## **CTE Program Assessment Guidelines and Template**

(or, How to Assess a CTE Program in Two or Three Hours)

#### **Background**

The Accrediting Commission for Community and Junior Colleges (ACCJC) expects that "authentic assessment" of all courses, *programs*, and degrees be "in place" at California Community Colleges as of fall, 2012" (emphasis added). Authentic assessment is usually understood to refer to the use of <u>direct</u> assessment methods in measuring student learning—examining or reexamining what students actually do in the classroom, not what they say they have done or can do. During the 2012-13 academic year, Norco College has worked vigorously to ensure that it meets this mandate. To complete an initial cycle of assessing our A.A./A.S. degrees from which students most frequently graduate, we are collecting data this spring from approximately 75 classes. Those data will be analyzed over the summer and reports on each of the seven major areas of emphasis written in early fall. In fall, 2013, we will be assessing at least one of the main general education outcomes (and continue to assess other outcomes in successive fall semesters), and we will also begin initial assessment work on the new TMC majors.

Assessing CTE programs is equally important, not only to satisfy ACCJC requirements but also for its benefit to student learning. We need to know where our graduates are succeeding and in what areas they are struggling so that we can better help them meet our goals—and theirs. With over 40 CTE programs at Norco of 18 units or more (California Educational Code defines "programs" as those greater than 17 units), program assessment places a considerable burden on an already overworked CTE faculty. The Norco Assessment Committee has tried to develop some recommendations for CTE program assessment that will enable faculty to complete meaningful, authentic assessment of the programs in a reasonable amount of time.

It's important that all CTE programs complete a cycle of assessment in 2013, preferably during spring semester. Reports on these projects should also be submitted in 2013 or, at the latest, by February 2014. Thereafter, we expect to develop a schedule (with input from CTE faculty) that will ensure each CTE program is regularly assessed, though certainly not in every semester.

A reporting template for completing CTE assessment may be found in the appendix to this document. A writable pdf version of the form will be available shortly at the NAC website: <a href="http://www.norcocollege.edu/employees/faculty/Pages/Outcomes-Assessment.aspx">http://www.norcocollege.edu/employees/faculty/Pages/Outcomes-Assessment.aspx</a>. Until our TracDat software is in place, CTE program reports should be sent to the Office of Student Success.

#### **Methodology**

Assessment at Norco College rests on the fundamental principle that mandating a uniform assessment method for all courses or all programs is not a good idea. Obviously, the instruments we use to measure learning within our classes vary widely from discipline to discipline, and even from instructor to instructor. Likewise, in the area of outcomes assessment, no single method is superior to all the others. Certainly at the course level, we have seen robust, authentic assessment generated from the use of rubrics that allow for the scoring of essays, presentations, or projects; the evaluation of questions embedded in multiple choice exams; the comparison of post-tests with pretests; and a number of other methods. Accordingly, CTE programs are free to choose their own method of assessing student learning in their program—as long as they employ at least one direct

assessment method. Below we provide detailed instructions for doing a form of "good enough" assessment that should be adopted when no other technique is readily available.

## **Indirect assessment**

CTE programs do <u>not</u> have to engage in indirect assessment or provide indirect assessment data. However, most will benefit from employing at least one form of indirect assessment along with a form of direct assessment, since one form has the potential to reinforce the findings of the other. Methods that might be considered, depending on the specific program, include:

- The use of learning gains surveys, in which graduates from a program are asked to what extent they think they achieved the learning outcomes of that program. We continue to work toward embedding these surveys into the certificate application process, and we would expect that most programs would want to look at these data when the write their assessment reports. Faculty who teach capstone-like courses can survey their own students (perhaps even specifically surveying students whom they know to be in and near the end of the program) for this same information. Please be clear, however: we cannot rely exclusively on learning gains surveys in assessing our courses or programs.
- If mechanisms can be developed that permit programs to do follow-up interviews, focus groups, etc. with alumni, learning gains questions can also be asked. It's important to note that general questions about employment status, general degree of satisfaction with the program, etc. are not strictly speaking relevant to the issue of learning gains in the program.
- Surveys of employers or advisory boards may also be conducted and used as part of outcomes assessment, provided that questions target learning issues specifically.

# **Direct assessment**

Among the methods programs might consider to assess learning, here are some of the most commonly used at other colleges and universities:

- Collection and interpretation of results of external licensure exams. Where they exist, as in Nursing, Cosmetology, etc., these are excellent forms of direct assessment, as long as data are tracked longitudinally and problem areas noted and addressed. Such licensure exams seem to be unavailable to Norco College CTE faculty, however.
- Aggregating course assessment data and mapping it to PLOs. Instructors of various courses that make up the program may be asked to assess a particular PLO within the course and information collected to provide a snapshot of PLO achievement. A problem with this approach can be that not all students in a particular course are taking it as part of the overall program.
- Assessing learning in a capstone (or capstone-like) course in the program. Some programs have courses that are taken mostly by students in, and near the end of, the program. These can be identified and PLOs assessed, making course assessment a valid form of program assessment. Generally, program assessment using a capstone (or capstone-like) course focuses on a culminating project in which students can be

expected to demonstrate all (or almost all) of the learning outcomes of the particular program.

• Students in programs may be asked to build electronic portfolios containing examples of their work as a condition of passing a particular class or even being given a certificate. Eportfolios permit faculty to assess student achievement of PLOs with relative ease. Faculty can examine representative samples of student work within particular programs against rubrics that measure achievement of particular PLOs. Please note, however: a collection of eportfolios alone does not represent a form of learning assessment. The collection (or a sample from the collection) must be evaluated, typically against a rubric, for assessment to have taken place.

What to do if capstones, eportfolios, etc. are not feasible for your program? Here is a relatively simple, not-very-labor-intensive approach to doing "good enough" direct assessment for your program:

- 1. Identify a particular PLO to assess. You're free of course to look at more than one program level outcome, even all of them, but focusing on a single PLO in a first project makes the project more manageable. Choose a PLO that you think is reasonably well written (save the ones in need of modification for later). Ideally, the PLO should be one you suspect students are having difficulty with—merely confirming that they've learned what you know they've learned won't be of much value.
- 2. Identify two or more courses which have SLOs that map to the PLO(s) you plan to assess. The courses should ideally be ones advanced enough to have majors (or prospective majors) in them. Try to avoid introductory courses if you can. If you have a true capstone course, or a capstone-like course that is taken largely be students in the program, you might get by with that course alone. But multiple courses work best for a project like this.
- 3. Ask instructors in these classes to examine a late-term project, presentation, or exam for evidence of student achievement of this PLO (or these PLOs). We recommend that you use a simple four-point scale for this activity, with 4 = strong evidence of achievement, 3 = adequate evidence of achievement, 2 = inadequate evidence of achievement, and 1 = little or no evidence of achievement. (Some programs will want to write more specific or rigorous scales to reflect what knowledge looks like in this particular PLO.) Instructors assign a number ranging from 4 to 1 for each student in their courses in terms of their level of PLO mastery based on this particular assignment. (With multiple choice exams, instructors map questions to the PLO and give 4's to students who answer 85% of the correctly or higher, 3's to students who answer 70 84% of them correctly; 2's to students who answer 55 to 69% of them correctly, and 1's to students who answer 54% or below of them correctly.¹) Instructors provide scores (keyed to student identification numbers) on Scantron sheets or Excel spreadsheets (exporting student rosters to Excel spreadsheets is a simple process). Linking scores to student ID numbers permits analysis of how well various categories of students (e.g., those with more than 15 units in the program) achieved the outcome.

3

 $<sup>^{1}</sup>$  The cut score percentages may of course be adjusted upward or downward to suit the needs of a particular program.

- 4. Scantrons or spreadsheets may be sent to the Office of Institutional Effectiveness for analysis with student performance broken down by number of units completed in the program. Reports reflecting further analysis of the data are written and submitted to the Institutional Effectiveness Office.
- 5. During this process, program assessment leaders dialogue as much as possible about methodology and results with colleagues. Evidence of that dialogue should be provided in the report.

We expect this process to be greatly simplified when our new TracDat software comes online in fall 2013 or early spring 2014. It should permit faculty to see their student rosters on a screen, with check boxes that will let them score student performance with a simple series of clicks. Data can then be uploaded for analysis. But with an accreditation visit looming, we need to try to complete a cycle of assessment before the TracDat system is implemented.

# Norco College Program Assessment Report (for initial assessment)

Name of Program
Number of units
Number of graduates in the program, 2012
Lead Person
Semester/year
Program Curriculum Mapping (please attach a copy of your SLO-PLO matrix)
1. In examining your matrix, did you identify any gaps that might make it possible for a student to complete the program without having been exposed (or exposed sufficiently) to a particular PLO? If so, how might the program be modified to eliminate gaps and create better alignment between course SLOs and the PLOs?
2. Does your list of PLOs require modification in any way, either by addition, subtraction, or alteration in wording? If so, when do you expect to complete that modification?
3. Should any courses be added or subtracted from the list of elective courses for the program? Should any particular courses be required or removed from required status? (Please explain.)

**Program Assessment Report** 

1.	Which PLO(s) did you assess?
2.	What method(s) did you use to assess it/them? (Please provide a brief description and attach instruments, rubrics, etc. in the appendix).
3.	Who besides yourself was involved in this work (e.g., by providing sample student work, evaluating student work, assisting in the interpretation of data, etc.)? Describe and provide evidence for any dialogue you had on assessment data and results.
4.	Provide a short summary/overview of the data you collected (attach any detailed data sets in the appendix, being careful not to include names of students). Were you generally satisfied with the results? Why or why not? If you assessed multiple PLOs, which one(s) did students do best and worst with?
5.	Based on these results, what suggestions do you have for program improvement?
6.	What timeline do you propose for implementing changes in the program?