General Assessment Related Terms and Definitions:

Program Assessment Basic Implementation Process

1. Turning **Program Student Learning Goals** (SLG) into => **Measurable Learning Outcomes**
   - All Assessment Standards derived from these

2. **Develop specific Criteria for each SLG** with 5 performance levels (1-5) to assess the Student Learning Goals (SLG) – Now the measurable outcomes.
   - The 5 performance levels are: Unsatisfactory, Developing, Basic, Proficient and Exemplary

3. **Assessments/Artifacts (*)**
   - Designed based on the Program SLG and the criteria derived directly from them, to measure the level of student competency in each Program SLG (preferably at the Advanced level)

4. **Program Assessment Rubrics**
   - These articulate the expectations for an assignment by listing the criteria, or what counts, and describing each performance level of quality from Unsatisfactory to Exemplary for each Criterion. Also an Assessment rubric measures performance by rating each Criterion instead of just focusing on global grades.

  (*) Artifact: How the assignment/assessment looks like once completed.
Commonly Used Terms

Program Student Learning Goals (SLG)
(Relate to Student Learning Outcomes (SLO) --- also called Learning Standards or just Standards)
In the new model of Program Assessment for Higher Education, Program Student Learning Goals (SLG) are objective, specific and measurable Learning Outcomes, which will be measured through the course of the program by means of specific assessments designed to be valid measures for those learning outcomes. ---In the past, Program Assessment was a process basically related to how much students were learning, as measured by how many were passing with good grades and how many were completing the programs. Program Student Learning Goals (SLG) were basically objective but general points of reference, and in some cases even subjective intentions in the teaching/learning process, related to the content. Because of this, measures were basically content driven. The new model of Program Assessment in Higher Ed calls for a more systematic approach, as such it calls for a model that is more objective, comprehensive and quantitative.

Student Learning Outcomes (SLO)
Student learning outcomes are the specific measurable goals and results that are expected subsequent to a learning experience. ---These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. A Student Learning Outcome refers to an overarching goal for a course, program, degree or certificate.

Assessment Artifacts
Valid measures will have to be adapted or developed in the form of Assessment Artifacts (assessment tools) which can be projects, exams, research papers, professional portfolios, etc. (Also relates to Assessment Methods) designed and placed within the program to measure the students learning progression towards the program student learning goals at the Advanced (*) level of content delivered and practiced. (*)Content related to each SLG/SLO should be identified as: Introduced, Reinforced, Advanced. Advanced Levels are= Summative, Comprehensive.

Assessment Rubrics
An Assessment Rubric "is a document that articulates the expectations for an assignment by listing the criteria, or what counts, and will be describing each possible performance level of quality from Unsatisfactory to Exemplary for each available criterion. Rubrics are often used to grade student work but they serve another, more important, role as well: Rubrics can teach us to assess well. When used as part of a formative, student-centered approach to assessment, rubrics have the potential to help students develop understanding and skill, as well as make dependable judgments about the quality of their own work. Students should be able to use rubrics in many of the same ways that faculty use them—to clarify the standards for a quality performance, and to guide ongoing feedback about progress toward those standards." ---An Assessment rubric measures performance by rating each Criterion instead of just focusing on global grades.
Standard Scale for Assessment Rubric

The standard scale for Assessment rubrics is the norm or scale to measure the competency or performance of a student in each particular criterion of an assessment rubric. Institutionally it has been defined from left to right and lower to higher as follows: Unsatisfactory=1, Developing=2, Basic=3, Proficient=4, Exemplary=5 (*Do not change the order or number of columns*)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Performance Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unsatisfactory (1)</td>
</tr>
<tr>
<td>Criterion 1:</td>
<td></td>
</tr>
<tr>
<td>Criterion 2:</td>
<td></td>
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<tr>
<td>Criterion 3:</td>
<td></td>
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<tr>
<td>Criterion 4:</td>
<td></td>
</tr>
<tr>
<td>Criterion 5:</td>
<td></td>
</tr>
</tbody>
</table>

You can add or remove a criterion to a rubric, however, you can not add or delete Performance Levels as they have been fixed in the LOM system.

Program Student Learning Goals (SLG)–Assessment Mapping Chart or Curriculum Map Chart

It is a form used in the college to map all the assessment process of a specific academic program in the school. It should show every specific Program Student Learning Goal or Student Learning Outcome, a list of core and required courses, the list of available and current assessments used to measure student competency in each of the program student learning goals. The chart should indicated by means of marks what assessments are given to students and in what courses for each program student learning goal, and also what content level is being given to students in each class of the program with regard to the same program student learning goals or student learning outcomes.

See chart in next page:
### 1. What are we assessing?

**Learning Goals/Outcomes**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Spring 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Department</td>
<td>Core</td>
</tr>
<tr>
<td>Degree</td>
<td>Bachelor's</td>
</tr>
</tbody>
</table>

### 2. How are we assessing it?

- **Critical Thinking:** The student will be able to identify a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.
- **Communication:** The student will be able to analyze a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.
- **Problem Solving:** The student will be able to identify a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.
- **Analytical Reasoning:** The student will be able to identify a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.
- **Synthesis:** The student will be able to identify a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.
- **Assessment:** The student will be able to identify a problem, evaluate the quality of evidence, select alternative courses of action, and effectively communicate conclusions.

What are the specific assessments used for this purpose? See Assessment list in Next page.

### 3. Where are we assessing it?

- In what courses of the program?

### 4. What is the content level delivered regarding each learning goal?

- Introduced, Reinforced or Advanced?

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**Core and Required Courses**

- **Core Courses:**
  - ENG 110 College Writing
  - MTH 201 Calculus
  - HUM 201 World Civilizations
  - PSY 110 Introduction to Psychology
  - SOC 110 Introduction to Sociology
  - CHM 110 General Chemistry

- **Required Courses:**
  - MTH 210 Calculus
  - ENG 210 Literature
  - HUM 210 World History
  - PSY 210 Developmental Psychology
  - SOC 210 Social Problems

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**Mark Level:**

- **Introductory (I)**
- **Reinforced (R)**
- **Advanced (A)**

**Assessment Level:**

- **Introductory (I)**
- **Reinforced (R)**
- **Advanced (A)**
Learning Outcome Management System (LOM)

*Learning Outcome Management (LOM) is an online tool developed by Pearson to help us track, store and report on assessment data.* ---LOM will allow us to use standardized results obtained through the program assessments developed to measure students’ performance based on the Program Student Learning Goals (SLG), which should become the student learning outcomes (SLO) from each program in the school. LOM will work from within the grade books located in the eCompanions.

*With Learning Outcome Manager, institutions can analyze and track student performance against defined learning outcomes at multiple enterprise levels.*
General List of Assessment Related Terms (in alphabetical order)

Assessment
The systematic process of determining educational objectives through gathering, using, and analyzing information about student learning outcomes to make decisions about programs, individual student progress, or accountability.

- **Assessment Method(s)**
  Refers to any technique used to collect data associated with assessment. Methods may include such techniques as: course project, graduate survey, portfolio, external licensing exams, etc.

- **Performance Assessment aka Authentic Assessment**
  A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills. A Performance Assessment usually includes a task for students to perform and a rubric by which their performance on the task will be evaluated. Authentic assessment is a contrast to traditional educational testing and evaluation, which focuses on reproducing information such as memorized dates, terms, or formulas.

**Assessment Artifacts**
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**Benchmark**
Expected levels/skills for an educational outcome. A benchmark must be quantifiable, typically stated as a percentage or number.

**Bloom’s Taxonomy (Cognitive Domain)**
Bloom’s Taxonomy Six levels arranged in order of increasing complexity or intellectual sophistication:
1. Knowledge: Recalling or remembering information without necessarily understanding it. Includes behaviors such as describing, listing, identifying, and labeling.

2. Comprehension: Understanding learned material and includes behaviors such as explaining, discussing, and interpreting.

3. Application: The ability to put ideas and concepts to work in solving problems. It includes behaviors such as demonstrating, showing, and making use of information.

4. Analysis: Breaking down information into its component parts to see interrelationships and ideas. Related behaviors include differentiating, comparing, and categorizing.

5. Synthesis: The ability to put parts together to form something original. It involves using creativity to compose or design something new.


**Collegiate Assessment of Academic Proficiency (CAAP)**
CAAP is the standardized, nationally normed assessment program from ACT that enables postsecondary institutions to measure, evaluate, and enhance the outcomes of their general education programs.

**Collegiate Learning Assessment (CLA)**
It is a standardized testing initiative in United States higher educational evaluation and assessment. It uses a "value-added" outcome model to examine a college or university's contribution to student learning which relies on the institution, rather than the individual student, as the primary unit of analysis. The CLA measures are designed to test for critical thinking, analytic reasoning, problem solving, and written communication skills. The assessment consists of open-ended questions, is administered to students online, and controls for incoming academic ability. An institution's average score on the CLA measures correlates highly with the institution's average SAT score ($r = 0.90$).

**Cooperative Institutional Research Program (CIRP)**
CIRP is the largest and oldest empirical study of higher education in the United States. The CIRP data comes from three main surveys, one for incoming freshman, another given after the completion of the first year, and a final exit survey for graduating seniors. The data covered by these surveys ranges from basic demographics to the political views of students.

**Capstone Courses**
Culminating experiences in which students synthesize subject-matter knowledge they have acquired, integrate cross-disciplinary knowledge, and connect theory and application in preparation for entry into a career.

**Classroom Assessment Techniques**
Techniques employed to give instructors information on the prior knowledge and skills of a class and on the class’ understanding of or reaction to a particular session or reading.

**Classroom-Based Assessment**
Classroom-based assessment is the formative and summative evaluation of student learning within a single classroom.

**Competency-Based Assessment (Criterion-Referenced Assessment)**
Measures an individual's performance against a predetermined standard of acceptable performance. Progress is based on actual performance rather than on how well learners perform in comparison to others; usually still given under classroom conditions. CASAS\textsuperscript{1} and BEST\textsuperscript{2} are examples of competency-based assessments.

**Direct Assessment**
Direct measures of student learning require student to display their knowledge and skills as they respond to the instrument itself. Objective tests, essays, presentations, and classroom assignments all meet this criterion.

**Direct Assessment Tools**
Direct assessment tools and strategies include: portfolios, licensure exams, internships, and other measures of student learning.

**E-Portfolios**
E-Portfolio provides students with the ability to electronically store collections of their intellectual work, thus enabling them to document their intellectual growth and development from entry to graduation and beyond. The goal of the e-Portfolio project is to deepen learning and empower students by providing them visible evidence of their learning and illuminating a pathway toward educational and career goals.

**Educational Testing Services (ETS)**
ETS is a nonprofit organization that offers testing and assessment services and products. Among other things it provides assessment services for several majors in the form of Major Field Tests that are used to measure student performance following a specific criteria related to their particular area of study.

**Formative Assessment**
Assessment that provides feedback to the teacher for the purpose of improving instruction. An assessment which is used for improvement (individual or program level) rather than for making final decisions or for accountability.

**Higher Education Research Institute (HERI)**
HERI serves as an interdisciplinary center for research, evaluation, information, policy studies, and research training in postsecondary education. HERI is housed in the Graduate School of Education & Information Studies (GSE&IS) at the University of California, Los Angeles (UCLA). The Institute's research program covers a variety of topics including the outcomes of postsecondary education, leadership development, institutional transformation, faculty performance, federal and state policy, and educational equity.

**Holistic Scoring**
Evaluating student work in which the score is based on an overall impression of student performance rather than multiple dimensions of performance (analytic scoring).

\textsuperscript{1} Comprehensive Adult Student Assessment Systems (CASAS) - is the most widely used system for assessing adult basic reading, math, listening, writing, and speaking skills throughout the United States.

\textsuperscript{2} Basic English Skills Test (BEST) - it was developed at the Center for Applied Linguistics as a performance-based test for measuring the functional language skills of ESOL learners. The BEST has two sections, Oral Interview and Literacy Skills. (ESOL: English for Speakers of Other Languages)
Indirect Assessment
Indirect assessment asks students to reflect on their learning rather than to demonstrate it. Techniques include external reviewers, student surveys, exit interviews, alumni surveys, employer surveys, and curriculum and syllabus analysis.

Indirect Assessment Tools
Indirect assessment tools and strategies include external reviewers, student surveys, exit interviews, alumni surveys, employer surveys, and curriculum and syllabus analysis.

Learning Outcome (Educational Outcome) (see also Student Learning Outcomes)
A Learning Outcome is a statement of what a student should understand and be able to do as a result of what he or she has learned in a course or program. --- A Learning Outcome reflects specific knowledge, skills and abilities a student is expected to achieve. Learning outcomes describe the learning mastered in behavioral terms at specific levels. In other words, what the learner will be able to do.

Learning Outcome Management System (LOM)
Learning Outcome Management (LOM) is an online tool developed by Pearson to help us track, store and report on assessment data. --- LOM will allow us to use standardized results obtained through the program assessments developed to measure students’ performance based on the Program Student Learning Goals (SLG), which should become the student learning outcomes (SLO) from each program in the school. LOM will work from within the grade books located in the eCompanions.
Nyack Institutional Core Values
1. Academically Excellent
2. Globally Engaged
3. Intentionally Diverse
4. Personally Transforming
5. Socially Relevant

Nyack College Core Student Learning Goals
1. Knowledge – Students will attain an educational foundation in arts and humanities, mathematics, and natural and social sciences and will demonstrate in-depth knowledge in a chosen field of study. (Relates to the Core Value of being Academically Excellent)
2. Skills – Students will demonstrate critical thinking, problem solving and research skills across the curriculum and communicate with proficiency in oral and written form. (Relates to the Core Value of being Academically Excellent)
3. Culture – Students will understand the interplay of historical, cultural and geographic realities of the global community and will value diversity through understanding worldviews, heritages and traditions of peoples and cultures. (Relates to the Core Value of being Globally Engaged)
4. Diversity – Students will value diversity through understanding worldviews, heritages and traditions of peoples and cultures. (Relates to the Core Value of being Intentionally Diverse)
5. Discipleship – Students will apply biblical principles of discipleship to assist them as they grow in the faith and pursue God’s calling for their lives. (Relates to the Core Value of being Personally Transforming)
6. Community – Students will recognize the value of economic, political and social systems as tools for positive change, promote biblical principles of social justice, and demonstrate servant leadership as they engage local communities in the global marketplace. (Relates to the Core Value of being Socially Relevant)

Nyack Standard Academic Skill Outcomes
1. Reading and Study Skills, The student will be able to critically read, interpret, and apply text from a variety of academic contexts.
2. Written Communication, The student will be able to develop and express ideas and construct a strong thesis statement using properly annotated quality sources using the appropriate style guide without errors in writing mechanics, spelling, and grammar.
3. Technological Literacy, The student will have the knowledge, decision-making skills, and technical knowledge to use, manage, understand and assess technology academically, professionally and personally.
4. Critical Thinking, The student will be able to identify a problem, evaluate the quality of evidence, analyze the evidence, consider alternatives, choose appropriate conclusions and communicate choices effectively.
5. Information Literacy, The student will be able to determine nature and extent of information needed, effectively access information in a variety of formats, evaluate sources critically, successfully integrate new knowledge into his/her own knowledge base and value system, and understand the legal and ethical issues in the use of all formats of information.
6. Oral Communication, The student will be able to speak/present in an organized way that uses appropriate language and vocabulary. The delivery will be polished presenting the central message with sufficient supporting material.
7. **Quantitative Reasoning**, The student will be able to solve problems with numeric content, conceptual content, or geometric content, and represent and manipulate data.

8. **Scientific Reasoning**, The student will be able to observe, suggest a hypothesis, design an experiment, predict logical outcomes, and make judgments on conclusions based on empirical evidence.

Note: Each of these outcomes is assessed by means of a standard assessment rubric developed by the Office of Institutional Assessment.

**Pedagogy**

Pedagogy is the art and science of how something is taught and how students learn it. Pedagogy includes how the teaching occurs, the approach to teaching and learning, the way the content is delivered and what the students learn as a result of the process. In some cases pedagogy is applied to children and andragogy to adults; but pedagogy is commonly used in reference to any aspect of teaching and learning in any classroom.

**Portfolios**

A systematic and organized collection of a student’s work that exhibits to others the direct evidence of a student's efforts, achievements, and progress over a period of time. Examples include:

- Showcase: Student only puts best example or best product in for each objective.
- Cumulative: Student places all work relevant to each objective into the portfolio.
- Process: Student places pre/post-samples of work for each objective into the portfolio.

**Portfolio Assessment**

A portfolio is a collection of work, usually drawn from students' classroom work. A portfolio becomes a Portfolio Assessment when (1) the assessment purpose is defined; (2) criteria or methods are made clear for determining what is put into the portfolio, by whom, and when; and (3) criteria for assessing either the collection or individual pieces of work are identified and used to make judgments about performance. Portfolios can be designed to assess student progress, effort, and/or achievement, and encourage students to reflect on their learning.

**Program Assessment**

Evaluation of determined student learning outcomes that informs changes in pedagogy and curriculum to increase student success.

**Program Student Learning Goals (SLG)**

(Relate to **Student Learning Outcomes (SLO)** --- also called **Learning Standards** or just **Standards**)

In the new model of Program Assessment for Higher Education, Program Student Learning Goals (SLG) are objective, specific and measurable Learning Outcomes, which will be measured through the course of the program by means of specific assessments designed to be valid measures for those learning outcomes. ---In the past, Program Assessment was a process basically related to how much students were learning, as measured by how many were passing with good grades and how many were completing the programs. Program Student Learning Goals (SLG) were basically objective but general points of reference, and in some cases even subjective intentions in the teaching/learning process, related to the content. Because of this, measures were basically content driven. The new model of Program Assessment in Higher Ed calls for a more systematic approach, as such it calls for a model that is more objective, comprehensive and quantitative.
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1. What are we assessing?

2. How are we assessing it?

3. Where are we assessing it?

4. What is the content level delivered regarding each learning goal? Introduced, Reinforced or Advanced?

Qualitative Data

Data collected as descriptive information, such as a narrative or portfolio. These data often collected in open-ended questions, feedback surveys, or summary reports, are more difficult to compare, reproduce, and generalize. It is bulky to store and to report, however, it is often extremely valuable and insightful data, often providing potential solutions or modifications in the form of feedback.
Quantitative Data
Data collected as numerical or statistical values. These data use actual numbers (scores, rates, etc) to express quantities of a variable. Qualitative data, such as opinions, can be displayed as numerical data by using Likert scaled responses which assign a numerical value to each response (e.g. 4 = strongly agree to 1 = strongly disagree). This data is easy to store and manage; it can be generalized and reproduced, but has limited value due to the rigidity of the responses and must be carefully constructed to be valid.

Rating Scales
Values given to student performance. Subjective assessments are made on predetermined criteria for documenting where learners fall on a continuum of proficiency. Rating scales include numerical scales or descriptive scales.

Reliability
The measure of consistency for an assessment instrument. The instrument should yield similar results over time with similar populations in similar circumstances.

Rubric
A rubric is a scoring and instruction tool used to assess student performance using a task-specific range or set of criteria. To measure student performance against this pre-determined set of criteria, a rubric contains the essential criteria for the task and levels of performance (i.e., from unsatisfactory to excellent) for each criterion.

Standardized Assessment
Assessments created, tested, validated, and usually sold by an educational testing company e.g. GRE’s, SAT, ACT, ACCUPLACER for broad public usage and data comparison, usually scored normatively.

Standard Scale for Assessment Rubric
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Student Satisfaction Inventory (SSI)
The Student Satisfaction Inventory provides a powerful tool to improve the quality of student life and learning. It measures student satisfaction and priorities, showing you how satisfied students are as well as what issues are important to them.

Summative Assessment
It is a culminating assessment, which gives information on students' mastery of content, knowledge, or skills. The gathering of information at the conclusion of a course, program, or undergraduate career to improve learning or to meet accountability demands.

Validity
The extent to which an assessment measures what it is supposed to measure and the extent to which inferences and actions made on the basis of test scores are appropriate and accurate.

The Outcome Based Assessment Process

1. Establish Student Learning Goals (SLG) as measurable Learning Outcomes
2. Develop Comprehensive Assessment Tools for each SLG
3. Collect Data from Assessed SLG using a standard format (through LOM system)
4. Analyze Assessment Data
5. Use Data to Improve Student Learning and Report for Accreditation
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