THE LEADER IN GLOBAL EDUCATION

FAIRLEIGH DICKINSON UNIVERSITY

Student Learning Outcomes Assessment Guide

For Full- and Part-Time Faculty

The content of this document is presented to assist Fairleigh Dickinson University's faculty with Student Learning Outcomes Assessment. This is a working document. Refer to www.fdu.edu/outcomes for updates as well as additional information.

Guide provided by the University Provost's Learning Outcomes Assessment Advisory Committee

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Preview Copy

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The purpose of this handbook is to provide the faculty with useful information that will serve as a guide for work on student learning outcomes assessment (LOA) for programs offered at Fairleigh Dickinson University (FDU). Background information on LOA at FDU, key ideas and terms, strategies for assessment, helpful websites and resources, and templates are provided. This document is to be a resource for the faculty. The members of the Provost's Learning Outcomes Assessment Advisory Committee (PLOAAC) believe it is important that the FDU community share important, meaningful, and useful information on student learning outcomes assessment that facilitates assessment efforts. It is our goal that this handbook will serve these functions. We will update the handbook periodically based on faculty feedback and current trends. –PLOAAC, 2009-2010

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A Little Something About the Provost's Learning Outcomes Assessment Committee

The committee was created by the interim University Provost, Joseph Kiernan, in 2008 to provide a team of faculty, staff and university administrators to move FDU's student learning outcomes initiatives forward. Based on the recommendations of the Learning Outcomes Assessment Committee (LOAC) co-chaired by J. Scorza and J. Hughes, the PLOAAC is proceeding with the work it is charged to accomplish.

The PLOAAC consists of a small number of faculty members, representing each of the colleges; university administrators, directly involved in assessment; two faculty members representing CORE; and the chairs of the LOAC. In fall 2009, the University Provost established the position of Associate University Provost for Learning Outcomes Assessment, and Marlene Rosenbaum was selected. Her role is to provide the leadership needed to coordinate, facilitate, and oversee the implementation of student learning outcomes assessment goals across the university.

PLOAAC Mission & Goals

Mission

The mission of the Provost's Learning Outcomes Assessment Advisory Committee (PLOAAC) is to facilitate and oversee the implementation of the recommendations made by the Learning Outcomes Assessment Committee (LOAC) provided to the Middle States Commission on Higher Education (2007/2008); to work collaboratively with the faculty, staff, and administration to assist in making progress in a timely fashion; to work with our constituents in providing evidence that the student learning outcomes assessment is an integral part of FDU's culture; and to ensure that our student learning outcomes assessment initiatives are aligned with the mission and goals of the university.

Committee Goals

The goals are to:

- Work collaboratively on LOA across campuses and colleges with all our constituents—faculty, staff, deans, and administrators to facilitate student learning outcomes assessment in a timely fashion.

- Build upon and utilize the recommendations made by the original LOAC planning group using their work as a guide.

- Work with our constituents on the development of a systematic and systemic approach for learning outcomes assessment university-wide.

- Oversee and facilitate the creation and implementation of plans for reporting progress on learning outcomes assessment with suggested timelines on data collection, analysis, feedback, and action plans for program improvement.

- Join with faculty, administrators, and technology staff members in creating the infrastructure needed for the collection, analysis, and report generation for learning outcomes assessment.

- Foster a "culture of assessment" at FDU.

- Gather the information and data needed to assist in the preparations of Middle States Periodic Review Report (due June of 2011) on student learning outcomes assessment.

- Provide periodic updates for the University Provost, APRC, Dean's Council, faculty, staff, and administration on the committee's findings, recommendations, and accomplishments.

Advisory Committee Members

The following members of the FDU community comprise the 2009-2010 Provost Learning Outcomes Assessment Advisory Committee:

MEMBER	DISCIPLINE	COLLEGE AFFILIATION
Daniel Cassino	Political Science	Becton
Karen Denning	Economics, Finance, and International Business	Silberman
Andrew Eisen	Psychology/Sociology	University
Deborah Fredericks	Administrative Science	Petrocelli
Indira Govindan	Institutional Research and Assessment	Administration
Martin Green	Language, Literature, Writing, and Philosophy	Becton
John Hughes	Hotel, Restaurant, Hospitality & Tourism Management	Petrocelli
Cathy Kelley	Center for Teaching and Learning Technology	Administration
Joseph Kiernan	University Provost	Administration
Jim Kuehl	University Core	Becton/University
Braimoh Oseghale	Economics, Finance, and International Business/University Core	Silberman/University
Marlene Rosenbaum	Associate University Provost/LOA	Administration
Jason Scorza	Global Learning	Administration

Middle States Council on Higher Education: Key Learning Outcomes Assessment Standards

The standards listed below (MSCHE, 2006) are ones that pertain to student learning outcomes assessment. We recommend you review them as you work on your assessment plans, strategies, and action plans.

Standard 7: Institutional Assessment

> "The institution has developed and implemented an assessment process that evaluates its overall effectiveness in achieving its mission and goals, and its compliance with accreditation standards" (p. x).

Standard 11: Educational Offerings

> "The institution's educational offerings display academic content, rigor, and coherence appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings" (p. x).

Standard 12: General Education

> "The institution's curricula are designed so students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency" (p. xi).

Standard 14: Assessment of Student Learning

> "Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals" (p. xi).

Common Vocabulary for Student Outcomes Assessment

The members of the PLOAAC agreed it was important for the FDU community to use a common vocabulary. The working definitions (Suskie, 2009) are as follows:

LEARNING OUTCOME: Knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience.

GOALS: Goals state what you, your colleagues, or your institution aim to achieve.

BEHAVIORAL OBJECTIVES: Describe what students can do after they've learned the material.

Behavioral objectives are stated in measurable form. It is easier to assess student progress on desired outcomes when you have measurable objectives.

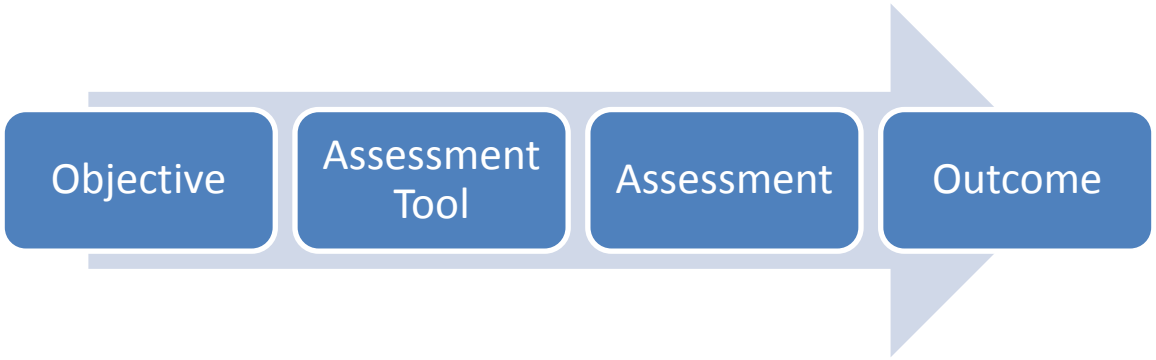
Example:

Behavioral Objective: Students will be able to describe the key characteristics of each planet.

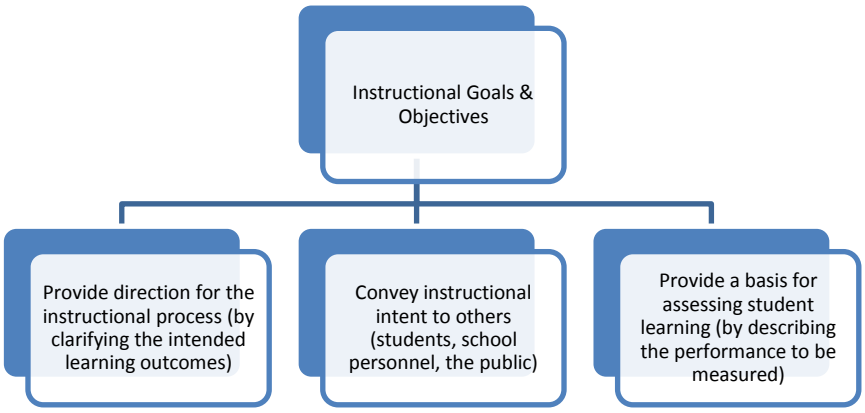
Assessment: Students will write a description of the key characteristics of each planet.

Assessment tool: Rubric—Rating Scale

Outcome: Scientific Literacy



Goals and objectives provide the foundation for assessment and serve three purposes:



Note. Figure replicated from Linn and Gronlund (2000, p. 52).

Instructional goals and objectives describe intended student learning outcomes, thereby clarifying what students will learn and how the learning will be presented. The intent is to specify "the types of student performance we are willing to accept as evidence that the instruction has been successful" (Linn & Gronlund, 2000, p. 54). This shifts the focus from the process to the product of learning.

STANDARDS AND BENCHMARKS:

"Standards and benchmarks are the specific targets against which we gauge success in achieving an outcome" (Suskie, 2009, p. 117).

COMPETENCIES AND PROFICIENCIES:

"Competencies and proficiencies are terms sometimes used to describe learning outcomes or objectives. Typically, they are used to describe skills rather than knowledge, values or attitudes" Suskie, (2009, p. 117).

DIRECT AND INDIRECT METHODS FOR ASSESSING STUDENT LEARNING:

"Direct and indirect methods of evaluating learning relate to whether or not the method provides evidence in the form of student products or performances. Such evidence demonstrates that *actual learning* has occurred relating to a specific content or skill. Indirect methods reveal characteristics associated with learning, but they only imply that learning has occurred" (Middle States Commission on Higher Education, 2007, p. 28). See page 18 of this document for a list of direct and indirect methods.

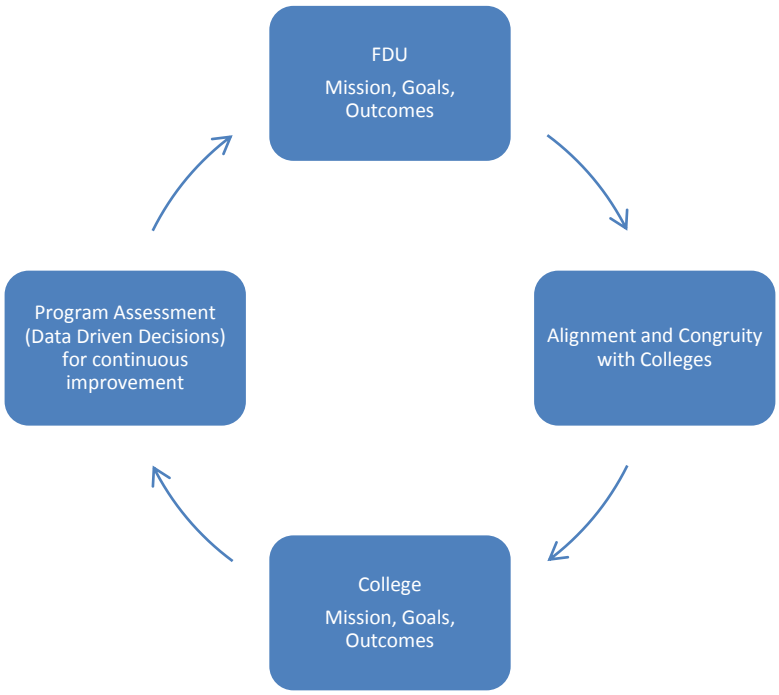
Realistic Picture of Assessment

1. Keep it simple, appropriate, and tied to learning outcomes
2. Use multiple measures
    a. Grades (indirect measure)
    b. Rubrics (direct measure)
    c. Standardized tests: Praxis, GRE, GMAT, I-Skills (direct measure)
    d. Surveys, exit interviews, job placement data (indirect measure)
3. Assessment characteristics; data collected is:
    a. Aligned with goals, objectives, and outcomes
    b. Evidence of student work
    c. Shared
    d. Used for program improvement
    e. Documented

(MSCHE Annual Conference materials, December 2009)

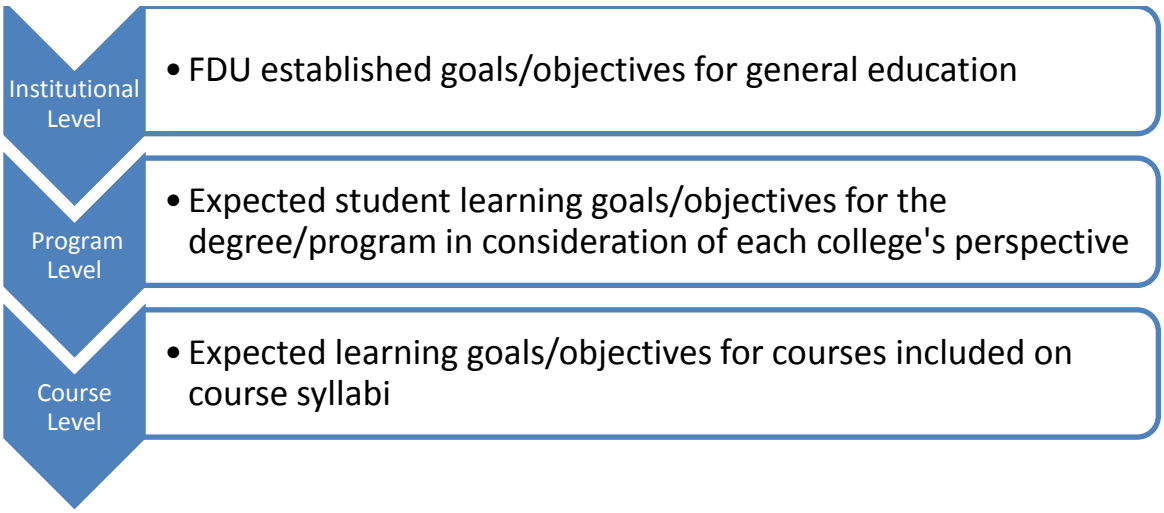
Graphic LOA Model for Continuous Program Improvement

The focus of assessment is on improving student learning through a continuous program improvement model as illustrated in the following diagram.



Student Learning Outcomes Assessment Goals

Learning outcomes assessment goals fall into three main categories: **university**, **program**, and **general education**. They are aligned with the mission of the university and serve as the basis for our student learning outcomes initiatives. According to the Middle States Commission (2005), "Learning outcomes should be interrelated, and their continuity, coherence, and integration among the three levels should be evident" (p. 51).



The Provost's Learning Outcomes Assessment Advisory Committee reviewed the university learning outcomes goals as stated in our response to Middles States (May 2007), at the first meeting of the fall 2009 semester. After careful consideration, the committee unanimously recommended that the number be reduced from 10 to 8 outcomes. The committee's suggestions were shared with the APRC, the Dean's Council, and the University Provost. These recommendations were approved.

The following recommendations are to be used at the present time. Please note that technology, as an outcome, will be addressed in multiple ways: through information literacy, programs, and general education.

FDU Common Learning Goals

The learning goals that follow are general in nature and do not represent specific goals/objectives for particular courses, certificates, or academic programs. It is expected that courses and programs will have several learning goals and outcomes specific to the area of study. The following information regarding FDU general education learning goals was included in FDU's SLOA Plan submitted to Middle States:

Each of four undergraduate colleges pursues these goals in somewhat different ways and it is not the intention of this plan to impose a standardized general education curriculum upon the entire university. Rather, the intention is to ensure all Fairleigh Dickinson University students have ample opportunity to make progress toward meeting these goals through specific college curricula and common university core curriculum. **In all instances, these goals aim at high minimum standards for all university undergraduates. There is no reason, however, that specific colleges and degree programs cannot or should not require even higher levels of competency with respect to specific goals.** Nor is there any reason why additional general education goals may not be adopted by the different colleges. Because of the distinctiveness of each college, these competencies will be measured and reported separately.

Written Communication: An FDU graduate will demonstrate the ability to write documents that present and evaluate information and opinion in a logical and analytic manner, incorporating research and documentation, and using style, grammar, mechanics, and format appropriate to an educated audience.

Skills to be assessed: Students will demonstrate the ability to prepare papers that

- Present a clear and defined thesis.
- Organize arguments in a logical manner.
- Present evidence to support the thesis.
- Document sources in a style appropriate to the discipline and assignment.
- Employ acceptable, standard, and educated English.

Oral Communication: An FDU graduate will demonstrate the ability to prepare and deliver effective oral presentations, incorporating suitable research and using presentation software appropriate to an educated audience.

Skills to be assessed: Students will demonstrate the ability to make oral presentations that

- Present information in clear and effective manner.
- Organize information in a logical manner.
- Present evidence in graphic and textual form.
- Demonstrate ability to employ presentation software.
- Employ a style of delivery appropriate to the assignment and audience.

Information Literacy: An FDU graduate will demonstrate the ability to carry out thorough and effective information search strategies using traditional print, digital, and Internet sources, evaluate information accessed, and use this information along with existing knowledge to create something new.

Skills to be assessed: Students will demonstrate the ability to

- Determine the extent of information needed.
- Access appropriate data and bibliographical resources in traditional print, digital, and Internet formats.
- Evaluate information for its relevancy, accuracy, and point of view.
- Effectively assimilate, organize, and use information appropriately.
- Combine existing knowledge with acquired information for a specific purpose (e.g., to create something new).
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

NOTE: These standards are adapted from the Information Literacy Competency Standards for Higher Education established by the American Library Association.

Quantitative Literacy: An FDU graduate will demonstrate the ability to analyze and interpret quantitative information, and apply mathematical methods in solving problems encountered by an educated adult in daily life and within a field of study.

Skills to be assessed: Students will demonstrate the ability to

- Interpret mathematical information represented by formulas, graphs, tables, and diagrams; draw conclusions; and judge their accuracy.
- Communicate mathematical ideas in various modes, including symbolic, verbal, graphical, and numerical forms.
- Apply mathematical reasoning, concepts, and methods from set theory, logic, number theory, algebra, financial management, probability, statistics, and/or other fields of mathematics as needed to solve authentic problems.

NOTE: These standards are adapted from the Quantitative Literacy requirements established by the Mathematical Association of America.

Global Understanding: An FDU graduate will demonstrate the ability to analyze important current global issues from multiple viewpoints, with an understanding of the inter-connectedness of political, economic, environmental, and social systems.

Skills to be assessed: Students will demonstrate

- Knowledge of important current global issues and the ability to analyze them from multiple viewpoints.
- An understanding of the inter-connectedness of global political, economic, environmental, and social systems.

Cultural Understanding: An FDU graduate will demonstrate the ability to understand and appreciate multiple cultures and global issues from historical, ethical, and moral perspectives.

Skills to be assessed: Students will demonstrate

- Knowledge of one's own and other cultures.
- Ability to examine an event or a theme from multiple cultural perspectives.

Critical Thinking: An FDU graduate will demonstrate competency in critical thinking that encompasses dimensions of informal (natural language) logic and ethical analysis.

Skills to be assessed: Students will demonstrate the ability to

- Articulate the difference between normative and non-normative claims.
- Evaluate the credibility of sources of information and opinion, and determine when additional information is needed for a given purpose.
- Identify valid and invalid arguments, including fallacies of deduction and induction, and identify in a given context necessary or probable assumptions and presuppositions, relevant and irrelevant claims, and misleading uses of language.
- Construct deductive and inductive arguments.
- Evaluate one's own beliefs, values, and assumptions.
- Comprehend and articulate multiple sides of controversial questions.
- Take a position and articulate arguments on behalf of positions that identify reasons and go beyond the mere statement and restatement of opinion.

Scientific Analysis: An FDU graduate will demonstrate the ability to explain and summarize the scientific worldview, explain and apply the scientific method of inquiry, and explain the nature of the scientific enterprise specific to at least one scientific content discipline.

Skills to be assessed: Students will demonstrate the ability to

- Explain and summarize the scientific worldview: Science presumes the things and events in the universe occur in consistent patterns that are comprehensible through careful, systematic study. Scientists believe that, through the use of the intellect and with the aid of instruments that extend the senses, people can discover patterns in all of nature.
- Explain and apply the scientific methods of inquiry: Science is a process for producing knowledge. The process depends both on making careful observations of phenomena and on developing theories for explaining those observations and predicting new ones.
- Explain the nature of the scientific enterprise: Science, as an enterprise, has individual, social, and institutional dimensions including peer review for quality control. Scientific activity is one of the main features of the contemporary world and, perhaps, more than any other, distinguishes our times from earlier centuries.

(Fairleigh Dickinson University Learning Outcomes Assessment Committee, 2008, pp. 10-15).

Faculty Role in Assessment

Course Level Assessment Checklist

The commitment of faculty is essential for any assessment initiative. To assist in the process, Middle States has proposed a course-level checklist as follows:

- ❑ Embedded assessment elements faculty prepare, such as syllabi, curricula, instructional materials and methods, assignments, exams, and quizzes;
- ❑ Direct evidence of student learning and development, such as student products and performances resulting from embedded assignments, tests, and other educational experiences;
- ❑ Indirect indicators such as surveys, placement, and other institutional research data. These indicators can provide both qualitative and quantitative information over time and across situations. (MSCHE, 2007, p. 16)

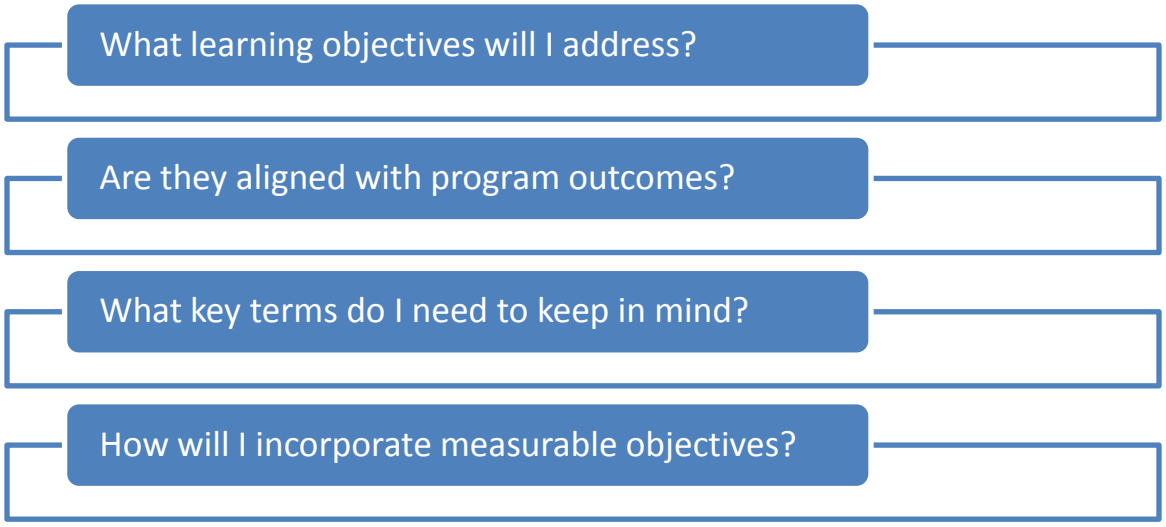
Types of Assessment

Assessment can be categorized as formative, summative, direct, or indirect. Each serves a different purpose in determining whether learning has occurred and contributes to the richness of data.

- **Formative Assessment**: Occurs during learning for the purpose of improving an individual student's performance.
- **Summative Assessment**: Occurs at the end of a course or program to provide information on whether goals have been achieved (Suskie, 2009).

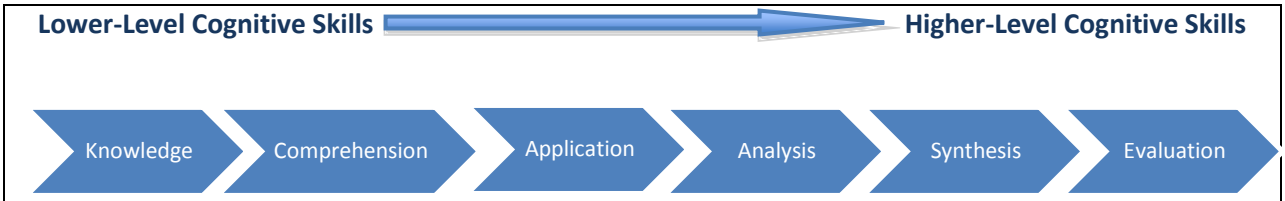
Designing Your Course

The questions below are aimed at helping you think through the key areas you will need to address as you design your course and align it with the various components for SLOA.



Bloom's Taxonomy of Cognitive Skills Presented by Complexity

The following chart is based on Bloom's Taxonomy (presented by Linn & Gronlund, 2000) as examples of verbs to assist in crafting learning outcomes:



Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
defines	converts	changes	breaks down	categorizes	appraises
describes	defends	computes	diagrams	combines	compares
identifies	distinguishes	demonstrates	differentiates	compiles	concludes
labels	estimates	discovers	discriminates	composes	contrasts
lists	explains	manipulates	distinguishes	creates	criticizes
matches	extends	modifies	identifies	devises	describes
names	generalizes	operates	illustrates	designs	discriminates
outlines	gives examples	predicts	infers	explains	explains
reproduces	infers	prepares	outlines	generates	interprets
selects	paraphrases	produces	points out	modifies	justifies
states	predicts	relates	relates	organizes	relates
	rewrites	shows	selects	plans	summarizes
	summarizes	solves	separates	rearranges	supports
		uses	subdivides	reconstructs	
				relates	
				reorganizes	
				revises	
				rewrites	
				summarizes	
				tells	
				writes	

Note. Table concepts from Linn and Gronlund (2000, p. 551).

Descriptions of the Major Categories in the Cognitive Domain

1. **Knowledge**: Knowledge is defined as the remembering of previously learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information. Knowledge represents the lowest level of learning outcomes in the cognitive domain.

2. **Comprehension:** Comprehension is defined as the ability to grasp the meaning of material. This may be shown by translating material from one form to another (words or numbers), by interpreting material (explaining or summarizing), and by estimating future trends (predicting consequences or effects). These learning outcomes go one step beyond the simple remembering of material and represent the lowest level of understanding,

3. **Application:** Application refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws, and theories. Learning outcomes in this area require a higher level of understanding than those under comprehension.

4. **Analysis:** Analysis refers to the ability to break down material into its component parts so that its organizational structure may be understood. This may include the identification of the parts, analysis of the relationship between parts, and recognition of the organizational principles involved. Learning outcomes here present a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material.

5. **Synthesis:** Synthesis refers to the ability to put parts together to form a new whole. This may involve the production of a unique communication (theme or speech), a plan of operations (research proposal), or a set of abstract relations (scheme for classifying information). Learning outcomes in this area stress creative behaviors, with major emphasis on the formulations of *new* patterns or structures.

6. **Evaluation:** Evaluation is concerned with the ability to judge the value of material (statement, novel, poem, research report) for a given purpose. The judgments are to be based on definite criteria. These may be internal criteria (organization) or external criteria (relevance to the purpose) and the student may determine the criteria or be given them. Learning outcomes in this area are highest in the cognitive hierarchy because they contain elements of all of the other categories plus value judgments based on clearly defined criteria.

(Linn & Gronlund, 2000, p. 550).

Websites for Writing Objectives Using Bloom's Taxonomy

For further assistance in writing objectives using Bloom's Taxonomy, visit:

http://www.ukcle.ac.uk/resources/reflection/table.html

http://www.ehow.com/how_4646973_course-objectives-using-blooms-taxonomy.html

http://teaching.uncc.edu/resources/best-practice-articles/goals-objectives/objectives-using-bloom

http://www.kcmetro.cc.mo.us/longview/ctac/blooms.htm

www.stedwards.edu/cte/bwheel.htm

http://www.k-state.edu/assessment/slo/instructions.htm

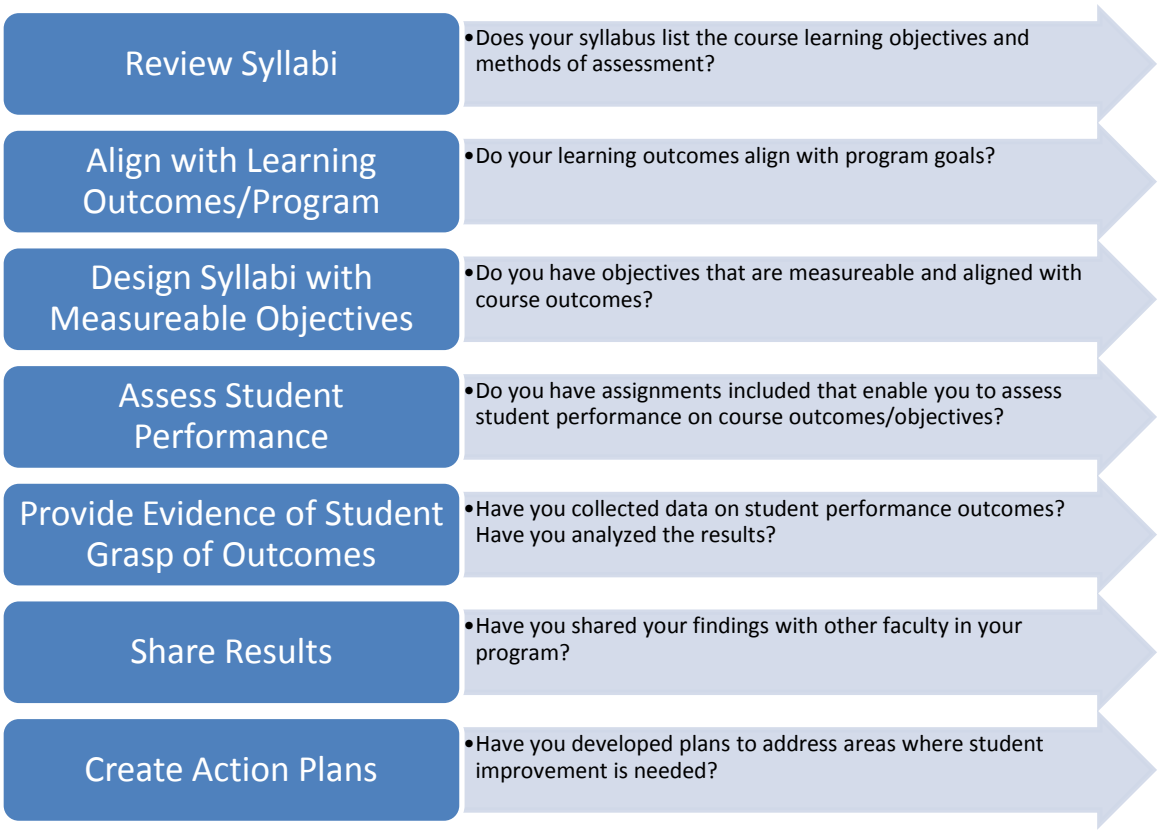
Additional Websites for Writing Objectives

http://www.oucom.ohiou.edu/FD/writingobjectives.pdf

http://www.utexas.edu/academic/diia/assessment/iar/students/plan/objectives/

http://cstep.csumb.edu/Obj_tutorial/

How Do We Proceed?



The aforementioned steps, which are a basic part of the assessment process, are an important contribution the faculty makes in conjunction with colleagues in their program.

Direct and Indirect Measures of Student Learning

MSCHE suggests implementing two types of assessment: direct and indirect.

Examples of Direct and Indirect Measure of Student Learning (Course and Program Levels):

	Direct Measures	Indirect Measures
Course	• Course and homework assignments • Examinations and quizzes • Standardized tests • Term papers and reports • Observations of field work, internship performance, service learning, or clinical experiences • Research projects • Class discussion participation • Case study analysis • Rubric (a criterion-based rating scale) scores for writing, oral presentations, and performances • Artistic performances and products • Grades that are based on explicit criteria related to clear learning goals	• Course evaluations • Test blueprints (outlines of the concepts and skills covered on tests) • Percent of class time spent on active learning • Number of student hours spent on service learning • Number of student hours spent on homework • Number of hours spent at intellectual or cultural activities related to the course • Grades that are not based on explicit criteria related to clear learning goals
Program	• Capstone projects, senior theses, exhibits, or performances • Pass rates or scores on licensure, certification, or subject area tests • Student publications or conference presentations • Employer and internship supervisor ratings of student performance	• Focus group interviews with students, faculty members, or employers • Registration or course enrollment information • Department or program review data • Job placement • Employer or alumni surveys • Student perception surveys • Proportion of upper level courses compared to the same program at other institutions • Graduate school placement rates

Note. Table partially replicated from MSCHE (2007, p. 29). Reprinted with permission as follows: "Permission is granted to colleges and universities within the jurisdiction of the Middle States Commission on Higher Education to photocopy these guidelines for the purpose of institutional self-study and continuing institutional improvement" (p. ii).

Direct Assessment

"The scoring procedures for judging students' responses to performance tests are usually referred to as scoring rubrics" (Popham, 2008, p. 180).

Rubrics can be designed as a simple checklist, simple rating scale, or a detailed rating scale. A simple checklist is used to record whether a required component is present, but does not evaluate student competence in these areas. A simple rating scale is used to determine the level of mastery the student has obtained using a numeric scale. A detailed rating scale describes each level of mastery for each criterion. Other rubric forms include holistic rating scales, self-reflection, ratings from internship or research supervisors, and placement rates. They are usually given to a student in advance of the assignment so expectations are clear. Criteria can include aspects of the cognitive, affective or psychomotor domains (MSCHE, 2007).

Rubrics are a scoring guide used to differentiate between levels of student performance.

Kinds of Rubrics

Analytic Rubric

For an analytic rubric, the response is broken down in relevant parts. Each part is assessed separately and assigned a separate score.

Holistic Rubric

For a holistic rubric, the students' work is evaluated in its entirety.

The website that follows is a good resource for designing rubrics. It provides examples of both analytic and holistic rubrics, as well as information on creating them, how to weight components, and the advantages of using rubrics.

http://www.teachervision.fen.com/teaching-methods-and-management/rubrics/4524.html

The One-Minute Assessment

One simple technique that can be used to assess student learning during the course is the one-minute assessment (Suskie, 2009). It can be distributed at the end of each class session to get a real-time indication of how students are grasping and relating to the material presented in class, and to allow you to make needed adjustments while the course is in session. It consists of three components:

1. Describe one thing you learned.
2. Name one thing you would like to hear more about.
3. Name one thing you did not like.

(MSCHE Conference presentation, September 2009)

Criteria to Keep in Mind When Selecting a Rubric

- Is the rubric aligned with your learning outcomes?
- Does the rubric capture the essence of what you want to assess?
- How will you develop the rubric?
- Do you want a holistic or analytical rubric?
- How will you use the data collected?

Other Websites for Rubrics

http://www.aacu.org/value/rubrics/index.cfm

http://www.unk.edu/uploadedFiles/academicaffairs/Assessment/Training/Developing%20Rubrics.pdf

http://www.personal.psu.edu/sxr133/teaching/paprubr.htm

http://fcit.usf.edu/assessment/performance/assessb.html

http://www.howard.edu/library/Assist/Guides/rubrics/default.htm

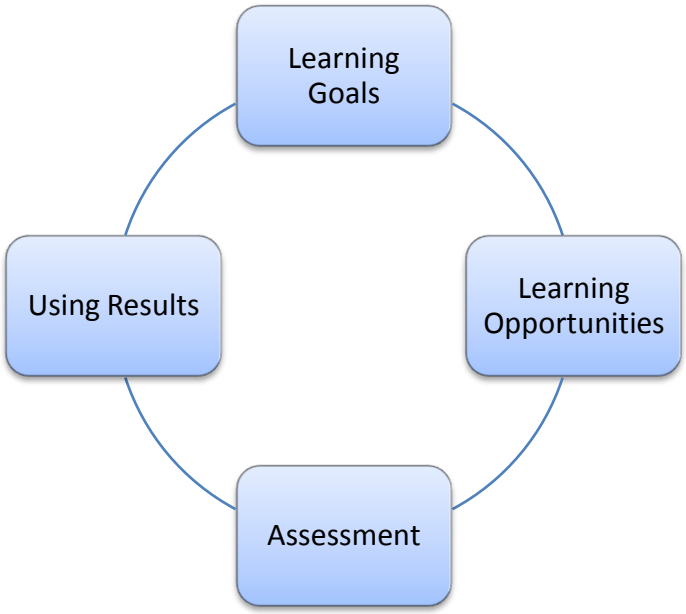
Collecting & Analyzing the Data

Keep in mind the following:

- How do you want to collect the data?
- How will it be stored?
- How will you share it?
- What records are you keeping of the process?

The Teaching-Learning Assessment Cycle

According to the Middle States Commission on Higher Education (2005) Standard 14, assessment includes four interdependent steps:



1. Developing clearly articulated **learning outcomes**: the knowledge, skills, and competencies that students are expected to exhibit upon successful completion of a course, academic program, co-curricular program, general education requirement, or other specific set of experiences;

2. Offering courses, programs, and experiences that provide purposeful **opportunities** for students to achieve those learning outcomes;

3. **Assessing** student achievement of those learning outcomes; and

4. **Using the results** of those assessments to improve teaching and learning and inform planning and resource allocation decisions. (MSCHE, 2005, p. 3)

The diagram above illustrates the process recommended for student learning outcomes assessment (SLOA). The work done on SLOA is ongoing and continuous. Faculty input is critical in terms of informing appropriate decisions for action plans.

For more details, go to the Middle States website: www.msche.org. See the section on publications and the information you need will be found in the document titled "Characteristics of Excellence, Requirements of Affiliation and Standards for Accreditation," online version, revised March 2009.

Library Resources

Fairleigh Dickinson University's libraries are an important resource for the faculty, staff, and administration working on student learning outcomes assessment. At both the College at Florham and the Metropolitan campus, librarians have purchased reading materials, in consultation with the Associate Provost for Learning Outcomes Assessment, and identified valuable online resources. The material that follows is a list of recent and available holdings at each campus.

College at Florham: Readings Available on Learning Outcomes Assessment

Assessing student learning (2nd ed.) / Linda Suskie

Designing effective assessment / Trudy W. Banta

Effective grading (2nd ed.) / Barbara E. Walvoord et al.

How to thrive as a teacher leader / John G. Gabriel

Meaningful course revision / Catherine M. Wehlburg

Our underachieving colleges / Derek Bok

Planning and assessment in higher education / Michael F. Middaugh

Metropolitan Campus: Readings Available on Learning Outcomes Assessment

Assessing Student Learning / Linda Suskie

Designing Effective Assessment: Principles and Profiles of Good Practice / Banta, Jones, Black

Effective Grading / Barbara Walvoord

Meaningful Course Revision / Catherine M. Wehlburg

Our Underachieving Colleges / Derek Bok

Planning and Assessment in Higher Education: Demonstrating Institutional Effectiveness / Michael F. Middaugh

Online Resources for Learning Outcomes Assessment:

Student Learning Assessment: Options and Resources (MSCHE publication)
http://www.msche.org/publications/SLA_Book_0808080728085320.pdf

Squeeze Play: How Parents and the Public Look at Higher Education Today (The National Center for Public Policy and Higher Education)
http://www.highereducation.org/reports/squeeze_play/squeeze_play.pdf

How Should Colleges Assess and Improve Student Learning? (Peter D. Hart Research Assoc.)
http://www.aacu.org/advocacy/leap/documents/Re8097abcombined.pdfHelpful

Helpful Websites

Middle States Commission of Higher Education
The Middle States Commission of Higher Education website has a wealth of valuable information on student learning outcomes assessment. Of interest is much of the material listed under events, in particular, the 2009 annual conference. This website provides notice of upcoming professional development workshops and reading materials that deal with the accreditation process and assessing student learning. http://www.msche.org

Provost's Learning Outcomes Assessment Committee
The Provost's Learning Outcomes Assessment Committee (PLOAAC) has developed a website geared particularly to Fairleigh Dickinson University's student learning outcomes assessment.
http://www.fdu.edu/outcomes

Center for Teaching and Learning with Technology
Fairleigh Dickinson University's Center for Teaching and Learning provides a wide variety of professional development workshops. Some of these address student learning outcomes assessment.
http://view.fdu.edu/default.aspx?id=1455

Office of Institutional Research and Assessment
The Office of Institutional Research and Assessment plays a key role in our assessment initiatives at the university. www.fdu.edu/oira

Additional Recommended Links
Deborah Fredericks, Director of Operations and Continuing Education, Petrocelli College, recommends looking at this comprehensive website. It has a good deal of information on what other colleges and universities are doing regarding learning outcomes assessment, as well as other helpful resources.
http://www2.acs.ncsu.edu/UPA/assmt/resource.htm

Appendix

Sample recommended formats for syllabi by college.

Syllabus Components

Petrocelli College of Continuing Studies

School of Administrative Science
Guide for Completing Syllabus Template

I. **Course Specification:** Use information from the catalog. You will need to include: course and course number, the semester (fall, winter, or spring with the year), location, and course meeting dates and times for courses that meet as a class.

II. **Instructor:** Indicate your name and credentials as well as any addresses, phone numbers and email contacts. Let students know the best way to contact you. You should indicate how and when students may communicate with you outside of class.

III. **Course Description:** Provide a narrative about the course. You should begin with any information promulgated by the program and expand to include the approach you will take. Include teaching methods and strategies, and what students can expect regarding how the class will be run.

IV. **Text and Readings:** Indicate the name(s) of the text(s) that are to be used. Provide author, publisher, year, and ISBN number. Specify any handouts you might provide.

V. **Entrance Competencies**: Indicate what a student should know prior to taking the class. For example, before taking a class in personnel, the student could be expected to be familiar with basic practices associated with recruitment and selection. In a course in computer forensics, one should enter with an understanding of operation systems, data storage, and retrieval.

VI. **Course Objectives:** Considering your course outline, the texts(s), and instructional methodologies, you should develop and present objectives. Since these are adult learners with experiences and competencies, try to use terms such as: to enhance, to more thoroughly understand, to augment, etc. In addition, the objectives should be written in terms of what they are to learn, not what you are to teach or present to them. An example of an objective for a personnel class is: The student will enhance his/her understanding of recruitment and selection.

VII. **Exit Competencies:** Indicate how the objectives are achieved/applied and demonstrated. What is the indicator for achieving the objective? Using the previous objective from a personnel course: The student will be able to explain the steps in the recruitment and selection processes, and indicate how these could apply in the work setting.

VIII. **Assessment of Learning/Basis for Grades:** Whether formal class meeting, blended or online, indicate the methods you will use to assess the learning outcomes of each student. You should be specific in describing the modality of the assessment. For example, indicate how you will use tests, case studies, application papers, term papers, and so forth. If indicating a test, you should inform the students about its nature, i.e., if it will contain multiple choice questions, short answer, essay, what they need to bring, if it is open book, and any time constraints. In a term paper assessment, you should indicate required content as it applies to the course, length of paper, format, and how the paper should be documented (i.e., APA, Turabian, and Chicago, etc.). If there are class presentations, what is expected of students and the presenter? If you use participation as a means of assessment, be sure to indicate how you will determine the value of that participation. Finally, you should clearly indicate how much value in terms of percentages will be placed on respective assessment items.

IX. **Additional Requirements:** Indicate how you will treat lateness to class, notification of class cancellations, absences from class, lateness with assignments, any online problematic concerns, whether you will accept papers or assignments electronically, how students might get extra credit, how a student may appeal a grade, and any other information associated with policies you will use to administer this class.

X. **Supplemental Readings/Bibliography (recommended/optional):** Indicate readings, texts, or other sources that the student may wish to use. Indicate where these might be available or how to access the FDU library, if applicable. Caution students about the use of the Internet and the reliability of some things they may find. Suggest appropriate websites that will add value to the student's access to additional materials.

XI. **Course Outline:** Present, in an outline format, what topics will be covered in which order and the readings/assignments associated with each topic. It is placed at the end of the syllabus for ready reference. At the conclusion, include the following statement: "Note: The instructor reserves the right to reasonably adjust this schedule, albeit with timely notice to participants."

University College: Arts ● Sciences ● Professional Studies

Suggested Syllabus Format

This template has been endorsed by the CEPC and the School Directors as containing the required elements for course syllabi.

All faculty offering courses within University College must provide their students with copies of syllabi for each of their courses. Faculty members are strongly urged to file updated copies of each of their syllabi in the school office.

The following format was approved by the School Directors at their March 8, 2000 meeting.

A good syllabus should contain the following components:

1. Informative Heading

- Faculty member's name
- Office location
- Office hours
- Office telephone
- E-mail address
- School location
- School telephone
- School fax

Provide specific course information by including:

- School
- Course number
- Course title
- Section number
- Meeting days & times
- Course location

2. Course Prerequisites and Co-requisites

3. *Bulletin* Course Description

4. Course Objectives or Goals (Learning Outcomes)

5. Course Requirements

Number and types of exams, oral presentations, papers, homework assignments, notebooks, or journals, etc.

6. Required Material

Required or recommended texts and supplies, classroom material, reference books, and software, etc.

7. Course Grading Explanation

Example:

Assignment	Earned/Possible	94% - 100%	A
Exam 1	_____/200	90% - 93%	A-
Exam 2	_____/200	87% - 89%	B+
Exam 3	_____/300	84% - 86%	B
Journal	_____/100	80% - 83%	B-
Oral Presentation	_____/100	77% - 79%	C+
Attendance	_____/100	74% - 76%	C
_____		70% - 73%	C-
TOTAL	**_____/1000**	65% - 69%	D
		Below 65%	F

8. Additional Course Policies

Examples:

- Paper format (MLA, APA, etc.)
- Academic Integrity Policy
- Late or missed assignments
- Progress notification (e.g., midterm)
- Incomplete grades, withdrawals, etc.
- Paper revision option
- Attendance and participation
- Extra credit options
- Grievances

9. Student Resources

Examples:

- Writing Studio
- Computer programs
- Center for Student Academic Success
- Reserve library materials
- Library holdings

10. Caveat

For example, “The format, content, policies, and procedures of this course may be subject to change should extenuating circumstances dictate. Such changes will only be implemented with collective student consent, and students will be notified in writing of any significant changes.”

11. Course Calendar

- Due dates for major assignments
- Place, date, time of exams and finals
- Dates of holidays and breaks

Reading assignments and dates

Dates of topics covered

(Faculty may wish to include a “syllabus comprehension form” that a student signs and dates, indicating the student understands the content and policies outlined in the syllabus.)

Recommended Bibliography

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco, CA: Jossey Bass.

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Walvoord, B. E., & Johnson Anderson, V. (2010). *Effective grading: A tool for learning and assessment in college* (2nd ed.). San Francisco, CA: Jossey Bass.

For more library resources, check our website: http://www.fdu.edu/outcomes