To the CR Community,

Assessment is an integral part of what we are about. Whether it is a course or program or service area assessment, our goal for assessment remain the same—to ultimately improve student learning and experience. I am glad to see the Assessment Committee produce this important handbook.

As we look to enhance educational excellence, it will be important for all of us to individually, and collectively, be part of the culture of assessment. It is my hope that each of us will do our part to make assessment at CR the very best it can be.

Thanks in advance for your good work.

(Electronic Signature)

Utpal K. Goswami, Ph.D.
Interim President/Superintendent
This assessment handbook is provided to staff and faculty at College of the Redwoods (CR) to assist in the development of student learning outcomes, program outcomes, and assessment practices for determining the effectiveness administrative and student support services and programs.

The intrinsic value of the assessment process related to service and program quality improvement is evident throughout the cycle of identifying student learning and program outcomes, assessing them, interpreting the data, and using the data to improve programs. External mandates also require appropriate, ongoing assessment.

The College of the Redwoods Assessment Handbook provides a framework for continuous improvement of student learning and a commitment to program excellence.

CR’s framework insures that learning outcomes are observable and are performed by the student, that curriculum alignment provides the opportunity for students to achieve these outcomes because the curriculum is driven by intended learning outcomes and assessment evidence, and that learning opportunities are consistent and contribute to student learning. The assessment process further ensures that successful program completion provides students with the requisite skills and abilities described in the general education goals and are clear enough to be understood by our stakeholders; and that faculty teaching these courses provide students with multiple integrated learning opportunities to assure that students will be able to do outside the classroom (in context) what they have learned through their learning experiences.
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Nine Principles of Good Practice for Assessing Student Learning
American Association for Higher Education ASSESSMENT FORUM

1. The assessment of student learning begins with educational values.
Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.

2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.

3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.
Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

4. Assessment requires attention to outcomes but also, and equally, to the experiences that lead to those outcomes.
Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. Assessment works best when it is ongoing not episodic.
Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples
of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. **Assessment fosters wider improvement when representatives from across the educational community are involved.**

Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment’s questions can’t be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. **Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.**

Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return “results”; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. **Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.**

Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution’s planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. **Through assessment, educators meet responsibilities to students and to the public.**

There is a compelling public stake in education. As educators, we have a responsibility to the public that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.
July 2011

Memo to: ACCJC Member Institutions
From: Barbara Beno, President
Subject: ACCJC Rubric for Evaluating Institutional Effectiveness

Attached you will find a copy of the Rubric for Evaluating Institutional Effectiveness, updated by the Accrediting Commission for Community and Junior Colleges/WASC in June 2011. This Rubric was first published in 2007 and has undergone two previous editorial revisions. The 2011 edition reflects language added to provide some additional detail.

Since 1994, the Commission’s Accreditation Standards have required institutions to engage in a systematic and regular review of program quality as well as in short-and long-term planning, and an allocation of resources to assure that institutions achieve their stated mission and assess and improve institutional effectiveness. The 2002 Accreditation Standards added requirements that institutions become more intentionally supportive of student learning by defining intended student learning outcomes, assessing learning, and incorporating the results of assessment into decisions about institutional priorities and improvement plans.

The Rubric for Evaluating Institutional Effectiveness was developed to assist colleges as they conduct self-evaluation, and to assist external review teams as they examine institutional quality during accreditation reviews. The Rubric gives institutional members, evaluators, and the Commission a common language to use in describing the institution’s practices in three key areas of the continuous quality improvement process – Program Review, Integrated Planning, and Student Learning Outcomes.

It is important to note that the sample behaviors described in each text box of the Rubric are not new criteria or standards for evaluation of an institution’s quality, but rather are examples of behavior that, if characteristic of an institution, would indicate the institution’s stage in the implementation of the Accreditation Standards, particularly Standard II B and important sections of Standard II and Standard III. The Rubric should be used in conjunction with the Accreditation Standards and the Guide to Evaluating Institutions, and Guide to Evaluating Distance Education and Correspondence Education.
The Commission has previously announced its expectations for institutional performance with regard to the practices described in the Rubric, as follows:

- The Commission expects all accredited institutions to be at the Sustainable Continuous Quality Improvement level in Program Review (Part 1 of the Rubric) and Planning (Part 2 of the Rubric).
- At present, the Commission expects all accredited institutions to be at least at the Development Level or above in Student Learning Outcomes (Part 3 of the Rubric).
- The Commission expects all accredited institutions to be at the Proficiency Level in Student Learning Outcomes by fall 2012. The Commission will assess all member institutions during the 2012-13 year.

Institutions in the ACCJC membership widely share a commitment to the purposes of assessment – to improve student outcomes. The Commission hopes that institutional leaders will find the 2011 Rubric helpful as they assess their own institution’s quality and work to achieve greater student success.

The Commission welcomes any ideas for improving the Rubric and for improving institutional practices in continuous quality improvement. Please direct comments to accjc@accjc.org.

BAB/bd

Attachment

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1 The ACCJC’s Task Force on Student Learning Outcomes met in spring 2011 to provide the updates contained in the 2011 Rubric.
Rubric for Evaluating Institutional Effectiveness – Part I: Program Review  
(See cover letter for how to use this rubric.)

| Levels of Implementation | Characteristics of Institutional Effectiveness in Program Review  
(Sample institutional behaviors) |
|--------------------------|--------------------------------------------------------------------------------|
| **Awareness**            | • There is preliminary investigative dialogue at the institution or within some departments about what data or process should be used for program review.  
                           • There is recognition of existing practices and models in program review that make use of institutional research.  
                           • There is exploration of program review models by various departments or individuals.  
                           • The college is implementing pilot program review models in a few programs/operational units. |
| **Development**          | • Program review is embedded in practice across the institution using qualitative and quantitative data to improve program effectiveness.  
                           • Dialogue about the results of program review is evident within the program as part of discussion of program effectiveness.  
                           • Leadership groups throughout the institution accept responsibility for program review framework development (Senate, Admin. Etc.)  
                           • Appropriate resources are allocated to conducting program review of meaningful quality.  
                           • Development of a framework for linking results of program review to planning for improvement.  
                           • Development of a framework to align results of program review to resource allocation. |
| **Proficiency**          | • Program review processes are in place and implemented regularly.  
                           • Results of all program reviews are integrated into institution-wide planning for improvement and informed decision-making.  
                           • The program review framework is established and implemented.  
                           • Dialogue about the results of all program reviews is evident throughout the institution as part of discussion of institutional effectiveness.  
                           • Results of program review are clearly and consistently linked to institutional planning processes and resource allocation processes; college can demonstrate or provide specific examples.  
                           • The institution evaluates the effectiveness of its program review processes in supporting and improving student achievement and student learning outcomes. |
| **Sustainable Continuous Quality Improvement** | • Program review processes are ongoing, systematic and used to assess and improve student learning and achievement.  
                           • The institution reviews and refines its program review processes to improve institutional effectiveness.  
                           • The results of program review are used to continually refine and improve program practices resulting in appropriate improvements in student achievement and learning. |
Accrediting Commission for Community and Junior Colleges
Western Association of Schools and Colleges

Rubric for Evaluating Institutional Effectiveness – Part II: Planning
(See cover letter for how to use this rubric.)

| Levels of Implementation | Characteristics of Institutional Effectiveness in Planning  
<table>
<thead>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>(Sample institutional behaviors)</td>
</tr>
<tr>
<td></td>
<td>• The college has preliminary investigative dialogue about planning processes.</td>
</tr>
<tr>
<td></td>
<td>• There is recognition of case need for quantitative and qualitative data and analysis in planning.</td>
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<tr>
<td></td>
<td>• The college has initiated pilot projects and efforts in developing systematic cycle of evaluation, integrated planning and implementation (e.g. in human or physical resources).</td>
</tr>
<tr>
<td></td>
<td>• Planning found in only some areas of college operations.</td>
</tr>
<tr>
<td></td>
<td>• There is exploration of models and definitions and issues related to planning.</td>
</tr>
<tr>
<td></td>
<td>• There is minimal linkage between plans and a resource allocation process, perhaps planning for use of &quot;new money&quot;</td>
</tr>
<tr>
<td></td>
<td>• The college may have a consultant-supported plan for facilities, or a strategic plan.</td>
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| Development               | • The Institution has defined a planning process and assigned responsibility for implementing it. |
|                          | • The Institution has identified quantitative and qualitative data and is using it. |
|                          | • Planning efforts are specifically linked to institutional mission and goals. |
|                          | • The Institution uses applicable quantitative data to improve institutional effectiveness in some areas of operation. |
|                          | • Governance and decision-making processes incorporate review of institutional effectiveness in mission and plans for improvement. |
|                          | • Planning processes reflect the participation of a broad constituent base. |

| Proficiency               | • The college has a well documented, ongoing process for evaluating itself in all areas of operation, analyzing and publishing the results and planning and implementing improvements. |
|                          | • The institution's component plans are integrated into a comprehensive plan to achieve broad educational purposes and improve institutional effectiveness. |
|                          | • The institution effectively uses its human, physical, technology, and financial resources to achieve its broad educational purposes, including stated student learning outcomes. |
|                          | • The college has documented assessment results and communicated matters of quality assurance to appropriate constituencies (documents data and analysis of achievement of its educational mission). |
|                          | • The institution assesses progress toward achieving its education goals over time (uses longitudinal data and analyses). |
|                          | • The institution plans and effectively incorporates results of program review in all areas of educational services: instruction, support services, library and learning resources. |

| Sustainable Continuous Quality Improvement | • The institution uses ongoing and systematic evaluation and planning to refine its key processes and improve student learning. |
|                                           | • There is dialogue about institutional effectiveness that is ongoing, robust and pervasive; data and analyses are widely distributed and used throughout the institution. |
|                                           | • There is ongoing review and adaptation of evaluation and planning processes. |
|                                           | • There is consistent and continuous commitment to improving student learning; and educational effectiveness is a demonstrable priority in all planning structures and processes. |
### Rubric for Evaluating Institutional Effectiveness – Part III: Student Learning Outcomes

(See cover letter for how to use this rubric.)

<table>
<thead>
<tr>
<th>Levels of Implementation</th>
<th>Characteristics of Institutional Effectiveness in Student Learning Outcomes (Sample institutional behaviors)</th>
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| **Awareness**            | • There is preliminary, investigative dialogue about student learning outcomes.  
                           • There is recognition of existing practices such as course objectives and how they relate to student learning outcomes.  
                           • There is exploration of models, definitions, and issues taking place by a few people.  
                           • Pilot projects and efforts may be in progress.  
                           • The college has discussed whether to define student learning outcomes at the level of some courses or programs or degrees; where to begin. |
| **Development**          | • College has established an institutional framework for definition of student learning outcomes (where to start), how to extend, and timeline.  
                           • College has established authentic assessment strategies for assessing student learning outcomes as appropriate to intended course, program, and degree learning outcomes.  
                           • Existing organizational structures (e.g. Senate, Curriculum Committee) are supporting strategies for student learning outcomes definition and assessment.  
                           • Leadership groups (e.g. Academic Senate and administration), have accepted responsibility for student learning outcomes implementation.  
                           • Appropriate resources are being allocated to support student learning outcomes and assessment.  
                           • Faculty and staff are fully engaged in student learning outcomes development. |
| **Proficiency**          | • Student learning outcomes and authentic assessment are in place for courses, programs and degrees.  
                           • There is widespread institutional dialogue about the results of assessment and identification of gaps.  
                           • Decision-making includes dialogue on the results of assessment and is purposefully directed toward aligning institution-wide practices to support and improve student learning.  
                           • Appropriate resources continue to be allocated and fine-tuned.  
                           • Comprehensive assessment reports exist and are completed and updated on a regular basis.  
                           • Course student learning outcomes are aligned with degree student learning outcomes.  
                           • Students demonstrate awareness of goals and purposes of courses and programs in which they are enrolled. |
| **Sustainable Continuous Quality Improvement** | • Student learning outcomes and assessment are ongoing, systematic and used for continuous quality improvement.  
                           • Dialogue about student learning is ongoing, pervasive and robust.  
                           • Evaluation of student learning outcomes processes.  
                           • Evaluation and fine-tuning of organizational structures to support student learning is ongoing.  
                           • Student learning improvement is a visible priority in all practices and structures across the college.  
                           • Learning outcomes are specifically linked to program reviews. |
Guidelines for Assessment Activities
College of the Redwoods Academic Senate

The College of the Redwoods’ Academic Senate defines our assessment philosophy and related activities at the college as the following:

I. Why assess student learning outcomes?
The purpose of student learning assessment is to document and improve the college’s programs. When we assess our students’ learning, we are able to identify which of our teaching practices have been successful and which have not, thus enabling us to modify our teaching practices in order to increase success. When we identify student learning outcomes for our courses and share them with our students, we encourage students to become more actively involved in their own learning.

II. What is assessment?
Assessment is an ongoing process aimed at understanding and improving student learning. It involves making expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. Assessment helps us create a shared academic culture dedicated to assuring and improving the quality of higher education. (AAHE Bulletin 1995)

Assessment is an ongoing process, which ideally permeates the institution. The assessment loop involves both gathering information and using that information to modify and improve teaching and student learning. Outcomes assessment is not for the purpose of evaluating an individual student or a faculty member’s performance. Therefore, assessment information will be reported in collective form.

III. Who will conduct outcomes assessment?
It is within the purview of the faculty of College of the Redwoods to identify the core knowledge and skills that our students need to master, in keeping with the college’s goals, and to shape, design, and disseminate institutional assessment, as instructed by the Academic Senate.

IV. Who will develop the processes of assessment?
It is within the purview of the faculty of College of the Redwoods to develop the criteria by which student progress may be evaluated. These ongoing processes are open to modification and improvement. Not all assessment need be done in individual classes, and not every faculty member need assess all of the core learning. Faculty shall maintain ownership of student learning outcomes and assessment processes.

V. What will assessment be used for?
At College of the Redwoods, ongoing assessment of student learning outcomes helps us understand, and thereby improve, student learning through informed decision making and planning.
Assessment of student learning may include multiple measures. As such, the measures used by department/programs may vary across the college. Specific measures may depend upon both the learning goals and the methods of assessment most appropriate for specific curriculum. Indicators of student learning can be expressed as narratives, a performance, or numbers.

More specifically, assessment helps us:

- Improve services, feedback, guidance, and mentoring to students in order to help them better plan and implement their educational programs
- Design and improve programs and courses
- Plan at the department and program level
- Identify shared definitions and measurable benchmarks for evaluating student abilities
- Understand how groups of students experience the college differently and respond appropriately to the needs of all students
- Align and coordinate courses within and across disciplines
- Align and coordinate courses and programs with external institutions’ requirements as necessary
- Continuously reflect, refine and modify teaching and learning practices.

VI. What will assessment not be used for?

Effective assessment relies upon a climate of trust and freedom of inquiry. As faculty at College of the Redwoods, we perform assessments of student learning and control the results of our assessments. Data gathered in support of all learning assessment work shall be aggregated so as to remove the identity of any students, faculty, and/or staff.

Therefore, College of the Redwoods:

- Will not use assessment of student learning as an end in itself. Assessment that does not help us promote student learning is a waste of time.
- Will not use assessment of student learning punitively or as a means of determining faculty or staff salaries or rewards. The purpose of assessment is to evaluate student learning, not to reward or punish faculty or staff.
- Will not use any single mode of assessment to answer all questions or strictly determine program decisions.
- Will not use assessment in a way that will impinge upon the academic freedom or professional rights of faculty. Individual faculty members must continue to exercise professional judgment in matters of grading and discipline.
- Is not expected to assess all students in order to learn about the effectiveness of our programs and policies; a subset is sufficient.
- Will not assume that assessment is only quantitative. While numerical scales or rubrics (such as the four-point grading scale) can be useful, their accuracy always depends upon the clear understanding of the concepts behind the numbers. We will not assume that assessment is only grading.
- Will not use assessment only to evaluate the end of the student’s experience or merely to be accountable to outside parties.
- Will not use student learning outcomes for evaluation of faculty.
- Will not use student learning outcomes data for program/discipline reduction or elimination.
VII. What is the college’s role in assessing student learning?
Assessment of student learning can significantly enhance the college’s ability to fulfill our mission and goals. Consequently, the college supports assessment of student learning as a valued and important activity and provides successful models for developing assessment.

VIII. How will we use assessment of student learning?
When faculty chooses to assess student learning, we will:

- Always seek multiple methods of assessing student learning rather than relying on any single method.
- Assess those skills, attitudes, behaviors and knowledge that our faculty judges to be important and valuable.
- Assess the ongoing progress of students throughout their experience at College of the Redwoods.
- Use assessment processes and instruments to accommodate and encourage creativity and originality shown by students.
- Explain the purposes of assessment so that staff, students, and the community can see why assessment is being used.

In conclusion, faculty shall facilitate and drive the process of assessment of student learning in their own programs. This process includes the selection of the methods chosen or designed for assessment of student learning, administration of the assessment, analysis of the assessment data, and use of the assessment results.

This Academic Senate document is based upon the work done by College of Marin, Palomar College, Modesto Junior College, Coastline Community College, and El Camino College.
The Assessment Committee will support the collaborative efforts of faculty and staff in the enhancement of student success by providing guidance and support for the assessment of outcomes and a continuous cycle of improvement.

Scope

The Assessment Committee (AC) provides guidance to committees and individuals about how and why assessment should be conducted, facilitates discussions and decision-making related to assessment work, and helps to ensure that outcomes assessment is embedded in processes as directed by the ACCJC, WASC, CCC Systems (Chancellor's) office, and other accreditation and supervisory organizations.

While the AC may produce summary documents concerning the overall progress and needs of the College, the AC itself will not measure or document the degree to which specific outcomes are achieved.

In order to support its mission, the AC provides guidance to related committees including, but not limited to, the Program Review Committee, Curriculum Committee, and Enrollment Management Committee. The AC will include an Academic Assessment Subcommittee and the Student Services Assessment Subcommittee, as well as other subcommittees related to specific college functions.
Assessment is a type of action research to help us gather indicators that will be useful for improving student learning through our curriculum and teaching strategies. It focuses on student learning and what the student will be able to do and not so much on what we are going to teach.

The following Q & As will attempt to provide answers to some frequently asked questions that may further your understanding of the assessment process.

1. **Q. Why do we assess student learning?**
   A. To do assessment for the goal of doing assessment and writing a report would be a waste of time. Link your assessment practices to compelling, powerful, and consequential processes such as department review or program validation. You can link it to curriculum revisions, distance learning, retention, service learning, and improving student learning and teaching strategies.

   There is considerable evidence that assessment drives student learning and curriculum. Most importantly, our assessment tools tell our students what we consider to be important and make clear our expectations of what the student will do to be successful in the course or program. They will learn what we guide them to learn through our assessments. By using appropriate assessment techniques, we can encourage our student to raise the bar. Think of assessment for learning as the “learning process” where our students and we receive significant feedback to improve learning.

   It's not always the assessments, but the changes they lead to, that are important. Change and innovation take courage, but they're also at the heart of the teaching profession.

2. **Q. I already give tests and grades. Isn’t that assessment?**
   A. Not really. Tests and quizzes are an evaluation of learned material. Assessment involves a sample of behavior from your student that can be observed and judged on the basis of specific criteria developed and assessed in multiple modes and contexts, the learning process. For example, a project, presentation, a number of writing assignments, labs, and more. Traditional testing methods are limited measures of student learning and of limited value for guiding student learning. We can’t just say that 73% of our students are getting As and Bs, so we must be doing okay. A letter grade itself does not give enough information about the learning that is occurring.

3. **Q. Aren’t student learning outcomes specific tasks that the student will perform?**
   A. No, not tasks. Student learning outcomes are generic abilities that can be developed/improved and assessed.

4. **Q. What is an outcomes-based course?**
   A. An outcomes-based course is supported with multiple learning opportunities for the student to achieve the learning outcomes.
5. Q. How does assessment FOR learning help faculty?
A. It provides teachers with useful information about their students, including the quality as learners and readiness for learning. Ongoing assessment informs the teachers about the pace and progress of student learning in their classroom.

6. Q. Is this something extra for me to do? Who should be doing assessment?
A. No, it’s not extra. You’re already assessing. It’s those learning opportunities that you have designed in your curriculum where you can give your students on-going feedback so that they can improve learning. The primary differences are that assessment targets specific outcomes, rather than giving grades based upon multiple criteria, and assessment is concerned with how the entire group of students is performing, rather than the grade of a single individual. Only faculty who guide the learning process can identify the student learning outcomes of that process, what it is they expect to happen to/for the student. It is the faculty who teach in that program, who can interpret the results, and recommend improvements in pedagogy and curriculum.

7. Q. How can I assess attitudes and understandings which are simply not quantifiable?
A. It seems a common misunderstanding that assessment requires that everything be reduced to statistical measures. The thrust of assessment is objective results such that anyone will know that the learning goals are being met; but this *need not be quantifiable*. If the faculty identify as an important result that which is not quantifiable, the process simply asks them to specify some objective means to demonstrate that the results are happening as intended.

8. Q. Does student assessment information results affect faculty evaluation?
A. No. We’re focusing on the classroom level. Assessment is informed by the expertise and professional judgment of the faculty. Faculty in an academic department or program, interpreting the results of an assessment measure, might collectively decide to give more attention to certain outcomes, and might even recommend changes in pedagogy.

9. Q. Why is the ACCJC making us assess?
A. Right now, higher education is concerned with two national issues: the learning college and accountability. Most faculty have been engaged in some type of assessment throughout their teaching careers and have found it to be a tool for understanding what their students are learning.

10. Q. Are associate faculty involved?
Yes, by all means. All faculty—full and part-time are involved in student learning. We have many creative and dedicated associate faculty at College of the Redwoods.

11. Q. What is the connection among the various levels of assessment?
A. The focus of assessment is student learning. The most significant educational interaction happens between students and faculty in the classroom. The individual class section is part of a course, and courses are parts of programs. These levels reflect different, yet interrelated, facets of a student’s education.
12. How will assessment improve learning?
A. Assessment is a tool; however, it is a tool by which we can communicate with our students about learning with learning opportunities and ongoing feedback. Assessment does not accomplish learning—but it provides information to the student and the faculty who may use it to improve learning.

14. How does classroom assessment relate to program/discipline assessment, and how does program/discipline assessment fit in with the College’s overall assessment efforts?
Classroom assessment involves assessing student learning in a particular course. This can be accomplished using Classroom Assessment Techniques (CATs), which are quick, ungraded, classroom assignments used to provide feedback for determining student understanding of particular lessons. It is an ongoing process with the primary purpose of improving course-level instruction and student learning.
This is accomplished through an annual process where each program/discipline designs and implements an Assessment Plan, measures learning outcomes, analyzes the data collected, communicates the information, and uses these results to develop an action plan aimed at improving student learning.

College assessment efforts include classroom assessment, program/discipline assessment, and assessment of general education. The goal of assessment of student learning at College of the Redwoods is to improve student learning and support the College in fulfilling its educational mission. Assessment provides evidence of how well College of the Redwoods is meeting its mission and helps identify areas for improvement. These improvements might include things like from providing more research materials in the library, to finding better means to communicate information about policy changes to students, to developing more explicit rubrics for assignments, to changing the requirements for a degree, to better utilizing feedback from advisory boards.

15. Q. How many faculty of a given program should participate in the assessment process?
A. All faculty, both full time and adjunct, should participate in assessment. All have a stake in the success of their respective program or discipline.

16. Q. How, why, or when would or should a department rotate courses to be assessed?
A. Faculty within a department may decide to assess student learning in one or more courses as a means to gain insight into the level of success of student learning throughout the program. There is no real rule that courses need to be rotated.

17. Q. How do faculty within a department identify student learning outcomes?
A. Some learning outcomes can be mandated by outside agencies or advisory boards. Others are identified through discussion among faculty who have tried to answer the question of what knowledge or skills their students should demonstrate upon exiting the course or program. Course-level outcomes, developed by faculty from throughout the district who teach a subject, are included in the course outlines that are approved by the Curriculum Committee.
Degree- and certificate-level outcomes are also developed by faculty who teach the courses included in our degrees and certificates, but they reflect goals and skills that students should attain in the process of successfully completing these programs of study. While each course in a degree or certificate need not contribute knowledge related to every outcome, they cumulatively should enable students to achieve these outcomes. Learning outcomes inform our curriculum, teaching, and assessment.

18. Q. Who chooses lead instructors for assessment in the department/discipline?
A. This is a departmental decision. Typically the department chair or area coordinator would make this decision. 26. Q. What is a program outcome? A. Think about what your students will need to be able to DO “out there” (in the rest of life) that you are responsible for in your program?” (The Outcomes Primer, 2002. Stiehl, Lewchuk)

When developing your program outcomes, encompass several levels of learning through the learning sequence of the program. One program outcome will encompass more than one course. Look at the big picture, not tiny details of skills that could be checked off.

27. Q. What’s the difference between an objective and an outcome?
A. Objectives describe skills, tools, and content that enables a student to achieve the outcome. Objectives are teacher-centered. Objectives may be impossible to assess because they can often be numerous, specific, and detailed.
Outcomes describe the overarching product(s) that students will generate by applying skills, tools, and content. Outcomes are learner-centered. Outcomes require the use of higher-level thinking such as analysis, synthesis, and evaluation in order to demonstrate the student’s ability to apply the skills, tools, and content in authentic contexts for learning.
Outcomes can be assessed. They are products that can be observed as a behavior, attitude, skill, or discrete usable knowledgeable and can be measured against criteria (rubric, checklist, Likert scale, survey).

From
COLUMBUS STATE COMMUNITY COLLEGE
CENTER FOR TEACHING & LEARNING INNOVATION
**Assessment** is the analysis and use of data by students, faculty, and/or departments to make decisions about improvements in teaching and learning.

**Evaluation** is the analysis and use of data by faculty to make judgments about student performance. Evaluation includes the determination of a grade or a decision regarding pass/fail for an individual assignment or a course.

### Assessment vs. Evaluation

<table>
<thead>
<tr>
<th>Assessment Examples</th>
<th>Evaluation Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A faculty member provides feedback to a student regarding performance on an exam</td>
<td>A faculty member corrects an examination and assigns a grade of 82% to a student.</td>
</tr>
<tr>
<td>ination. The student uses that feedback to study differently in order to improve</td>
<td></td>
</tr>
<tr>
<td>learning and performance.</td>
<td></td>
</tr>
<tr>
<td>A team of faculty members analyzes examination results of all students in a course</td>
<td>Pop quizzes are given in a class to determine if students have read sections of the</td>
</tr>
<tr>
<td>and discovers that 65% of the students did not demonstrate understanding of an</td>
<td>text that cover important concepts. Simple Pass/Fail grades are assigned and</td>
</tr>
<tr>
<td>important concept. Faculty members investigate possible causes and plan changes in</td>
<td>tallied at the end of the quarter. The quizzes count for 5% of the total course grade.</td>
</tr>
<tr>
<td>teaching/learning strategies to improve student understanding.</td>
<td></td>
</tr>
<tr>
<td>A student delivers an oral presentation in class. The faculty member provides a</td>
<td>A student delivers an oral presentation in class. The faculty member provides a</td>
</tr>
<tr>
<td>critique of delivery and content so that improvements may be made in the student's</td>
<td>critique of delivery and content accompanied by a grade for the assignment.</td>
</tr>
<tr>
<td>subsequent presentations.</td>
<td></td>
</tr>
<tr>
<td>A faculty member analyzes the results of oral communication checklists completed</td>
<td>An Allied Health faculty member uses a rating scale to assign numbers (1-4) that</td>
</tr>
<tr>
<td>for all students in the course section who delivered oral presentations in class in</td>
<td>indicate the level of achievement of clinical criteria based on observation of a</td>
</tr>
<tr>
<td>order to determine opportunities for improving teaching and learning.</td>
<td>student's performance of patient care.</td>
</tr>
<tr>
<td>The class attendance record indicates that a student has been absent multiple times.</td>
<td>Points are deducted from a student's grade for each class absence in accordance with</td>
</tr>
<tr>
<td>The faculty member advises the student in order to facilitate improved attendance,</td>
<td>a department policy.</td>
</tr>
<tr>
<td>as studies suggest that regular class attendance contributes to student success.</td>
<td></td>
</tr>
<tr>
<td>Students are videotaped interacting with the children in the Early Childhood</td>
<td>Students are videotaped interacting with children in the Early Childhood Education</td>
</tr>
<tr>
<td>Education Centers. They view their videotapes and develop self-assessment</td>
<td>Centers. A faculty member evaluates each videotaped performance based upon course</td>
</tr>
<tr>
<td>narratives in which they describe and evaluate their performances. They then</td>
<td>criteria and assigns a letter grade.</td>
</tr>
<tr>
<td>develop specific plans for improvement.</td>
<td></td>
</tr>
<tr>
<td>A student reads another student's essay and gives feedback on the content and</td>
<td>A faculty member reviews a student peer reader's feedback and assigns a point value</td>
</tr>
<tr>
<td>correctness of the essay as a way to improve the writing.</td>
<td>to the documentation to indicate satisfactory completion of the assignment.</td>
</tr>
</tbody>
</table>
Notes About Qualitative Assessment

Qualitative assessment is a legitimate form of assessment which should be seriously considered in any departmental decision regarding the choice of means of assessment. Qualitative means of assessment describe those evaluations in which a holistic judgment concerning a subject is made.

Some examples include portfolio reviews, public performances, oral examinations, or dissertation defenses. Some limitations include:

- Difficulty in identifying specific criteria for assessment and standards for success
- Unless external evaluators are used, those conducting the evaluations are frequently the same faculty who taught the students, reducing objectivity
- Inter-rater reliability is inconsistent over time, which can only be solved through thorough training of evaluators using identical procedures each year.

Class Grades v. Assessment

There are 2 instances in which course grades are acceptable as means of assessment:

- Analysis of course grades in mainstream courses as a measure of the success of developmental or remedial education
- Analysis of grades or grade point averages of students transferring from two- to four-year institutions as a means of assessment for the success of the transfer program at the two year institution.

The following grading matrix shows that assessment differs from grading in the aggregation of specific criteria (e.g. spelling, grammar, punctuation, and structure) across rows/students rather than down the columns (Nichols and Nichols, p. 43 of Assessment Toolkit).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Student 1</th>
<th>Student 2</th>
<th>Student 3</th>
<th>Student 4</th>
<th>Student 5</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spelling</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Grammar</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Punctuation</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>Structure</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>17</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Student Grade</td>
<td>C</td>
<td>A</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

Total "down the columns" for Individual Student Grading
Analyze "across the rows" for assessment of educational outcomes accomplishment
Accountability
The obligation placed on an educational institute by public officials, employers, and taxpayers for school officials to prove that money invested in education has led to measurable learning. Accountability is often viewed as an important factor in education reform. An assessment system connected to accountability can help identify needs so that resources can be equitably distributed. The responsibility of an agency to its sponsors and clientele for accomplishing its mission with prudent use of its resources. In education, accountability is currently thought to require measurable proof that faculty and institutions are teaching students efficiently and well, usually in the form of student success rates on various tests.

Accreditation
Official recognition that an institution meets required standards. College of the Redwoods is accredited by the ACCJC.

Achievement Test
A standardized test designed to efficiently measure the amount of knowledge and/or skill a person has acquired, usually as a result of classroom instruction. Such testing produces a statistical profile used as a measurement to evaluate student learning in comparison with a standard or norm.

Affective
The affective domain describes learning objectives that emphasize a feeling tone, an emotion, or a degree of acceptance or rejection. Affective objectives vary from simple attention to selected phenomena to complex but internally consistent qualities of character and conscience. They include concepts being undertook and gained or realized through an active process of engagement with some problem or experiment. Students are encouraged to not just receive information at the bottom of the affective hierarchy. We’d like for them to respond to what they learn, to value it, to organize it and maybe even to characterize themselves as students or professionals in their fields of study.

Alternative Assessment
Alternatives to traditional, standardized, norm- or criterion-referenced traditional paper and pencil testing. An alternative assessment might require students to answer an open-ended question, work out a solution to a problem, demonstrate skill, or in some way produce work rather than select an answer from choices on a sheet of paper. Portfolios and instructor observation of students are also alternative forms of assessment. (Also Assessment Alternatives)

Analytic Scoring
A type of rubric scoring that separates the whole into categories of criteria that are examined one at a time. Student writing, for example, might be scored on the basis of grammar, organization, and clarity of ideas. Useful as a diagnostic tool. An analytic scale is useful when there are several dimensions on which the piece of work will be evaluated. (See Rubric.)

Aptitude Test
A test intended to measure the test-taker’s innate ability to learn, given before receiving instruction.
Artifact
A sample of student work that is scored according to an established rubric for assessment purposes.

Assessment
Assessment is “closing the loop” by conducting assessment, analyzing the data, and evaluating the results to inform improvements to the teaching and learning process. “Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards, and using the resulting information to document, explain and improve performance’ (Tom Angelo, 1995) “Assessment is the systematic collection, review and use of information about educational programs undertaken for the purpose of improving student learning and development” (Palomba & Banta, 1999). The systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development. The Latin root assidere means to sit beside. In an educational context, the process of observing learning; describing, collecting, recording, scoring, and interpreting information about a student’s learning. At its most useful, assessment is an episode in the learning process; part of reflection and autobiographical understanding of progress. Traditionally, student assessments are used to determine placement, promotion, graduation, or retention. In the context of institutional accountability, assessments are undertaken to determine the effectiveness of academic programs, etc. In the context of school reform, assessment is an essential tool for evaluating the effectiveness of changes in the teaching-learning process.

Assessment Literacy
The possession of knowledge about the basic principles of sound assessment practice, including terminology, the development and use of assessment methodologies and techniques, familiarity with standards of quality in assessment. Increasingly, familiarity with alternatives to traditional measurements of learning.

Assessment Task
An illustrative task or performance opportunity that closely targets defined instructional aims, allowing students to demonstrate their progress and capabilities.

Authentic Assessment
Evaluating by asking for the behavior the learning is intended to produce. The concept of model, practice, feedback in which students know what excellent performance is and are guided to practice an entire concept rather than bits and pieces in preparation for eventual understanding. A variety of techniques can be employed in authentic assessment. The goal of authentic assessment is to gather evidence that students can use knowledge effectively and be able to critique their own efforts. Tasks used in authentic assessment are meaningful and valuable, and are part of the learning process. Authentic assessment can take place at any point in the learning process. Authentic assessment implies that tests are central experiences in the learning process, and that assessment takes place repeatedly. Patterns of success and failure are observed as learners use knowledge and skills in slightly ambiguous situations that allow the assessor to observe the student applying knowledge and skills in new situations over time.
**Benchmark**  
Student performance standards (the level(s) of student competence in a content area.) An actual measurement of group performance against an established standard at defined points along the path toward the standard. Subsequent measurements of group performance use the benchmarks to measure progress toward achievement. Examples of student achievement that illustrate points on a performance scale, used as exemplars. (See *Descriptor, Cohort, Criteria/Standards*.)

**Bloom’s Taxonomy of Cognitive Objectives**  
Benjamin Bloom originated this taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize test questions, since professors will characteristically ask questions within particular levels, and if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies. There are six levels arranged in order of increasing complexity (1=low, 6=high):

1. Knowledge: Recalling or remembering information without necessarily understanding it. Includes behaviors such as describing, listing, identifying, and labeling.
2. Comprehension: Understanding learned material and includes behaviors such as explaining, discussing, and interpreting.
3. Application: The ability to put ideas and concepts to work in solving problems. It includes behaviors such as demonstrating, showing, and making use of information.
4. Analysis: Breaking down information into its component parts to see interrelationships and ideas. Related behaviors include differentiating, comparing, and categorizing.
5. Synthesis: The ability to put parts together to form something original. It involves using creativity to compose or design something new.

**Capstone Assessment**  
Assessment of outcomes structured into learning experiences occurring at the end of a program. The experiences involve demonstration of a comprehensive range of program outcomes through some type of product or performance. The outcomes may be those of the major and of the general education program or of the major only. (Palomba & Banta, 1999)

**Cohort**  
A group whose progress is followed by means of measurements at different points in time.

**Concept**  
An abstract, general notion -- a heading that characterizes a set of behaviors and beliefs.

**Criteria/Standards**  
Performance descriptors that indicate how well students will meet expectations of what they should be able to think, know or do. They are descriptive benchmarks against which performance is judged. These criteria or standards may be described in varying gradients of success as in rubrics or in grades. Often they are stated in terms of percentages, percentiles or other quantitative measures (Nichols, 2000) (See *Descriptor, Rubrics, Benchmark*.)
**Criterion Referenced Tests**
A test in which the results can be used to determine a student’s progress toward mastery of a content area. Performance is compared to an expected level of mastery in a content area rather than to other students’ scores. Such tests usually include questions based on what the student was taught and are designed to measure the student’s mastery of designated objectives of an instructional program. The “criterion” is the standard of performance established as the passing score for the test. Scores have meaning in terms of what the student knows or can do, rather than how the test-taker compares to a reference or norm group. Criterion referenced tests can have norms, but comparison to a norm is not the purpose of the assessment. Criterion referenced tests have also been used to provide information for program evaluation, especially to track the success or progress of programs and student populations that have been involved in change or that are at risk of inequity. In this case, the tests are used to give feedback on progress of groups and individuals.

**Curriculum Alignment**
The degree to which a curriculum’s scope and sequence matches a testing program’s evaluation measures, thus ensuring that teachers will use successful completion of the test as a goal of classroom instruction.

**Curriculum-embedded or Learning-embedded Assessment**
Assessment that occurs simultaneously with learning such as projects, portfolios and “exhibitions.” Occurs in the classroom setting, and, if properly designed, students should not be able to tell whether they are being taught or assessed because the assessment artifacts are being gathered from activities and assignments that are already a part of the class. Tasks or tests are developed from the curriculum or instructional materials, as opposed to being administered to students solely for the sake of gathering assessment artifacts.

**Cut Score**
Score used to determine the minimum performance level needed to pass a competency test. (See **Descriptor** for another type of determiner.)

**Descriptor**
A set of signs used as a scale against which a performance or product is placed in an evaluation. Descriptors allow assessment to include clear guidelines for what is and is not valued in student work.

**Dimension**
Aspects or categories in which performance in a domain or subject area will be judged. Separate descriptors or scoring methods may apply to each dimension of the student’s performance assessment.

**Direct Assessment Methods**
These methods involve students’ display of knowledge and skills (e.g. text results, written assignments, presentations, classroom assignments) resulting from learning experience in the class/program. (Palomba & Banta, 1999)
Essay Test
A test that requires students to answer questions in writing. Responses can be brief or extensive. Tests for recall, ability to apply knowledge of a subject to questions about the subject, rather than ability to choose the least incorrect answer from a menu of options.

Evaluation
Both qualitative and quantitative descriptions of student behavior plus value judgments concerning the desirability of that behavior. Using collected information (assessments) to make informed decisions about continued instruction, programs, activities. Exemplar Model of excellence. Decisions made about assessment findings; deciding about the value of programs/program outcomes; may involve recommendations for changes. (See Benchmark, Norm, Rubric, Standard.)

Formative Assessment
Observations which allow one to determine the degree to which students know or are able to do a given learning task, and which identifies the part of the task that the student does not now or is unable to do. Outcomes suggest future steps for teaching and learning. Assessment conducted during a performance/course/program with the purpose of providing feedback that can be used to modify, shape, and improve a performance/course/program. (Palomba & Banta, 1999) (See Summative Assessment.)

Holistic Method/Holistic Scoring
In assessment, assigning a single score based on an overall assessment of performance rather than by scoring or analyzing dimensions individually. The product is considered to be more than the sum of its parts and so the quality of a final product or performance is evaluated rather than the process or dimension of performance. A holistic scoring rubric might combine a number of elements on a single scale. Focused holistic scoring may be used to evaluate a limited portion of a learner’s performance. A type of grading in which an assignment is given an overall score. Possible scores are described in a rating scale. A high score indicates achievement of all aspects of the assignment, while a low score means few if any of the desired outcomes have been achieved. The score levels need to be specific enough to reveal meaningful, diagnostic information when the scores are aggregated. (Ewell, 1991; Palomba & Banta, 1999).

Indirect Assessment Methods
Assessment methods that involve perceptions of learning rather than actual demonstrations of outcome achievement (e.g. alumni surveys, employer surveys, exit interviews).

Institutional Effectiveness
The measure of what an institution actually achieves.

Item Analysis
Analyzing each item on a test to determine the proportions of students selecting each answer. Can be used to evaluate student strengths and weaknesses; may point to problems with the test’s validity and to possible bias.
**Journals**
Students’ personal records and reactions to various aspects of learning and developing ideas. A reflective process often found to consolidate and enhance learning.

**Mean**
One of several ways of representing a group with a single, typical score. It is figured by adding up all the individual scores in a group and dividing them by the number of people in the group. Can be affected by extremely low or high scores.

**Measurement**
Quantitative description of student learning and qualitative description of student attitude.

**Median**
The point on a scale that divides a group into two equal subgroups. Another way to represent a group’s scores with a single, typical score. The median is not affected by low or high scores as is the mean. (See Norm.)

**Metacognition**
The knowledge of one’s own thinking processes and strategies, and the ability to consciously reflect and act on the knowledge of cognition to modify those processes and strategies.

**Mission**
A holistic vision of the values and philosophy of a department, program, unit or institution. General education learning goals are often found in the institution’s mission statement. (Palomba & Banta, 1999; Allen, 2004)

**Modifications**
Recommended actions or changes for improving student learning, service delivery, etc. that respond to the respective measurement evaluation.

**Multidimensional Assessment**
Assessment that gathers information about a broad spectrum of abilities and skills.

**Multiple Choice Tests**
A test in which students are presented with a question or an incomplete sentence or idea. The students are expected to choose the correct or best answer/completion from a menu of alternatives.

**Norm**
A distribution of scores obtained from a norm group. The norm is the midpoint (or median) of scores or performance of the students in that group. Fifty percent will score above and fifty percent below the norm.

**Norm Group**
A random group of students selected by a test developer to take a test to provide a range of scores and establish the percentiles of performance for use in establishing scoring standards.
Norm Referenced Tests
A test in which a student or a group’s performance is compared to that of a norm group. The student or group scores will not fall evenly on either side of the median established by the original test takers. The results are relative to the performance of an external group and are designed to be compared with the norm group providing a performance standard. Often used to measure and compare students, schools, districts, and states on the basis of norm-established scales of achievement.

Objectives
Synonymous with outcomes. They are statements that describe measureable expectations of what students should be able to do when they’ve completed a given educational program. Each statement should describe one expectation; should not bundle several into one statement. The statements must be clear and easily understood by all faculty in the area/department.
(See Outcomes)

Objective Test
A test for which the scoring procedure is completely specified enabling agreement among different scorers. A correct-answer test.

On-Demand Assessment
An assessment process that takes place as a scheduled event outside the normal routine. An attempt to summarize what students have learned that is not embedded in classroom activity.

Outcomes
An operationally defined educational goal, usually a culminating activity, product, or performance that can be measured. (See Objectives)

Percentile
A ranking scale ranging from a low of 1 to a high of 99 with 50 as the median score. A percentile rank indicates the percentage of a reference or norm group obtaining scores equal to or less than the test-taker’s score. A percentile score does not refer to the percentage of questions answered correctly, it indicates the test-taker’s standing relative to the norm group standard.

Performance-Based Assessment
Direct, systematic observation and rating of student performance of an educational objective, often an ongoing observation over a period of time, and typically involving the creation of products. The assessment may be a continuing interaction between faculty and student and should ideally be part of the learning process. The assessment should be a real-world performance with relevance to the student and learning community. Assessment of the performance is done using a rubric, or analytic scoring guide to aid in objectivity. Performance-based assessment is a test of the ability to apply knowledge in a real-life setting. Performance of exemplary tasks in the demonstration of intellectual ability. Evaluation of the product of a learning experience can also be used to evaluate the effectiveness of teaching methods.
Performance Criteria
The standards by which student performance is evaluated. Performance criteria help assessors maintain objectivity and provide students with important information about expectations, giving them a target or goal to strive for.

Portfolio
A systematic and organized collection of a student’s work that exhibits to others the direct evidence of a student’s efforts, achievements, and progress over a period of time. The collection should involve the student in selection of its contents, and should include information about the performance criteria, the rubric or criteria for judging merit, and evidence of student self-reflection or evaluation. It should include representative work, providing a documentation of the learner’s performance and a basis for evaluation of the student’s progress. Portfolios may include a variety of demonstrations of learning and have been gathered in the form of a physical collection of materials, videos, CD-ROMs, reflective journals, etc.

Portfolio Assessment
A type of direct measure, a performance measure, in which students’ assignments are carefully reviewed for evidence of desired learning outcomes. The portfolios contain work selected over a period of time, with materials added as the student progresses through the course/program. In addition, the portfolios usually include students’ reflective learning/outcome analysis. Portfolios may be assessed in a variety of ways. Each piece may be individually scored, or the portfolio might be assessed merely for the presence of required pieces, or a holistic scoring process might be used and an evaluation made on the basis of an overall impression of the student’s collected work. It is common that assessors work together to establish consensus of standards or to ensure greater reliability in evaluation of student work. Established criteria are often used by reviewers and students involved in the process of evaluating progress and achievement of objectives.

Primary Trait Method
Factors or traits (assignment specific) that are considered in scoring an assignment generally stated in a hierarchical scale of three to five incremental levels of achievement quality. For each level on the scale, there is a specific statement that describes expected behavior (criterion) at that level. (Palomba & Banta, 1999; Walvoord & Anderson, 1998). A type of rubric scoring constructed to assess a specific trait, skill, behavior, or format, or the evaluation of the primary impact of a learning process on a designated audience.

Process
A generalizable method of doing something, generally involving steps or operations which are usually ordered and/or interdependent. Process can be evaluated as part of an assessment, as in the example of evaluating a student’s performance during prewriting exercises leading up to the final production of an essay or paper.

Product
The tangible and stable result of a performance or task. An assessment is made of student performance based on evaluation of the product of a demonstration of learning.

Profile
A graphic compilation of the performance of an individual on a series of assessments.
**Project**
A complex assignment involving more than one type of activity and production. Projects can take a variety of forms, some examples are a mural construction, a shared service project, or other collaborative or individual effort.

**Quantitative Methods of Assessment**
Methods that rely on numerical scores or ratings. Examples: Surveys, Inventories, Institutional/departmental data, departmental/course-level exams (locally constructed, standardized, etc.).

**Qualitative Methods of Assessment**
Methods that rely on descriptions rather than numbers. Examples: Ethnographic field studies, logs, journals, participant observation, and open-ended questions on interviews and surveys.

**Quartile**
The breakdown of an aggregate of percentile rankings into four categories: the 0-25th percentile, 26-50th percentile, etc.

**Quintile**
The breakdown of an aggregate of percentile rankings into five categories: the 0-20th percentile, 21-40th percentile, etc.

**Rating Scale**
A scale based on descriptive words or phrases that indicate performance levels. Qualities of a performance are described (e.g., advanced, intermediate, novice) in order to designate a level of achievement. The scale may be used with rubrics or descriptions of each level of performance.

**Reliability**
The measure of consistency for an assessment instrument. The instrument should yield similar results over time with similar populations in similar circumstances.

**Rubric**
Some of the definitions of rubric are contradictory. In general a rubric is a scoring guide used in subjective assessments. A rubric implies that a rule defining the criteria of an assessment system is followed in evaluation. A rubric can be an explicit description of performance characteristics corresponding to a point on a rating scale. A scoring rubric makes explicit expected qualities of performance on a rating scale or the definition of a single scoring point on a scale. A kind of holistic or primary trait scoring in which detailed criteria are delineated and used to discriminate among levels of achievement in assignments, performances, or products.

**Sampling**
A way to obtain information about a large group by examining a smaller, randomly chosen selection (the sample) of group members. If the sampling is conducted correctly, the results will be representative of the group as a whole. Sampling may also refer to the choice of smaller tasks or processes that will be valid for making inferences about the student’s performance in a larger domain. “Matrix sampling” asks different groups to take small segments of a test; the results will reflect the ability of the larger group on a complete range of tasks.
Scale
A classification tool or counting system designed to indicate and measure the degree to which an event or behavior has occurred.

Scale Scores
Scores based on a scale ranging from 001 to 999. Scale scores are useful in comparing performance in one subject area across classes, programs and other large populations, especially in monitoring change over time.

Score
A rating of performance based on a scale or classification.

Scoring Criteria
Rules for assigning a score or the dimensions of proficiency in performance used to describe a student’s response to a task. May include rating scales, checklists, answer keys, and other scoring tools. In a subjective assessment situation, a rubric.

Scoring
A package of guidelines intended for people scoring performance assessments. May include instructions for raters, notes on training raters, rating scales, samples of student work exemplifying various levels of performance.

Self-Assessment
A process in which a student engages in a systematic review of a performance, usually for the purpose of improving future performance. May involve comparison with a standard, established criteria. May involve critiquing one’s own work or may be a simple description of the performance. Reflection, self-evaluation, metacognition, are related terms.

Standards
Agreed upon values used to measure the quality of student performance, instructional methods, curriculum, etc.

Subjective Test
A test in which the impression or opinion of the assessor determines the score or evaluation of performance. A test in which the answers cannot be known or prescribed in advance.

Summative Assessment
Assessment conducted after a program has been implemented and completed to make judgments about its quality or worth compared to previously defined standards (Palomba & Banta, 1999). Evaluation at the conclusion 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. Outcomes are the culmination of a teaching/learning process for a unit, subject, or year’s study. (See Formative Assessment.)

Triangulation
Multiple lines of evidence pointing to the same conclusion.

Validity
The test measures the desired performance and appropriate inferences can be drawn from the results. The assessment accurately reflects the learning it was designed to measure.
Resources
http://www.ascd.org/portal/site/ascd/menuitem.5a47c86b3b7b44128716b710e3108a0c/

http://www/csus.edu/acaf/Portfolios/GE/glossary.htm


This glossary of terms and resources was compiled by Gallaudet University.
## Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Remember)</td>
<td>(Understand)</td>
<td>(Apply)</td>
<td>(Analyze)</td>
<td>(Evaluate)</td>
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<td>Examples and Key Words</td>
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</table>
| **Knowledge**: Recall data or 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. |
| **Comprehension**: Understand 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 **Examples**, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates. |
| **Application**: 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 workplace. | **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. |
| **Analysis**: 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. |
| **Synthesis**: 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. |
| **Evaluation**: 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. |
| **Receiving Phenomena**: Awareness, willingness to hear, selected attention. | **Examples**: Listen to others with respect. Listen for and remember the name of newly introduced people.  
**Key Words**: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses. |
| Responding to Phenomena: | Examples: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Know the safety rules and practices them.  
Key Words: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes. |
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<tr>
<td>Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).</td>
<td></td>
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</tbody>
</table>
Valuing: The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.  
Examples: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about.  
Key Words: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works. |
| Valuing: |  
Organization: Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating an unique value system. The emphasis is on comparing, relating, and synthesizing values.  
Examples: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self.  
Key Words: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes. |
| Organization: |  
Internalizing values (characterization): Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student’s general patterns of adjustment (personal, social, emotional).  
Key Words: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies. |
| **Perception:** The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation. | **Examples:** Detects non-verbal communication cues. Estimates where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet.  
**Key Words:** chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects. |
|---|---|
| **Set:** Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person’s response to different situations (sometimes called mindsets). | **Examples:** Knows and acts upon a sequence of steps in a manufacturing process. Recognize one’s abilities and limitations. Shows desire to learn a new process (motivation).  
**NOTE:** This subdivision of Psychomotor is closely related with the “Responding to phenomena” subdivision of the Affective domain.  
**Key Words:** begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers. |
| **Guided Response:** The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing. | **Examples:** Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds hand-signals of instructor while learning to operate a forklift.  
**Key Words:** copies, traces, follows, react, reproduce, responds |
| **Mechanism:** This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency. | **Examples:** Use a personal computer. Repair a leaking faucet. Drive a car.  
**Key Words:** assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. |
| **Adaptation:** Skills are well developed and the individual can modify movement patterns to fit special requirements. | **Examples:** Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Perform a task with a machine that it was not originally intended to do (machine is not damaged and there is no danger in performing the new task).  
**Key Words:** adapts, alters, changes, rearranges, reorganizes, revises, varies. |
| **Origination:** Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills. | **Examples:** Constructs a new theory. Develops a new and comprehensive training programming. Creates a new gymnastic routine.  
**Key Words:** arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates. |
Tips for Developing Statements of Intended Educational (Student Learning) Outcomes:

• Focus on results, not process. Don’t address what was taught or presented, but address the observable outcome you expect to see in the student. Think about the knowledge, skills, and attitudes you expect from students who receive a certificate or degree in the program.

• Make sure SLOs are written as outcomes rather than objectives (indicates the big picture rather than nuts and bolts, addresses student competency rather than content coverage). Focus on the substance of the outcomes, not just the means for their expression.

• Typically, between three and five statements of intended educational outcomes for each course, and for each academic program in the department is sufficient.

• Use active verbs in describing student learning outcomes. Active verbs are easier to measure. For instance, if you want students to understand how to correctly use a microscope – using the word “understand” is not measurable. Instead try to imagine the outcome – students will “focus” and “display” an image on the microscope (or describe, classify, distinguish, explain, interpret, compose, perform, demonstrate, etc.)

• At the departmental or program level, these statements are intended as overarching concepts which should span several courses, not a conglomeration of individual course objectives taken from each syllabus.

• For pragmatic reasons, remember that at least one means of assessment will need to be developed for each intended educational outcome. It is far better to limit the number of statements, conduct successful programs of assessment, and use assessment results to improve student learning than to curse a pile of paper which has been difficult to produce, expensive, and is virtually useless (Nichols and Nichols, p. 20).

• Consider whether the SLO is appropriate for the degree, certificate, or class: Does it represent a fundamental result of the program? Is it the penultimate outcome, the result of outcomes from courses in a sequence (if applicable)? Does it represent collegiate level work?

• The accomplishment of most statements of intended educational (student learning) outcomes should be ascertainable/measurable.

• “Measurable” doesn’t necessarily need to mean that it is quantifiable, precluding qualitative judgments. “Measurable” can include a general judgment of whether students know, think, and can do most of what is intended for them.

• Be careful when describing attitudes in a learning outcome, as they are hard to assess. Ask yourself if the attitude is crucial to success in your program or class.
• Criteria set for intended outcomes should be set realistically but should represent a reasonable challenge both for students and faculty

• Whenever feasible, set not only primary (overall), but secondary (detailed) levels as benchmarks or criteria for success at the degree or program level (e.g. average score of graduates on a standard exam will be at or near the 50th percentile and no subscale score will be below the 30th percentile)

• Write student learning outcomes in language that a student will understand.

• HINT: It’s sometimes easier to start backwards by thinking about the major assessments you use in the program. These would be the products or demonstrations of your outcomes. Make a list of your major assignments for this program. Then try to describe in one sentence what the students are being asked to demonstrate.
Course-level SLOs:

CHEM52
Apply chemistry concepts to practical problems.

ANTH5
Analyze and defend viewpoints on controversial archaeological concepts.

AT12
Diagnose and repair disc brakes.

ECE10
Design, implement and evaluate curriculum activities that are based on observation and assessment of young children.

Polsc10
Compare the three branches of California and US Government, and related political institutions.

MUS63
Identify and combine appropriate interpretative nuances and conventions in performance.

DT80
Use industry standard modeling, animation, and rendering software to create 3D content.

ART43A
Alter images to modify and correct color, contrast, resolution & sharpness using the appropriate tools and skills.

ENGL10
Differentiate genres in order to compare the relationship of genre to culture within specific contexts.

All course SLOs can be found at the Public Folder in Outlook (Curriculum>Course Outlines). If using these references look at most recent course updates as these will typically show Course Learning Outcomes that can be assessed.

Program Outcomes:

EARLY CHILDHOOD EDUCATION (from University of Laverne): Work successfully with children in early childhood education in public or private schools and/or social service settings.

NURSING (from San Jose State): Demonstrate critical thinking’ competencies, including the use of the nursing process, the research process, ethical decision-making, and an attitude of inquiry.

ADMINISTRATION OF JUSTICE: (from San Jose State) Integrate theory and current social and behavioral science research in the analysis of contemporary criminal justice issues.
AA LIBERAL ARTS DEGREE – SOCIAL AND BEHAVIORAL SCIENCE EMPHASIS: Extract and analyze information from primary and secondary sources relevant to the social and behavioral sciences.

AA LIBERAL ARTS DEGREE – SCIENCE: Use numerical, graphical, symbolic and verbal representation to solve problems and communicate with others.

Student Services:
ADMISSIONS: Counselors/Advisors/Students can view other college transcripts and other student forms that we have received and evaluate for prerequisites and or use for Student Education Plans.

ADMISSIONS: Communication to students will be tracked to each student.

STUDENT LIFE: Shows an increase in student acceptance and added interest in supporting student initiatives.

COUNSELING: All student athletes will have a Student Education Plan by the beginning of their second year.

DSPS: Students will identify appropriate accommodations based on their strengths and weaknesses.

FINANCIAL AID: Students receiving vet educational benefits will be able to identify and fulfill program requirements.

RESIDENCE HALLS: To inform both in state and out of state students of the true cost of attending College of the Redwoods and living in the Residence Halls.
Where to Find Resources and Information

Assessment:
The Assessment Committee has resources posted at:
http://www.redwoods.edu/assessment/
Assessment reporting now uses the A.R.T. (Assessment Report Tool) located at the above link.

Curriculum:
The Curriculum Committee has resources posted at:
http://inside.redwoods.edu/curriculum/

Academic Senate:
http://www.redwoods.edu/senate/

Program Review:
Active and archived documents:
http://mycr.redwoods.edu/xsl-portal (upon joining the PRC MyCR site)

Archived documents and supporting material:
http://inside.redwoods.edu/ProgramReview/

Forms and Data are available at:
http://redwoods.edu/district/ir/ProgramReviewInformation.asp
**Academic Assessment**

**Introduction**

The 2002 ACCJC Accreditation Standards require that student learning outcomes (SLOs) be assessed at the course, program, and degree level (ACCJC Standard II.A.2.f, p. 7).

Therefore, in addition to designing an assessment process for the SLOs for each certificate and degree related to a program, faculty must design at least one assessment process for the SLOs at the course level. In order to efficiently assess SLOs at these various levels, it is sometimes appropriate and useful to use a course-embedded assessment process, or to use a process that matches one developed for degrees and certificates so that both levels can be evaluated at the same time.

This section of the handbook includes explanations and examples for mapping course level outcomes to program level outcomes, identifying appropriate direct and indirect forms of assessment, developing qualitative and quantitative assessment methods, using rubrics for assessment, and ‘closing the loop’ to ensure assessment leads to evaluation, analysis, and dialogue that informs improvements to the teaching and learning process.

Information about where to locate specific College of the Redwoods forms such as curriculum, program review, and assessment forms is also provided in this chapter.
The objective of program mapping is specified as a means to evaluate and clarify the learning outcomes of a college’s educational programs; and its use as a graphic representation of the interdependent relationships among various learning components of an academic program is highlighted. Here are two examples of program mapping.

Example: Associate Degree in **Digital Media**
Program outcomes chart for specific courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>SLO 1</th>
<th>SLO 2</th>
<th>SLO 3</th>
<th>SLO 4</th>
<th>SLO 5</th>
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B = beginning level of competency/ understanding
I = intermediate level of competency/ understanding
M = master level of competency/ understanding

The following two pages show different diagram styles for program mapping.
Forestry Natural Resources

How to discuss a general overview of products, services, and benefits derived from natural resources

Describe the life cycle of trees, differences in ecology for different species, and implications of management

How to correctly identify and name woody plants of regional and national importance

How to interpret maps, use compasses, GPS and other technologies to navigate terrain and develop maps from field data

How to acquire field data for the various inventory techniques that measure natural resources including timber, wildlife, water, and recreation.

How to identify regionally important wildlife species and understand their ecology and habitats.

How to use GIS tools to develop maps and analyze spatial data

How to identify and manage for important fire, forest insects, and diseases.

How to interpret aerial photographs

How to complete basic land surveys using various types of equipment, including the Total Station.

How to predict, suppress, and use fire safely in wildland conditions.

The basic laws and regulations governing practicing forestry in California.

How to set up the physical layout of a timber sale in compliance with state regulations.
Assessment evidence may be direct or indirect, although indirect methods alone are not considered to be sufficient evidence. The examples of direct and indirect methods of assessment below are from Saddleback College’s “Guide to Developing and Assessing Student Learning Outcomes and Administrative/Service Unit Outcomes”.

Examples of direct methods of assessment include:

-Capstone Course Evaluation: Capstone courses integrate knowledge, concepts, and skills associated with an entire sequence of study in a program. This method of assessment is unique because the courses themselves become the instruments for assessing student teaching and learning. Evaluation of students’ work in these courses is used as a means of assessing student outcomes. For academic units where a single capstone course is not feasible or desirable, a department may designate a small group of courses where competencies of completing majors will be measured.

-Classroom Assessment: Often designed for individual faculty who wish to improve their teaching of a specific course but can also be used on the program level.

-Collective Portfolios: Faculty assembles samples of student work from various classes and use the “collective” to assess specific program learning outcomes.

-Commercially Produced or Standardized Tests: Commercially generated or standardized tests are used to measure student competencies under controlled conditions. Tests are developed and measured nationally to determine the level of learning that students have acquired in specific fields of study. For example, nationally standardized multiple-choice tests are widely used and assist departments in determining programmatic strengths and weaknesses when compared to other programs and national data.

-Embedded Questions on Assignments or Exams: Questions related to program learning outcomes can be embedded within course assignments or exams. For example, all sections of “research methods” could include a question or set of questions relating to your program SLOs. Faculty grade the exams as usual and then copy exam questions that are linked to the program SLOs for analysis. The findings are reported as an aggregate.

-Locally Developed Exit Exams: Faculty can create an objective exam for graduating students that is aligned with the program SLOs. Performance expectations should be delineated prior to obtaining results.

-Pre-Test/Post-Test Evaluations: Pre-test/post test assessment is a method used by academic units where locally developed tests and examinations are administered at the beginning and at the end of courses or academic programs. These test results enable faculty to monitor student progression and learning throughout prescribed periods of time. The results are often useful for determining where skills and knowledge deficiencies exist and most frequently develop.

-Observations: Observations of any behavior such as student presentations or students working in the library can be used for assessment. Observations can be recorded as a narrative or in a highly structured format, such as a checklist, and they should be focused on specific program SLOs.
-Scoring Rubrics: Rubrics can be used to score any product or performance such as essays, portfolios, recitals, oral exams, etc. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring. Generally two raters are used to review each product and a third rater is used to resolve discrepancies.

-Transfer Records: For community colleges, the data on transfer student success in upper division courses is extremely valuable. Cal-PASS, a system of data sharing between all the systems of education in California, may be helpful.

-Videotape or Audiotape Evaluations: Videotapes and audiotapes have been used by faculty as a kind of pre-test/post-test assessment of student skills and knowledge. Disciplines, such as theatre, music, art, and communication, which have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes and audiotapes as assessment tools.

Examples of indirect methods of assessment include:

-Alumni Surveys: Surveying of alumni is a useful assessment tool for generating data about student preparation for professional work, program satisfaction, and curriculum relevancy. As an assessment supplement, alumni surveying provides departments with a variety of information that can highlight

-Employer Surveys: Employer surveys can provide information about the curriculum, programs, and students that other forms of assessment cannot produce. Through surveys, departments traditionally seek employer satisfaction levels with the abilities and skills of recent graduates. Employers also assess programmatic characteristics by addressing the success of students in a continuously evolving job market.

-External Reviewers: Peer review of academic programs is a widely accepted method for assessing curricular sequences, course development and delivery, and the effectiveness of faculty. Using external reviewers is a useful way of analyzing whether student achievement correlates appropriately with departmental goals and objectives.

-Student Exit Interviews/Surveys: Students leaving the college are interviewed or surveyed to obtain feedback. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, theories or skills.
Qualitative and Quantitative Assessment Methods

Data collected through assessment activities can be qualitative or quantitative. Quantitative data use numbers (or can be converted to numbers for data analysis); whereas qualitative data use words and are generally reported as a narrative. For quantitative data, the same information is usually collected from each participant in exactly the same way, and different responses are translated into a series of numbers. Qualitative data emphasize flexibility in data collection and focus on understanding processes and events, rather than precisely measuring them. For these reasons, a combination of both types is suggested. Quantitative data are generally assumed to be more objective; whereas qualitative data might provide richer information about recurrent themes and trends. Each type has unique advantages.

These distinctions can easily be seen in questionnaires with closed-ended (quantitative) versus open-ended (qualitative) questions.

**Example of a closed-ended question:**
How well did your program prepare you for a career in engineering?
(Circle one number on the scale below.)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat</th>
<th>Moderately</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Example of an open-ended question:**
Describe how well your program prepared you for a career in engineering?

Closed-ended questions limit the responses a person can make and either use a number scale in the question or later translate responses into numbers. Results from closed-ended questions can be reported as average scores on each question (including standard deviations or range of scores to help reviewers to get a more complete picture), and these results can easily be presented in tables and graphs.

Open-ended questions allow people to give any answer they wish and to go into greater detail, but they are more difficult to analyze and report objectively (although computer analysis programs are becoming available for qualitative data). Typically, for open-ended questions, various types of answers can be described in a narrative or frequencies of responses containing the same or similar themes can be counted (preferably by multiple raters) and reported as simple frequencies or percentages. It is usually not as helpful (even though readers find it interesting) to report all responses verbatim. It’s better if the data summary and interpretation come from the program itself, rather than having reviewers try to interpret the meaning of a long list of open-ended survey comments.

Taken from Oakland University Guidelines for Assessment
Use of Assessment Results to Improve Programs and Services:

In order for assessment results to be used to improve instructional programming, effective communication of the results is necessary. The most effective means is typically in summary form with graphic support of tabular data presented orally at departmental faculty meetings.

Using the Results:
Assessment results may be used simply to improve the means of assessment or to restructure the statement of intended educational outcomes.

Assessment results may be used to change or improve a program through a closer alignment of course offerings with the requirements of the work world, or restructuring of course sequencing.

Program reviews should include assessment results, as well as plans for future assessment.

Methods of improving student learning might include:

- Revising activities leading up to and/or supporting assignment/activities
- Increasing guidance for students as they work on assignments
- Revising the amount of writing/oral/visual/clinical or similar work
- Stating goals or objectives of assignment/activity more explicitly
- Stating criteria for grading more explicitly
- Employing different/revised teaching methods (Explain below)
- Increasing/improving in-class discussions and activities
- Increasing/improving student collaboration and/or peer review
- Providing more frequent and/or more effective feedback on student progress
- Encouraging more interaction with students outside of class
- Seeking out collegial feedback on assignments/activities
- Collect more data

Below is an example of prioritized actions to improve student learning taken from Anth 3

- Clearer and more repetitive explanations of how to respond to essay questions
- Review of important concepts following their initial presentation
- Inclusion of more varied instructional modes, including non-lecture-based methods

Below is an example of prioritized actions to improve student learning taken from Art 2

- Continue to incorporate digital technologies such as Google docs, YouTube, and Art Stor
- Encourage student knowledge of historical and contemporary art trends by assigning student research presentations on course related topics.
- Tour students around the Creative Art facilities. This extra effort encourages students to engage deeply in their material and in our discipline.
## Rubric: Speaking

<table>
<thead>
<tr>
<th></th>
<th>Listening Comprehension</th>
<th>Fluidity</th>
<th>Pronunciation</th>
<th>Vocabulary</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance exceeds expectations 4 points</td>
<td>Student understands the examiner’s questions, and responds easily and without probing</td>
<td>Speech continuous, with few pauses or stumbling</td>
<td>Enhances communication</td>
<td>Rich use of vocabulary</td>
<td>Correct use of basic language structures (1-5 errors)</td>
</tr>
<tr>
<td>Performance meets expectations 3 points</td>
<td>Student understands the examiner’s questions and knows how to respond, but needs occasional probing</td>
<td>Some hesitation, but manages to continue and complete thoughts</td>
<td>Does not interfere with communication</td>
<td>Adequate and accurate use of vocabulary for this level</td>
<td>Adequate use of basic language structures (6-10 errors)</td>
</tr>
<tr>
<td>Performance almost meets expectations 2 points</td>
<td>Student understands the examiner’s questions after probing</td>
<td>Speech choppy and/or slow with frequent pauses; few or no complete thoughts</td>
<td>Occasionally interferes with communication</td>
<td>Somewhat inadequate and/or inaccurate use of vocabulary</td>
<td>Emerging use of basic language structures (11-15 errors)</td>
</tr>
<tr>
<td>Performance does not meet expectations 0-1 point</td>
<td>Student fails to understand most questions even after probing</td>
<td>Speech halting and uneven, with long pauses or incomplete thoughts</td>
<td>Frequently interferes with communication</td>
<td>Inadequate and/or inaccurate use of vocabulary</td>
<td>Inadequate and/or inaccurate use of basic language structures (more than 16 errors)</td>
</tr>
</tbody>
</table>

**TOTAL**
## Rubric: Effective Writing

<table>
<thead>
<tr>
<th>Score</th>
<th>Clear Thesis</th>
<th>Supports</th>
<th>Conclusion</th>
<th>Documentation</th>
<th>Syntax &amp; Grammar &amp; Language*</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Thesis Statement is clearly defined, accessible to the reader, and reflects the writing prompt</td>
<td>Supports are linked to the thesis statement and flow logically. Major supporting details are supported by minor details and examples where appropriate</td>
<td>Conclusion is clearly stated and linked to the support offered for the thesis</td>
<td>Well documented with appropriate style sheet. Works Cited page is attached and done correctly with less than 3 errors; There are 10% or less of direct quotes in paper</td>
<td>Clear &amp; Concise, no grammatical errors; Appropriate language for discipline</td>
</tr>
<tr>
<td>4</td>
<td>Thesis Statement is defined, accessible to the reader and obliquely tied to the writing prompt</td>
<td>Supports are linked to the thesis statement and flow logically. Major details are supported by minor details. Examples are not offered widely</td>
<td>Conclusion is stated and linked to most of the supports offered for the thesis</td>
<td>Documentation is appropriate to style sheet with one to two omissions. Works Cited is attached, done correctly with less than 5 errors; 15% or less of direct quotes in paper</td>
<td>Clear and Concise with no more than 3 grammatical or syntactical errors; appropriate language for discipline</td>
</tr>
<tr>
<td>3</td>
<td>The thesis is stated but weak</td>
<td>Some supports are linked to the thesis. Not all supports have minor details; no supporting examples are evident.</td>
<td>Conclusion is stated but does not link back to the thesis</td>
<td>Documentation is evident for all direct quotes and some paraphrases. Works Cited is attached but format is not consistent for style sheet and there are more than 7 errors; 20 percent or less of direct quotes</td>
<td>More than 3 syntactical errors but message is still clear. Grammatical errors exceed 3 but are less than 7; some language is appropriate but not all for discipline</td>
</tr>
<tr>
<td>2</td>
<td>Thesis may be discerned but is not clearly stated</td>
<td>One or two supporting ideas tied to thesis statement with no elaboration or examples</td>
<td>Conclusion is weak and not supported by the essay</td>
<td>Direct quotes are cited but paraphrases are not. Works Cited is not attached to the document; 25% or less of direct quotes</td>
<td>Syntax makes the message difficult to understand w/o help from the writer. Grammatical errors exceed 7 but do not exceed 10; does not use appropriate language for discipline</td>
</tr>
<tr>
<td>1</td>
<td>No thesis statement</td>
<td>Few supporting details that may or may not be linked to the thesis statement</td>
<td>Conclusion not supported by details and not related to the thesis statement</td>
<td>Documentation is not evident; 30% or more of quotes</td>
<td>More than 10 grammatical or syntactical errors in the paper</td>
</tr>
</tbody>
</table>

*Syntactical and grammatical errors will count once for each type of error made. If the same error repeats, it will still be only counted as one.
Example One: The following rubric for scoring essays was developed by the faculty at Kauai Community College in Hawaii. This provides not only a useful scoring rubric for writing, but could also serve as a model for creating scoring rubrics in other academic areas.

<table>
<thead>
<tr>
<th>A (4 points)</th>
<th>B (3 points)</th>
<th>C (2 points)</th>
<th>D (1 point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly &amp; effectively responds to assignment.</td>
<td>Response to assignment generally adequate &amp; thorough.</td>
<td>Minimally responds to the assignment.</td>
<td>Does not respond well to assignment.</td>
</tr>
<tr>
<td>Main idea (thesis) very clearly stated &amp; topic is effectively limited.</td>
<td>Main idea clear &amp; topic is limited.</td>
<td>Main idea clear or implicit &amp; topic is partially limited.</td>
<td>Main idea unclear &amp; topic only partially limited.</td>
</tr>
<tr>
<td>Thesis supported in body of paper by a variety of relevant facts, examples, &amp; illustrations from experience, references to related readings, etc.</td>
<td>Thesis well supported in body of paper by facts, examples, illustrations though support may not be as vivid as the &quot;A&quot; essay.</td>
<td>Thesis generally supported in body of paper by facts, examples, details. No more than one paragraph with inadequate support.</td>
<td>Thesis supported in body of paper by few facts, examples, details. More than one paragraph with inadequate support.</td>
</tr>
<tr>
<td>Organization &amp; structure very evident: major points divided into paragraphs and signaled by use of transitions. Each paragraph has a topic sentence; sentences within each paragraph relate to each other &amp; are subordinate to the topic. Introduction &amp; conclusion effectively related to the whole.</td>
<td>Organization &amp; structure clear. Most major points are separated into paragraphs and signaled by transitions. Paragraphs are built on related sentences that logically develop the main points. No major digressions. Introduction &amp; conclusion effectively related to the whole.</td>
<td>Organization &amp; structure mostly clear. Many major points are separated into paragraphs and signaled by transitions. Most points are logically developed. There may be a few minor digressions but no major ones. Introduction &amp; conclusion are somewhat effective.</td>
<td>The organization &amp; structure must be inferred by the reader. Only some major points are set off by paragraphs and are signaled by transitions. There are some logically connected points. There may be some major digressions. Introduction and conclusion may be lacking or ineffective.</td>
</tr>
<tr>
<td>Voice &amp; tone are consistent &amp; appropriate to the audience/purpose.</td>
<td>Voice &amp; tone consistent &amp; appropriate although somewhat generic or predictable in places.</td>
<td>Voice &amp; tone adequate to audience/purpose although often generic or predictable.</td>
<td>Voice noticeably generic or inappropriate (e.g. first person narrative may predominate in an analysis assignment). Tone is often inappropriate.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Full variety of sentence structures used correctly. Word choice interesting, accurate and contributes to the writer’s ability to communicate the purpose.</td>
<td>Variety of sentence structures used correctly despite an occasional flaw. Accurate &amp; varied word choice.</td>
<td>Sentences &amp; word choice predictable. Occasional errors in sentence structure, usage &amp; mechanics do not interfere with writer’s ability to communicate the purpose.</td>
<td>Little sentence structure variety; wording predictable; few synonym alternatives used. Errors in sentence structure, usage &amp; mechanics sometimes interfere with the writer’s ability to communicate the purpose.</td>
</tr>
<tr>
<td>Few, if any, minor errors in sentence construction, usage, grammar, or mechanics.</td>
<td>There may be a few minor or major errors in sentence construction, usage, grammar, or mechanics.</td>
<td>There are some common errors (major and minor) in sentence construction and mechanics but the writer generally demonstrates a correct sense of syntax.</td>
<td>There are numerous minor errors and some major errors. Sentence construction is below mastery and may display a pattern of errors in usage and mechanics.</td>
</tr>
<tr>
<td>Source material is incorporated logically &amp; insightfully. Sources are documented accurately.</td>
<td>Source material incorporated logically. Sources documented accurately.</td>
<td>Source material incorporated adequately &amp; usually documented accurately.</td>
<td>Source material incorporated but sometimes inappropriately or unclearly. Documentation is accurate only occasionally.</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Excellent Skill Exhibited</td>
<td>Above Average Skill Exhibited</td>
<td>Average Skill Exhibited</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Work in groups to accomplish learning tasks and reach common goals</td>
<td>Participates in group work &gt;90% of the time &amp; contributes to learning tasks and common goals</td>
<td>Participates in group work 76 - 90% of the time</td>
<td>Participates in group work 50% - 75% of the time</td>
</tr>
<tr>
<td>Demonstrate interpersonal skills and accountability in working in diverse groups</td>
<td>Demonstrates evidence of interpersonal skills and accountability in diverse groups &gt;90% of the time</td>
<td>Demonstrates evidence of interpersonal skills and accountability in diverse groups 76-90% of the time</td>
<td>Demonstrates evidence of interpersonal skills and accountability in diverse groups 50 - 75% of the time</td>
</tr>
<tr>
<td>Design and complete a group project</td>
<td>Demonstrates leadership skills in group to design project and completes their portion of the work &gt;95% of the time</td>
<td>Works in group to design project and completes their portion of the work approximately 90% of the time</td>
<td>Works in group to design project and completes their portion of the work approximately 75% of the time</td>
</tr>
<tr>
<td>Write or make a presentation based on group work</td>
<td>Writes or makes a presentation on group work &gt;95% of the time and assists others in group to do the same</td>
<td>Writes or makes a presentation based on group work approximately 90% of the time</td>
<td>Writes or makes a presentation based on group work approximately 75% of the time</td>
</tr>
</tbody>
</table>
## Differentiate and make informed decisions about issues based on multiple value systems

<table>
<thead>
<tr>
<th>Component</th>
<th>Excellent Skill Exhibited</th>
<th>Above Average Skill Exhibited</th>
<th>Average Skill Exhibited</th>
<th>Below Average Skill Exhibited</th>
<th>No Skills Exhibited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the key elements of issues &amp; analyze them from the perspectives of multiple value systems</td>
<td>Identifies all key elements of issues and analyzes them from the perspective of the respective value systems.</td>
<td>Identifies most key elements of issues and analyzes from the perspective of the respective value systems.</td>
<td>Identifies some key elements of issues and analyzes from the perspective of at least two value systems.</td>
<td>Identifies few key element of a single value system.</td>
<td>No evidence of any of the skills listed.</td>
</tr>
<tr>
<td>Identify values and their origins in culture, religion, philosophy, political, social or economic theory</td>
<td>Identifies values and their origins in culture, religion, philosophy, political, social or economic theory with thorough analysis, synthesis or evaluation.</td>
<td>Identifies values and their origins in culture, religion, philosophy, political, social or economic theory with adequate analysis, synthesis or evaluation.</td>
<td>Identifies values and their origins in culture, religion, philosophy, political, social or economic theory using a rudimentary analysis, synthesis or evaluation.</td>
<td>Identifies values and their origins in culture, religion, philosophy, political, social or economic theory without evidence of analysis.</td>
<td>No evidence of any of the skills listed.</td>
</tr>
<tr>
<td>Differentiate ethical and non-ethical elements in arguments and/or behavior</td>
<td>Identifies ethical and non-ethical elements and can adequately articulate why they are different.</td>
<td>Identifies ethical and non-ethical elements and can adequately articulate why they are different.</td>
<td>Identifies ethical and non-ethical elements but cannot articulate why they are different.</td>
<td>Identifies ethical and non-ethical elements but cannot articulate why they are different.</td>
<td>No evidence of any of the skills listed.</td>
</tr>
<tr>
<td>Distinguish facts from values in issues</td>
<td>Distinguishes facts from values in issues and articulates why they are different.</td>
<td>Distinguishes facts from values in issues and adequately articulates why they are different.</td>
<td>Identifies facts from values in issues and minimally articulates why they are different.</td>
<td>Identifies facts and values in issues but cannot articulate why they are different.</td>
<td>No evidence of skill in this area.</td>
</tr>
<tr>
<td>Apply varying values or ethical principles and approaches to respond to questions, dilemmas, or problems and describe alternate approaches.</td>
<td>Response is multi-dimensional, includes all relevant alternative outcomes.</td>
<td>Response is multi-dimensional and includes alternative approaches.</td>
<td>Response is multi-dimensional and includes at least one alternative approach.</td>
<td>Response is one-dimensional and cannot describe/ create an alternate approach.</td>
<td>No evidence of skills in this area.</td>
</tr>
</tbody>
</table>
Introduction

This chapter is intended to assist in the development of student learning outcomes, program outcomes, and assessment practices for determining the effectiveness of administrative and student support services and programs. As the cycle of identifying student learning and program outcomes, assessing them, interpreting the data, and using the data to improve programs is utilized, the intrinsic value of the assessment process related to service and program quality improvement is apparent. However, external mandates also require appropriate, ongoing assessment.

Accreditation Requirements Related to Assessment

The Introduction to the 2002 Accreditation Standards states:
“…An effective institution ensures that its resources and processes support student learning, continuously assesses that learning, and pursues institutional excellence and improvement. An effective institution maintains an ongoing, self-reflective dialogue about its quality and improvement.” (p. 1)

ACCJC Standard I: Institutional Mission and Effectiveness states:
“…The institution uses analyses of quantitative and qualitative data and analysis in an ongoing and systematic cycle of evaluation, integrated planning, implementation, and re-evaluation to verify and improve the effectiveness by which the mission is accomplished.” (p. 2)

ACCJC Standard I.B., Improving Institutional Effectiveness, elaborates:
“The institution uses ongoing and systematic evaluation and planning to refine its key processes and improve student learning.”

And I.B.1: “The institution maintains an ongoing, collegial, self-reflective dialogue about the continuous improvement of student learning and institutional processes.” (p. 3)

Standard II.B, concerning Student Support Services, states:
“…The institution systematically assesses student support services using student learning outcomes, faculty and staff input, and other appropriate measures in order to improve the effectiveness of these services.” (p. 5)

From Standard III, Resources:
“The institution effectively uses its human, physical, technology, and financial resources to achieve its broad educational purposes, including stated student learning outcomes, and to improve institutional effectiveness.” (p. 14)

Introduction to Program Outcomes
Whether your program or service has student learning outcomes, program outcomes may
be applicable. The outcomes for most administrative/service units (program outcomes) are
different from SLOs in that they focus on what services the units provide in order to support
the mission of the College. Program outcomes, then, unlike student learning outcomes, can
look at process and not just intended results. Program outcomes can related to any aspect
of institutional effectiveness (see below). Administrative/Service Units, however, can also
have SLOs because they may provide educational support services such as tutoring, work-
shops, counseling, etc. Administrative and service units typically should assess no more
than two to three outcomes per year.

Concept of Institutional Effectiveness related to Program Outcomes: Program outcomes are
developed to ensure and improve quality of programs and services in support of student
learning and institutional effectiveness. According to CR’s Program Review Guide Glossary,
Institutional Effectiveness is the process of articulating the mission of the college, setting
goals, defining how the college and community will know when the goals are being met, and
using the data from assessment in an ongoing cycle of goal-setting and planning. According
to the ACCJC, there are three types of Institutional Effectiveness, as follows:
Organizational Effectiveness: The focus here is on structures, resources, processes – is not
particularly education-oriented, but is oriented to what any good organization needs to sur-
vive
Educational Effectiveness (indirect measures): Focuses on students moving through the
institution and addresses the results of educational efforts – student achievement
Educational Effectiveness (direct measures): Student Learning Outcomes (what students
have learned as a result of attending college)
Student Outcomes in Student Support Services

The term *Intended Educational Outcome*, also referred to as *Student Learning Outcome*, describes what students to be able to think (attitudinal), know (cognitive), or do (behavioral) when they’ve completed a given educational program and services.

What is meant by Student Learning Outcomes related to support services? Not every program or service will have student learning outcomes, but many will. Think about what you want students to know or do as a result of interacting with our services or at the end of a learning unit (such as orientation/advising sessions).

In the **attitudinal** domain, your expectations of students might be:
- Feeling confident about the college environment
- Fitting in socially
- Feeling competent
- Feeling that college is friendly
- Feeling that college improves their lives

In the **knowledge** domain, your knowledge expectations of students might be:
- Regulatory knowledge: requirements for matriculation, graduation, and transfer (e.g. knowledge about Math and English requirements, math and English transferability)
- Procedural knowledge: knowing how to get stuff done (e.g. arrange transportation, scheduling, research, adding and dropping classes, negotiating, reading and comprehending policies, using the phone to register or access services, using the web to reference the schedule, catalog, or other information)
- Spatial knowledge: students’ mental maps such, as where to go on campus to access services (e.g. where to go to pay fees, to get reserve books, to get book vouchers).

In the **behavioral** domain, your expectations of students might be:
- Following student conduct codes
- Participating in student organizations
- Persisting from one semester to another through program completion

If you think your program or service has no student learning outcomes, consider whether students would be able to attain the desired level of educational effectiveness related to learning or achievement without your program or service.

- Consider that almost every student who attends the institution, no matter how many classes s/he takes, must apply for admission, seek counseling, go through assessment testing and orientation, visit health services (if needed), purchase text books, dine at the cafeteria, utilize parking, discuss career and transfer issues at the career or transfer center, and apply for financial aid.

- Consider that students rely on these services to continue their study, and these interactions influence their learning experiences. Consider that close to a quarter of the reasons students drop out of college are related to counseling, admissions and registration, and financial aid issues.

(Luan, Jing. “Pragmatic Assessment of Student Services in Community Colleges” *iJournal: Insight into Student Services*, No. 4, March 2003).
Student Learning Outcomes Implementation Steps:

The following is a logical order for implementation activities related to student learning outcomes:

- Identify intended educational outcomes
- Develop and implement appropriate assessment procedures to determine accomplishments of the identified programmatic expectations
- Demonstrate use of assessment results to improve student learning or departmental operations

No institution or department has the resources or time to continually assess all possible aspects of each program. Given this limitation, priorities for the assessment effort must be set to avoid measuring the meaningless. Hence, it is logical to begin or focus the department’s assessment efforts on those expectations for graduates which have been identified as of primary importance.

Tips for Developing Statements of Intended Educational (Student Learning) Outcomes:

- Focus on results, not processes. Don’t address what was taught or presented, but address the observable outcome you expect to see in the student. Think about the knowledge, skills, and attitudes you expect from students who complete program activities.

- Make sure SLOs are written as outcomes rather than objectives (indicates the big picture rather than nuts and bolts, addresses student competency rather than content coverage). Focus on the substance of the outcomes, not just the means for their expression.

- Typically, between three and five statements of intended educational outcomes for each program is sufficient.

- Use active verbs in describing student learning outcomes. Active verbs are easier to measure. For instance, if you want students to understand how to correctly use a microscope – using the word “understand” is not measurable. Instead try to imagine the outcome – students will “create” and “produce” quality resumes at the Career and Transfer Center (or describe, classify, distinguish, explain, interpret, compose, perform, demonstrate, etc.)

- At the departmental or program level, these statements are intended as overarching concepts which should span several activities, not a conglomeration of individual course objectives taken from individual activities.

- For pragmatic reasons, remember that at least one means of assessment will need to be developed for each intended educational outcome. It is far better to limit the number of statements, conduct successful programs of assessment, and use assessment results to improve student learning than to curse a pile of paper which has been difficult to pro-
duce, expensive, and is virtually useless (Nichols and Nichols, p. 20).

- Consider whether the SLO is appropriate: Does it represent a fundamental result of the program? Is it the penultimate outcome, the result of outcomes from sequenced activities? Does it represent collegiate level work?

- The accomplishment of most statements of intended educational (student learning) outcomes should be ascertainable/measurable.

- “Measurable” doesn’t necessarily need to mean that it is quantifiable, precluding qualitative judgments. “Measurable” can include a general judgment of whether students know, think, and can do most of what is intended for them.

- Be careful when describing attitudes in a learning outcome, as they are hard to assess. Ask yourself if the attitude is crucial to success in your program or class.

- Criteria set for intended outcomes should be set realistically but should represent a reasonable challenge both for students and faculty.

- Whenever feasible, set not only primary (overall), but secondary (detailed) levels as benchmarks or criteria for success at the degree or program level (e.g. average score of graduates on a standard exam will be at or near the 50th percentile and no subscale score will be below the 30th percentile).

- Write student learning outcomes in language that a student will understand.

- Three characteristics of good learning outcomes according to Keith Snow-Flamer:
  1. The specified action by the learners must be important and have some meaning.
  2. The specified action by the learners must be measurable (since outcomes inform planning and organizational change) and can be assessed.
  3. The outcome should link in some way to the Division’s learning outcomes.

HINT: It’s sometimes easier to start backwards by thinking about the major assessments you use in the program. These would be the products or demonstrations of your outcomes. Make a list of your major activities related to this program. Then try to describe in one sentence what the students are being asked to demonstrate.
Assessment activities don’t need a rocket scientist to be implemented. The perfect means of assessment will never exist. To compensate for the lack of perfection in means of assessment, several or multiple means of assessment are suggested for each intended outcome.

Assessment may be qualitative or quantitative. Assessment evidence may be direct or indirect, although indirect methods alone are not considered to be sufficient evidence. The examples of direct and indirect methods of assessment below are from Saddleback College’s “Guide to Developing and Assessing Student Learning Outcomes and Administrative/Service Unit Outcomes”.

Examples of direct methods of assessment include:

- **Commercially Produced or Standardized Tests**: Commercially generated or standardized tests are used to measure student competencies under controlled conditions. Tests are developed and measured nationally to determine the level of learning that students have acquired in specific fields of study. For example, nationally standardized multiple-choice tests are widely used and assist departments in determining programmatic strengths and weaknesses when compared to other programs and national data.

- **Locally Developed Exit Exams**: Faculty can create an objective exam for graduating students that is aligned with the program SLOs. Performance expectations should be delineated prior to obtaining results.

- **Pre-Test/Post-Test Evaluations**: Pre-test/post test assessment is a method used by academic units where locally developed tests and examinations are administered at the beginning and at the end of courses or academic programs. These test results enable faculty to monitor student progress and learning throughout prescribed periods of time. The results are often useful for determining where skills and knowledge deficiencies exist and most frequently develop.

- **Observations**: Observations of any behavior such as student presentations or students working in the library can be used for assessment. Observations can be recorded as a narrative or in a highly structured format, such as a checklist, and they should be focused on specific program SLOs.

- **Scoring Rubrics**: Rubrics can be used to score any product or performance such as essays, portfolios, recitals, oral exams, etc. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring. Generally two raters are used to review each product and a third rater is used to resolve discrepancies.

- **Transfer Records**: For community colleges, the data on transfer student success in upper division courses is extremely valuable. Cal-PASS, a system of data sharing between all the systems of education in California, may be helpful. Another data source is the National Student Clearinghouse, which provides various student tracker information.

- **Videotape or Audiotape Evaluations**: Videotapes and audiotapes have been used by faculty as a kind of pre-test/post-test assessment of student skills and knowledge. Disciplines such as theatre, music, art, and communication (which have experienced difficulty
in using some of the other assessment methods), have had significant success in utilizing videotapes and audiotapes as assessment tools.

- **Datatel Data: Datatel “Colleague”** is the integrated data management system in place at CR. Datatel modules include Enrollment Management, Financials, Scheduling, Human Resources & Payroll, and the Foundation. The data in Colleague is entered by and available to staff having authorized access. Much of the information from Datatel can be viewed through the online WebAdvisor program. Data and information not visible on WebAdvisor can be requested by submitting an ITS Data Request form or IR Services Request form with appropriate approval from a supervisor.

- **SARS (Student Appointment Reporting System) Data:** Data is used by multiple departments in student services, staff use the “grid” while students use the “track”

  - **SARS grid:** Appointment scheduling, appointment check-in, tracking, drop-ins, completion of appointments, comment, reports

  - **SARS track:** Students utilize SARS track to log math, english, and tutor hours

**Examples of indirect methods of assessment include:**

- **Alumni Surveys:** Surveying of alumni is a useful assessment tool for generating data about student preparation for professional work, program satisfaction, and curriculum relevancy. As an assessment supplement, alumni surveying provides departments with a variety of information that can highlight program areas that need to be expanded or enhanced.

- **Employer Surveys:** Employer surveys can provide information about the curriculum, programs, and students that other forms of assessment cannot produce. Through surveys, departments traditionally seek employer satisfaction levels with the abilities and skills of recent graduates. Employers also assess programmatic characteristics by addressing the success of students in a continuously evolving job market.

- **External Reviewers:** Peer review of student services programs is a widely accepted method for assessing program goals and objectives as well as the effectiveness of staff. Using external reviewers is a useful way of analyzing whether student achievement correlates appropriately with departmental goals and objectives.

- **Student Exit Interviews/Surveys:** Students leaving the college are interviewed or surveyed to obtain feedback. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, experiences, or skills.

SOURCE: Administrative and Student Services Assessment Toolkit (pp. 3-4, 8-11)
## 10. Report on Results of Learning Outcomes Assessment 2009-2010

*(Please provide a 1 page historical reference of outcomes)*

<table>
<thead>
<tr>
<th>Objective</th>
<th>Student Learning Outcome (SLO) or Program Outcome (PO)</th>
<th>Linked to Student Service Goal/ Campus Goal/ District Initiative</th>
<th>Assessment Criteria (Specify Target Performance Level)</th>
<th>Assessment Measure</th>
<th>Completion (or anticipate completion)/ Findings</th>
<th>Improvement Recommendations (next step)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
<td>Increase college attendance and enrollment rates</td>
<td>Students participating in outreach activities during their senior year (06-07 FY) will successfully enroll at CR during the fall 07. (PO)</td>
<td>Student Services Goals #2-provide a seamless outreach process; #5-provide comprehensive outreach services to potential students; Education Master Plan Goal #3-Increase student access</td>
<td>Increase enrollment of graduating seniors from 06-07 FY by 80% (258 students) out of the 322 seniors processed through Admissions during their senior year. During 06-07 FY, outreach staff members tracked all student contacts in an Access senior database. During 07-08 FY, outreach staff used Datatel to look up student enrollment status.</td>
<td>Out of the 322 students who completed outreach activities during their senior year; 245 (76%) enrolled into the fall 07 term.</td>
<td>Since department staff was unsuccessful in meeting the SLO goal by 4%, the recommendation is to follow-up with the same SLO during the next fiscal year. The recommendation is to continue providing follow-up outreach services to high school graduates after they have graduated and particularly during the summer to ensure fall term enrollment, thus increasing college enrollment amongst those students assisted through outreach services during the regular fiscal year.</td>
</tr>
</tbody>
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1.  

2.  

### Sample Assessment Rubrics