Sample process

1. Establish a measurable learning outcome.
2. Decide how you will assess the outcome.
   Depending on the discipline, instructors may decide to share common exam questions, common exams, or common rubrics.
3. Set a benchmark so you’ll know when the goal has been achieved.
4. Collect random samples from a rotating set of core classes.
5. On a rotating basis, involve all faculty (full time, adjunct, and non-Arts and Sciences) in blind evaluation of assessments.
6. Analyze results and decide on adjustments to outcomes, benchmarks, instructional methods, or assessments as necessary.
Examples from CPCC’s Vanguard Learning College Project

### 2000-2001 Revised General Education Goals and Possible Courses for Assessment

<table>
<thead>
<tr>
<th>General Ed Goal</th>
<th>Possible courses for assessment</th>
</tr>
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<tbody>
<tr>
<td><strong>Reading</strong> - Students will demonstrate the ability to obtain meaning from printed, electronic, and graphical resources.</td>
<td>RED090</td>
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<tr>
<td><strong>Communication</strong> – Students will effectively communicate both orally and in writing. Students will demonstrate the ability to locate, critically evaluate, and present information.</td>
<td>COM110 COM231 ENG111</td>
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<tr>
<td><strong>Mathematics</strong> – Students will apply mathematical concepts and skills to analyze, manipulate, and interpret quantitative data.</td>
<td>MAT115 MAT161</td>
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<tr>
<td><strong>Computer Skills</strong> – Students will demonstrate the basic computer skills necessary to function in a technological world.</td>
<td>CIS110 CIS111</td>
</tr>
<tr>
<td><strong>Critical Thinking / Problem solving</strong> – Students will demonstrate an understanding of solving problems by recognizing the problem; reviewing information about the problem; developing plausible solutions; and evaluating results.</td>
<td>ENG111</td>
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<tr>
<td><strong>Cultural Awareness</strong> – Students will demonstrate knowledge of cultural differences.</td>
<td>ENG111</td>
</tr>
<tr>
<td><strong>Social / Behavioral Sciences</strong> – Students will demonstrate an understanding of the influence of the individual on group behavior and conversely, the influence of the group on the individual.</td>
<td>PSY150 HIS111 SOC210</td>
</tr>
<tr>
<td><strong>Natural Sciences</strong> – Students will demonstrate comprehension of the major steps of the scientific method.</td>
<td>BIO110</td>
</tr>
<tr>
<td><strong>Humanities / Fine Arts</strong> – Students will demonstrate knowledge of the humanities and critical skills in assessing cultural/artistic merit and significance.</td>
<td>Rotate through all humanities courses</td>
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</tbody>
</table>
General Education Goal Area: Oral Communication

Goal: Students will effectively communicate both orally and in writing. Students will demonstrate the ability to locate, critically evaluate, and present information.

The requirement of a communication course for students is designed to assure that each student meets a minimal level of competence in organizing and presenting information for a public speech. For this reason, faculty set the following objective:

Objective: 70% of students will meet minimal objective for effective oral presentation.

Means of assessment: 70% of student speeches evaluated will receive at least a score of 3 or better on a 5 point evaluation rubric.

In order to measure objectives and student outcomes, faculty recorded final presentations in selected speech courses during the fall of 2000. Each presentation was then viewed and assessed by at least two coders and a number was assigned to that presentation based on a guiding rubric. If assigned scores were either identical for that presentation or within one score, the score itself or an average of the two adjacent scores was counted. Any speech that received scores from the two viewers that were either not identical or not adjacent scores was viewed by a third instructor.

Results:

Fifty speeches were collected. Forty-eight were evaluated because two speeches were incomplete on the tape. No speeches had to be viewed by a third instructor because of discrepancy in scores.

The scores for the 49 speeches that were evaluated are as follows:

A1 – 2   B1 – 2   C1 – 3.75   D1 – 3.5   E1 – 4.5   F1 – 3.375
A4 – 3   B4 – 3.5   C4 – 4.25   D4 – 2.5   E4 – 3.25   F4 – 4
A5 – 3.5  B5 – 3   C5 – 2.75   D5 – 3.0   E5 – 2.5   F5 – 2.5
A6 – 3   B6 – 3.5   C6 – 3.5   D6 – 3.5   E6 – 2.5   F6 – 3.375
A7 – 4   B7 – 3.5   C7 – 4.25   E7 – 1.875
A8 – 2.5  B8 – 3   C8 – 4.0   E8 – 2.75
C9 – 3.25   E9 – 3.5
C10 – 3.5
C11 – 4.5
C12 – 3.5

Of those evaluated, 70.8% of student speeches received a 3 (1 = poor; 5 = excellent) or better from evaluating faculty.

The Oral Communication Goal was Met.
General Education Goal Area: Mathematics

Goal: Students will apply mathematical concepts and skills to analyze, manipulate, and interpret quantitative data.

Math faculty determined that the skills necessary to meet the above goal are:

1. The ability to analyze quantitative data
2. The ability to manipulate quantitative data
3. The ability to interpret quantitative data

Therefore, the following objective was set for the purpose of general education assessment:

Objective: 60% of those taking the final exam will show mastery of all three goals.

Means of assessment: 60% of those taking the final exam will correctly answer three of five questions on each of the three goal areas.

Math faculty developed a testing instrument that consisted of 15 multiple choice questions - five for each of the three skill areas adopted by the department. The questions were prepared each semester and included in the final exam. Students were considered to have "mastered" the skills if three of the five questions were answered correctly on each of the goal areas.

During the pilot study year, the assessment was given to one class of students with the following results:

Number taking the exam 22
Number passing the course 17
Number who met the criteria in all three goal areas 14 (63.6%)
Number who met the criteria for two goals 3 (13.6%)

After the pilot test results, the math faculty revised their assessment tool and began full implementation in Fall 2001.

The Math Goal was Met.
General Education Goal Area: Critical Thinking and Problem Solving

New Goal: Students will demonstrate an understanding of solving problems by recognizing the problem; reviewing information about the problem; developing plausible solutions; and evaluating results.

During the Spring of 2001, 64 student papers were selected for the purpose of assessing critical thinking and problem solving skills. Papers were graded utilizing a grading rubric scaled from 1 to 5.

Objective: At least 60% of students will score a 3 or better on the critical thinking and problem solving assessment.

Assessment results were as follows:

<table>
<thead>
<tr>
<th>Scoring Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 – 5</td>
<td>28.1%</td>
</tr>
<tr>
<td>2</td>
<td>59.4%</td>
</tr>
<tr>
<td>1</td>
<td>12.5%</td>
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</tbody>
</table>

The Critical Thinking and Problem Solving Goal was not Met.