							
for? What facts can you compile? Can you construct a model that would change?		Based on what you know, how would you explain? What information would you use to support the view? How would you justify?							
for? What facts can you compile? Can you construct a model that would change? Can you think of an original way for		Based on what you know, how would you explain? What information would you use to support the view? How would you justify? What data was used to make the							

ANALYSIS	SYNTHESIS	EVALUATION				
(Analyzing)	(Creating)	(Evaluating)				
Ability to break down material into its	Ability to put parts together to form a	Ability to judge the value of material				
component parts and perceive	new whole; use elements in new	(statement, novel, poem, report, etc.) for				
interrelationships	patterns and relationships	a given purpose;				
		judgement is based on given criteria.				
	Assessment					
Questionnaire	Article	Conclusion				
Argument	Invention	Self-evaluation				
Parts of propaganda	Report	Recommendation				
Word defined	Set of rules	Valuing				
Statement identified	Set of standards	Court trial				
Conclusion checked	Game	Survey				
Syllogism broken down	Machine	Evaluation				
Report	Experiment	Standard compared				
Survey	Play	Standard established				
Graph	Book	Group discussion				
	Alternative course of action					
	Question					
	Song					
	Formulation of hypothesis					
Multiple choice	Multiple choice	Multiple choice				
Multiple choice Essay	Multiple choice Essay	Multiple choice Essay				
-	· ·	·				
Essay	Essay	Essay				
Essay Project	Essay Project	Essay Project				
Essay Project Portfolio (on analyzing case studies or	Essay Project Portfolio	Essay Project Portfolio				
Essay Project Portfolio (on analyzing case studies or clinical experiences)	Essay Project Portfolio Simulation Presentation	Essay Project Portfolio Simulation				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based,	Essay Project Portfolio Simulation Presentation	Essay Project Portfolio Simulation Presentation				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play)	Essay Project Portfolio Simulation Presentation Paper	Essay Project Portfolio Simulation Presentation Paper				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation	Essay Project Portfolio Simulation Presentation Paper Virtual labs	Essay Project Portfolio Simulation Presentation Paper Virtual labs				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures,				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems)	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs graphic organizers Exam - Analyze, compare, distinguish,	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts Exam - Develop, plan, prepare, propose,	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend judge, predict, rate, support				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs graphic organizers	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts Exam - Develop, plan, prepare, propose, construct, design, formulate, create Portfolio	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend judge, predict, rate, support				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs graphic organizers Exam - Analyze, compare, distinguish, examine (Take home, online, or face-to-	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts Exam - Develop, plan, prepare, propose, construct, design, formulate, create Portfolio Design and build a model	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend judge, predict, rate, support				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs graphic organizers Exam - Analyze, compare, distinguish, examine (Take home, online, or face-to-	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts Exam - Develop, plan, prepare, propose, construct, design, formulate, create Portfolio Design and build a model Create a work of art	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend judge, predict, rate, support				
Essay Project Portfolio (on analyzing case studies or clinical experiences) Simulation (computer-based, mannequins, part task trainers, role play) Presentation Paper Virtual labs case studies Discussion labs graphic organizers Exam - Analyze, compare, distinguish, examine (Take home, online, or face-to-	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies (Class or small group discussions assemble relevant info to produce a hypothesis, plan to address recurring problems) Interviews with experts Exam - Develop, plan, prepare, propose, construct, design, formulate, create Portfolio Design and build a model	Essay Project Portfolio Simulation Presentation Paper Virtual labs case studies - Small groups discussions on appropriateness of procedures, results Debates Exams - Evaluate, argue, assess, defend judge, predict, rate, support				

Appendix F – Course-to-Program Outcomes Map



Appendix G - Knowledge-Application-Synthesis (K-A-S) Map

KNOWLEDGE-APPLICATION-SKILLS MAP

Degree/Certificate Name

		REQUIRED									ELECTIVE					
Program Outcomes	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO	CRSE-NO
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	K-A-S	K-A-S	K-A-S	K-A-S	K-A-3	K-A-3	K-A-S	K-A-S	N-A-S	N-A-S	K-A-S	K-A-3	K-A-S	N-A-S	K-A-S	K-A-S
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	K-A-S	N-A-S	N-A-S	K-A-S	2-4-5	K-A-S	K-A-S	K-A-S	N-A-S	N-A-S	N-A-S	2-4-5	K-A-S	N-A-S	K-A-S	K-A-S
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	K-H-3	N-H-3	N-H-3	N-H-3	N-H-3	N-H-3	N-M-3	N-M-3	N-M-S	N-M-S	N-A-3	N-H-3	N-H-3	N-A-3	N-H-3	K-H-3
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	K-A-3	K-A-3	K-A-3	K-H-3	N-A-3	K-H-3	K-A-3	K-A-3	N-A-3	N-A-3	N-A-3	N-H-3	K-H-3	N-A-3	K-H-3	K-A-3
Program Outcome	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S	K-A-S
Description	N-A-3	N-M-3	N-M-3	N-A-3	K-A-3	K-A-3	N-A-3	K-H-3	N-A-3	K-H-3						

Use a * to indicate which course will be used to measure program-level assessment

Appendix H - Assessment Map

ASSESSMENT MAP

Degree/Certificate Name

	REQUIRED							ELECTIVE				
Program Outcomes	CRSE-NO											
Program Outcome	Assessment											
Description	Tool											
Program Outcome	Assessment											
Description	Tool											
Program Outcome	Assessment											
Description	Tool											
Program Outcome	Assessment											
Description	Tool											
Program Outcome	Assessment											
Description	Tool											
Program Outcome	Assessment											
Description	Tool											

Use a * to indicate which course will be used to measure program-level assessment

Appendix I – 2017-2018 Academic Program Review

2017-2018 Academic Program Review

In section I, provide a brief description of the program for someone who may not have direct interactions with the program. A more detailed explanation of the program will be included throughout the review document.

I. Overview

- a. Narrative
 - *State the purpose of the program and its contributions to the community.*
 - Define what sets this program apart from other programs in the college.
 - How does the program gather input and/or respond to community needs?
 - *How long has the program existed?*
 - When was the last program review?
- b. Program goals
 - Define the program goals.
 - Describe how the program goals are tied to the institutional mission statement.
- c. Decision making
 - Describe how decisions are made within the program.
 - Describe the communication process within the program.
 - Define any outside agencies that inform decision making and their scope.
- d. A statement of the program's accomplishments in support of the College's current strategic plan
 - Provide the goals from the strategic plan that the program contributes to.
 - Provide evidence on how the program has been contributing to the strategic plan.

In the following sections II-IV, provide a detailed description and provide evidence and data to support the claims.

II. <u>Teaching and Learning</u>

- a. Program requirements and course offerings
 - i. Degrees and Certificates
 - Discuss any changes to the degree and certificate outcomes within the program. (A curriculum map with the degrees and certifications will be provided by the assessment team to be included in the Appendix.)
 - Discuss any opportunities and impacts to the program from changes to degrees and certificates at the college. (A list of degree and certifications that the program contributes to will be provided by the assessment team to be included in the Appendix.)
 - ii. Course Offerings

- Discuss course offerings, types of courses, modalities, scheduling of courses and frequency of offerings. (A list of course offerings will be provided by the assessment team to be included in the Appendix.)
- iii. Enrollment and student success information for the previous five years
 - Elaborate on any patterns or outlying data contained within provided tables. (Data tables will be provided by the assessment team to be included in the Appendix. The first set of data tables will contain a breakdown by course of student success rates overall, by campus, by instructional method, and by session. The second set of data tables will contain an overview of the number of courses, sections, enrollments, and potential tuition earned for the previous five years.)
 - Discuss other data collected by the program if desired.

b. Licensure/certifications of students

- Discuss what licensures/certifications students may be able to obtain upon completion of the program.
- Outline the requirements for each licensure/certification.
- Describe how the program contributes to the student's ability to achieve the current licensures/certifications.
- Discuss any impediments to the student obtaining the licensures/certifications.

c. Curriculum

- i. Course outline reviews and updates
 - Define how often course outlines are reviewed and updated.
 - Discuss changes made to the course outcomes since the last program review.
 - Discuss the effects these changes have had on the program.
- ii. Other curriculum changes
 - Describe any curricular changes since the last program review such as program outcome changes, pedagogy, software updates, different delivery methods, or different time offerings.
 - Note any impending course changes.
 - Discuss the effects these changes have had on the program.

d. Articulation

- Describe the program's participation in Articulation Tasks Forces.
- Discuss changes in transferable courses.
- Provide elaboration on any courses that are only transferable as electives or non-transferable. (A transfer table of the courses will be provided by the assessment team to be included in the Appendix.)
- e. Is the program accredited by a programmatic accrediting agency? If so, name the agency and include the status of the most recent accreditation.

f. Teaching loads

- Provide a description of the responsibilities and loads of the full-time faculty.
- Provide a description of the responsibilities and loads of the part-time faculty.
- Discuss the delivery methods of the courses.
- Discuss any release time of the full-time faculty. (Charts and tables detailing the number of courses and sections taught by full-time and part-time faculty will be provided by the assessment team to be included in the Appendix.)

g. Faculty credentials

- Describe minimum credentials needed to teach in the program.
- Discuss any specializations or achievements of the current faculty. (A table listing the program faculty for the last five years with the faculty members' degrees will be provided by the assessment team to be included in the Appendix.)

h. Student Learning Assessment

- Provide detailed descriptions on types of assessment used to measure student learning.
- Describe any course-level assessments that were conducted and the results since the last program review.
- Report any shared assessments within the program and data gathered from those assessments.
- Record any observations or trends found within the student learning assessment data.

III. Facilities and Resources

- a. Specify any designated space that is primarily for the program's use since the last program review.
 - Describe how the designated facilities contribute to the program's overall student success.
- b. Specify any designated equipment purchased primarily for the program's use since the last program review.
 - Describe how the designated equipment contributes to the program's overall student success.
- c. Specify any designated budget and differential tuition that is primarily for the program's use. (The assessment team will provide A program budget.)

IV. Analysis and Reflection

- a. Strengths, Weakness, and Challenges Analysis
 - What do you see as internal strengths of the program?
 - Provide evidence and data to support answers.
 - What do you see as internal weaknesses of the program?
 - Provide evidence and data to support answers.
 - What do you see as opportunities for the program?

- What do you see as challenges of the program?
 - Provide any challenges that the program has faced since the last program review and the results.
 - Provide any challenges the program is facing now internally and externally.
 - Discuss any challenges for the students completing a certificate or degree.
- b. Previous Recommendations and Results
 - i. List recommendations that were received at the last program review.
 - Elaborate on actions taken on recommendations and effects on the programs.
 - ii. List any recommendations from Program Advisory Committees/Councils (if applicable).
 - Elaborate on any actions take on recommendations and effect on the program.

V. Recommendations

Provide recommendations for specific actions for continuous improvement of the program.

- a. Five Year Plan
 - Where will this program be in five years?
- b. Action Plan/Recommendations (To be completed in the next five years). List action items in order of priority of completion.
 - i. Action Item #
 - ii. Anticipated date for completion
 - iii. List of the potential benefits to student success
 - iv. Status update (Only update at Annual Review Meeting)
 - v. Last reviewed date

Appendix

- Documents mentioned throughout program review above
- Other documents as needed to support program review

Appendix J - 2017-2018 Non-Academic Program Review

2017-2018 Non-Academic Program Review

Executive Summary

A short summary of the program review that readers can rapidly become acquainted with the material without having to read all of it. This section is written last.

Program Overview (Narrative)

A brief description of the program explaining why it exists, what its function is within the college, and the services the program provides.

Program Mission, Goals, and Objectives

Program Mission, if applicable

Provide a clear and concise statement of the program's mission and how that mission ties into the overall mission of the college.

Goals and Objectives

Provide a list of the goals, objectives, and outcomes of the program. When applicable, define how these goals align with the current strategic plan and provide evidence on how the program has been working to accomplish these goals.

Changes/Improvements Since Last Review (if applicable)

Recommendations from most recent program review and/or advisory committee(s)

List recommendations that were received given during the last program review and any that have occurred within the previous five years. Elaborate on actions taken on the recommendations and the effects these actions had on the program. If no action was taken on a recommendation, describe why no action was taken.

Personnel, Facilities, Resources and Funds

Personnel

Provide an overall description of the staffing and organization of the program. Provide a description of the distribution of responsibilities between the positions within the program. Detail the professional development opportunities offered and utilized by staff.

Facilities and Resources

Describe any designated space that is provided to support the program. Describe any designated equipment purchased to support the program. Provide observations on how the facilities and equipment contribute to the mission of the program. Provide observations/data on how the facilities and equipment contribute the quality/quantity of services provided by the program. Elaborate on future trends or needs of the program detailing how this will lead to student success.

Finances

Align revenues and expenditures within the budget, and outline what revenues are generated through program activities. Any applicable trends and impacts on the budget should also be discussed.

Partnerships and Collaborations, if exist

Internal

List any internal committee(s), advisory groups, or other collaborations in which the program participates. Detail the composition, information on meetings, other functions or activates of involvement.

External

Identify advisory councils, high school connections, community agency connections, or other forms of connections which pertain to the mission and objectives of the program. Detail the composition, information on meetings, other functions, or activities of involvement.

Customer and Services Review

Review of Provided Services

Provide a detailed review of the services provided by the program. Explain how the services support teaching and learning within the college.

Support of Students

- 1. Provide the program's definition of student success.
- 2. Analyze the demographics of the participants of the program, and identify any populations not being served. Identify trends and patterns and compare to other Arizona programs. Use results of qualitative measures aimed at how best the program provides services or support students.
- C. Support of Faculty and Staff

Analyze the demographics of the participants of the program, and identify any populations not being served. Identify trends and patterns and compare to other Arizona programs. Use results of qualitative measures aimed at how best the program provides services or support faculty and staff.

Analysis

SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis and description using the following definitions:

Strengths – The programs capabilities, resources, assets, people (experience/knowledge) processes/systems. Strengths should be realistic and not modest.

- What are the advantages of the program?
- What does the program do well?
- What relevant resources do you have access to?
- What do other people see as the program's strengths?

• What would the program boast about to someone who knows nothing about this organization and its work?

Weaknesses – The disadvantages, gaps in capabilities, reputation, financial, deadlines, moral/leadership, processes/systems that could serve as a barrier. Weaknesses should be truthful so that they may be overcome as quickly as possible.

- What can be improved?
- What is done poorly?
- What should be avoided?
- What is the program doing that could be done more effectively/efficiently?
- What is the program not doing that it should be doing?
- List one thing that could be changed to help the program function more effectively.

Opportunities – Any market developments, industry/lifestyle trends or geographical partnerships that create favorable situations now or in the future.

- Where are the good opportunities for the program?
- What are the interesting trends that the program is aware of?

Threats – External forces that are potentially damaging now or in the future.

- What obstacles does the program face?
- Are there required specifications for your program changing?
- Is changing technology threatening the program?
- Are there financial issues?
- Are any of the weaknesses a serious threat to the program?

Internal Factors

What do you see as the internal strengths of the program? What are the internal challenges?

STRENGTHS	WEAKNESSES
OPPORTUNITIES	THREATS

External Factors

What are the external opportunities of the program? What are the external weaknesses?

STRENGTHS	WEAKNESSES
OPPORTUNITIES	THREATS

Recommendations and Future Directions

1- to 3-Year Recommendations

Provide the goal, objective, timeframe, responsible party(ies), and resources implications. Devise plans to help improve student success.

Revision of Current Goals, if applicable

Future Direction (5-year view)

Where will this program be in five years? What evolutions needs to occur for the program to continue to meet its purpose and objectives.

