

\*\*\*\*\*

Developing Course-Level Student Learning Outcomes:  
Why do we need them? What are the characteristics of good course-level outcome statements?

Presentation #1, September 29, 2003

\*\*\*\*\*

#### A. BACKGROUND INFORMATION:

Why do we need them? One of the often debated issues in developing institutional assessment efforts is "where do we start?" Some California Community College faculty have begun by clarifying course-level instructional goals. As Cross and Angelo (1993, p. 13) note, "to assess and improve instruction, faculty must first clarify exactly what they want students in their courses to learn. Once teachers know what their instructional goals are, and have determined the relative importance of those goals, they can begin to assess how well students are learning what they are trying to teach."

One way of expressing instruction goals is in terms of student learning outcomes, i.e., 'what a student is expected to know, understand, and/or be able to demonstrate after completion of a process of learning.' (National Credit Consortia, 2001). Through departmental discussions of the essential learning outcomes for a course, faculty can sharpen their shared understandings of the instructional goals for the course and its role in the curriculum. Additionally, students' performance on learning outcomes can provide faculty with a measure of the extent to which instructional goals are being achieved.

What are the characteristics of good course-level learning outcome statements?

The most comprehensive definitions of student learning outcomes contain three elements addressing:

1. what students should be able to do
2. the conditions under which they should be able to do it
3. how well they should be able to do it.

In our initial presentations, we will restrict our attention to the first component of this definition. Components #2 and #3, sometimes referred to as "performance elements," will be discussed in later presentations as we move toward assessing learning outcomes.

\*\*\*\*\*COURSE-LEVEL Component #1 Statements should\*\*\*\*\*

- \* Focus on what students should be able to do at the end of the course, i.e. they should reflect the desired end of the learning experience, not the means or the process;
- \* Use concrete verbs such as define, argue, solve, and create rather than vague verbs such as know or understand or passive verbs such as exposed to. (Walvoord and Johnson)
- \* Refer, as much as possible/practical, to observable and measurable knowledge, skills, or attitudes that are the essential outcomes of the learning experience (See Tip #3

and Walvoord and Johnson-Anderson (p. 19) for further thoughts on important, yet seemingly ineffable, instructional goals.)

\*\*\*\*\*SOME EXAMPLES\*\*\*\*\*

From an Elementary Algebra Course:

- \* Solve equations involving linear, quadratic, rational, and radical expressions

From an English Composition Course:

- \* Employ the conventions of written English to produce intelligible essays almost entirely free from errors in syntax, grammar, punctuation, and spelling

From a Nursing Course:

- \* Administer medications according to legal guidelines

\*\*\*\*\*

## B. PUTTING IT INTO PRACTICE: Tips for Stating Meaningful and Assessable Course-Level Learning Outcomes:

1. If the course-level learning outcomes are to be effectively used to enhance instruction and learning, they must reflect the shared instructional goals of the faculty teaching the course. To accomplish this, Arend Flick, RCC English instructor, recommends involving as many faculty as possible with the development of the course-level outcomes. Dr. Flick notes that what worked well for the English faculty at Riverside Community College (RCC) was to initiate discussion of the essential learning outcomes for English 1A (a college-level composition course) through a survey of all the discipline faculty. The survey results gave rise to a lot of small-group discussion, e-mailing back and forth, and periodic discussions with the discipline as a whole regarding the English 1A learning outcomes.
2. Dr. Susan Mills, Mathematics Department Co-chair and Outcomes Assessment Coordinator at RCC, notes that Bloom's taxonomy of cognitive objectives is a helpful tool for identifying appropriate verbs to use in learning outcomes statements. The web site: <http://faculty.washington.edu/krumme/guides/bloom.html> provides more detailed guidance on the use of the taxonomy
3. Janet Fulks, Bakersfield Community College Biology instructor, suggests taking a look at Angelo and Cross' online Teaching Goals Inventory at: [http://itsnt12.its.uiowa.edu/cft/tgi/FMPro?-db=tgi.data\\_fp5&-format=tgi.data.entry.html&-view](http://itsnt12.its.uiowa.edu/cft/tgi/FMPro?-db=tgi.data_fp5&-format=tgi.data.entry.html&-view). The inventory is easy to use (takes about 10 minutes or less) and provides an immediate analysis of the essential instructional goals for a course.
4. Another tip from Dr. Flick - often times the more complex and important learning outcomes are difficult to define and measure. It is important not to abandon these in

favor of trivial learning outcomes that can be easily measured. Instructional goals should always drive assessment. Assessment considerations should not drive the selection of instructional goals.

\*\*\*\*\*

C. OTHER RESOURCES:

Angelo, T. A. and Cross, K. P. (1993). Classroom Assessment Techniques: A Handbook for College Teachers, John Wiley & Sons, Inc., San Francisco.

Palomba, C.A. and Banta, T.W. (1999). Assessment Essentials: Planning, Implementing and Improving Assessment in Higher Education; Jossey-Bass, San Francisco.

Walvoord, B. E. and Johnson-Anderson, V. (1998) Effective Grading: A Tool for Learning and Assessment; Jossey-Bass, San Francisco.

Web sites:

"How to write learning outcomes" by Alan Jenkins & Dave Unwin at:

<http://www.ncgia.ucsb.edu/education/curricula/giscc/units/format/outcomes.html>

<http://www.brookes.ac.uk/services/ocsd/firstwords/fw32.html>

<http://dental.gbrownc.on.ca/programs/insadult/currlo.htm>

<http://www2.bc.cc.ca.us/tl>

\*\*\*\*\*

D. REQUESTED FEEDBACK: What have been some of the major difficulties you have encountered with articulating course-level learning outcomes? What have been the most effective methods or strategies that you have used to overcome these difficulties?

## Summary of Feedback from Presentation #1

Dear Subscribers,

Thanks you for the many helpful and insightful observations you sent to the Listserv moderators last week. Below is a summary of your responses. Please send us your comments this week (by 5 pm on Friday) on the issues discussed in the summary below.

Thanks,

Your moderators: Bob, Jerry, & Rick

\*\*\*\*\*

Moderators' Summary #1:

Summary of Feedback from Presentation #1

October 6, 2003

\*\*\*\*\*

### A. GENERAL OBSERVATIONS:

In many ways, the feedback we received on Presentation #1 served to highlight the central challenges of developing practical and meaningful ways of assessing student learning outcomes and will help us frame our Listserv discussion over the coming months. It appears that all of us would agree that education, training, and healthy communication (dialogue) about learning outcomes and their attainment are the foundation of an effective approach. To do so, however, requires that an appropriate, and at times a delicate, balance be struck on a number of issues.

1. Providing institutional resources, structure, and support for assessment without becoming an overly prescriptive, stifling, and/or bureaucratic process. For example, Dr. Jane Jensen, Educational Policy faculty member at University of Kentucky asks, "In what way do we avoid having this pedagogic activity become a bureaucratic one?"
2. Developing clear, specific, and measurable learning objectives that can be used in assessment processes without losing the essence of the instructional goal.
3. Developing assessment tools that provide valid and reliable data without being too cumbersome or time-consuming to properly implement.
4. Building comprehensive system of outcomes assessment that link course - program - degree outcomes without being too cumbersome or time-consuming to properly implement and maintain.

\*\*\*\*\*

### B. ADDITIONAL TIPS FROM THE FIELD:

1. Dr. Susan Dressler, VP of Instruction at Cuesta College writes that they have had success in developing course level learning outcomes with the following steps: 1) include information and examples of course level outcomes in the Curriculum Handbook; 2) provide training annually for faculty on how to develop curriculum including outcomes; 3) continuously stress this when reviewing course outcomes by the Curriculum Committee.

2. Dr. Gordon Lam, Assistant Professor of History at Folsom Lake College, says " The entire topic of student learning objectives is predicated on successful "dialogue". For me, that is the key ingredient to our successful efforts in implementing SLOs. A good start for our organization has been to revisit that communication technique and promote its use in other aspects of our collegial discourses."

3. Anna Martinez, Reedley College found that good examples of course level outcome statements ("the more the better -especially if they come from different disciplines") are helpful for starting assessment efforts.

4. Joan Thomas-Spiegel, LA Harbor College, writes "We examine the course outlines (which by now have all been updated to include course outcomes) and begin there. First, we agree that the course outline outcomes are appropriate. If not, we discuss and make changes. Then we provide formats and discussion for what type of activities in the class and assignments will lead the student to accomplish those course outcomes/objectives.

5. Dr. Carol Bennett, Santa Rosa Junior College, also finds that course outlines provide a useful starting point. She says " many of our formal course outlines of record are already using nicely written objectives that clearly address student outcomes.

Your items 2 and 3 --(#2. the conditions under which they should be able to do it #3. how well they should be able to do it.)

-- are where the attention needs be focused for our faculty and staff to grow the existing well written objectives into SLOs.

6. Dr. Alan Keyes, Assistant Professor of Psychology/Research at Sacramento City College, observes that "... Often course objectives are stated in general terms in order to encompass a variety of specific learning goals. When faculty, myself included, are asked to operationally define these types of course objectives it is often quite a difficult process at first. However, active exploration of the specific intentions of an objective and the exposure to verbal tools, such as Bloom's taxonomy often lead to more concrete objectives that are potentially measurable.

Taking a step-by-step approach from clarification of objectives to the alignment between these objectives with course activities that help to achieve them often leads to EXISTING outcomes measures that are embedded in course examinations, projects, or other assignments. The other main challenge is extracting or modifying these existing measures from aggregate scores or grades in order to link them with specific objectives. Sometimes all it takes is transposing the rows of a gradebook to columns in order to produce objective-specific outcome measures."

\*\*\*\*\*

C. ADDITIONAL RESOURCES:

Dr. Lam suggests that the forms colleges use to articulate curriculum/course outlines are useful tools for developing course-level learning objectives.

\*\*\*\*\*

D. REQUESTED FEEDBACK:

"Course Outlines of Record" appear to be a helpful starting point for developing and refining course-level outcome statements. Our next presentation will explore this issue. Do you have any resources, experiences, or comments that you would like to share with your Listserv colleagues on this topic?