



## **Western New England College**

### ***Assessment of Student Learning: An Introduction***

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## ***I. Background***

### **History of movement nationally**

Higher education has been targeted for accountability from the mid '80s, but momentum has picked up since the early '90s. Pressure has come from accrediting bodies, both regional and specialized, and from the “customers” of our educational product. The national focus resulted from a confluence of events: the dramatic rise in the cost of education, skills (or lack thereof) of college graduates, type of jobs filled by graduates, and the financial aid default rate.

The response from institutions of higher learning followed Total Quality Management (TQM) or Continuous Improvement models of business. The student has been identified as our educational product; our customers include: the student, parents, employers, society, and other institutions of higher learning that might enroll the graduate.

In addition, developments such as: grade inflation, lowering of academic standards, performance and attitudes of our graduates, students as “revenue” source and tuition increases, brought attention to the need for oversight and evaluation. It is not surprising, then, that assessment of student learning has become a national concern.

### **New England Association of Schools and Colleges (NEASC) requirements**

NEASC is the accrediting association for Western New England College. In 1992, NEASC reaffirmed the importance of each educational institution measuring its effectiveness, which had been written into each of its individual standards. To highlight their commitment, the Commission issued a *Policy Statement on Institutional Effectiveness* that discusses the assessment of institutional effectiveness.

NEASC is interested in student learning. They look to both the process and demonstrated achievement of student learning outcomes.

### **Western New England College (WNEC) response**

Western New England College has responded to the Commission’s statement in our reaccreditation letter of 1992. NEASC said: “It is important that the institution has in place mechanisms for determining student competencies and the attainment of learning objectives.” In our 1997 reaccreditation letter, NEASC called for WNEC’s “developing an integrated system of assessment throughout the institution.”

Presently there is a Faculty Senate Committee on Assessment, a Coordinator of Assessment, and Faculty Development funding for assessment-related activity. Annually each academic department submits an assessment report to the Provost. The non-academic areas have initiated unit effectiveness models. In addition, several programs and schools have assessment mandates from their specialized accrediting agencies.

## II. *Language of Assessment*

Like any specialized area, there is jargon to master. On our campus, the following is commonly accepted terminology.

**Assessment Process:** A way to improve institutional effectiveness.

- ◆ Process centers around the Mission and Purposes of the institution
- ◆ Process is built on educational objectives and expected student learning outcomes
- ◆ Primary focus is on the teaching/learning experience
- ◆ Continuous circular process of gathering evidence on how well we achieve our educational objectives, interpreting this evidence, sharing results, making changes to improve, and sharing this information with others
- ◆ Ultimate purpose of academic assessment is to improve student learning

**Learning Outcomes:** New or increased knowledge, skills, abilities and/or a change in attitudes, values, behavior, and status that is desired or expected of our graduates.

- ◆ Articulated in measurable language by faculty, administration, and staff
- ◆ Represent what our students should know or be able to do when they graduate
- ◆ Are in agreement with the Mission and Purposes of the institution
- ◆ Are reviewed periodically

**Outcomes Measurement:** Systematic measurement of the achievement of the expected outcomes.

**Classroom Assessment:** A simple method faculty can use to collect feedback, early and often, on how well their students are learning what they are being taught. The purpose of classroom assessment is to provide faculty and students with information and insights needed to improve teaching effectiveness and learning quality. (Angelo, 1991)

**Institutional Effectiveness:** The capacity of an institution to assess, verify, and enhance the fulfillment of its mission and purposes, giving primary focus to the attainment of its educational objectives.

**Direct Evidence:** Student work samples, such as capstone projects, course-embedded assessment, standardized tests.

**Indirect Evidence:** Data such as from alumni surveys, job placement, focus groups.

**Matrix:** Method of matching and recording information, such as a curricular matrix of desired outcomes and where in the curriculum (or extracurriculum) students are able to attain these.

### *III. Levels or Dimensions of Academic Assessment*

Academic assessment has more than one dimension. While we normally assume an all-encompassing entity, ie., the institution, as facilitating student learning, for measurement and analysis, we generally identify the levels as:

- ◆ Institution
- ◆ School
- ◆ Program Major
- ◆ Minor or Certificate
- ◆ Course
- ◆ General Education
- ◆ Institutional Support Units

### *IV. What Might be used as Evidence*

There are many types of assessment methods and there is no one “best” model. In fact, multiple assessment techniques are recommended because each instrument captures different information.

**Question? Why aren't course grades enough?** Course grades are important assessment tools, but they usually measure limited course outcomes. The assessment process is more comprehensive and long-term in nature. Besides, we are ultimately interested in improving curriculum, teaching, and other processes that contribute to student learning overall. In addition, good assessment relies on analysis by several evaluators of the same information, thereby reducing the bias inherent when the classroom instructor is the only evaluator.

Below are some examples of ways to measure expected outcomes. Other tools are also used on out campus.

#### **Institutional Level**

##### *Direct Evidence of student learning*

- ◆ Focus groups
- ◆ Placement tests
- ◆ Other

##### *Indirect Evidence of student learning*

- ◆ Alumni surveys
- ◆ Employer surveys
- ◆ Graduate follow-up studies
- ◆ Retention and transfer studies
- ◆ Length of time to obtain degree
- ◆ Graduation rates and transfer rates
- ◆ Job placement statistics
- ◆ Unobtrusive measures, such as facility utilization of labs, etc.
- ◆ Entrance surveys
- ◆ Exit Interviews
- ◆ Focus groups
- ◆ Recruiter surveys
- ◆ Other

## **School Level**

### *Direct Evidence of student learning*

- ◆ Portfolio assessment
- ◆ Capstone experience (Comprehensive)
- ◆ Senior projects
- ◆ Thesis
- ◆ Internship
- ◆ Other

### *Indirect Evidence of student learning*

- ◆ Student surveys
- ◆ Senior exit interviews
- ◆ Graduate follow-up studies
- ◆ Other

## **Department Level**

### *Direct Evidence of student learning*

- ◆ Standardized tests (ETS, GRE, GMAT)
- ◆ Capstone experience (Course; internship)
- ◆ Locally developed tests
- ◆ Comprehensive examination
- ◆ Essay questions blind scored across units
- ◆ External juried review of student projects
  
- ◆ Internal juried review of student projects
- ◆ Externally reviewed internships
- ◆ Portfolio assessment
- ◆ Peer teaching evaluations
- ◆ Outside reviewers
- ◆ Focus groups
- ◆ Pre- and Post- tests
- ◆ Performance on National Licensure exams
- ◆ Simulations
- ◆ Senior project
- ◆ Senior thesis
- ◆ Exhibits
- ◆ Performance experience
- ◆ External program review
- ◆ Other

### *Indirect Evidence of student learning*

- ◆ Program Review (with external peer review)
- ◆ Graduate School placement; fellowships
- ◆ Awards; prizes
- ◆ Transcript analysis
- ◆ Unobtrusive measures (use of labs; tutors)
- ◆ Surveys of alumni
- ◆ Graduating senior survey
- ◆ Other

## Course Level

### *Direct Evidence of student learning*

- ◆ Course-embedded measures
- ◆ Comprehensive examinations
- ◆ Performance measures, such as papers, projects, and presentations
- ◆ Simulations
- ◆ Journals, logs
- ◆ Student self-assessment
- ◆ Pre and post tests
- ◆ Portfolios
- ◆ Other

### *Indirect Evidence of student learning*

- ◆ Student evaluations
- ◆ Self-reported measures
- ◆ Other

## General Education

### *Direct Evidence of student learning*

- ◆ Multiple points: Beginning, middle, end
- ◆ “Rising Junior” test
- ◆ Peer exams [GRE, LSAT, GMAT, MCAT, etc.]
- ◆ Student portfolios: Student reflects on self as a learner
- ◆ Faculty developed exams
- ◆ Exit interviews
- ◆ Other

### *Indirect Evidence of student learning*

- ◆ Satisfaction surveys: Entry, end of first year, graduating
- ◆ Other

## **Things that DO NOT Indicate Student Learning (but might give information about effectiveness)**

- ◆ Faculty publications (unless students are involved)
- ◆ Courses selected or elected by students
- ◆ Faculty / Student ratios
- ◆ Percentage of students who study abroad
- ◆ Enrollment trends
- ◆ Percentage of students who graduate within five – six years
- ◆ Diversity of student body
- ◆ Satisfaction surveys
- ◆ Other

## ***V. Questions about Teaching and Learning***

As attention has shifted from teaching to learning, it is useful to consider the following questions articulated by NEASC. They are intended to help you develop your course and prepare your syllabus. Additional templates and source materials are provided in the Appendices to guide your thinking.

- ◆ What do you expect your students to know and be able to do by the end of their four years at your institution?
- ◆ What do the curricula and other educational experiences “add up to?”
- ◆ What do you do in your classes to promote the kinds of learning/development that the institution seeks?
- ◆ Which students benefit from which classroom teaching strategies?
- ◆ What educational processes are responsible for the intended student outcomes the institution seeks?
- ◆ How can you help students make connections between classroom learning and experiences outside of the classroom?
- ◆ How do you intentionally build upon what each of you teaches to achieve institutional educational objectives?

## ***VI. Some Reminders about Assessment***

- ✓ Assessment instruments should measure expected outcomes
- ✓ Expected outcomes need to be clear to student and teacher
- ✓ No one instrument captures everything; use more than one
- ✓ External review is an appropriate complement to internal assessment
- ✓ Demonstrating learning over time is ideal
- ✓ Results need to be shared, acted upon, and re-measured – close the loop

## *Appendix A*

### **Template for Course Review**

1. Course is:
  - General Education requirement
  - Major, Minor, Certificate requirement
  - Elective
  
2. Type of course offered:
  - Multiple sections
  - Individual section
  - Special topic/periodic
  - Distance learning
  - Other \_\_\_\_\_
  
3. Class composition:
  - Freshmen
  - Sophomore
  - Upper-level
  - Traditional students
  - Adult learners
  - Distance learners
  - Other \_\_\_\_\_
  
4. Learning outcomes (what students should know or be able to do):
  - Clearly articulated
  - Appropriate to type of course
  - Appropriate to class composition
  
5. Standards for achievement of outcomes (rubric or scale):
  - Appropriate to type of course
  - Appropriate to class composition
  
6. Assessment techniques:
  - Tied to outcomes
  - Varied to capture different learning styles
  - Useful for modifying course on regular basis
  - "Evidence" of learning available for analysis

7. Course coverage

- Matrix of course topics and program objectives
- Fits with the rest of curriculum

8. Pre-requisites:

- Identify
- Explain rationale

9. Assignments:

- Match with learning outcomes
- Appropriate to type of course
- Appropriate to class composition

10. Pedagogy

- Effective in enabling students to achieve outcomes at required level

*Appendix B*

**Sample Syllabus  
Western New England College  
School**

**Course Title:  
Semester, Date**

**Instructor:  
Office:  
Telephone:  
Office Hours:**

**Pre-requisite:**

**Course Description:** (Course focus, main topics emphasized)

**Required Material:** (Books, computer supplies, etc.)

**Supplementary Materials:** (Optional)

**Learning Objectives and Assessment:** The learning objectives of this course and the assessment methods used are summarized as follows. After taking the course, students should have:

<b>Program Objectives</b>	<b>Objectives/Outcomes (Course)</b>	<b>Assessment</b>

**Course Requirements:** (Should be tied to grading schedule)

1. Assignments/Homework:
2. Examinations:
3. Quizzes:
4. Projects:
5. Attendance: (Explain how students will get points, if appropriate)
6. Participation: (Explain how students will get points, if appropriate)
7. Writing Component

**Method of Instruction:** (Pedagogy used)

**Grading:** (Incorporate your scale; definite portion of the grade must be determined by performance in written work, for example:)

1. Weights for assignments A 93+
2. Grade distribution A-90-92
3. Letter grades are converted to the average of the range, ie. A- = 91

**Exam Policy:** (Specific reference to make-up policy and final exam.)

**Attendance Policy:** (College policy is that students are expected to attend all class sessions for courses in which they are enrolled.)

**Mid-Semester Grades:** (Instructors are required to submit mid-semester grades. It is crucial that mid-term grade reports reflect the instructor's actual evaluation of student's progress. This practice ensures adequate feed-back to students.)

**Integrity of Scholarship from the College catalog:**

"Honesty in all academic work is expected of every student. This means giving one's own answers in all class work, quizzes, and examination without help from any sources not approved by the instructor. Written material is to be the student's original composition. Appropriate credit must be given for outside sources from which ideas, language, or quotations are derived."

**Other Information:**

1. Changes in syllabus and assignment sheet may be modified as deemed appropriate. All changes will be announced in class.
2. Students with a disability who are requesting academic accommodations should contact the SDS office in Deliso GO5, or call 782-1257 for an appointment.
3. Any student who is unable, because of his religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school.
4. Due date policy; late penalty policy
5. Faculty evaluations will be done at the end of the semester
6. Other, as appropriate

**Assignments and material covered:** (Separate Page)

July 10, 2000

## Appendix C

### Bloom's Classification of Cognitive Skills

Bloom's classification of cognitive skills is widely used in instruction planning. The six levels are arranged by level of complexity. Use of this or other classification systems is recommended to safeguard against a tendency to focus on content coverage and to ignore what the students should learn to do with content.

<b>Category</b>	<b>Definition</b>	<b>Related Behavior</b>
Knowledge	Recalling or remembering something without necessarily understanding it	Define, describe, identify, label, list, match, memorize, point to, recall, select, state
Comprehension	Understanding something that has been communicated without necessarily relating it to anything else	Alter, account for, annotate, calculate, change, convert, group, explain, generalize, give examples, infer, interrupt, paraphrase, predict, review, summarize, translate
Application	Using a general concept to solve problems in a particular situation; using learned material in new and concrete situations	Apply, adopt, collect, construct, demonstrate, discover, illustrate, interview, make use of, manipulate, relate, show, solve, use
Analysis	Breaking something down into its parts; may focus on identification to parts or analysis of relationships between parts, or recognition of organizational principles	Analyze, compare, contrast, diagram, differentiate, dissect, distinguish, identify, illustrate, infer, outline, point out, select, separate, sort, subdivide
Synthesis	Creating something new by putting parts of different ideas together to make a whole	Blend, build, change, combine, compile, compose, conceive, create, design, formulate, generate, hypothesize, plan, predict, produce, reorder, revise, tell, write
Evaluation	Judging the value of material or methods as they might be applied in a particular situation; judging with the use of definite criteria	Accept, appraise, assess, arbitrate, award, choose, conclude, criticize, defend, evaluate, grade, judge, prioritize, recommend, referee, reject, select, support

## *Appendix D*

### **Types of Learning Outcomes to Consider**

Gronlund (1981) provided the following list of types of outcomes. The list delineates many of the major areas in which instructional objectives might be produced. The specific categories were intended to be suggestive, not exclusive.

#### Knowledge

- Terminology
- Specific facts
- Concepts and principles
- Methods and procedures

#### Understanding

- Concepts and principles
- Methods and procedures
- Written material, graphs, maps, and numerical data
- Problem situation

#### Application

- Factual information
- Concepts and principles
- Methods and procedures
- Problem solving skills

#### Thinking Skills

- Critical thinking
- Scientific thinking

#### General skills

- Laboratory skills
- Performance skills
- Communication skills
- Social skills

#### Attitudes

- Social attitudes
- Scientific attitudes

#### Interests

- Personal interests
- Educational interests
- Vocational interests

#### Appreciation

- Literature, art, and music
- Social and scientific achievements

#### Adjustments

- Social adjustments
- Emotional adjustments

## Appendix E

### Illustrative Verbs Used for Defining Outcomes

#### Verbs for Stating General Instructional Objectives

Analyze	Compute	Interpret	Perform	Translate
Apply	Create	Know	Recognize	Understand
Appreciate	Demonstrate	Listen	Speak	Use
Comprehend	Evaluate	Locate	Think	Write

#### Verbs for Stating Specific Learning Outcomes

##### Complex, Logical, Judgmental Behaviors

Analyze	Conclude	Deduce	Formulate	Plan
Appraise	Contrast	Defend	Generate	Structure
Combine	Criticize	Evaluate	Induce	Substitute
Compare	Decide	Explain	Infer	

##### General Discrimination Behaviors

Choose	Detect	Identify	Match	Place
Collect	Differentiate	Indicate	Omit	Point
Define	Discriminate	Isolate	Order	Select
Describe	Distinguish	List	Pick	Separate

##### Creative Behaviors

Alter	Paraphrase	Reconstruct	Rephrase	Rewrite
Ask	Predict	Regroup	Restate	Simplify
Change	Question	Rename	Restructure	Synthesize
Design	Rearrange	Reorganize	Retell	Systematize
Generalize	Recombine	Reorder	Revise	Vary

##### Miscellaneous

Aim	Erase	Lead	Relate	Stake
Attempt	Expand	Lend	Repeat	Start
Begin	Feel	Light	Ride	Store
Bring	Finish	Make	Rip	Strike
Complete	Get	Offer	Send	Suggest
Consider	Include	Present	Share	Support
Develop	Inform	Propose	Signify	Use

*Appendix F (1)*

**Sample Feedback Form**

At this time during the semester, I would like you to take a few minutes to answer the following questions. Your feedback on the course will be helpful. Please do not sign this request. Thanks!

*How do you think the course is going so far?*

*What suggestions do you have for improvement for the second half of the course?*

*What do you like best about the course?*

*What do you like least about the course?*

*What can I do to assist you in meeting the learning objectives of the course?*

Thanks again!

*Appendix F (2)*

Session Evaluation

Date \_\_\_\_\_

	<u>Unsat.</u>	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excel.</u>
1. Information—did the session supply new material or clarify your ideas about material with which you were some what familiar?	1F	2D	3C	4B	5A
2. Applicability—was the material applicable or relevant to your current or potential position?	1F	2D	3C	4B	5A
3. Interest—did the material hold your interest?	1F	2D	3C	4B	5A
4. Participation—did session afford you the opportunity for participation that you were looking for?	1F	2D	3C	4B	5A
5. Overall Grade—on balance, how would you grade our session today?	1F	2D	3C	4B	5A

General Comment: please write at least one sentence that helps explain your reaction to this session.

### ***Appendix F (3)***

Please take a few minutes to reflect on this course.

*Now that you have taken the first exam and seen the results, describe how you studied for the test?*

*What will you do differently to improve your grade next time?*

*What suggestions do you have for me to help you meet the learning objectives of the course?*

Thanks!

### ***Appendix F (4)***

Date \_\_\_\_\_

1. *What was the most useful thing you learned in class today?*

2. *Give one suggestion for making this class better?*

### ***Appendix F(5)***

#### Identifying Learning

*What was the most important idea this session sparked for you?*

*When this session is repeated, what would you suggest be retained and/or changed?*

## *Appendix G*

### **Web Sites**

Outcomes Assessment is a national movement. Here are some resources and useful sites:

#### Web sites with links to other assessment sites:

AAHE Assessment Forum: <http://www.aahe.org/>

A Glossary of Assessment Terms: <http://www.csulb.edu/~ddowell/glossary.htm>

ERIC site: <http://ericae.net/> <http://marsquadra.tamu.edu/TIG/Forum.html>

[http://www-saris.admin.umass.edu/saris/re\\_home.htm](http://www-saris.admin.umass.edu/saris/re_home.htm)

<http://highered.org/links/assess.html>

<http://www.ga.unc.edu/UNCGA/assessment/resources.html>

<http://www.montana.edu/~aircj/assess/>

<http://www.jmu.edu/vag/vaglinks.html>

<http://www.umn.edu/~assess/other/instass/html>

<http://www2.acs.ncsu.edu/UPA/survey/resource.htm>

<http://academic-affairs.csusb.edu>

<http://www.ncacihe.org/aice/assessment/index.html>

#### Samples homepages from other campuses

<http://www.ohiou.edu/~insres/assessments/index.html>

<http://www.Colorado.EDU/outcomes/>

<http://www.washington.edu/oea/contents.html>

<http://www.washington.edu/oea/assmnt.htm>

<http://cwolf.uaa.alaska.edu/~aupsyh/index/htm>

<http://www.uncc.edu/stuaffairs/research.htm>

<http://www.west.asu.edu/tqteam/resource.htm>

<http://www.wcu.edu/acadafrs/AssessHomePage.html>

[http://www.csulb.edu/~ddowell/ge\\_asmt\\_res.htm](http://www.csulb.edu/~ddowell/ge_asmt_res.htm)

Source: <http://academic-affairs.csusb.edu/forumf98.htm>