

# **Outcomes Assessment Guidelines and Resources for Disciplines and Programs**



**Riverside Community College District**  
Office of Institutional Effectiveness

Web Resources:

<http://www.rcc.edu/administration/academicaffairs/effectiveness/assess/index.cfm>

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## I. Introduction

RCCD has been engaged in systematic, institution-wide efforts to assess student learning for a number of years. Every RCCD instructor is expected to participate in this process. Faculty are responsible for defining student learning outcomes in courses, programs, certificates, and degrees; determining student achievement of those outcomes; and (most important of all) using assessment results to make improvements in pedagogy and curriculum. Administration, particularly institutional research, acts primarily in an advisory and support role.

Since 2001, as a condition of approval for its Program Review self-study, each RCCD discipline has been expected to be regularly engaged in outcomes assessment efforts and to report on those efforts. The guidelines for doing outcomes assessment at RCCD have been developed (and revised several times) by the District Assessment Committee (DAC), which also mentors disciplines in the development of their assessment plans. In addition, DAC evaluates the assessment work of disciplines as reported in the PR self-studies, makes suggestions for improvement, and approves that portion of the self-study. DAC is composed of roughly 20 faculty members and staff personnel, representing a broad cross-section of the college community, all of whom have devoted themselves to studying outcomes assessment and trying to develop useful (and not unduly burdensome) guidelines for their colleagues. Voting members, two from each of the campuses, are elected by the faculty of the campus they represent. We invite your suggestions for improving these guidelines, and we encourage all interested faculty to join the committee.

Before providing specific guidelines for RCCD disciplines engaged in outcomes assessment work, we'll try to answer some frequently asked questions about assessment.

## II. Assessment FAQs

### What is Outcomes Assessment?

Outcomes assessment is any systematic inquiry whose goal is to document learning or improve the teaching/learning process. (ACCJC defines assessment simply as any method “that an institution employs to gather evidence and evaluate quality.”) It can be understood more precisely as a three-step process of

1. Defining what students should be able to do, think, or know at the end of a unit of instruction (defining, that is, the *student learning outcomes*)
2. Determining whether, and to what extent, students can do, think, or know it.
3. Using this information to make improvements in teaching and learning.

If this sounds partly recognizable, that's because all good teachers instinctively do outcomes assessment all the time. Whenever we give a test or assign an essay, look at the responses to see where students have done well or not so well, and reconsider our approach to teaching in light of that information, we're doing a form of assessment. Outcomes assessment simply makes that process more systematic.

DAC has struggled over the years with the slipperiness of this concept, often pausing in its work to remind itself of what “assessment” does and does not mean. Faculty frequently mistake it for something it is not. Though it over-simplifies a bit, we suggest that you ask yourselves these questions to be sure that you are actually engaged in outcomes assessment:

- Are you demonstrating, in more tangible ways than simply pointing to grading patterns and retention/success data, that learning is taking place in your discipline? If you are, you are doing outcomes assessment. *You are documenting student learning.*

- Are you identifying, with some precision, areas in your discipline where learning is deficient, and working actively to improve learning? If so, you are doing outcomes assessment. *You are trying to enhance and improve student learning in light of evidence you’ve collected about it.*

### **Isn’t Assessment the Same Thing As Grading?**

No—at least not as grading students on papers and exams, and in courses overall, is usually done. Traditional grading is primarily evaluative, a method for classifying students. Outcomes assessment is primarily ameliorative, designed to improve teaching and learning. The emphasis in outcomes assessment always falls on Step 3: using information about student learning patterns in order to improve. This is sometimes referred to as “closing the feedback loop”—something that must always be our ultimate aim in doing this kind of assessment.

Grades typically reflect an aggregate of competencies achieved (or not achieved) by a student on an assignment or for a class. Knowing that a particular student got a “B” in a course, or even knowing that 20% of the students in a class got an “A” and 30% got a “B,” won’t tell us very much about how well students in general did in achieving particular learning outcomes in the course. Disaggregating those grades using outcomes assessment techniques, however, may reveal that 85% of the students demonstrated competency in a critical thinking outcome, while only 65% demonstrated competency in a written communication outcome. That may lead us to investigate ways of teaching students to write more effectively in the course—resulting ultimately in improved learning.

Grades are also often based on a number of factors (e.g., attendance, participation or effort in class, completion of “extra credit” assignments) that may be unrelated to achievement of learning outcomes for the course. That may be why the GPAs of high school and college students have risen sharply over the last 15 years, while the performance of these same students on standardized tests to measure writing, reading, and critical thinking skills has markedly declined.

Outcomes assessment methodologies may actually help us grade our students more accurately, and give students more useful feedback in time for them to improve the work they do in the course later on. But simply pointing to grading patterns in classes and courses is not a form of outcomes assessment.

### **Why Should (or Must) We Do Assessment?**

The best reason for systematically assessing student learning is the intrinsic value of doing so. Effective teaching doesn't exist in the absence of student learning. Assessment is part of the broad shift in higher education today toward focusing on student learning, on developing better ways of measuring and improving it. Assessment results implicitly ask us to fit our teaching, as much as we can, not to some set of timeless pedagogical absolutes but to the messy reality of specific classrooms, where actual students in one section of a class may require a substantially different kind of teaching than their counterparts in another. Done well, outcomes assessment makes us happier teachers because it makes us better teachers. And it makes us better teachers because it makes our students better learners. *The primary purpose for doing assessment, then, is to improve learning.*

But there are, of course, other reasons for doing assessment. Colleges throughout the country are now required by regional accrediting bodies to document and assess student learning. Other governmental agencies charged with funding education see assessment as a way of enabling colleges to demonstrate that learning is taking place in their classes and programs. Colleges themselves can use assessment data for research and planning purposes, including budget allocation. And students (along with parents, employers, etc.) increasingly ask for evidence of what kind of learning a particular course, program, or degree results in to help in their decision-making processes. These largely external pressures to document and assess student learning worry some instructors, who may view all accountability measures as potentially intrusive, leading to the loss of academic freedom (more on that later) and even to the imposition of a corporate culture upon American higher education. But it may reassure us to learn that the assessment movement is now 30 years old, that its basic methodologies were developed and refined at some of the nation's best colleges and universities, that professors—not bureaucrats—led this process, and that assessment is being practiced at colleges and universities all over the world today.

A major recent stimulus to do outcomes assessment at the institutional, program, and course levels comes from RCCD's accrediting body, the Accrediting Commission for Community and Junior Colleges (ACCJC), which dramatically altered its standards for reaccreditation in 2002. ACCJC now asks community colleges to assess student learning at all levels of the institution, including every course being offered, and use this information to improve teaching and learning. Visiting accreditation teams will want to see evidence at RCCD that disciplines not only have a systematic plan for assessing student learning in their courses but that they are actually using that plan.

Outcomes assessment, then, serves at least three critical purposes: to provide clear evidence of learning that is already taking place, to improve learning in areas where it is deficient, and to help with planning and resource allocation decisions.

### **Isn't Assessment Really a Method to Evaluate Individual Instructors?**

DAC has agreed that assessment is not to be used for evaluating individual instructors, the process for which is a matter of contractual agreement anyway. We want faculty to want to participate in assessment efforts (it's not going to work otherwise). Having a system that could be used against faculty defeats its primary purpose. When you develop assessment processes in your discipline, we hope you will encourage individual instructors to use results for reflective self-evaluation. But barriers should be created to prevent any possible avenue for the evaluation

of individual teachers. DAC can suggest methods to employ when conducting your assessment projects that make evaluation of individual instructors impossible.

### **Couldn't Assessment Results Be Used to "Punish" Under-Performing Disciplines or Programs?**

Some instructors worry that when assessment results disclose problems in the achievement of outcomes in particular courses or programs, those programs will suffer. But the evidence suggests that this fear is unwarranted. Programs may occasionally need to be eliminated or downsized (e.g., most of America's major colleges and universities had Home Economics departments as recently as 50 years ago), but outcomes assessment is not a particularly useful method for identifying that need, nor has it ever (as far as we can determine) been used for that purpose. Typically, in fact, when outcomes assessment reveals a problem in student achievement of a learning goal, this becomes compelling evidence in support of a program's request for resources intended to ameliorate the problem. It may seem counter-intuitive, but disciplines should feel they have a logistical incentive for identifying learning deficiencies in courses and programs.

### **Isn't Assessment Really A Variation of "No Child Left Behind"?**

The short answer is "not as long as faculty are in control of the process." College and university faculty have been given an opportunity that was never given to their K12 counterparts. We are in charge of defining the outcomes, developing methods for assessing them, and determining how to interpret the results. Administrators and politicians have so far stayed essentially out of the process—only asking that it take place. No one is telling us to employ, for example, a particular standardized test to measure critical thinking—or even telling us to employ a standardized test at all. (The Spellings Commission Report on Higher Education, published in September 2006, does argue for some standardized testing of general education skills like writing and critical thinking, but it stops well short of mandating it.) DAC believes strongly that the best way to forestall the imposition of a "No College Student Left Behind" program of national testing on colleges and universities is to embrace this opportunity to do authentic outcomes assessment ourselves—to develop and implement our own methods, ones that fit our own individual disciplines and our institution's culture.

### **Doesn't Assessment Threaten Academic Freedom?**

If assessment meant standardized instruction, scripted lessons, and mandated common tests, it certainly would. But it doesn't. Assessment actually leads in many cases to less standardization, not more. Any instructor teaching two sections of the same class will probably find, through the use of classroom-based assessment techniques, that each will require substantially different pedagogical approaches. Nothing in the assessment literature suggests that all instructors should teach in similar ways.

Some disciplines will find it useful, *upon occasion*, to employ common prompts (and possibly even common finals or common questions embedded in otherwise instructor-specific finals) in order to generate meaningful assessment results. Others may decide not to do that at all. RCCD's English discipline, for example, has administered a common writing prompt in its

pre-transfer-level courses, but in doing outcomes assessment of its transfer-level course, in which students are expected to demonstrate research-paper-writing competency, it has collected and evaluated sample essays written on a variety of subjects, in response to many different sorts of assignments. The discipline is able to determine the extent to which students demonstrate competency in targeted outcomes areas using either method.

Assessment does encourage instructors of the same courses or program to collaborate on the generation of common learning outcomes for the course or program—though each instructor may very well have, in addition, idiosyncratic outcomes of her or his own. Outcomes assessment would suggest that no two Psychology 1 classes will be the same, or have identical learning outcomes—but that any student taking Psychology 1, no matter who teaches the course, will leave it being able to do or know some things in common. Since no one seriously argues that courses shouldn't have course outlines of record, that students shouldn't expect to get a common core of knowledge and/or skill in a particular course or program no matter which instructor(s) they have, it's difficult to entertain seriously the argument that this threatens academic freedom.

### **Doesn't Assessment Reduce Learning to Only That Which Can Be Easily Measured?**

No—unless we have a very limited notion of what the word “measure” means. As instructors, we measure complex forms of learning in our classrooms all the time, and there's no reason why outcomes assessment can't do that as well. Barbara Walvoord has written of outcome assessment that it “does not limit itself only to learning that can be objectively tested. It need not be a reductive exercise. Rather, a department can state its highest goals, including such goals such as students' ethical development, understanding of diversity, and the like. Then it can seek the best available indicators about whether those goals are met.” Some learning objectives may not lend themselves as readily to measurement as others, no matter how creatively we try to look for evidence they've been met. But nothing in the outcomes assessment literature suggests we should reduce learning only to those forms that can easily be detected or counted numerically.

### **Doesn't Assessment Wrongly Presuppose That Instructors Are Entirely Responsible for Student Learning?**

Of course other factors besides the effectiveness of teachers enter into the teaching-learning process—most notably, the level of preparation and motivation of students themselves. No one seriously suggests that if students aren't learning, or aren't learning as much or as well as we'd like them to, the instructor is entirely responsible. Students have a role to play, as do administrators, governments (ranging from the local to the national), family members—even the culture as a whole. Outcomes assessment focuses on those aspects of learning that the instructor (and, to an extent, administration) can and does influence. It asks of us that we do our best to *clarify* our teaching goals, *determine* which goals students are having difficulty achieving, and do all we can within our power to *enhance* that achievement. But it recognizes that there are aspects out of our control.

### **Isn't Assessment Just an Educational Fad—Likely to Disappear As So Many Other Previous “Improvement” Initiatives Have?**

Some experienced instructors believe that outcomes assessment is simply the educational flavor of the month—or year—and can be ignored (or outwaited) because it is likely to go the way of so many other pedagogical dodos. DAC doesn't think that this is likely to happen, however. As noted elsewhere in this document, assessment is not a recent methodology, and assessment in general is clearly in the ascendancy throughout the country today, an integral measure of institutional effectiveness as defined by every regional accrediting commission. ACCJC's movement in 2002 toward outcomes-based standards was preceded by a similar evolution on the part of every other accrediting commission in the country. If assessment is a fad, it's one of the longest-lived fads in American history. At its core, outcomes assessment means looking for evidence about patterns of student learning achievement in an effort both to document and improve that learning. It's likely that the specific methods we employ in doing assessment will evolve in the coming years. But it seems highly unlikely to expect the need to gather evidence and use it for improvement will somehow mysteriously vanish.

### **How Can Instructors Be Expected to Find the Time to Do This Work?**

DAC understands very well that RCCD instructors are busy (and often exhausted) people, not only with teaching responsibilities but with what can sometimes seem like endless amounts of committee work. No one wants to impose the kinds of additional burdens on instructors that might lead to resentment or burnout. We've found, however, that meaningful forms of outcomes assessment can be done with only a modest amount of time committed to the process. We also believe that the time spent doing assessment is so intrinsically valuable that it can be seen as one of the best forms of professional development available to us. And the time spent on this work can often be regained at the "back end," when we find, as a result of our assessment efforts, that our teaching and curricula grow more efficient. DAC believes it can help disciplines develop assessment plans that are not unduly burdensome.

### **III. Guidelines for Disciplines Doing Outcomes Assessment At RCCD**

Disciplines should be routinely engaged in course- and/or program-focused outcomes assessment, with project cycles undertaken and completed every year. We also ask disciplines to participate in institution-level assessment whenever asked, helping to define, measure, and improve general education outcomes (see Appendix E) and other outcomes related to degree and credential patterns. In doing assessment that focuses on individual courses or on programs, here are some guidelines to follow:

- ***Option 1:*** *Course-based assessment for disciplines in which multiple instructors teach the same course and can work collaboratively to define and assess SLOs for that course.*

If at least one course in the discipline is taught by a number of different instructors, choose such courses and work collaboratively to assess learning outcomes in them. You may want to focus on one course at a time, perhaps assessing a single SLO in the initial effort or perhaps several related SLOs. Involve part-time instructors in the process as much as possible. Focus on an assignment or examination toward the end of the semester in which students

can be expected to demonstrate what they've gained from the course. Depending on the discipline, you might develop a rubric by which to assess learning in sample essays (or other kinds of student work) taken from many different sections of the course, or—if your discipline routinely employs objective tests as a way of evaluating students—you may simply want to embed common questions in such tests and aggregate results to see where students are having success or difficulty<sup>1</sup>. You can learn much more about how to develop rubrics and do course-embedded assessment by looking at examples from English, CIS, and Chemistry at the RCCD assessment website. Keep careful records of these course-based assessment projects, which should include sections on methodology, results, and analysis of results. Sometimes minutes of department or discipline meetings are useful appendices to show how results are used to improve teaching and learning. Plan to share results in the annual PR update.

- **Option 2:** *Course-based assessment for disciplines in which instructors mostly teach different courses, or in which collaboration among instructors is not possible in defining and assessing SLOs.*

If you teach in a discipline with few or no courses taught by multiple faculty members, you may not find collaboration feasible or desirable. And even some disciplines whose faculty do teach identical courses may not be able to work collaboratively on a process to do assessment. In that case, ask every instructor (full- and part-time) to choose a course she or he routinely teaches and develop an individual assessment project for it. Ask instructors to identify a significant SLO for a course they teach (they may be able to agree on a common, generic SLO to look it), then choose a major graded assignment in that class that they believe measures that SLO. Next, have them develop a rubric (or, for objective examinations, some other method of analysis) by which achievement of that SLO can be assessed. Once the course, SLO, and assignment are chosen and the method of assessment created, have instructors do the actual assessment. Finally, ask instructors to report on and analyze the results of the assessment, in writing. It's useful to plan some discipline meeting time for discussion of these results, but even more vital that they be captured in written form. Make sure that the reports describe how the instructor would change or improve the teaching of this assignment (and the assignment itself). Discipline discussion should identify common problems instructors are having and potential solutions to those problems. Keep careful records and share results on annual PR updates.

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<sup>1</sup> An example of such an approach at RCCD is a project by mathematics instructors focused on Math 52. The members of the discipline agreed to design a common final for the course, with 20 of the 45 questions mapping directly to six SLOs on the COR. Part of the exam was given as a pre-test, allowing for calculations of learning gains for various SLOs after sub-scores were calculated for each.

- **Option 3:** *Program-level assessment for disciplines, particularly in occupational education, which may find looking at learning patterns in sequences of classes (or classes that are required for a certificate) desirable.*

Some disciplines, particularly in occupational education, may want to focus their efforts on program-level assessment. If you want to assess sequences of courses that lead to credentials, we suggest the following strategy:

- Work as a discipline to identify SLOs for the program or certificate, involving adjuncts as much as possible.
  - Identify assessment methods that will enable the discipline to determine whether, and to what extent, those SLOs are achieved. As suggested below, student performance on national or state licensing exams may be a good initial assessment method, as are surveys of students on self-perceived learning gains, alumni, and employers. Focus groups might also be used for assessment purposes.
  - Interpret the results of the assessment in order to make improvements in the program or teaching of courses in it.
  - Keep careful records of your work and share results on annual PR updates.
- **Option 4:** *An alternative if none of the first three options seems feasible for your discipline.*

If, for whatever reason, none of the first three options seems to suit the particular needs of your discipline, you may petition DAC for approval of an alternate strategy. Make sure, whatever you do, to engage in an activity that enables you to learn more about your students as learners. Your method should allow you to document some of the learning that does take place in the discipline (e.g., through the use of portfolios of student work) and to identify areas in which you don't achieve the kinds of learning you'd like—so that you can begin to consider ways of improving. *Most importantly, your assessment efforts must move beyond conversation—though discipline conversations are valuable, and you should document them as much as possible in minutes and reports. But your efforts must reach the point of generation and interpretation of data about learning.*

Besides the direct assessment methods outlined earlier, all disciplines may want to consider other approaches to assessment as they develop and implement their comprehensive assessment plan. See Appendix A for examples of indirect assessment techniques. These methods should be employed in addition to, not in lieu of, the approaches outlined in section III.

## IV. Final Thoughts

At a college with more than 1000 courses listed in its catalog and hundreds of programs, comprehensive assessment of student learning is a daunting process. It will not happen overnight, and no one expects it to. Please bear in mind, though, that this must be an ongoing process. It's vital not to conceive of assessment as something we do only when our discipline is up for program review. DAC and its co-chairs are available to help you with all parts of the assessment process.

### Need Assistance?

When questions arise, please contact Arend Flick or Kristina Kauffman co-chairs of the District Assessment Committee. To review assessment plans of other disciplines at RCCD, visit the DAC website at <http://www.rcc.edu/academicaffairs/effectiveness/assess/index.cfm> and look at the samples under the "documents" section.

## V. Appendix

### A. Student Learning Outcomes and Assessment Methods

Assessment can either be *direct*, focusing on actual student work (essays, exams, nationally normed tests) where we look for evidence that learning has been achieved, or *indirect*, where we look for signs that learning has taken place through proxies or such "performance indicators" as surveys, focus groups, retention or transfer rates, etc. Both methods of assessment can be valuable, and in fact the assessment experts agree that no single assessment method should ever be relied on exclusively. The first step to any assessment plan is to define the student learning outcomes for the course or program under consideration: the things we want students to be able to do (or think or know) by the time they've finished a course of study.

#### Student Learning Outcomes

Student learning outcomes for courses or programs should share the following characteristics:

- They should describe the broadest and most comprehensive goals of the course or program, what assessment theorist Mark Battersby refers to as "integrated complexes of knowledge" or competencies. They should focus on what a student should be able to do with the knowledge covered, not simply on what the instructor will cover. Courses and programs may typically have three to five outcomes, though fewer or more are possible.
- They should employ active verbs, usually taken from the higher levels of Bloom's taxonomy (reprinted in the appendix to this document)—e.g., students should be able to "analyze" or "evaluate," not "define" or "describe."
- As much as possible, they should be written in intelligible language, understandable to students.
- As often as possible, they should arrived at collaboratively, as instructors who teach the same class or in the same program come to consensus about the key objectives of that unit of instruction. (For course-level SLOs, instructors will undoubtedly have SLOs of

their own in addition to consensus ones.) Adjunct instructors—and students themselves—should be involved in the process of developing SLOs as much as possible.

- SLOs should be measurable. Ideally, they should contain or make reference to the *product* (papers, projects, performances, portfolios, tests, etc. through which students demonstrate competency) and the *standard* (e.g., “with at least 80% accuracy”) or criterion by which success is measured. When the behavior/product and standard are specified, the SLO is sometimes referred to as made “operational.”

Consult Appendix D for links to the websites like Teachopolis, which have program tools for building SLOs, and 4Faculty.org, with useful overviews of SLOs and assessment methodology.

### Direct Assessment Methods

Some effective direct assessment methods that can be employed to measure achievement of SLOs in courses or programs include

- *Embedded assessment*, in which instructors use existing tests, exams, or writing prompts to identify learning trends in a particular course or group of related courses. A particular discipline might agree to give a common final in which questions are mapped to specific learning outcomes for the course, then the results aggregated. (A variation of this approach would require all instructors in a course to ask a set of common questions on a part of an exam, but permit them to develop instructor-specific questions for the rest of the exam.) Another discipline might simply decide to look at student writing on a variety of late-term essay assignments for evidence that certain learning outcomes have been met. The main advantage with embedded assessment is that it simplifies the assessment process, asking instructors to evaluate existing student work, but in a different way than they usually do and for a different purpose. It’s usually good practice to collect such assessment data in a way that would make evaluation of individual instructors impossible.
- *Portfolios* are collections of student work over time (a semester, a college career) that are used to assess either individual student learning or the effectiveness of the curriculum. Collected work may include papers, exams, homework, videotaped presentations, projects, and self-assessments. This is a particularly effective method of assessing institutional learning outcomes.
- *Capstone courses* are usually ones taken in a student’s final semester in a program and intended to allow students to demonstrate comprehensive knowledge and skill in the particular degree pattern. Capstone courses (and capstone projects usually required in such course) integrate knowledge and skills associated with the entire sequence of courses that make up the program. Assessing student performance in these classes therefore approximates assessment of student performance in the major as a whole.
- *Scoring rubrics* enable us to assess student performance captured in portfolios, capstone courses, or individual essays or performances. Individual instructors can employ them on their own, too. Look at a specific assignment—an essay, a demonstration, an oral report—in which student learning cannot be measured with numerical precision.

Develop (whether alone or with others) a scoring guide or checklist that will indicate various skill levels for various “primary traits,” with clearly delineated language suggesting the degree to which the assignment demonstrates evidence that the SLO has been achieved. If our SLO were “students should be able to write an adequately developed, well-organized essay that contains few major errors in grammar or diction,” a simple rubric by which to assess sample essays might look something like this:

<b>Learning Outcome</b>	<b>1-little or no evidence</b>	<b>2-insufficient evidence</b>	<b>3-adequate evidence</b>	<b>4-clear evidence</b>
Organization, Focus, and Coherence	A very disorganized essay, with inadequate or missing introduction, conclusions, and transitions between paragraphs.	An essay with significant organization problems, and/or inadequate introduction, conclusion, and/or transitions.	An organized essay, though perhaps marginally so, with adequate introduction, conclusion, and transitions.	A well-organized essay, with effective introduction and conclusion and logical transitions between paragraphs
Development	An essay with major development problems: insufficient, confusing, and/or irrelevant support for major points.	An essay with significant development problems: support for major points often insufficient or confusing.	A developed essay, though perhaps marginally so, with adequate support for most major points.	A very well developed essay, with full and effective support for all major points.
Conventions of Written English	Many significant errors in grammar, punctuation, and/or spelling.	Frequent minor errors and occasional major errors in grammar, punctuation, and/or spelling	Occasional minor errors but infrequent major errors in grammar, punctuation, and spelling.	Few or no errors in grammar, punctuation, or spelling.

This is an example of an *analytic* rubric, in which multiple performance indicators, or primary traits, are assessed individually. A *holistic* rubric aggregates these criteria into a single grading scale, so that (for example) an “A” essay might be distinguished by all of the features noted under a “4” above: with particular characteristics having to do with organization, development, and so on. A holistic rubric is useful for grading purposes, but it is typically too crude a measure to be employed in outcomes assessment work.

Rubrics can be developed collaboratively with students, and in the classroom setting they have the additional advantage of helping to make grading practices as transparent as possible. As assessment tools, part of their value is that they require instructors to “norm” themselves against a set of consensus evaluative criteria, enabling us to define (and hold to) our common teaching goals more sharply than we might otherwise do. Rubrics also let us identify specific areas where our students are having trouble achieving significant learning outcomes for our courses.

Links to websites that contain rubric-building templates and examples may be found in Appendix D.

- *Standardized tests*, particularly nationally normed tests of such institution-wide learning outcomes as critical thinking or writing, or discipline-specific tests like exams required of nursing or cosmetology students. Standardized tests may be useful measures if instructors agree to teach the skills that such tests can be shown to measure, and they have the advantage of providing departments with a national standard by which to measure their students. But standardized tests are costly to administer; students are often insufficiently motivated to do their best work when taking them; and as noted, they may not measure what faculty in the program actually teach.
- A *course-program assessment matrix* can also be used to map course SLOs with those of a broader certificate or degree pattern. It allows a discipline to gather more precise information about how its learning goals are being met more locally, in specific courses. Gaps between program and aggregated course outcomes can be identified. For a sample matrix of this kind, see Appendix B.

### Indirect Assessment Methods

- *Student surveys and focus groups*. A substantial body of evidence suggests that student self-reported learning gains correlate modestly with real learning gains. You may want to consider surveying students (or a sampling of students) at the end of a course of instruction (or after graduation from a program) to determine what they see as their level of achievement of the course or program's learning outcomes. You may also want to gather a representative group of students together for more informal conversation about a particular course or program when it has ended, asking them open-ended questions about its effect upon them. Surveys of alumni can also produce meaningful assessment data. These techniques are particularly valuable when done in conjunction with more direct assessment measures.
- *Faculty surveys*. Instructors can be asked, via questionnaires, about what they perceive to be strengths and weaknesses among their students.
- *Data likely to be kept by the Office Institutional Research* on retention, success, and persistence, job placement information, transfer rates, demographics, etc. may also be strong assessment tools. Consult the IR office (and its publications) for assistance with particular information you need. Some disciplines (particularly in occupational education) will have strong, if indirect evidence of student learning in these data.
- *Classroom Assessment Techniques*. DAC encourages instructors to familiarize themselves (and routinely employ) some of the classroom-based assessment techniques that Thomas Angelo and Patricia Cross detail in their (eponymous) text on the subject published by Jossey Bass. For example, instructors might use the "minute paper" at the end of a class period to have students respond quickly and anonymously to two questions: "what was the most important thing you learned today?" and "what important question remains unanswered?" CATs are ideal ways of helping instructors in specific classes determine what their students know and don't know, or are having difficulty learning. When you adjust teaching practices in light of the information you gather from a CAT, you're completing the feedback loop that is successful outcomes assessment. If members

of your discipline agree to employ CATs regularly, consider detailing their efforts in a report that can become part of an annual assessment report.

One caveat: indirect assessment measures should be used to augment, not substitute for, more direct measures. Ideally, in fact, *multiple* assessment methods should be employed whenever possible, so that student surveys (for example) can become a useful additional check against data derived from doing embedded assessment or administering standardized tests.

### B. A Sample Course-Program Assessment Matrix

This is the simplest matrix that allows a discipline to gather information about assessment being conducted in its courses and to map that information against its broader, certificate or degree-level goals. Each instructor in the discipline fills out the first matrix for the courses she or he teaches, then the discipline aggregates the data. This allows the discipline to see where it has disparate goals within the same course, and whether all of its outcomes are being assessed somewhere in the curriculum.

#### Completed by Each Instructor for His/Her Own Courses

**Name of Instructor:** Thomas

Degree Program Learning Outcomes [listed and numbered]

To the Instructor: For each course you taught last year or are teaching this year, place an X under every goal that you actively teach and significantly assess in a major exam or project. Leave the other cells blank.

Course	Program SLO 1	Program SLO 2	Program SLO 3	Program SLO 4	Program SLO 5
11	x	x			
12					
13					
14					
21					
23	x	x	x		
26					
30					
4			x	x	
(and so on)					

#### Department-Wide Summary

Course	Program SLO 1	Program SLO 2	Program SLO 3	Program SLO 4	Program SLO 5
11	100%	45%			
12	100%		100%		
13		84%	45%	59%	5%
14		37%	58%	100%	
21	100%	100%	100%		
(and so on)					

(adapted from Barbara Walvoord, *Assessment Clear and Simple*)

### C. Further Reading

- Banta, Trudy W., ed. *Hallmarks of Effective Outcomes Assessment*. San Francisco: Wiley, 2004.
- Palomba, C.A. and Trudy W. Banta. *Assessment Essentials: Planning, Implementing and Improving Assessment in Higher Education*. San Francisco: Jossey Bass, 1999.
- Suskie, Linda. *Assessing Student Learning: A Common Sense Guide*. Bolton, MA: Anker, 2004.
- Walvoord, Barbara E. *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*. San Francisco: Jossey Bass, 2004.
- Walvoord, Barbara E. and Virginia J Anderson. *Effective Grading: A Tool for Learning and Assessment*. San Francisco: Jossey Bass, 1998.

### D. Websites:

- <http://www.4faculty.org/>
- The California Assessment Initiative: <http://cai.cc.ca.us/>
- The Center for Student Success of the California College Research and Planning (RP) Group: <http://css.rpgroup.org/>
- Janet Fulks's excellent Bakersfield College website: <http://online.bakersfieldcollege.edu/courseassessment/Default.htm>
- The Teachopolis website, containing useful program tools for building SLOs: <http://www.teachopolis.org/myTA/index.html>
- For rubric builders and scoring downloads, consult: <http://rubistar.4teachers.org/index.php> or [http://landmark-project.com/classweb/tools/rubric\\_builder.php](http://landmark-project.com/classweb/tools/rubric_builder.php)
- North Carolina State University's comprehensive website, with many links to other assessment resources: <http://www2.acs.ncsu.edu/UPA/assmt/resource.html>
- Angelo and Cross's Teaching Goals Inventory at <http://www.uiowa.edu/~centeach/tgi/book.html>
- California State University's learning outcomes assessment website: <http://calstate.edu/AcadAff/SLOA/>
- Oklahoma State University offers assessment tips and examples of assessment methods: [http://www.okstate.edu/assess/assessment\\_plans/assessment\\_plans.htm](http://www.okstate.edu/assess/assessment_plans/assessment_plans.htm)

**E. RCCD General Education Student Learning Outcomes for Academic and Vocational Degrees****Critical Thinking**

- Analyze and solve complex problems across a range of academic and everyday contexts
- Construct sound arguments and evaluate arguments of others
- Consider and evaluate rival hypotheses
- Recognize and assess evidence from a variety of sources
- Generalize appropriately from specific cases
- Integrate knowledge across a range of contexts
- Identify one's own and others' assumptions, biases, and their consequences

**Information Skills**

- Demonstrate computer literacy
- Locate, evaluate, and use information effectively

**Communication Skills**

- Write with precision and clarity to express complex thought
- Read college-level materials with understanding and insight
- Listen thoughtfully and respectfully to the ideas of others
- Speak with precision and clarity to express complex thought

**Breadth of Knowledge**

- Understand the basic content and modes of inquiry of the major knowledge fields
- Analyze experimental results and draw reasonable conclusions from them
- Use the symbols and vocabulary of mathematics to solve problems and communicate results
- Respond to and evaluate artistic expression

**Application of Knowledge**

- Maintain and transfer academic and technical skills to workplace
- Be life-long learners, with ability to acquire and employ new knowledge
- Set goals and devise strategies for personal and professional development and well being

**Global Awareness**

- Demonstrate appreciation for civic responsibility and ethical behavior
- Participate in constructive social interaction
- Demonstrate teamwork skills
- Demonstrate understanding of ethnic, religious, and socioeconomic diversity
- Demonstrate understanding of alternative political, historical, and cultural viewpoints