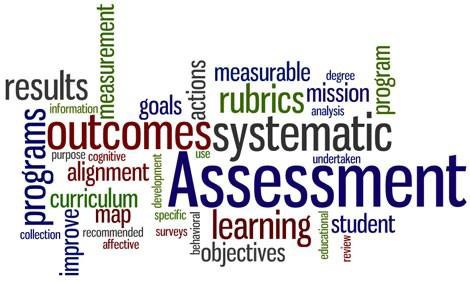


Assessment Handbook



# Acknowledgements

Assessment is an integral part of Hawai‘i Community College. The roots of assessment reach back to 2004 when an Ad Hoc Assessment Committee was formed in the Academic Senate. The Assessment Committee developed the College’s initial assessment processes, tools, training, and the comprehensive review process for instructional programs and non-instructional support units.

A petition to make the Assessment Committee a formal College committee was approved by the College Council in May 2013. Guided and convened by the Institutional Assessment Coordinator (IAC), the Committee developed and regularly updates this Assessment Handbook to assist faculty and staff across the Kauhale to design and implement meaningful assessments.

This guidebook is a reflection of the efforts made by committee members and their commitment to continually help improve the College’s institutional assessment and planning efforts.

#### *Our Mission:*

***The Hawaiʻi Community College Assessment Committee is dedicated to supporting continuous improvement in learning by sponsoring assessment activities, encouraging meaningful assessment practices and experiences, and promulgating discovery based on results of the assessment process. The Committee reports to the College Council and is chaired and convened by the Institutional Assessment Coordinator.***

***Committee membership is comprised of administrators, faculty, and staff from academic and service units.***

To maintain currency and to improve content, the handbook is considered a living document and any suggestions for modifications or general comments should be sent to the Hawai‘i Community College Institutional Assessment Coordinator for review and consideration by the Assessment Committee. Review of contents by the Institutional Assessment Coordinator occurs annually.

# Table of Contents

[Purpose 1](#_bookmark0)

[Assessment at Hawai‘i Community College 2](#_bookmark1)

Program and Unit Review 3

[Responsibility for the Process](#_bookmark2) 5

The [Assessment Cycle](#_bookmark3) 6

[Learning Outcomes 9](#_TOC_250001)

[Unit Outcomes 13](#_TOC_250000)

Alignments 17

Appendices

[Appendix A – Glossary 1](#_bookmark4)8

[Appendix B – Blooms Taxonomy 27](#_bookmark5)

# Purpose

This handbook describes the goals, processes, principles, and procedures of outcomes-based assessment at Hawai‘i Community College for instructional programs and non-instructional service units. It begins with a brief overview of outcomes-based assessment and the context in which it is conducted, describes what learning and service outcomes are and their purposes, and provides practical strategies to develop, assess, and establish practices for continuous improvement in learning, teaching, and services.

A few overarching themes are woven throughout this handbook:

* Assessment helps you serve your students and clients more effectively and efficiently.
* Assessment plays a central role in institutional effectiveness and planning for success.
* All campus constituencies are responsible to participate and engage in outcomes-based assessment and, where appropriate and feasible, develop collaborative assessment strategies that demonstrate professional and institutional commitment to student success.

Keep in mind that meaningful assessment:

* ultimately improves student learning and the workplace environment
* requires clarity of purpose, standards, criteria, and approach
* is not a solitary exercise and works best when colleagues and peers participate together
* requires a variety of measures and approaches
* requires attention to processes as well as results
* is ongoing rather than episodic
* is most likely to be embraced when embedded in a larger practice of continuous improvement
* values authentic, useful evidence in planning and implementing changes for improvement
* works best when it engages stakeholders from across all sectors of the educational community

# Assessment at Hawai‘i Community College

Assessment is the process of gathering information on student learning and services for the purposes of evaluating and improving the learning environment. Assessment is the responsibility of everyone employed by Hawai‘i Community College. The College engages in systematic assessment of learning and service outcomes to ensure continuous improvement and create increased opportunities for student success. The College Council’s Assessment Committee and the Institutional Assessment Office provide leadership to ensure that the College achieves its mission by sponsoring assessment activities, encouraging meaningful assessment practices and experiences, and promulgating discovery based on results of the assessment process.

The College’s approach to assessment makes student learning more meaningful and effective. As an outcomes-focused institution, we increase student success in the real world by building educational experiences and opportunities based on what students will be able to accomplish with the knowledge and skills they acquire in their courses, programs, and extra-curricular activities at the College. By engaging in an educational and student-centered support environment based on learning and service outcomes, our students are able to clearly identify the relevance and value of their education.

At Hawai‘i Community College, assessment includes developing and implementing strategies and documentation to assess students’ attainment of learning outcomes, including

* Institutional Learning Outcomes (ILOs)
* General Education Learning Outcomes (GELOs)
* Program Learning Outcomes (PLOs)
* Course Learning Outcomes (CLOs)

Assessment also includes developing and implementing strategies and documentation to assess non-instructional units’ achievement of their service goals, called

* Unit Outcomes (UOs)

Assessment across the Kauhale is governed by the College’s Assessment Policy, Haw 5.202 <http://hawaii.hawaii.edu/sites/default/files/assets/ovcadmin/admin-manual/haw5-202.pdf>

In addition, standards and criteria from the Accrediting Commission for Community and Junior Colleges (ACCJC, <http://www.accjc.org/>) as well as industry-specific accrediting bodies providing oversight for career and technical education programs, serve as the overall guidelines within which the college establishes, supports, and utilizes the results of its assessment activities.

**PROGRAM AND UNIT REVIEW**

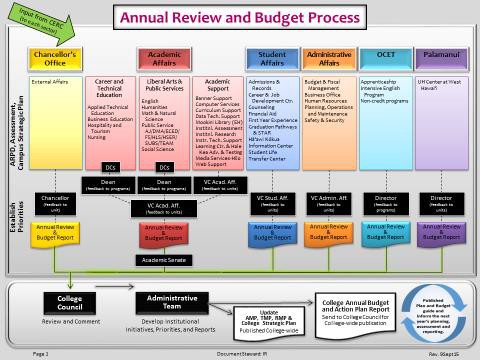
Assessment is integrated with strategic planning and the biennium and supplemental budget process through program and unit annual reviews, and comprehensive reviews on a three-year cycle that are initiated and monitored by the College Effectiveness Review Committee (CERC).

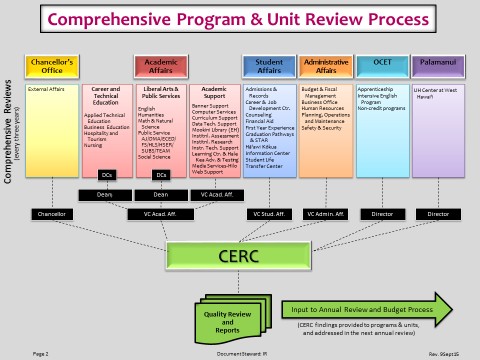
The following HawaiiCC, UH System, and UHCC policies determine requirements for program review:

* + Haw #4.201 Integrated Planning for Institutional Effectiveness <http://hawaii.hawaii.edu/sites/default/files/assets/ovcadmin/admin-manual/haw4-201.pdf>
  + UHCCP #5.202 (May 2012)

[http://uhcc.hawaii.edu/OVPCC/policies/docs/UHCCP\_5.202\_Review\_of\_Established\_Program](http://uhcc.hawaii.edu/OVPCC/policies/docs/UHCCP_5.202_Review_of_Established_Programs.pdf) [s.pdf](http://uhcc.hawaii.edu/OVPCC/policies/docs/UHCCP_5.202_Review_of_Established_Programs.pdf)

* + Board of Regents Policy, Section 5-1.b [www.hawaii.edu/offices/bor/policy/borpch5.pdf](http://www.hawaii.edu/offices/bor/policy/borpch5.pdf)
  + University of Hawaiʻi Systemwide Executive Policy, E5.202 <http://www.hawaii.edu/policy>





# Responsibility for Assessment

***Using the assessment of learning outcomes to improve teaching and learning is a joint responsibility of faculty, lecturers, staff, and administrators***. All have a role to play. The Institutional Assessment Coordinator and the Assessment Committee are charged with facilitating the process of developing and assessing learning and unit outcomes, and providing assessment information and support to instructional and non-instructional departments.

At the course, program, and service unit levels, departments are responsible for identifying learning and service outcomes, assessing achievement of those outcomes, analyzing the assessment results, and using them to make decisions about what actions to take to improve learning and services.

Guided by the College’s assessment process, principles, and requirements and in consultation with the IAC, departments determine appropriate mechanisms and instruments for conducting meaningful assessment and using the results to improve learning and services. Each member of the faculty, including lecturers, and all staff at Hawaiʻi Community College has a professional responsibility to contribute to the overall assessment efforts of their department and the College.

Departments are aided in this process through the program and course approval process of the Academic Senate’s Curriculum Review Committee (CRC), as well as the program/unit annual and comprehensive review and budget process**.** When a proposal for a new course or program, or modification of an existing course or program, comes before the Curriculum Review Committee, its members will assist faculty in reviewing the learning outcomes. During the annual and comprehensive review process, departments summarize results of their annual assessment data and indicate changes planned or already initiated as a result of outcomes assessment. Recommendations made as part of the CERC’s consideration of comprehensive reviews will guide departments’ planning. Over time, each department will demonstrate and document improvements being made in teaching, learning, and service as a result of the assessment and review process.

All departmental faculty and staff are responsible for maintaining documentation and record keeping of collected assessment data over time. The College assists these efforts by maintaining a web archive of submitted assessment plans, reports, and supporting documentation on the Assessment website > Reports and Resources page: <http://hawaii.hawaii.edu/files/assessment/reports/>

Administrators are responsible for supporting faculty and departments in their assessment efforts and to ensure compliance with accreditation expectations and standards. This responsibility includes ensuring that opportunities exist for faculty and departments to receive training in the development and assessment of student learning and service outcomes, creating structures and mechanisms whereby the results of assessment can be reported and shared, and fostering regular and meaningful institutional dialogue about the assessment process, assessment results, and evidence-based planning.

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# The Assessment Cycle

The process outlined below describes the three-stage approach used by the college to complete assessment efforts: initial planning, initial assessment and follow-up planning, and follow-up assessment (Closing the Loop).

Establishing and maintaining a systematic, regular assessment practice in each department, program, and unit provides the means to view the work that has been accomplished, discuss the results, and develop and implement actions to meet our students’ needs and continuously improve instruction, learning, and services.

### THE ASSESSME NT PRO CESS

**STAGE ONE > PLAN**

* + - Develop an assessment plan based on learning/service outcomes.
    - Review the plan with your department chair or unit supervisor, and the IAC.
    - Report the Plan to the College.

### STAGE TWO > CONDUCT INITIAL ASSESSMENT

* + - Implement the assessment plan and collect evidence of learning or service outcomes.
    - Analyze the evidence and develop an action plan for improvement.
    - Report assessment results and action plan to the College.

### STAGE THREE> CLOSE THE LOOP

* + - * Implement action plan and re-assess to “Close the Loop.”
      * Analyze follow-up assessment results and plan for long-term success.
      * Report Closing the Loop assessment to the College and provide any required supporting documentation.

### ASSESSMENT SCHEDULES AND DUE DATES

COURSES and PROGRAMS:

Courses are assessed on a five-year cycle, during which all three stages of the assessment cycle must be completed and reported to the College. Departments are responsible to ensure that each course is assessed every five years, at a minimum, and that assessment plans and reports are submitted to the College in a timely manner.

Departments are responsible to develop and maintain up-to-date five-year course assessment schedules. In consultation with the IAC, these schedules will be made available to faculty, students, and the public on the Assessment website.

rev. August 2016

Initial assessment plans should be reviewed and reported to the College within the first month of instruction.

Initial assessment results and action plans, should be reported to the College within one month after the end of instruction.

Closing the Loop follow-up assessments should be conducted during the first subsequent semester that the course is taught after the semester in which the initial assessment was conducted. Follow- up assessment results and long-term improvement plans should be reported to the College within one month after the end of instruction.

Departments and faculty are encouraged to conduct additional follow-up assessments of courses within the five-year cycle as necessary and appropriate to support continuous improvement in learning.

NON-INSTRUCTIONAL UNITS1:

Service and support units are assessed annually based on the Hawai‘i Community College fiscal cycle, July 1st through June 30th. Annual assessment results are used each year to develop plans for improvement for the following year. Thus, each year, units “Close the Loop” of the previous year’s assessment as a regular part of the annual process of assessment, planning, and implementation of change for improvement.

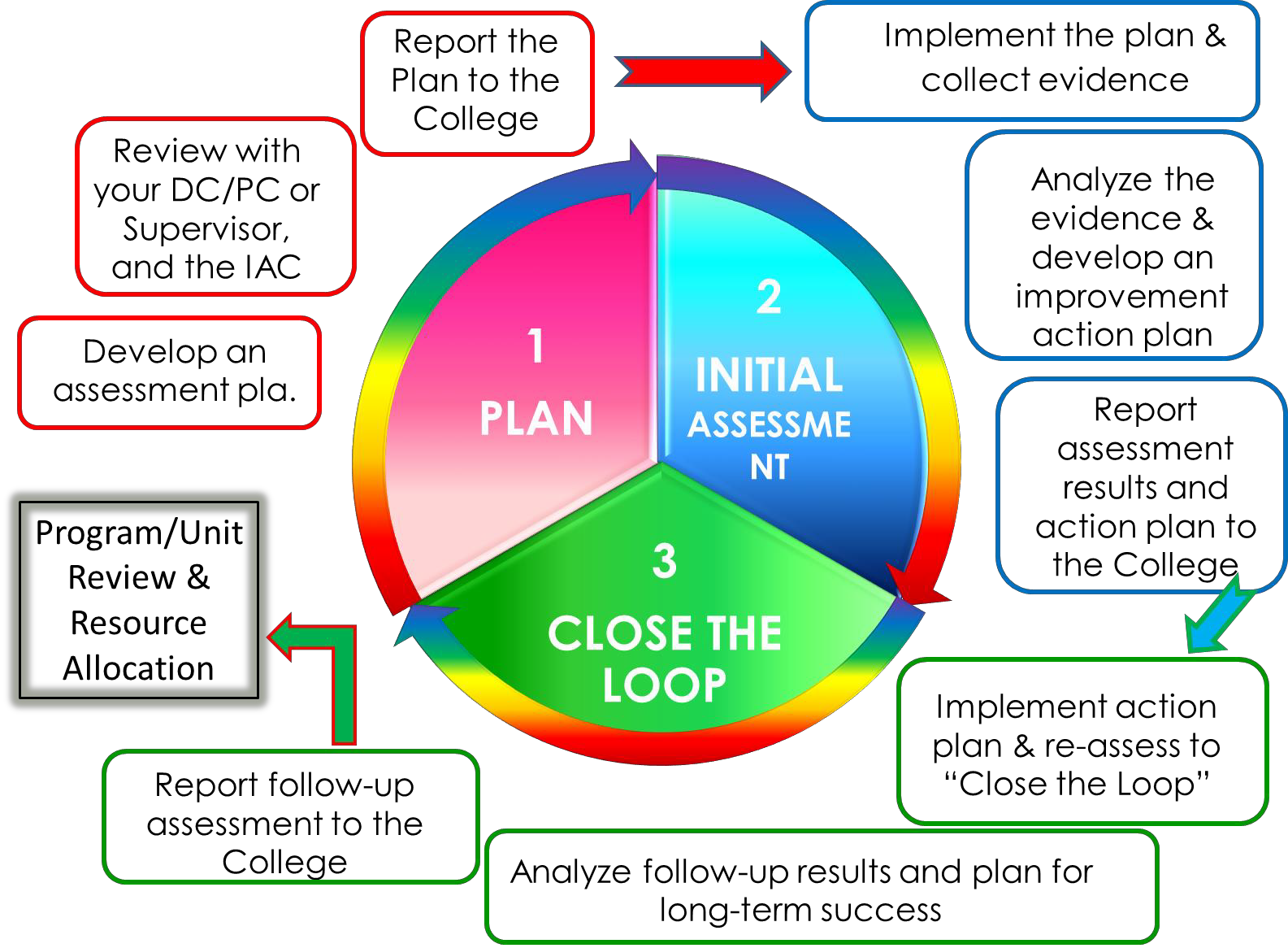
Assessment results and action plans are reported to the College annually within one month after the beginning of each new fiscal cycle, i.e., by July 31st.

1 Includes non-instructional units in Academic Support, Student Affairs, Administrative Support, Office of Continuing Education and Training, and ABDOM at Pālamanui.

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**THE ASSESSMENT CYCLE**

8

rev. August 2016

# Learning Outcomes

A **Learning Outcome** (ILO, GELO, PLO, CLO) is a statement about what a ***learner*** will know or be able to do as a result of an ***educational experience***.

**Institutional Learning Outcomes** (ILOs) state what students will be able to do as a result of their total educational and extracurricular experiences at the college.

* The development, revision, and assessment of institutional learning outcomes are the responsibility of the College Council.
* Program Learning Outcomes and Unit Outcomes must align to at least one ILO. In support of the College’s Mission, Vision, and strategic goals, faculty and staff are encouraged to align programs and units to as many ILOs as is appropriate.

**General Education Learning Outcomes** (GELOs) state what students will be able to do as a result of their participation in courses designated as general education courses.

* The development, assessment, alignment to the ILOs, and revision of general education learning outcomes are the responsibility of the Academic Senate.
* General education learning outcomes are assessed at least every five years.

For the learner, general education at Hawaiʻi Community College fosters self-awareness, broadens the understanding of an individual's roles within communities and environments, supports cultural understanding, emphasizes the breadth and interconnectedness of knowledge, and creates a foundation for continued personal, intellectual, and professional development. More information is available at: <http://hawaii.hawaii.edu/gened>

**General Education Assessment** is the assessment of student learning within the curricular areas meeting the College's general education requirements for a degree: communication, critical reading, critical thinking, information competency, technological competency, quantitative reasoning, self and community, cultural diversity, ethics, and areas of knowledge within the natural sciences, social sciences, and humanities. Because the general education requirement is an institutional requirement that crosses disciplines, assessment may occur on a broader scale than course or program assessment. General education assessment also may occur via the assessment of aligned CLOs in courses that meet the general education requirement.

rev. August 2016

**Program Learning Outcomes** (PLOs) describe the measurable skills, knowledge, attitudes, and behaviors that students will be able to demonstrate as a result of participation in and completion of a program of study leading to a degree or certificate.

* The development, revision, and assessment of program learning outcomes, including alignment with course and institutional learning outcomes, are the responsibility of program faculty and staff.
* Through its PLOs, each program must align with at least one ILO. In support of the College’s Mission, Vision, and strategic goals, program faculty and staff are encouraged to align the program and each PLO to as many ILOs as is appropriate.

**Program Assessment** is the assessment of student learning within a particular instructional program leading to a degree or certificate. Program learning outcomes focus on the significant components of a program Programs are assessed to determine whether students are achieving the learning outcomes developed by the department as stated in the original approval documents for the program and any subsequent approved revisions. Program assessment provides information about students' overall achievement of the broad goals of the instructional program (e.g. employment, mastery of skills, successful transfer, etc.).

* Students’ achievements of program learning outcomes primarily are assessed through their achievement of course learning outcomes over a scaffolded or related series of courses taught in the program; capstone courses, assignments, or experiences; cumulative or comprehensive projects or portfolios completed across a series of courses taught in the program; graduate or employer surveys; other specified program requirements, such as national licensure or industry exams, or through a combination of assessment strategies.
* Programs learning outcomes assessed through their alignment with assessed course learning outcomes are assessed at least every five years.

## Course Learning Outcomes (CLOs)

Course Learning Outcomes (CLOs) are statements that describe the measurable skills, knowledge, attitudes, and behaviors that students are able to do or demonstrate as a result of completion of a course of study. Course learning outcomes define specific learning experiences for students within individual courses. Most instructional assessment done at the College is course-level assessment of CLOs.

* The development, assessment, and revision of course learning outcomes are the responsibility of program faculty and staff.
* Each CLO must support and align to at least one of the PLOs of the program in which the course is taught. In support of the College’s Mission, Vision, and strategic goals, faculty and staff are encouraged to align courses and each CLO to as many PLOs as is appropriate.
* Alignment of CLOs to ILOs is accomplished via the PLO-to-ILO alignments submitted by the program.
* Every CLO must be assessed at least every five years based on programs’ published 5-year course assessment schedules, and all CLOs must be assessed using the full assessment cycle, which includes three stages:
  1. Assessment Plan
  2. Results Report and Action Plan
  3. “Closing the Loop” follow-up re-assessment

**Course Learning Outcomes Assessment** is summative, i.e., it measures students’ achievement of the CLOs at or near the end of the course of study. Summative assessment thus captures information at the point of the culmination of students’ learning in a course. Summative assessment generally is conducted separately from formative assessments that contribute to an individual student’s aggregate or cumulative final grade. Formative assessments may include a wide range and series of on-going evaluations that occur throughout a semester or teaching cycle, and allow faculty to address individual student’s learning and educational needs during the course. Summative course assessment, instead, focuses on the end-learning result of the course as a whole, not on the grades of individual students, and provides information about the learning that a cohort or group of students have attained by the end of a course.

* Courses must be assessed to determine whether students are achieving the CLOs as they are stated in the approved **Course Outline of Record.**
* All sections of a course that are assessed should be assessed for the same learning outcomes and using the same assessment instrument(s), rubric(s), and strategies.
* Course assessment may be accomplished through a wide variety of assessment tools and student assignments, such as summative course/department or other exams, portfolios, projects, papers performances, demonstrations, presentations, and many other types of assessable summative activities.
* Summative assignments generally should be assessed using an agreed-upon rubric or scoring guide that clearly states the standards and criteria of the assessment.
* Course faculty and staff are encouraged to develop assessment strategies and instruments to collect qualitative as well as quantitative data, and that use both direct and indirect evidence, if and as appropriate to the course.

Within a program’s curriculum, courses’ increasing rigor creates opportunities for strengthening students’ understanding and provides opportunities for them to attain the program’s intended overall outcomes. CLO-based assessments of student learning within a particular course provide one way for programs to assess their effectiveness in helping students achieve the program’s learning outcomes and overall educational goals.

## Course learning outcome examples:

|  |  |  |
| --- | --- | --- |
| ACTION VERB  *(performance)* | LEARNING STATEMENT  *(the learning)* | CRITERION  *(the conditions of the performance or demonstration)* |
| Students will apply | theory and principles for the diagnosis, repair, and maintenance | of power train components. |
| Students will explain | how cellular organelles support homeostasis | in the human body. |
| Students will analyze | the role of hula | in personal and community leadership. |
| Students will apply | health and safety principles | to environments and practices for young children. |
| Students will meet | the minimum training requirements | for a federal wildland firefighter. |
| Students will analyze | global economic and environmental factors | in terms of their effects on people and communities. |
| Students will compose | college-level writing | with a clear purpose in a form appropriate to intended audiences. |
| Students will be able to model and solve | simple real-life problems | algebraically. |
| Students will demonstrate critical thinking | in analyzing and evaluating the concepts and theories | of physical anthropology. |
| Students will apply | basic concepts and terminology | of poetry, drama, literature and literary analysis for the purpose of discussing and analyzing literature with understanding and appreciation. |
| Student will be able to identify and demonstrate. | the application | of various hand tools and fasteners. |

# Unit Outcomes

**Unit Outcomes (UOs)** describe the measurable experiences, comprehension, skills, and perceptions that students, faculty, staff, or community members will have gained as a result of receiving or participating in services or activities provided by non-instructional service, support, and/or administrative units.

The provision of a unit’s services constitutes the unit’s ***output***, which also generally is recorded, measured, and reported in relation to goals and expectations as a component of the unit’s annual assessment and review practices.

* Non-instructional units are assessed annually and should provide information about both the unit’s services outputs and outcomes.
* Units’ assessment results and action plans for improvement are reported to the College annually, constituting an on-going cycle of follow-up assessments comparable to the Closing the Loop stage of the course assessment cycle.

Unit Outcomes (UOs) describe the intended impact, effect, or result of the educational and co- curricular services provided directly to students, faculty, staff, and community members, including the support and administrative services necessary to meet the College’s functions and needs, and those services that are provided in collaboration with other programs/units at Hawai‘i Community College and the community.

**Unit Outcomes Assessment** encourages conversations about what services are offered, how services are provided, how customers will best benefit from the services, and the experiences and perceptions of those served about the services they have received and skills they have gained as a result of participation in the unit’s activities.

### Effective unit assessment should answer these questions:

* + What are you trying to do?
  + How well are you doing it?
  + How can you improve what you are doing?
  + How can the clients’ experiences be improved?
  + What and how does the unit contribute to the success of students and the College?

A crucial part of developing a unit assessment plan is clarifying the focus, intent, and strategies of your plan, which should be based on the needs and resources of your service unit. The assessment approach will depend on your unit’s mission, services, and goals.

rev. August 2016

Keep in mind that the purposes of assessment can be:

* + - **To improve:** The assessment process should provide feedback to determine how the unit can be improved.
    - **To inform:** The assessment process should inform unit heads and other decision makers of how well they have served the students, faculty, staff, and community.
    - **To prove:** The assessment process should encapsulate and demonstrate what the administrative unit is accomplishing as it relates to students, faculty, staff, and outsiders.
    - **To support:** The assessment process should provide support for campus decision-making activities such as unit review and strategic planning, as well as external accountability activities such as accreditation.

### Developing Unit Outcomes

Unit outcomes describe the effectiveness of a unit in carrying out its service or purpose. Outcomes are what you want to accomplish or anticipate will happen has a result of the unit’s outputs, i.e., the service(s) provided.

Examples:

Haʻawi Kōkua Disability Services:

* + - * Through participation in Haʻawi Kōkua, our students will be able to self-advocate and seek and utilize college and community resources.

ITSO:

* + - * Faculty will be increasingly comfortable integrating current instructional technology

into Curriculum due to the Instructional Technology Support Office’s Laulima training and support.

Identify the outcomes that are crucial to what you do. There may be many, but try to determine the top three to five things that you do in your unit and the goals you have for each type of service, task, or activity. Ensure that the outcomes are compatible with the College’s mission and institutional learning outcomes, and with the unit’s mission. Unit outcomes should describe your expected outcome or an expected performance level. All outcomes must be measureable and stated in measureable terms.

### Identifying Assessment Methods

When determining the success of administrative outcomes, you need tools or assessment methods. When identifying an assessment method, you should keep in mind what you are trying to measure:

Are you trying to measure the results of a student recruitment or informational campaign on campus?

Are you trying to measure the unit’s efficiency in processing applications, forms, work orders, etc., in a timely manner?

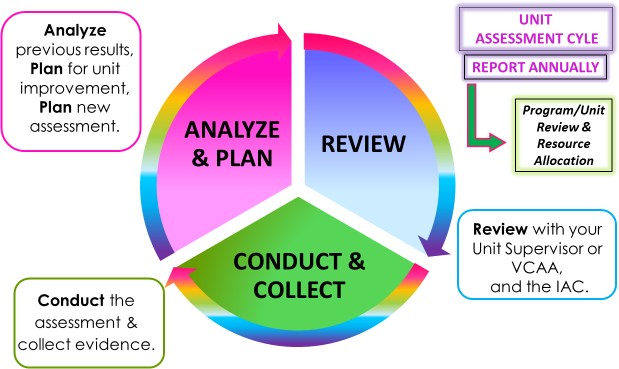
Are you trying to measure faculty members’ satisfaction with the services you provide to students in their courses?

Unit Outcomes can be assessed using both direct and indirect measures and generally should incorporate both quantitative data and qualitative or response data.

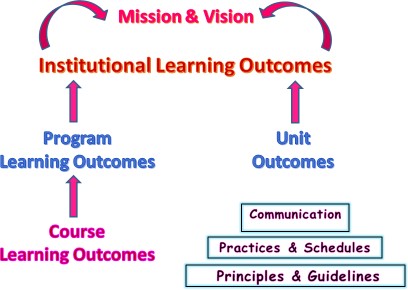
* Direct measures generally capture information about the actual performance of a unit’s staff in delivering its services or products, i.e., the unit’s outputs. Direct measures of a unit’s outputs can include a report about student or faculty participation rates, unit productivity or task-completion rates, or unit competencies as reflected in staff having completed professional development opportunities. Direct measures may also be used to capture information about learning outcomes for students involved in co-curricular classes, programs, and services provided by non-academic units.
* Indirect measures often are used to assess a unit’s outcomes. Indirect measures allow a unit to evaluate clients’ experiences or perceptions about the provision of services, such as their satisfaction with the timeliness of services rendered, or how they perceive the type and level of assistance provided, or their reflections about their experiences or what

they’ve learned after participating in unit services or programs.

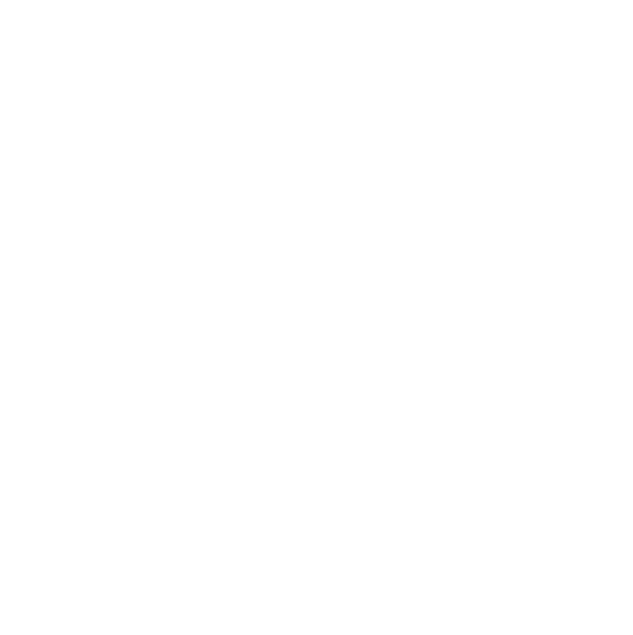
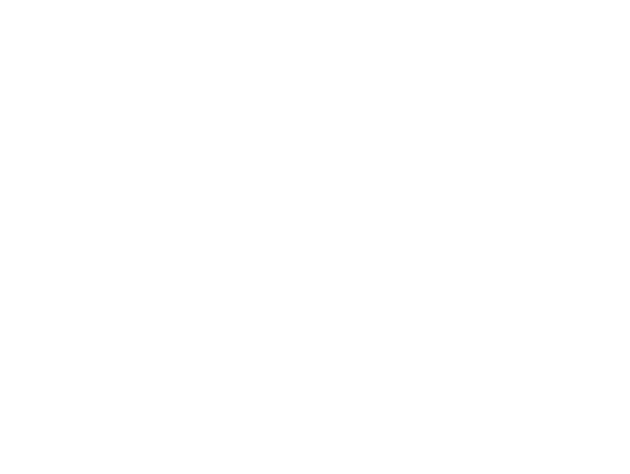
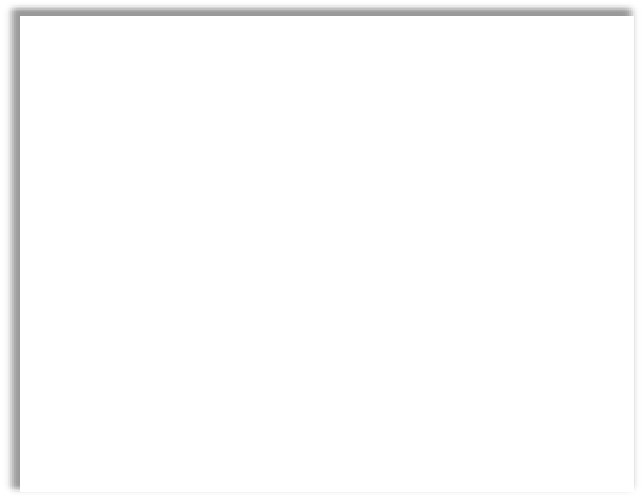
* Quantitative data includes numerical or mathematical counts of work done or services provided, and Likert-type numerical scores of participants’ reported responses to receiving services.
* Qualitative data is generally narrative or textual in nature, but may include or be drawn from any type of non-numerical response-based information. Qualitative data may include clients’ responses to survey questions, comments in focus groups, and observations or remarks provided to the unit by participants in a variety of situations and formats, both formal and informal.



**OUTCOME ALIGNMENTS**



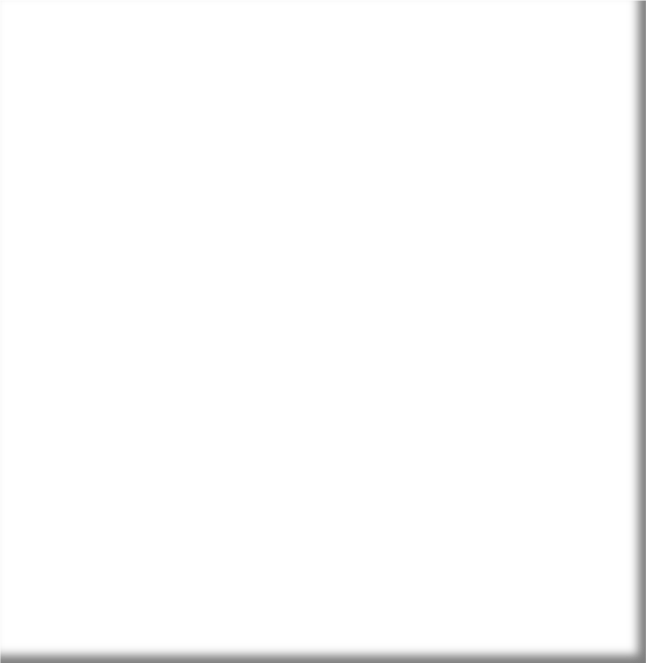
**APPENDIX A : GLOSSARY**



**An Educational Experience**

can include

* a topic/unit
* a course
* a program
* a degree or certificate
* an apprenticeship program
* an extracurricular event
* a professional development workshop/training



**Learners and Clients**

can include

* HawCC students
* faculty members
* staff members
* parents and ʻohana members
* high school students
* community members
* colleagues and peers



**Services** can include

* admission and records
* counseling, advising, and registration
* financial aid, disability services, 1st year experience
* catalog and curriculum services
* educational and support facilities, such as -

~ Library, Learning Center, course labs

~ websites, email, media services, computer labs

~ cafeteria, parking, security

* administrative and business services
* career and job development
* staff and faculty professional development

|  |  |  |  |
| --- | --- | --- | --- |
| **Term** | **Definition** | **Examples** | **Synonyms** |
| **Assessment** | Assessment is the process of gathering information/data on student learning and services for the purposes of evaluating and improving the learning environment. | * Portfolios * Exams * Performances * Observations * Surveys | Evaluation |
| **Course Learning Outcome (CLO)** | A statement that describes the measurable skills, knowledge, attitudes, and behaviors that students will demonstrate as a result of participation in and completion of a course of study.  Note: Learning outcomes should be SMART:  Succinct, Measurable, Appropriate, Realistic, and Timely. | * Students will produce a marketing plan that meets specified criteria and incorporates all major components. | Competencies Proficiencies |

|  |  |  |  |
| --- | --- | --- | --- |
| **Direct Measure** | Direct demonstration of students' knowledge, skills, and/or behaviors assessed based on a rubric or scoring guide focused on learning outcomes.  A numerical measure of a non- instructional unit’s service outputs. | * Essays and reports * Skills demonstrations in a shop or lab * Portfolios * Oral Presentations * Hula performances * Course-specific exams * Standardized national examinations * Licensure certifications or professional exams | Meaningful Assessment  Real-world performance |
| **Indirect Measure** | Evidence that shows student learning indirectly, through which student learning can be inferred rather than directly demonstrated.  Reports on performances that reveal perceptions, i.e., views, beliefs, or opinions of students' knowledge, skills, and/or behaviors.  Evidence of clients’ perceptions,  experiences, and responses to receiving or participating in unit services or activities. | * Student Satisfaction Surveys * Focus Groups * Employer Surveys * Response surveys of students, faculty, staff, administrators, and alumni * Exit interviews * Job placement data * Graduate follow-up studies | Surveys Satisfaction data |

|  |  |  |  |
| --- | --- | --- | --- |
| **Institutional Learning Outcome (ILO)** | A broad, institution-level outcome statement describing what students are able to do as a result of their instructional, student support, and extracurricular experiences at the College.  ILOs state what you, your colleagues, and the College aim to achieve. They can describe goals outside the teaching and learning process, as well as within it.  ILO statements are broad, but provide a detailed description of the general aims and intended outcomes for students and graduates of the College that support the Mission. | * Our graduates will be able to communicate effectively in a variety of situations. * Our graduates will be able to gather, evaluate, and analyze ideas and information to use in overcoming challenges, solving problems and making decisions. * Our graduates will develop the knowledge, skills, and values to make contributions to our community in a manner that respects diversity and Hawaiian culture. | ILOs  Institutional Goals |

|  |  |  |  |
| --- | --- | --- | --- |
| Learning Outcomes | A statement that describes the measurable skills, knowledge, attitudes, and behaviors that students should be able to do or demonstrate as a result of the learning unit, course, or program.  A learning outcome describes how students will be different because of a learning experience.  Learning outcomes are the knowledge, skills, attitudes and habits of mind that students take with them from a learning experience.  Learning outcomes should be SMART:  Succinct, Measurable, Appropriate, Realistic, and Timely. | Course Students will produce a marketing plan that meets specified criteria and incorporates all major components.  Program Apply basic ecosystem concepts to natural resource management. . | Outcomes Competencies |

|  |  |  |  |
| --- | --- | --- | --- |
| **Outcome** | An end result of an action or learning situation. | **Another way to state … Outcomes** are what a student or client KNOWS and CAN DO – things that are learned and applied. Outcomes should be general and conceptual. The number of outcomes in a course, program, or institution should be developed logically and organically from the content of the course or program, the services provided by a unit, or the mission and strategic plan of the institution. There  is no “magic number” of outcomes, but all outcomes should be appropriate to the learning or service situation.  Outcomes must be measurable and, when applied to learning in a course, are intended to show student ability and mastery of knowledge and skills at the completion of the course.  **Outcomes** can be thought of as the destination rather than the journey taken to get there – the end rather than the means, the outcome rather than the process. |  |
| **Portfolio** | A pre-planned collection of work over a course, internship, or program that is the basis of evaluation. | Capstone portfolio for program or course | Journal and attachments |

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| **Program Learning Outcome (PLO)** | A statement that describes the measurable skills, knowledge, attitudes, and behaviors that students demonstrate as a result of participation in and completion of a program of study. | Graduates will produce a schematic that illustrates all HVACR requirements for a new commercial building.  Engage, articulate, and analyze topics relevant to the aboriginal Hawaiian community using college-level research and writing methods. | Competencies |
|  | Program learning outcomes should be SMART:  Succinct, |  |  |
| **Qualitative** | Data relating to, or involving quality or kind, which cannot be represented numerically. | * portfolios of work * narrative description * text-based evaluation of a performance * learner description and analysis of a learning experience * written evaluations of a unit’s services | Clients’ text responses on a survey. |
|  | Narrative or textual data |  |
| **Quantitative** | Data that can be represented numerically. | test scores  compiled assessment results scores |  |

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| **Rubric** | Rubric is an agreed upon rating/evaluating tool with a set of criteria and a standard or scale designed to evaluate students' knowledge, skills, attitudes, and/or behaviors. | See Rubric Example | Scoring Guide Checklist |
|  | Each criteria category contains a graduation of levels of completion or competence, with a score assigned to each level and a clear description of what criteria need to be met to attain the score at each |  |  |
| **Standards** | Specific targets against which we gauge success in achieving an outcome. | Exceeds Expectations, Meets Expectations, Does Not Meet Expectations | Benchmark |
|  |  | Excellent, Good, Fair, Poor |  |
|  |  | Exceeds, Meets, Developing |  |
| **SMART** | Acronym for characteristics of high quality outcomes statements: **S**uccinct, **M**easurable, **A**ppropriate,  **R**ealistic, **T**imely |  |  |

focused, and clear.

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| **Standardize d Instrument** | A test that allows scores to be compared across populations and over time. These instruments are often externally developed and either norm or criterion- referenced. | * MAPP * CAAP * ACT * Work Keys * ATI | Standardized tests |
| **Unit Outcome (UO)** | Statement that specifies what students, faculty, and staff will know, be able to accomplish, or will feel or perceive after they have received or participated in the services and/or programs offered by a unit. |  |  |
|  | UO’s specify an action or response by the client that can be observed, measured, and/or demonstrated. |
|  | Keep UO’s simple |

# APPENDIX B - BLOOMS TAXONOMY

## Help Sheet - Action Words in Student Learning Outcomes

#### *Words like “understand,” “know” and “appreciate”* are not measurable and should not be used in outcomes.

**Bloom's Revised Taxonomy**

Lorin Anderson, a former student of Bloom, revisited the cognitive domain in the learning taxonomy in the mid-nineties and made some changes, with perhaps the two most prominent ones being, 1) changing the names in the six categories from noun to verb forms, and 2) slightly rearranging them (Pohl, 2000).

This new taxonomy reflects a more active form of thinking and is perhaps more accurate:

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| **Original Domain** | **New Domain** | **Verbs used for Outcomes** |
| **Evaluation** | **Creating** | judge, assess, decide, measure, appraise, estimate, evaluate, infer, rate, deduce, compare, score, value, predict, revise, choose, conclude,  recommend, select, determine, criticize |
| **Synthesis** | **Evaluating** | compose, setup, plan, prepare, propose, imagine, produce, hypothesize, invent, incorporate, develop, generalize, design, originate, formulate, predict, arrange, contrive, assemble, concoct, construct, systematize,  create |
| **Analysis** | **Analyzing** | interpret, classify, analyze, arrange, differentiate, group, compare, organize, contrast, examine, scrutinize, survey, categorize, dissect, probe, inventory, investigate, question,  discover, text, inquire, distinguish, detect, diagram, inspect |
| **Application** | **Applying** | exhibit, solve, interview, simulate, apply, employ, use, demonstrate, dramatize, practice,  illustrate, operate, calculate, show, experiment |
| **Comprehension** | **Understanding** | restate, summarize discuss, describe, recognize, explain, express, identify, locate, report, retell  review translate |
| **Knowledge** | **Remembering** | define, memorize, repeat, record, list, recall, name, relate, collect, label, specify, cite, enumerate, tell, recount |

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| **Category** | **Example and Key Words (verbs)** |
| **Remembering:** Recall previous learned information. | **Examples**: Recite a policy. Quote prices from memory to a customer. Knows the safety rules.  **Key Words**: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states. |
| **Understanding:** Comprehending the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words. | **Examples**: Rewrites the principles of test writing. Explain in one's own words the steps for performing a complex task. Translates an equation into a computer spreadsheet.  **Key Words**: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates. |
| **Applying:** Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the work place. | **Examples**: Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.  **Key Words**: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces,  relates, shows, solves, uses. |
| **Analyzing:** Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences. | **Examples**: Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.  **Key Words**: analyzes, breaks down, compares, contrasts, diagrams,  deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates. |
| **Evaluating:** Make judgments about the value of ideas or materials. | **Examples**: Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.  **Key Words**: appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains,  interprets, justifies, relates, summarizes, supports. |
| **Creating:** Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure. | **Examples**: Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.  **Key Words**: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes. |

## Help Sheet - Action Words in Student Learning Outcomes

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| --- | --- | --- | --- | --- | --- |
| **KNOWLEDGE** | **UNDERSTAND** | **APPLY** | **ANALYZE** | **EVALUATE** | **CREATE** |
| **copy** | Ask | Act | advertise | Appraise | adapt |
| **define** | Associate | Administer | analyze | Argue | anticipate |
| **describe** | Cite | Apply | appraise | Assess | arrange |
| **discover** | Classify | Articulate | break down | Choose | assemble |
| **duplicate** | Compare | Calculate | calculate | compare | choose |
| **enumerate** | Contrast | Change | categorize | conclude | collaborate |
| **examine** | Convert | Chart | classify | consider | collect |
| **identify** | Demonstrate | Choose | compare | convince | combine |
| **label** | Describe | Collect | conclude | criticize | compile |
| **list** | Differentiate | Complete | connect | critique | compose |
| **listen** | Discover | Compute | contrast | debate | construct |
| **locate** | Discuss | Construct | correlate | decide | create |
| **match** | Distinguish | Demonstrate | criticize | defend | design |
| **memorize** | Estimate | Determine | deduce | discriminate | develop |
| **name** | Explain | Develop | devise | distinguish | devise |
| **observe** | Express | Discover | diagram | editorialize | express |
| **omit** | Extend | Dramatize | differentiate | estimate | facilitate |
| **quote** | Generalize | Employ | discriminate | evaluate | formulate |
| **read** | give examples | Establish | dissect | find errors | generalize |
| **recall** | Group | Examine | distinguish | grade | hypothesize |
| **recite** | Identify | Experiment | divide | judge | imagine |
| **recognize** | Illustrate | Explain | estimate | justify | infer |
| **record** | Indicate | Illustrate | evaluate | measure | integrate |
| **repeat** | Infer | Interpret | experiment | order | intervene |
| **reproduce** | Interpret | Interview | explain | persuade | invent |
| **retell** | Judge | Judge | focus | predict | justify |
| **select** | Observe | List | illustrate | rank | make |
| **state** | Order | Manipulate | infer | rate | manage |
| **tabulate** | Paraphrase | Modify | order | recommend | modify |
| **tell** | Predict | Operate | organize | reframe | negotiate |
| **visualize** | Relate | Paint | outline | score | organize |
|  | Report | Practice | plan | select | originate |
|  | Represent | Predict | point out | summarize | plan |
|  | Research | Prepare | prioritize | support | prepare |
|  | Restate | Produce | question | test | produce |
|  | Review | Record | select | weigh | propose |
|  | Rewrite | Relate | separate |  | rearrange |
|  | Select | Report | subdivide |  | reorganize |
|  | Show | Schedule | survey |  | report |
|  | Summarize | Show | test |  | revise |
|  | Trace | Simulate |  |  | rewrite |
|  | Transform | Sketch |  |  | role-play |
|  | Translate | Solve |  |  | schematize |
|  |  | Teach |  |  | simulate |
|  |  | Transfer |  |  | solve |
|  |  | Use |  |  | speculate |
|  |  | Write |  |  | structure |
| substitute | | | | | |
| support | | | | | |
| test | | | | | |
| validate | | | | | |
| write | | | | | |