2010

Toolkit for Assessment & Program Improvement: A Guideline for Student Learning Outcomes and Service Unit Outcomes

Ventura College

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Introduction

This toolkit has been developed to assist the faculty and staff at Ventura College in their effort to assess student learning and services and explain how they drive program improvement.

The standards of the Accrediting Commission for Community and Junior Colleges (Western Association of Schools and Colleges) were revised in 2002 to include the development and assessment of student learning outcomes across college programs and services.

The development of student learning outcomes (SLOs) has become a focus for the campus. Training sessions were held through flex day activities and group meetings as well as during the development of program improvement processes through program review. Throughout this process, the campus has come to recognize that the two must be connected through an institutionalized process cycle. The goal is to gather data based on SLOs and use the resultant data to make informed decisions for program improvement and planning that support student learning and achievement.

This *Toolkit for Assessment and Improvement 2010* provides user-friendly strategies for the three key steps in the process:

- Development of student learning outcomes
- Measurement of student learning outcomes
- Application of assessment results to improve college programs across the college including academic, instructional and student support services, functional units, and business services.

The toolkit has been developed to help guide faculty and staff through the formative assessment process and will be reviewed and updated on a regular basis.

STUDENT LEARNING OUTCOMES OVERSIGHT GROUP (SLOOG)

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ACKNOWLEDGEMENTS

This toolkit was adapted from both the Moorpark College's *Toolkit for Program Improvement* and Mt San Antonio College's *A Guidebook to Student Learning Outcomes and Administrative Units Objectives*. Ventura College's Toolkit for Assessment and Program Improvement was first created by the Student Learning Outcomes Oversight Group (SLOOG) in November 2010, and then presented to the Academic Senate for review on November 18, 2010 and adopted on February 17, 2011

First Things First…. Explanation of Instructional Programs and Service Unit Programs

What is a Program?

At Ventura College, a program is defined as any course of study that counts toward a certificate, degree or transfer and/or any stand-alone or combined student support services that may enhance students' academic achievement.* These are broken down into two main categories: Instructional Programs and Service Unit Programs. Further, Service Unit Programs are divided into three subcategories: Student and Instructional Service Programs, Business Service Programs and Institutional Offices.

INSTRUCTIONAL PROGRAMS:

Accounting
Agriculture
Anthropology
Architecture
Art (Art, Art History, Ceramics, Drawing, Multimedia, Painting, Photography)
Astronomy
Athletics
Automotive Technology
Biological Sciences (Anatomy, Biology, Biotechnology, Microbiology, Physiology)
Business
Chemistry
Chicano Studies
Child Development (Child Development & Education)
Communication Studies (*Speech*)
Computer Information Systems (BIS/CIS, Computerized Office, Microcomputers)
Computer Science
Construction Technology
Criminal Justice
Dance
Drafting
Economics
Emergency Medical Technologies (EMT)
Engineering
English
English as a Second Language (ESL)
Environmental Science & Resource Mgmt (ESRM)
Fashion Design and Merchandising (Fashion Design and Merchandising, Home Economics)
Foreign Languages (French, German, Italian, Japanese, Spanish)
Geosciences (Geology, Geography, GIS)
Health Education
Health Care Ancillaries (Certified Nursing Assistant, Health Sciences Administration, Medical assisting, Phlebotomy)
History
Holistic Studies
Human Services
Humanities
Interior Design
Interdisciplinary Studies
International Studies
Kinesiology (*Physical Education*)
Leadership
Learning Assistance
Management
Manufacturing Technology
Mathematics
Music
Nursing Science
Office Technologies (Executive Assistant, Reception Skills)
Paramedic Studies
Philosophy
Physical Science
Physics
Political Science
Psychology
Reading
Real Estate
Sign Language
Sociology
Supervision
Theater Arts
Water Science
Welding
Work Experience

*Note: Courses that are cross-listed should only be covered in one program for the purposes of program review and the development of student learning outcomes.

SERVICE UNIT PROGRAMS:

Student and Instructional Services Programs:
Admission and Records
Assessment Office
CalWORKS
Child Development Center
Counseling
Distance Education
Educational Assistance Center (EAC)
EOPS
Financial Aid
International Students
Learning Resource Center (LRC)
Library
MESA
Student Activities/Student Government
Student Health Center
Supplemental Instruction
Transfer& Career Center
Tutoring Center
Welcome/Intake Center

Business Services Programs:
Bookstore
Business Office
College Technology Services (CTS)
Custodial
Food Services
Grounds
Maintenance & Operations (M&O)
Operator/Mail Services
Warehouse

Institutional Offices:
Academic Senate
Classified Senate
Executive Vice-President's Office
Institutional Research
Off-Campus Programs
President's Office
Student Learning Outcomes Office
Vice-President's Office

OVERVIEW OF SLOs/SUOs

	Student Learning Outcomes (SLOs) **Course level**	**Student Learning Outcomes (SLOs)** **Program level**	**Service Unit Outcomes (SUOs)** **Service Unit level**
Documents:	College/Program Missions Program Level SLOs Core Competencies	College/Program Missions Course Level SLOs Core Competencies	College/Program Missions Service Unit Outcomes Core Competencies Strategic Plans
Focus is on:	Students and Curriculum	Students and Curriculum	Students, Clients, Customers and Activities, Services or Processes
Who:	Faculty with administrative support	Faculty with Administrative support	Faculty & Staff with administrative support
Institutional Processes involved:	Curriculum SLO Review Committee Program Review	Curriculum SLO Review Committee Program Review	SLO Review Committee Program Review

Assessment at Ventura College

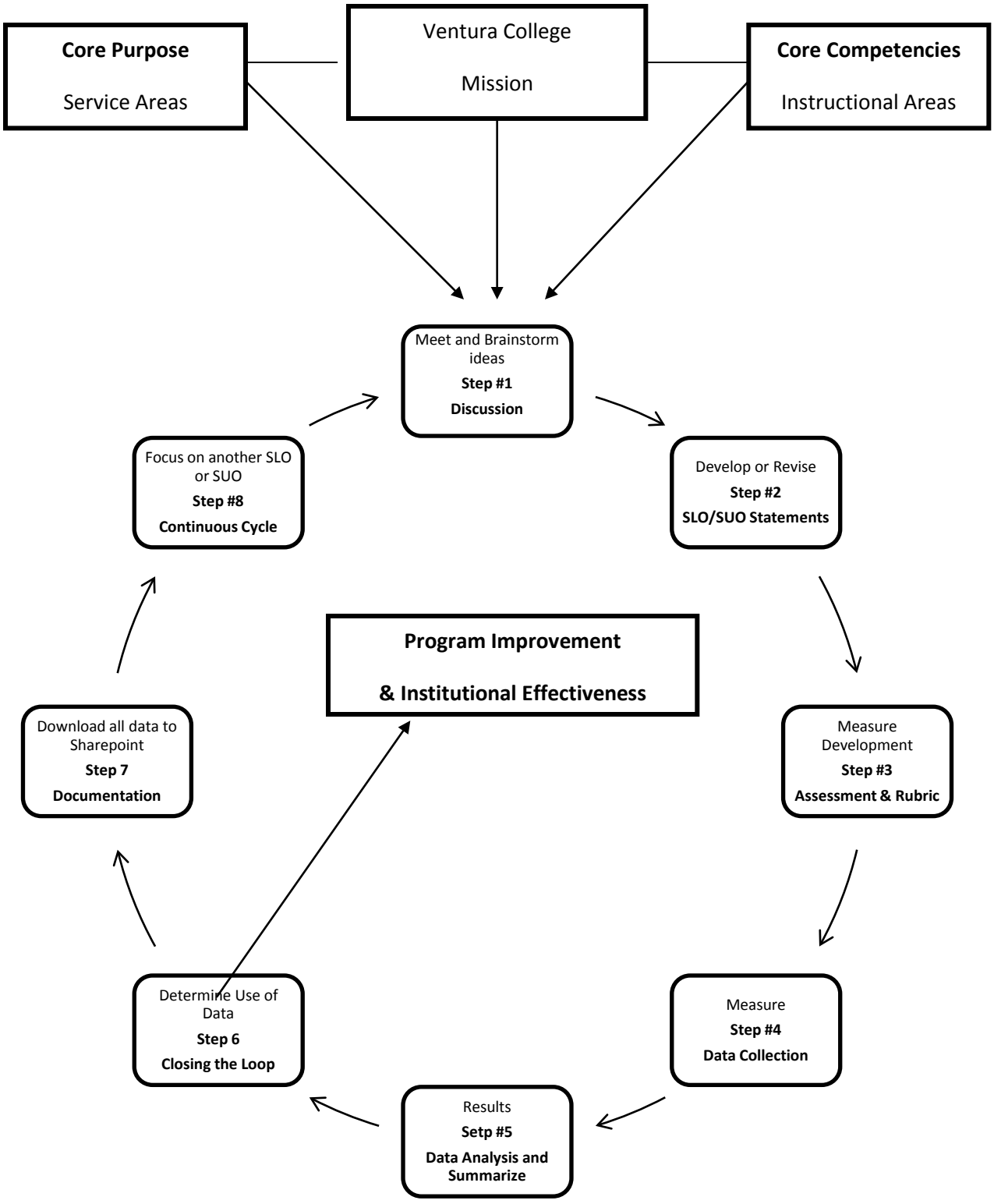
Assessment at Ventura College occurs at both the institutional and service program levels:

- Institutional effectiveness student learning outcomes (SLOs) are summary or formative assessments of how well the college is doing in meeting its mission and college -wide goals. These quantitative and qualitative measures create a snapshot of the college at specific points in time and are useful benchmarks for comparison across time within the institution as well as with national and state trends.

  The specific institutional effectiveness measures currently used at Ventura College (identified on the left side of the diagram on the next page), is documented annually, and is distributed each spring in an Annual Program Outcomes and Assessment Monitoring Report.

- Service program effectiveness service unit objectives (SUOs) formative assessments of how well specific programs are doing in fulfilling their specific purpose within the college. These assessments are documented through the college program planning process.

Assessment Model Chart



The Eight Step process for Assessment

Getting started with SLOs/SUOs is seen as the most difficult part of assessment, it is important to remember that you have been doing this all along. Upon some reflection, nearly everyone can see that in some way or other we have been doing a great deal of SLO work all along. Therefore, what we need to do is to start formulizing it, making it routine, and being more aware of how it can be a tool for improving our institution. This process is outlined below and detailed for your information on the next few pages. The intention of the process and this toolkit is to provide you with the steps to guide you with: the development of course and program-level SLOs and SUOs, how to assess them, what to do with the data, and how to use the results. This process is intended to serve as a guideline: your department may choose to modify it to best determine how to implement the process.

The process for documentation is also an important step in the process. This toolkit explains how to document your SLO/SUO development and assessment efforts utilizing the SharePoint document depository being used by the campus for this purpose. The establishment and maintenance of documentation will not only be beneficial for the campus but it will also help you and your department see the work that has been done, record for your reference how it went, and what actions need to be taken to meet and/or improve the goals and needs of your department.

Below is an overview and brief explanation of the process and a more detailed description of each can be located on the subsequent pages.

STEP		DESCRIPTION
1	Discussion	Schedule a faculty/staff meeting to brainstorm ideas for program and course level SLOs/SUOs.
2	SLOs/SUOs	Develop or revise SLO/SUO statements
3	Assessment Plan & Rubric	Develop assessment measures and rubrics
4	Data Collection	Assess and collect data
5	Data Analysis and Summarize	Analyze data and summarize in a report
6	Closing the Loop	Determine the ways to use the data and make applicable revisions to the curriculum, departmental processes, and the outcomes/objectives.
7	Documentation	Incorporate your SLO/SUO meeting notes, the statements, reports, and process into *SharePoint document depository*.
8	Continuous Cycle	Repeat the process continuously focusing on various SLOs/SUOs as relevant.

A set of guidelines has been developed to help you evaluate your SUO progress. See the SLO/SUO Checklist on page 26.

STEP 1: DISCUSSION

For SLOs, the meeting will include faculty members teaching the course or program to be assessed. When developing or revising SLOs, the focus is to identify what the students should know or apply with the central knowledge, skills, and abilities gained from a course or finishing the program.

For SUOs, classified staff and managers (and faculty members, where appropriate) will identify the services for evaluation. When developing SUOs, the focus is on Students, Clients, Customers and Activities, Services Processes or what a student experiences from a service. .
Regardless of what outcome(s) or objectives(s) you select as a group, make sure that they are relevant to your course/program/department. This can be confirmed by looking at your program's mission statement and/or your department's short-term and long-term goals. Alignment to your program or department goals is important and enables the process to be more logical and relevant.

The following three factors are aimed to ensure that the process has the solid foundation to reach the end of the assessment cycle:

- **Central**
  Ensure that any outcome/objective that you decide is central to your course/program/department is being met, or, if it is not, how you plan on improving to work toward meeting your goal. This will ensure the greatest amount of buy-in from various individuals and thus, have the best chance of being completed. This will enable the widest impact on student learning, student success and client experience.

- **Feasible**
  Look at your resources (human, time, technological, etc.) and determine whether the SLO/SUO and its assessment are feasible. Is it likely that the process could be accomplished or is it wishful thinking? A reality check helps determine the likelihood of success in following through with the assessment.

- **Meaningful**
  Are you selecting the outcome/objective because it is easy to measure or because you really think it is important to measure? It is recommended that you select something that your group is curious about, something that will make a positive impact for your students/clients, and something you will be interested in starting and completing in the assessment process.

STEP 2: SLO/SUO STATEMENTS

Develop a list of SLO/SUO Statements or Revise Previously Developed Statements

Develop a first draft list of SLOs/SUOs. Bear in mind that even though your SLOs/SUOs are defined, they are not static. Outcomes and objectives are dynamic. They are subject to periodic revision in order to maintain currency and relevance and, most importantly, continue to meet the needs and expectations of the students and clients. However, if they continue to be relevant through time, they do not need to be changed.

Think about the big picture. Set realistic goals and have high expectations (those that require higher-level thinking such as synthesis of basic skills or the analysis of critical thinking skills) of your students or clients. Discuss the kinds of student product or client output that might demonstrate these expectations so that the performance can be measured.

As mentioned above, it is neither necessary nor efficient to start from scratch when developing outcomes/objectives. The following are some resources where outcomes/objectives might already exist:

- Look at goals and outcomes from another course, program, or department that is similar to yours but external.
- Professional organizations may have broad outcomes/objectives that can be revised to become applicable to your course/program/department.
- When developing or updating their SLOs, Career and Technical Education (CTE) programs should consult their advisory committees, accrediting boards or other professional organizations for guidance. These groups can easily define what knowledge, applications and evaluative skills program completers should have in order to be successful in their occupation.

The following are some guiding questions to help you and your teams develop SLOs and SUOs:

SLO	SUO
Think about a course completer or program graduate. What kind of course/program experience would allow for the greatest student success? As a result of this course/program: • What should this student know or comprehend? • What/How will this student be able to apply the knowledge/skills gained? • What kind of critical analytical, synthesis or evaluative skills or values will this student possess?	Think about a student who will receive the service. What kind of service experience would allow for the greatest student satisfaction? As a result of this service: • What will the student/client know/comprehend? • Was the service adequate to meet the student's or client's needs? • How will this student or client apply the knowledge/skills gained? How will the student or client be able to analyze, synthesize or evaluate the information/knowledge/skills gained?

When considering the questions above, think about how you will know whether or not your students or clients have performed as you had intended for them to perform. What will the students or clients do to provide evidence that they have successfully met your expectations?

It is also important that your outcomes/objectives are **measureable** or **observable**. Can they be observed or tested? Can accurate and reliable data be collected for the objective? One way to ensure that an SLO or an SUO is measureable is to use action verbs (such as demonstrate, apply, recall, evaluate), because action on the students' or clients' part will result in an overt behavior that can be measured. Avoid terms like "become aware of," "appreciate," "learn" or "understand" because these verbs do not lead to measureable or directly observable results.

A major element in planning your SLO/SUO assessment is to determine what tool you will use to determine whether or not (and how well) your students or clients have met your expectations. Thus, the assessment tool is very important. Consider using existing materials or processes. Look at what is already being done to minimize any duplication of effort. For SLOs, use your syllabi, course outlines or textbooks and choose one or two major assignments/activities that you give regularly and that you feel are central to the course. This can also be applied to the non-instructional side. For SUOs, discuss any service checks that you perform on an ongoing basis.

Regardless of what you select as a group to assess, it must be important to you! And, remember to keep it simple, especially when you are starting out. In areas where there are multiple sections of same course being taught, instructors must meet and decide which SLO will be assessed in a given semester, what rubric will be used to standardize the results, and what achievement level (performance indicators) is desired.

WRITING STUDENT LEARNING OUTCOMES

How to write a Course Level SLO:

In one sentence, describe one major piece of knowledge, skills or abilities that a student will have gained by the end of your course. Make sure that the SLO represents a fundamental result of the course and aligns with other courses in a sequence, if applicable.

There is no need to reinvent the wheel. **It may actually help to work backwards.** What are you already doing in the course that you feel is central to the course? Take a look at your course assignments or syllabus. If there were just a couple of topics that you could teach the students from the entire course, what would they be? Another approach would be to make a list of all of your major assignments and try to extract the central piece of knowledge, skills or abilities that you are intending for the students to capture.

A set of guidelines has been developed to help you evaluate your SLO progress. The checklist is provided on page 26 of this toolkit. It includes the following questions:

1. Have you indicated whether your outcome is course-level or program-level?
2. Does it align with department goals?
3. Is it central to the course/program?

4. Is it reasonable given the ability of the students?
5. Does it explicitly state what the students will think, know, or be able to do as a result of the course/program?
6. Is it measurable or observable? (Hint: Use action verbs.—See Blooms Taxonomy on page 14)

How to Write a Program Level SLO

All courses will belong to a program (see the description of a program and program list on page 5 of this toolkit).

Program faculty will meet, discuss, and develop their program level student learning outcomes using the same process as noted for the development of their course level SLOs. In one sentence the faculty will describe what knowledge, skills or abilities that a student will have gained as a result of completing the program. The *PROGRAM LEVEL SUMMARY* form has been developed to document this process. Once this process is completed these forms will be stored into the *SharePoint* depository for future use by the Department Chair.

Once the program level and course level SLOs have been created, faculty will also meet to discuss and decide how their courses are "mapped" to the program level SLOs. The purpose of mapping is to illustrate where program-level outcomes are being address across the program's courses. It can also help to identify curricular needs and resource priorities. The map indicates where knowledge and skills are introduced, reinforced, and mastered. The point where the program-level is mastered is where the SLO should be assessed.

In programs where there are clear prerequisites and/or sequencing, program level SLOs will be measured in the course with the highest level of knowledge or skill (capstone). In programs with courses that do not build in this manner, programs may introduce and master knowledge or a particular skill in one course.

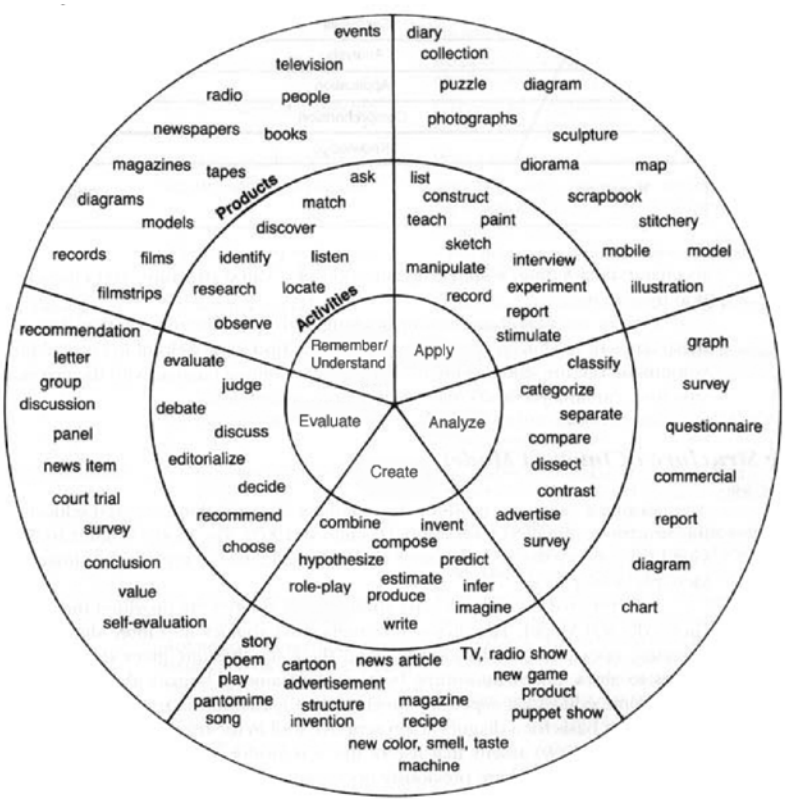
Bloom's taxonomy is a very useful framework for describing SLOs. It identifies a hierarchy of cognitive learning outcomes from lower-level to higher-level thinking abilities. It starts at the basic knowledge level and works through the evaluation level. A variety of action verbs are provided to assist with measuring specific student abilities and skills.

The great benefit of these verbs is that they are action verbs and thus, observable and measurable! Since SLOs can address a variety of learning from simple memorization and recall of basic facts to complex analysis and evaluation skills, Bloom's taxonomy is especially effective when developing SLOs/SUOs.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Cite	Associate	Apply	Analyze	Arrange	Appraise
Count	Classify	Calculate	Appraise	Assemble	Assess
Define	Compare	Classify	Categorize	Collect	Choose
Draw	Compute	Demonstrate	Classify	Compose	Compare
Identify	Contrast	Determine	Compare	Construct	Criticize
List	Differentiate	Dramatize	Debate	Create	Determine
Name	Discuss	Employ	Diagram	Design	Estimate
Point	Distinguish	Examine	Differentiate	Formulate	Evaluate
Quote	Estimate	Illustrate	Distinguish	Integrate	Grade
Read	Explain	Interpret	Examine	Manage	Judge
Recite	Express	Locate	Experiment	Organize	Measure
Record	Extrapolate	Operate	Identify	Plan	Rank
Repeat	Interpolate	Order	Inspect	Prepare	Rate
Select	Locate	Practice	Inventory	Prescribe	Recommend
State	Predict	Report	Question	Produce	Revise
Tabulate	Report	Restructure	Separate	Propose	Score
Tell	Restate	Schedule	Summarize	Specify	Select
Trace	Review	Sketch	Test	Synthesize	Standardize
Underline	Tell	Solve		Write	Test
	Translate	Translate			Validate
		Use			
		Write			

Source: Bronx Community College Institutional Research (http://www.bcc.cuny.edu/InstitutionalResearch/Assessment.htm)

The next diagram is another representation of Bloom's taxonomy. It identifies the transition from lower-level to higher-lever thinking by moving clockwise in the innermost circle from Remember/Analyze to Evaluate.



Hints for writing SLOs:

• Make sure the outcome can be tested or assessed or observed.

• Have a manageable number of outcomes. Maybe a course/program/department could develop 2-4 outcomes. Try to pare down the outcomes to those that truly reflect the major skills or knowledge that students will take away from the course/program/department.

• When developing your outcomes, keep in mind what kind of student product (i.e. assignment, test, or project) will help you decide if the expectations have been met.

• Define any terms that individuals outside of the course or program would not be able to readily understand.

• When starting out, try not to get in over your head with the number or difficulty of the statements. Keep your statements simple and assess one main skill at a time. A rule of thumb is to have two SLOs per course, two SLOs per program, etc.

• If multiple skills can be synthesized to build a major skill, feel free to create one SLO. Don't bundle unrelated items – break them down into separate SLOs. Sample SLO statements could begin with the following:

- Nursing V 10 students will be able to evaluate…
- ESL V02 students will be able to categorize…
- Chemistry V20 students will be able to hypothesize…
- Political Science V03 students will be able to discuss…
- Health Education V93 students will be able to construct…
- Students meeting with Academic Counselors will be able to prepare…

Faculty members attending a Professional Development Flex Day activity on Desire2Learn basics will be able to create…

How to Write a Service Unit Outcome

In one sentence, describe what a client will experience, receive, understand, or find satisfactory as a result of a given service. Make sure that the SUO represents a fundamental function of your department and aligns with your department goals and/or mission statement. SUOs are central to unit/office/department's critical activities such as providing a service, improving a service or decreasing/increasing the likelihood of an event. What does the client experience through interaction with your unit? How do you know when your unit is both efficient and effective? Please note that service units will be expected to create and assess the program level SUOs only.

Some concepts to consider include the following:

- Level or volume of activity
- Efficiency (cost savings measures, turnaround time, improving a process)
- Compliance with external standards or regulations
- Student satisfaction
- Student outcomes

Sample objective statements could begin with the following:

- The students will be able to demonstrate self advocacy skills ….
- Students will be able to identify course needs….
- Students will be able to successfully complete the admissions application….
- Students will be able to identify the (center) as a place to….

It is important to think about the following when developing you SLO or SUO:

- Does it align with department goals?
- Does it state that the unit will provide, improve, increase, and decrease *or* that the clients will understand, be satisfied with, receive…?
- Is it measurable or observable?
- Is it central to the unit/office/department?

Hints:

- Make sure the objective can be tested or assessed.
- Have a manageable number of objectives. Maybe a department could develop 2-4 objectives. Try to pare down the objectives to those that truly reflect the major skills or knowledge that students will take away from the service(s) provided.
- When developing your objectives, keep in mind what kind of student behavior will help you determine if the expectations have been met.
- Define any terms that individuals outside of the service department would not be able to readily understand.
- When starting out, try not to get in over your head with the number or difficulty of the statements. Keep your statements simple and assess one thing at a time.

Step 3: Assessment of SLOs

Develop achievement levels (Performance Indicators) and rubrics for the SLOs/SUOs.

Once you have created your SLOs or SUOs, it is time to decide how to assess each of them and decide what indicators will benchmark student achievement or service level satisfaction. This process needs to involve appropriate course level faculty and/or appropriate service area faculty and staff. Faculty teaching the course will need to create a rubric for scoring student work using these set criteria. Individual faculty may select a different assessment tool but the criteria for evaluation (the achievement level) and rubric must be the same for all to follow.

It is important to create a process that is easy to follow.. Think of it as a recipe for a cake that anyone can follow. There may be expected or unexpected changes in the individuals who work in a program or department and instead of starting the SLO or SUO process from the beginning, a clear assessment process will serve as a blueprint for anyone to continue. In disciplines in which there are multiple sections of the same course, discipline faculty must meet prior to the start of a semester to determine which SLO will be assessed and how it will be assessed, what rubric will be used to standardize the results, and what achievement level (performance indicators) is desired.

Your assessment strategy should include the following:

- What SLO are you going to assess?
- What means of assessment will you employ? Choices include course-embedded assessment, portfolio, survey, test, etc. Remember these tools may be different for each faculty or the department may decide to use the same assessment tool, but that is for the course faculty to decide. Please see pages 27-40 for a list of assessment tools.
- How do you expect your students to fare? Using your rubric to guide you, establish a minimum score for success and indicate the number (%, fraction, actual number) of students who you expect to meet the minimum score. Your rubric needs to align with your established success levels which are your performance indicators. Sample rubrics can be found on pages 41-45. It is important that all course faculty members agree with this performance indicator and the rubric to be used.
- Who will you assess? Consider the course(s), class sections, activity, workshop, term, etc.
- How will you collect your evidence?
- When will you collect your evidence?
- If you have conducted this assessment in the past, do you have any previous data to use as a marker for comparison?
- How would you plan to use the results?
- Faculty will be responsible for conducting the assessment.
- Department Chairs will be responsible for scheduling the meetings, gathering data from individual faculty, and maintaining an historical data file that will transfer to future department chairs.

Remember that you don't have to measure everything about every student during every course in every term or about every client for every service! Be selective and measure only those areas in which you are most interested and/or that are most relevant to meeting current or future student/client needs

In order for the results to be useful, the assessment tools must possess both **validity** and **reliability**. Validity is the degree to which the assessment measures what it was intended to measure. Reliability is the consistency of an assessment.

The concepts of validity and reliability are demonstrated in the following example. If someone that weighs 175 pounds steps on a bathroom scale ten separate times, and it reads "175" each time, then the measurement is valid and reliable. If the scale consistently reads "225," then it is not valid, but it is still reliable because the measurement is consistent. Reliability is a measure of consistency whereas validity is a measure of accuracy.

For more information regarding validity, reliability, or anything related to research and statistics, please contact the faculty SLO facilitators or SLOOG committee member for assistance. Consider the following questions when developing your assessment strategies:

- How will you know if and how well you have accomplished your objective? What can the student do to demonstrate that they have met the SLO or SUO?
- For SLOs:
  Do you have any existing assignments that will offer students an opportunity to address the expectation set in your SLO?
- For SUOs:
  Are there existing service performance checks that could be used to assess the outcomes statement?

Note: For SLOs, another way to develop outcomes is to look at what is already being done. This process is called **course-embedded assessment**, since the assessing or testing of outcomes is being incorporated into the course itself or may already exist.

Consider the use of multiple measures to assess an SLO or SUO. If you have a concept that is central to your course, program, or service, try to find more than one way to assess it. For example, if you expect your students to be able to possess a skill, think about several ways that they could provide evidence that they indeed possess the skill. Thus, students could self-report their skill on a survey, correctly answer the relevant questions on a final exam, and produce a project that requires them to use the skill. Using more than one way to assess an SLO or an SUO enables you to truly determine if your outcome or objective was met.

Assessment results and the process will be documented first by individual faculty on the *INDIVIDUAL FACULTY SLO ASSESSMENT RESULTS* form. This form is for individual faculty use and will be the data utilized as the department evaluates the appropriate course level SLO. The individual faculty should keep a copy in his/her files and supply a copy to the department chair for use in the department meetings at which improvements in student learning are discussed. The individual faculty document is not stored in the *SharePoint* depository and its purpose is only to support the information included in the COURSE LEVEL SLO ASSESSMENT SUMMARY form.

Step 4: Data Collection
Assess student learning or client experiences.

This step sounds easy but is the one where most assessment efforts stall. Many departments are able to develop SLOs and SUOs and accompanying assessment plans but have difficulty administering the assessment and collecting the data. The first assessment cycle is usually the hardest to complete because it competes with many other responsibilities and priorities. It may help to discuss the challenge and brainstorm possible ideas during the formation of the assessment process noted above.

The Student Learning Outcomes Oversight Group (SLOOG) has developed several forms to help guide you and document the assessment process. Copies of the forms may be found on pages 46-51 of this document and electronic copies are available in SharePoint and the Student Learning Outcomes Website. They are:

- The INDIVIDUAL FACULTY SLO ASSESSMENT RESULTS form
- The COURSE LEVEL SLO ASSESSMENT SUMMARY form
- The SERVICE UNIT OUTCOME ASSESSMENT SUMMARY

Some helpful tips:

- Have SLOs/SUOs as a standing item on department meeting agendas.
- Set a timetable that not only involves the assessment but also the meetings to analyze, summarize and document your findings and plans.
- Block time in your schedule to complete the assessment plan.
- Create a timetable for assessment
- Seek assistance as needed from the assigned faculty SLO facilitators

Assessment Tools:

Faculty use quizzes, exams, etc. throughout the semester to assess student achievement. Service areas may wish to make use of surveys, focus groups, comment cards, and observation as their assessment tools. A list of suggested tools can be found in the appendix on pages xx-xx in this document. Each of these tools provide very useful data, but it is up to the course faculty and service area faculty and staff to determine which tool is most appropriate to use.

The faculty SLO facilitators are available assist with selecting the appropriate assessment tool, performing validity and reliability checks, preparing data interpretation and analysis, and explaining guidelines for creating rubrics. Faculty assessing the course SLO may use different tools to assess students or they may decide to all use the same tool. The administration of conducting surveys will be conducted by the service unit however units may wish to work together to help minimize the workload. The data collection must be housed within the program or department.

Step 5: Data Analysis
Analyze the data and summarize.

Course level faculty, program level faculty or service unit faculty and staff will meet after the assessment has been conducted to analyze and summarize the data. The goal of this discussion is to discuss with your colleagues the ways in which student success can be improved.

Some questions to consider when discussing the data with faculty and/or staff in your area:

- What skills (or portions of skills) did student achieve? What were the most common errors that students made? What did the students not grasp at all?
- What parts of the service did clients express the greatest satisfaction? What were some of their recommendations?
- Are there other findings that exist that you did not expect? What are you most surprised by?
- Were there any trends, patterns or themes that emerged from the data?

Remember the following forms have been developed to help guide you and your colleagues through these dialogues:

- The COURSE LEVEL SLO SUMMARY form;
- The SERVICE UNIT OUTCOME ASSESSMENT SUMMARY form

Also when summarizing your findings, please ask yourselves:

- **Have you fully noted the achievement level using % or actual numbers of students the determined success level?**
- **Did you note whether or not the goal was achieved?**
- **Did you note reasons why success could not be determined?**
- **Did you remember to include all pertinent data?**
- **Did you list the most appropriate actions that you plan to initiate change to improve success?**
- **Did you note when you plan to implement the change?**
- **Did you note all resources needed to assist with your actions for improvement?**

Step 6: Closing the Loop

Determine ways to use the data and make applicable revisions to the curriculum, departmental processes, and the outcomes/objectives.

Meeting with your department faculty and/or staff to discuss the assessment results and the data summary is the most vital step because this is the time when you and your colleagues examine the findings, identify areas for growth or opportunity, and brainstorm ideas and methods to address those areas. The purpose of this meeting is to stimulate meaningful dialogue and initiate change. For instructional faculty, this process will occur both at the course level and program level. Service units are programs, thus need only to complete this process at the program level.

Guiding questions could include the following:

- Were you satisfied with the student performance or response?
- Did the students meet or exceed your expected level of success?
- Are changes or improvements necessary?
- Based on the data analysis and summary, how would you modify your teaching or service to better address the student needs?
- SLOs: What should be done to improve student learning? What elements of the teaching and learning process should be added, deleted or modified to increase student success?
- SUOs: What do you need to change to improve student experiences?
- Evaluate the assessment plan. What did you think of this SLO or SUO? Does it need to be revised? Does the criteria for success (performance indicators) need to be changed?
- Should this SLO or SUO be assessed again sooner rather than later?

Once this discussion has taken place, determine the plan of action to make necessary revisions or changes. When documenting your use of results, consider the following:

- Does your plan for change align with the findings from the assessment effort?
- What does your unit/office/department plan to do as a result of the findings?
- Who will be responsible for making the change?
- When will the change take place?

Step 7: Documentation

The SLO and SUO process needs to be documented through use of the summary forms that were developed through this process. Summary forms are filed into the SharePoint depository by Department Chairs and service area assigned staff. Individual faculty forms are maintained by individual faculty and department chairs.

Providing documentation throughout the assessment development process is an important aspect that leads to continuous student learning improvement, program improvement, service improvement, and drives Program Review and institutional effectiveness. The stated "initiatives, steps, timeline, and resources" will be the information used to develop any requests through the Program Review process. Departments will be required to support their request with data retrieved from their assessment process. The Program Review form will require that you include assessment measures to drive any budgetary requests, including staffing, supplies, equipment, and facility improvements.

Therefore as you move throughout the assessment process, document your SLO or SUO progress and assessment efforts by uploading all vital information into the SharePoint depository. Remember that the following forms have been developed as a way to document your process and copies can be obtained through SharePoint or from any SLOOG committee member or faculty SLO facilitator:

- The INDIVIDUAL FACULTY SLO ASSESSMENT RESULTS form
- The COURSE LEVEL SLO ASSESSMENT SUMMARY form
- The SERVICE UNIT OUTCOME ASSESSMENT SUMMARY
- The PROGRAM LEVEL ASSESSMENT SUMMARY sheet

Develop your goals, needs, and resource requests based on the results of your assessment efforts and subsequent discussions. Remember to align your SLOs and SUOs to the related department goals, college mission, and core competencies or core purposes, as applicable.

SharePoint Document Depository:

Department Chairs and key service area staff members will receive SharePoint training throughout the process. A SharePoint guidebook is also accessible in SharePoint as well. Any questions regarding the technical aspects of SharePoint can be directed to the faculty SLO facilitators, David Oliver, or Sandy Hajas.

Step 8: Continuous Cycle

Repeat the process of continuously focusing on various SLOs/SUOs.

The process of self-reflection and assessment must remain a continuous process in order to bring about meaningful change. Assessment enables each department to evaluate its current and future goals and needs and plan strategies to better serve students. Continuous improvement builds on existing efforts to improve student performance and optimize their experiences. Thus, it is imperative to continue the dialogue and revise assessment efforts as necessary to ensure that student needs are being met and that student success initiatives continue.

The development, assessment and evaluation of SLOs and SUOs should be iterative and reflective. SLOs and SUOs should be discussed, modified and updated on an on-going basis so that we create a culture of evidence that leads to sustainable, continuous quality improvement in course instruction, instructional support services, and student services areas. It is not necessary to assess every SLO/SUO each year. Select one that is meaningful to the department and then rotate. The important aspect of the process is to create a process that is continually working toward creating improvement in student learning and the student experience

Program Review and Planning for Institutional Effectiveness

The culmination of the process of developing student learning outcomes, their assessment and this entire program review process ends with resource requests presented to the Program Review Committee and initiatives to the Planning Committee at Ventura College to support continuous institutional improvement, future planning, and institutional effectiveness.

The SLO and SUO summary sheets both include data entry boxes for resources based on your findings, initiatives and improvement plans. Requests for improvement, budgetary allotments for personnel, supplies, equipment, and facility changes will be based on SLO and SUO assessment and findings. This data will be used by faculty and departments as support for their requests.

Ventura College Resources:

Educational Master Plan:
http://www.venturacollege.edu/assets/pdf/president_office/VC%20Educational%20Master%20Plan%202009-2019.pdf

Strategic Planning:
http://www.venturacollege.edu/college_information/strategic_planning/

Student Learning Outcomes:
http://www.venturacollege.edu/college_information/students_learning_outcomes/

APPENDIX #1: SLO/SUO PROCESS CHECKLIST

1. Meet as a department or program and write or revise your course level, program level or service unit outcomes.
2. Select one outcome per course to assess per semester and develop or revise the rubric for that SLO one does not already exist.
3. Select one SUO in each service unit to assess each semester.
4. Select who in the department will be responsible for assessing the outcome.
5. Develop the performance indicators that will benchmark your desired level of student achievement.
6. Discuss how your will assess. Individual faculty may assess the same outcome using different assessment tools.
7. Conduct the assessment.
    a. Faculty will collect data, analyze, and document the results on the Individual Faculty SLO Results form. Faculty will keep a copy for their files and provide the department chair a copy.
    b. Service Units will need to gather their assessment results from the tools they use.
8. Meet again to discuss your findings, analyze and determine what action needs to be taken to increase improvement. Also discuss what resources might be required.
    a. Faculty teaching courses in common will meet to compare and discuss results and how learning can be improved.
    b. Service units will also meet to compare and discuss results and how the student's experience can be improved.
9. Summarize and document your findings and action plan one of the following forms:
    a. Course Level SLO Summary form
    b. Services Unit Outcomes Summary form
10. File the forms in the *SharePoint* depository in your department's appropriate folder.
11. Discuss whether the outcome was adequately stated or needs to be revised and revise.
12. Prepare for the next semester process by setting the meeting date for the next SLO assessment process to begin again.

FORMS:

All forms can be found on SharePoint or obtained from any member of the Student Learning Outcomes Oversight Group.

PROCESS ASSISTANCE:

Faculty Facilitators:

- Ty Gardner, ext. 1253, email: tgardner@vcccd.edu
- P. Scott Corbett, ext. ext. 1394, scorbett@vcccd.edu

APPENDIX #2: TYPES OF MEASUREMENTS

APPENDIX #2: TYPES OF ASSESSMENT MEASUREMENTS (con't)

Introduction

This toolbox is designed to provide examples of assessment methods that can be used as course-embedded assessment. Each assessment method is briefly described and includes the suggested advantages and disadvantages along with references to review for more information. This list is not meant to be inclusive of all ways to measure student learning outcomes. If you are unsure of which method to use to measure your SLO or SUO, contact the Faculty Liaison Facilitator or the Office of Assessment and Evaluation.

Key Definitions:
Source: James Madison University Dictionary of Student Outcome Assessment

Evaluation: This term broadly covers all potential investigations, with formative or summative conclusions, about institutional functioning. It may include assessment of learning, but it might also include non-learning centered investigations (e.g., satisfaction with recreational facilities).
http://people.jmu.edu/yangsx/Search.asp?searchText=evaluation&submit=Search&Option=Term

Assessment: The systematic process of determining educational objectives, gathering, using, and analyzing information about student learning outcomes to make decisions about programs, individual student progress, or accountability
http://people.jmu.edu/yangsx/Search.asp?searchText=assessment&submit=Search&Option=Term
Additional information on The Assessment Process can be found at:
http://www.jmu.edu/assessment/resources/Tips_Process.htm

Formative assessment: An assessment which is used for improvement (individual or program level) rather than for making final decisions or for accountability
http://people.jmu.edu/yangsx/Search.asp?searchText=formative&submit=Search&Option=Term

Summative assessment: A sum total or final product measure of achievement at the end of an instructional unit or course of study
http://people.jmu.edu/yangsx/Search.asp?searchText=summative&submit=Search&Option=Term

Direct: Direct measures of student leaning 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.
http://people.jmu.edu/yangsx/Search.asp?searchText=direct&submit=Search&Option=Both

Indirect: Indirect methods such as surveys and interviews ask students to reflect on their learning rather than to demonstrate it.
http://people.jmu.edu/yangsx/Search.asp?searchText=indirect&submit=Search&Option=Term

Methods of Assessment

1. Muddiest Point

Based on the premise that most lectures can be improved, this method is to ask students to write down the concepts that were least clear to them. Those least understood concepts that total a pre-determined threshold would be addressed by the professor in future lectures or by an additional handout clarifying the subject-matter. Advantages: Requires students to organize and filter their understanding of several topics to select one that was least understood. It requires minimal time to read the results. Disadvantages: This method should be used only occasionally as it focuses on a negative aspect of learning rather than a positive one.

T.A. Angelo and K. P. Cross, 1993. *Classroom Assessment Techniques*, 2nd ed. San Francisco: Jossey-Bass.
http://www.siue.edu/~deder/assess/cats/muddy3.html

2. Directed Paraphrase

This method promotes simulation of actual work or life-related experiences. Students are asked to summarize the key concepts from a class or lecture and formulate a written discussion of those concepts to an imagined, specific recipient. The differentiation between this method and a simple summarization is use of role play by the students.

Examples:

1. A nursing student might be directed to paraphrase the concept of drug clearance by the kidneys to a worried patient.
2. An economics student might be directed to paraphrase a point of tax policy to a corporate CEO.
3. A philosophy student might be directed to paraphrase an ethics concept so that it is readily understood by a teenager.

Advantages: Students are challenged in brevity and choice of language when writing the paraphrase. Students become well-prepared for similar situations in the work environment.

Disadvantages: Some students may see this method as informal. This can be avoided by detailed phrasing of the initial question.

http://www.siue.edu/~deder/assess/cats/paraph1.html

3. Minute Paper

Students are asked to spend about a minute to write down the main idea of a topic or class. The Minute Paper is commonly used to determine if the main idea of the instructor's lecture is captured by the students. An instructor may request the inclusion of a question students may have on the subject matter, or, ask students to comment on interesting, disturbing, or surprising aspects of a lecture or class.

Advantages: Minute Papers offer immediate feedback and, possibly, positive reinforcement to the professor. There is creative variability in the use of Minute Papers. Students must use organizational skills to chunk the information and rank the concepts. If questions are used, the assessment becomes integrative. Use of Minute Papers requires minimal time.

Disadvantages: May be time-consuming to review for large classes. Forming teams to answer question(s) may alleviate this issue.

T.A. Angelo and K. P. Cross, 1993. Classroom Assessment Techniques, 2nd ed. San Francisco: Jossey-Bass., p.148-53
http://www.siue.edu/~deder/assess/cats/minpap4.html

4. Characteristic Features

Characteristic Features is an assessment technique that requires students to differentiate between characteristics that do or do not define one or more topics. Using a grid structure, the instructor lists several characteristics in the left-hand column. In the columns to the right, the instructors gives topic headers, and the students are to enter a plus, "+" or minus, "-" sign to designate whether the characteristic in the left hand column is or is not applicable to the topic header.

Example:

Characteristic Feature	Grades	Classroom Assessment
1. More closely focused on improving learning and teaching rather than on recording results	-	+
2. Used primarily at the end of a course or project	+	-
3. Source material is usually collected anonymously	-	+
4. Mostly quantitative and suitable for statistical analysis	+	-
5. Directly mirrors student understanding of course	+	+
6. Emphasizes judgmental process and summative evaluation	+	-
7. Results designed for official and external use	+	-
8. Use of standardized and externally validated instruments preferred	-	-
9. Requires training in research methods	-	-
10. Results useful to professors and students	+	+

Source: Southern Illinois University, Classroom Assessment

Advantages: Characteristic Features measure students' use of analysis to identify central concepts. Scanning results is simple and can be done quickly.

Disadvantages: Grid creation may be time-consuming. Students may score highly due to random selection rather than content knowledge.
http://www.siue.edu/~deder/assess/cats/featurs6.html

5. RSQC2 - Recall, Summarize, Question, Comment, and Connect

Students take two minutes to *recall* and list in rank order the most important ideas from a previous day's class. Then they take another two minutes to *summarize* those points in a single sentence in order to "chunk" the information. Next, students are asked to write one major *question* that they want answered. Finally, students identify a thread or theme to *connect* this material to the course's major goal. As an option, students may add a *comment* regarding their confidence in or wariness of the specific course content.

Advantages: RSQC2 requires students to organize information and to comprehensively assess how it applies to the overall foundation of the course.

Disadvantages:
RSQC2 is time-consuming to evaluate. It also forces the professor to evaluate the course structure.

T.A. Angelo and K. P. Cross, 1993. *Classroom Assessment Techniques*, 2nd ed. San Francisco: Jossey-Bass., p. 344-8

http://www.siue.edu/~deder/assess/cats/rsq9.html

6. Transfer and Apply

Students are asked to takes course theories learned and to transfer the knowledge to applications and situations they have experienced.

Advantages: Because transference of learned material is a challenging cognitive achievement, Transfer and Apply provides students practice in mastering the task. Evaluating the results may be done rather quickly.

Disadvantages: Creating rubric to assess Transfer and Apply may be time-consuming. (see section on Rubrics)

T.A. Angelo and K. P. Cross, 1993. *Classroom Assessment Techniques*, 2nd ed. San Francisco: Jossey- Bass., p. 236-9
http://www.siue.edu/~deder/assess/cats/apps9.html

7. Anecdotal Records

Anecdotal Records are written observations of instructional experiences within a predefined set of content standards.

Advantages: Anecdotal records facilitate review of assessment and curriculum by providing observations of student learning.

Disadvantages: This method requires planning, preparation and may be time consuming during class time.

T. K. Rhodes and S. Nathenson-Mejia *Anecdotal Records: A Powerful Tool for Ongoing Literacy Assessment*, Reading Teacher, v45 n7 p502-09 Mar 1992

8. ConcepTests

Conceptests are a technique used where the instructor asks questions about key concepts and offers students several possible answers. Students are asked to select an answer and to indicate immediately, either by show of hands or by clicker, the answer selected. If the majority of the class has not mastered the concept, students are then asked to discuss with their neighbor the reasons supporting their choice. A second assessment is given by the instructor to re-assess knowledge.

Example:

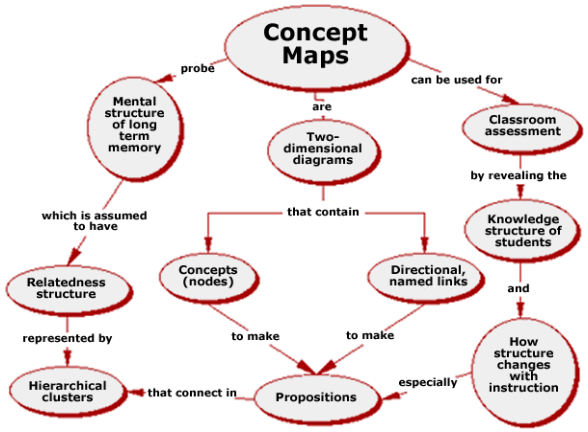
Advantages: This classroom assessment works well in large classes. Students require little training for Conceptests. It takes minimal class time to perform the tests and to analyze results.

Disadvantages: Formulating the questions and possible answers for the Conceptests can take time initially. There is a cost involved in the clicker system.
http://www.flaguide.org/cat/contests/contests1.php

9. Concept Maps

Concept Maps are a visual tool allowing students to see the relationships between general and specific concepts. Concepts are given in a hierarchical design, with links between defining the nature of the relationships.

Example:



Source: http://www.flaguide.org/cat/conmap/conmap2.php

Advantages: Effective for assessing students' understanding of complex relationships.
Disadvantages: Instructor prep time can be significant for creating fill-in Concept Maps.

See also: Flowcharts or Diagrams
http://www.flaguide.org/cat/conmap/conmap1.php

http://classes.aces.uiuc.edu/ACES100/Mind/c-m2.html

10. Quizzes or Exams

These are locally developed instruments designed by faculty to measure knowledge in single or multiple components of a course.

Advantages: The content is easily modified to adapt to specific outcomes. Results are meaningful for both student evaluation and learning outcomes. Embedding Learning Outcomes into the quiz or exam is uncomplicated. Feedback may be rapid.

Disadvantages: Creating quizzes or exams may be time-consuming. Determining reliability and validity require extensive knowledge in measurement.

http://www.apa.org/ed/eval_strategies.html

11. Rubrics

A rubric is a scale designed for scoring student work against a pre-defined set of criteria. A rubric is typically in table format with two or more criteria and two or more levels of performance to be measured.

Analytical rubrics specify individual criteria and evaluate these standards independent of one another.

Holistic rubrics measure performance across multiple factors as a complete product.

Advantages: Assessment is objective and consistent. Rubrics clearly document and communicate expectations.

Disadvantages: Using rubrics may be limiting to student creativity as students strive to follow a predefined outline. Rubrics are time-consuming to create.

http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm

http://www.ion.illinois.edu/resources/pointersclickers/2004_03/benefits.asp

12. Essays

Essays are a written evaluation of a topic utilized to demonstrate a student's ability to plan, research, analyze, organize and synthesize information. Students develop stronger communication skills through essay writing.

Advantages: Effective for assessing students' understanding of multiple concepts.

Disadvantages: Grading is time-consuming.

http://www.apa.org/ed/eval_strategies.html

13. Case Studies

Case studies are actual issues and problems that students analyze to formulate alternative solutions for the situations. Numerous case studies in various disciplines have been developed by academic institutions and are available for purchase and use by other schools.

Advantages: Case studies demonstrate analytical and synthetic thinking well. Also, students benefit from relating other knowledge to topic.

Disadvantages: The learning experience is dependent on student knowledge from multiple areas.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study

14. Problem Solving

Problem Solving uses the same approach as Case Studies, but may leave more developmental problem solving to the student. For instance, the student must develop the experiment or tests to obtain data.

Advantages: This technique displays analytic and synthetic thinking well and is authentic if real world situations are used.

Disadvantages: Problem solving assessment is difficult to grade due to multiple methods and potential multiple solutions.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study

http://www.ruf.rice.edu/~lane/rvls.html

15. Speech

Oral speech is a method used to emphasize a student's organizational and verbal communication skills. Students may be required to analyze an issue or situation and verbally present the findings or students may be asked to memorize passages to recite verbatim.

Advantages: Students improve skills in public speaking and organization.

Disadvantages: Some students may be insecure about public speaking.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8b.htm

http://serc.carleton.edu/NAGTWorkshops/assess/oralpresentations.html

16. Oral Interview

An oral interview provides a portrait of a student's understanding about a specific concept or set of related concepts. The interview may consist of a question and answer session or a task or problem-solving exercise.

Advantages: Appropriate for all disciplines.

Disadvantages: Several hours may be required to develop a reliable questions or problem sets. Interviews are best used when the student has developed a comfortable relationship with the professor.

http://www.colorado.edu/pba/outcomes/ovview/mwithin.htm

17. Debate

A debate is an oral speech contest between competing sides about a specific topic or proposition. Debates increase student abilities in knowledge, speaking skills, reasoning skills and analysis.

Advantages: Students are required to organize thoughts and formulate clear and concise arguments in a short period of time. Depending upon the number of students involved, the debate process may emphasize teamwork.

Disadvantages: Students from collective cultures may be uncomfortable with public displays of disagreement.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8b.htm

http://www.apa.org/ed/eval_strategies.html

18. Product Creation

Product creation requires the student to construct a tangible product. Students exhibit knowledge and practical skills required for the processes and outputs.

Advantages: Students have the opportunity to demonstrate employability.

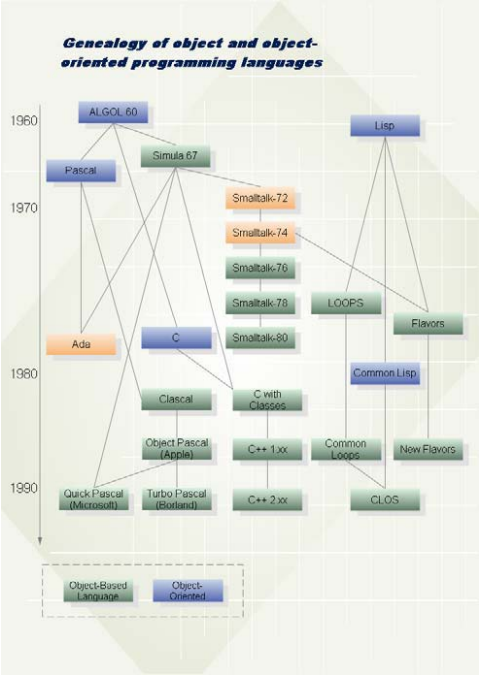
Disadvantages: Colleges may be limited in resources available for product creation.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8b.htm

19. Flowchart or Diagram

A flowchart is a visual or graphical representation, primarily through the use of symbols, of the logic or sequence of steps in a process, operation, function, or activity. Students must recall information and also analyze and synthesize organization and structure to develop systematic steps within the process.

Example:



Source: http://www.edrawsoft.com/flowchart-examples.php

Advantages: Effective for assessing student understanding of complex relationships.

Disadvantages: Instructor preparation may be time consuming to create complex outline of flowcharts.

See also: Concept Map

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study

20. Team Project

Team projects are collaborative projects produced to cover concepts in one course, multiple courses, such as learning communities, or community projects, such as service learning.

Advantages: Appropriate for assessing students' knowledge of multiple concepts, as well as multiple levels of understanding and application.

Disadvantages: May be difficult to assess individual student involvement. Additional time may be required due to collaboration with faculty from other disciplines.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study
http://www.cpcs.umb.edu/partners_projects/partners_projects_collaborations.htm

21. Portfolios

Portfolios are collections of students work that demonstrate the progress and level of learning that occurs over a period of time. The variety of work maintained in the portfolio illustrates multiple levels of learning.

Advantages: Analyzing a portfolio of work allows the faculty to assess a broad spectrum of knowledge at one time. Also, it allows for assessment of several learning objectives simultaneously. Portfolios are useful for a number of disciplines. Portfolios are easily adaptable to measuring different levels of assessment (e.g. course, program, general education).

Disadvantages: May be labor-intensive to assess at the end of a term or program. Depending upon the course or program, portfolios may require physical storage space for hard copies.

http://www.provost.wisc.edu/assessment/manual/manual2.html#a4

22. Performances

A performance is an execution of an action or artistic work. Performances emphasize what the student is able to do. Students receive valuable practical experience through active learning.

Advantages: Performances are adaptable. They promote student self-assessment. Students have the opportunity to demonstrate employability.

Disadvantages: Preparation and assessment for performances can be time-consuming. Students who are insecure may be dissuaded from participation. Depending upon the discipline assessed, this method may require extensive training of reviewers.
http://www.austincc.edu/oiepub/pubs/effectiveness/iumanual.pdf p 24

23. Capstone Project

A Capstone project measures student achievement of a broad knowledge base derived from participation in a program or a specific series of courses.

Advantages: Capstone projects are cumulative and integrative. Assessment of projects provides a setting for department or discipline-specific dialogue.

Disadvantages: Capstone projects can be labor-intensive. Coordination across the departments or disciplines may be challenging.

http://www.colorado.edu/pba/outcomes/ovview/mwithin.htm

24. Reflective Self-Assessment Essay

Students are asked to reflect on their college experiences. They must critically assess their academic growth and development in essay form, providing substantiation for their positions. When used in combination with Student Portfolios, students can observe development and document progress thoroughly.

Advantages: Student perspective is authentic.

Disadvantages: Reflective Self-Assessment is an indirect method of assessment.

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study

25. Satisfaction or Perception Surveys

Student satisfaction or perception surveys are used to gather data about student priorities and satisfaction. Surveys can be locally created or commercially standardized. Some standardized surveys allow for partial customization to allow the department or school to collect specialized data.

Examples: CCSSE and NSSE on student engagement, Noel-Levitz SSI (Student Satisfaction Inventory), CSEQ College Student Experiences Questionnaire

Advantages: For commercially developed surveys, scores are immediate and data are compared to student populations nationwide.

Disadvantages: Usually the college-wide instruments such as CCSSE are administered not for class-level feedback, but for college-level feedback; therefore, it is hard to use these surveys for class-based review of your own students. It is time consuming to generate questions for locally developed surveys.

See also: Exit Interview

http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Case%20Study

http://www.mtsac.edu/administration/research/pdf/tips/ResearchTips%20v1n1%20designing%20surveys.pdf

26. Licensing Exams

Many vocational careers require students to pass licensing exams to enter a specific field of work. Sample licensing exams are available for many professional licenses.

Advantages: Students see probable outcome of their preparation. Sample scores are useful for assessing areas of student strength and weakness, in order to modify and improve instruction.

Disadvantages: Low scores on sample exams may disillusion students.
http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_8Toolslinks.htm#Licensing%20Exams

27. Standardized Tests

Standardized tests are assessments created and tested under controlled conditions to determine the level of learning acquired. Student competencies are measured and compared to national standards.

Advantages: Benefits include broad public usage and ease of data comparison. Results demonstrate external validity. Recent high-school graduates may have familiarity with the format of standardized tests.

Disadvantages: Unlike locally-developed quizzes or exams, standardized tests do not offer the flexibility of customization to various goals or outcomes. Faculty may be unable to clearly determine where student succeed and fail.

http://www.provost.wisc.edu/assessment/manual/manual2.html#a3

28. Exit Interviews

Exit Interviews ask students to reflect upon student learning and their educational experiences. Students are asked about instructional approaches, classroom environments and perceptions of assignments that best encourage student learning.

Advantages: Provides authentic and immediate feedback useful for assessing program improvement. Interaction with students may provide richer data collection. Interviews allow for clarification and depth of inquiry.

Disadvantages: Best if used in conjunction with other assessment tools.

See also: Satisfaction or Perception Surveys

http://www.skidmore.edu/administration/assessment/hbmethods.htm#indirect

29. Focus Groups

Focus groups are interactive discussions among a small pool of participants. Students are asked about attitudes towards their educational experience.

Advantages: Focus groups allow for in-depth inquiry, clarification, and follow-up on issues. Useful when combined with quantitative analysis for a broad understanding of issues.

Disadvantages: Data is indirect. Assembling groups of students may be challenging due to scheduling differences. Focus group data may be biased. Focus group moderator must be properly trained to address the group. Requires additional personnel to record and/or transcribe responses.

http://www.mtsac.edu/administration/research/pdf/tips/ResearchTips%20v1n3%20focus%20groups.pdf

30. Pre-Post Assignment/Test

At the onset of a course, an assignment or test is administered to measure the baseline level of understanding of one or more concepts. After learning occurs, a similar assignment or test is given to determine the level of learning.

Advantages: Pre-test results offers direction for group learning. This methods provides immediate feedback, if desired.

Disadvantages: Possible tendency to teach to the post test or assignment.

http://www.pvc.maricopa.edu/AI/documents/PrePost.doc

APPENDIX 3: SAMPLE RUBRICS

Communication V01 Rubric:

French V01 Rubric:

French V02 Rubric:

APPRNDIX
History VO7A:

History V08A Rubric:

APPENDIX #4: FORMS

The following forms can be found next:

- Individual Faculty Assessment Form
- Course Level Assessment Summary Form
- Service Unit Outcomes Assessment Form
- Program Level Summary Form

INDIVIDUAL FACULTY SLO ASSESSMENT RESULTS FORM

NOTE: All sections of the course taught by the instructor must be assessed.

Year/Semester:	☐ Fall ☐ Spring Year?
Program:	Program?
Faculty Name:	
Course:	
Number of sections you teach of this course (Note: All sections need to be assessed.)	____ Sections taught
*** Course Level SLO assessed:**	
Assessment Tool/Assignment: (please describe briefly)	
***Rubric Used to Evaluate Student Performance of this SLO:**	(Attach a copy of the course-level rubric for this SLO)
STUDENT PERFORMANCE INDICATORS: *What achievement level has been agreed upon by the faculty who teach this course?	__ % or more of students will perform at __ level (or higher)
Was this goal achieved?	☐ Yes ☐ No
STUDENT PERFORMANCE ASSESSMENT: **Number of students in your course(s) who performed at/above OR below the achievement level:**	__students performed at or above the agreed achievement level __ students performed below the agreed achievement level
Explain any extenuating circumstances that may have affected performance of this SLO.	
Beyond any extenuating circumstances, provide your thoughts on the assessment results and, if appropriate, provide suggestions for ways to increase student success for this SLO in future semesters :	

* This information needs to be determined by the department (or by the faculty teaching this course) prior to the completion of the form.

Send a copy of this form to your Department Head and keep a copy for yourself. You will be using this form in discussions with other faculty teaching this course in completing the COURSE LEVEL SLO ASSESSMENT SUMMARY SHEET.

COURSE LEVEL SLO SUMMARY

Year/Semester:	☐ Fall ☐ Spring Year?
Program:	Program?
Faculty members in attendance at meeting:	
Course:	
Course-level SLO assessed: (Attach copy of rubric for this SLO)	
Assessment Tool(s)/Assignments Used by Faculty:(describe briefly)	
STUDENT PERFORMANCE INDICATORS: **What achievement level goal has been agreed upon by the faculty who teach this course?** Note: The achievement level would have been determined previously and should be on the Individual Faculty SLO assessment form.	__ % or more of students will perform at __ level (or higher)
Was this goal achieved?	☐ Yes ☐ No
STUDENT PERFORMANCE ASSESSMENT: **Summary of Assessment Results (include data when available).**	___# students performed at or above the achievement level ___# students performed below the achievement level
FINDINGS: **Explain the performance assessment results using the data collected and assessed.**	
Actions that will be taken to increase student learning for this SLO in future semesters: (check all that apply)	☐ Revise content of assignment/activities ☐ State goals or objectives of assignment/activity more explicitly ☐ Revise the amount of writing/oral/visual/clinical or similar work

	☐ Revise activities leading up to and/or supporting assignment/activities ☐ Increase in-class discussions and activities ☐ Increase student collaboration and/or peer review ☐ Provide more frequent or fuller feedback on student progress ☐ Increase guidance for students as they work on assignments ☐ Use methods of questions that encourage competency ☐ State criteria for grading more explicitly ☐ Increase supplemental learning activities ☐ Have colleagues critique assignments ☐ Collect more data ☐ Revisions to the course outline are needed ☐ Revisions to the curriculum are needed ☐ Nothing – assessment indicates no improvement necessary ☐ Other actions (please list)

PROGRAM INITIATIVES:

From the list of possible actions above, list your highest priorities below and give them a title. (i.e. Revise activities in the assignment; increase collaboration; etc.) The faculty teaching this course will determine the number of initiatives. Please place them in priority order.

INITIATIVE #1 TITLE:	
What steps will be taken:	
What is your timeline:	☐ Fall ☐ Spring Year?
What resources does your initiative require? (i.e. equipment, space, training, personnel, budget, etc.)	

INITIATIVE #2 TITLE:	
What steps will be taken:	
What is your timeline:	☐ Fall ☐ Spring Year?
What resources does your initiative require? (i.e. equipment, space, training, personnel, budget, etc.)	
If significant changes are made to address the course-level student learning outcome, it is recommended that the outcome be revisited soon rather than as part of a regular cycle. This course-level student learning outcome will be revisited:	☐ Fall ☐ Spring Year? ☐ This course-level student learning outcome will not be revisited specifically to address the changes made.
CLOSING THE LOOP: (Fall 2011 and beyond) **What is the status of the prior semester's initiatives?**	

Other comments:_____

Submitted by _____ Date _____

SERVICE UNIT OUTCOMES SUMMARY

The purpose of this summary form is both to document the results of the program outcome assessment levels and to lay part of the foundation for program review analysis.

Semester/Year:(Click on Semester/Year?)	☐ Fall ☐ Spring Year?
Program: (Click on Program?)	Program?
Faculty and staff members in attendance at meeting:	
Program-level SUO assessed:	
PERFORMANCE INDICATORS: *** What achievement level has been agreed upon?** (i.e. ___% or higher will correctly complete their applications OR ____% will rate the workshop satisfactory or better, etc.)	___% or higher will: _____
Assessment Tool(s) Used: (describe briefly)	
PERFORMANCE ASSESSMENT: **Did you meet the performance indictors identified above?**	☐ Yes, the goal was met ☐ Could not be determined from data ☐ No, did not meet the goal Additional analysis:
FINDINGS: **Explain the performance assessment results using the data collected and assessed.**	
Actions that will be taken to increase student learning for this SUO in future semesters: (check all that apply – these are intended to be examples, and they may or may not be appropriate for your area. Space is provided for additional actions.)	☐ Clarify instructions ☐ Revise workshop or session content ☐ Increase number of activities in workshop or sessions ☐ Create additional handouts ☐ Provide more student access to computers

	☐ Provide computer ☐ Provide more student access to faculty/staff ☐ Improve point of service/contact assistance ☐ Provide documentation in another language or in an alternate format ☐ Increase website presence ☐ Create or expand online services or resources ☐ Create instructional videos for website and/or YouTube ☐ Create online "Ask a ____" (e.g. counselor, A & R representative, etc.) ☐ Improve services for off-site students ☐ Increase outreach ☐ Increase outreach for online students ☐ Provide mechanism for students to email questions ☐ Collect more data ☐ Assessment indicates no improvement necessary ☐ Other actions (please list)
PROGRAM INITIATIVES: **From the list of possible actions above, list your highest priorities below and give them a title.** (i.e. Revise the online orientation or expand outreach to high schools, etc.) **The program faculty and/or staff will determine the number of initiatives. Please place them in priority order.**	
INITIATIVE #1 TITLE:	
What steps will be taken:	
What is your timeline:	☐ Fall ☐ Spring Year?
What resources does your initiative require? (i.e. equipment, space, training, personnel, budget, etc.)	
INITIATIVE #2 TITLE:	

What steps will be taken:	
What is your timeline:	☐ Fall ☐ Spring Year?
What resources does your initiative require? (i.e. equipment, space, training, personnel, budget, etc.)	
If significant changes are made to address the service unit outcome, it is recommended that the outcome be revisited soon rather than as part of a regular cycle. This service unit outcome will be revisited:	☐ Fall ☐ Spring Year? ☐ This course-level student learning outcome will not be revisited specifically to address the changes
CLOSING THE LOOP: (For Fall 2011 & beyond) **What is the status of the prior semester's initiatives?**	

Other comments:_____

_____

_

Submitted by _____ Date _____

VENTURA COLLEGE, DOCUMENTATION FORM FOR PROGRAM/SERVICE LEVEL SLOs

Program	
Date of Meeting	
Names of Attendees	
College Level SLOs (formerly "Core Skill Sets")	**List 1-3 <u>college level</u> SLOs that apply most logically and directly to your program.** The six college SLOs are: (1) Communication, (2) Information Competency, (3) Critical Thinking and Problem Solving, (4) Creative Expression, (5) Civic Responsibility, and (6) Social Interaction and Life Skills. ***Forgot what these headings describe? Look on page 41 of the current college catalog.*** *[Example: English might select (1) Communication and (2) Information Competency]* 1. Xxx 2. Xxx 3. Xxx
Provide a summary of the discussion in which program-level SLOs were created.	***Need some ideas about how to structure the discussion to create program level SLOs? Your dean has been provided with an example of one way to facilitate the meeting.***
Program/Service Level SLOs (add or delete number as appropriate)	**List 3-6 <u>program or service level</u> SLOs.** These outcomes should describe in a broad way what we intend for students to be <u>able to do</u> as a result of the work they done completing a degree or certificate in the program. *[Example: For a certificate in Accounting, the program SLOs might be: (1) Produce accurate financial statements for a company (2) Construct basic accounting documents and solve case problems utilizing appropriate technology, and (3) Analyze existing documents by verifying the accuracy of information for a company and performing necessary reconciliation.]* Before you complete your program level SLOs, review the SLOs for the individual courses in your program to ensure that there is a logical relationship and alignment between the course SLOs and the program SLOs. For programs where it is expected that a student may only take one or two required courses (Speech or English, for example), the program SLOs might be (but need not be) drawn from the bullet points that further define the college level SLOs and that are found on page 41 of the current college catalog. *[Example: If English were to draw its program level SLOs solely from the bullet points of the college SLOs, the program SLOs might be: (1) Write clearly and accurately in a variety of contexts and formats, (2) Evaluate authority, veracity, and bias of information, (3) Document their sources of information.]* ***Need some additional examples? Your Dean has a printout of examples from other colleges.***

	1. Xxxx 2. Xxxx 3. Xxxx

>>>> In addition: Attach a copy of the course-level SLOs for all courses taught by your program during the spring 2011 semester. Your division office can provide you with a copy of the existing course-level SLOs if you do not already have one.

Summary submitted by _____Date _____

Submit a copy of your completed form electronically to: Sandy Hajas, Learning Resources Division
Deadline: Friday, December 17, 2010.

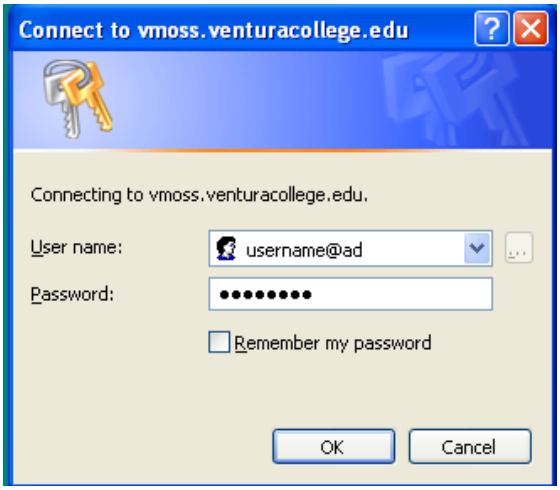
Submit a file copy of your form to your Dean.

APPENDIX #5: SharePoint How to Guide

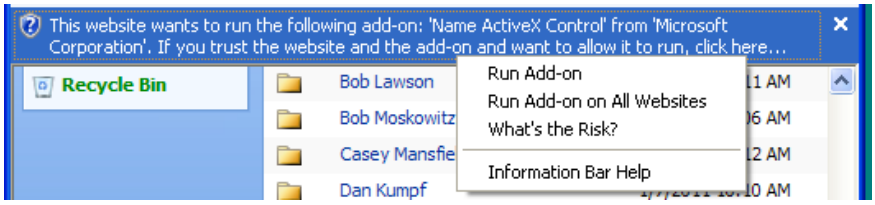
SharePoint Quick Start Guide for SLO site.

SharePoint is a web-based program that allows document saving, sharing, and updating. We have created a SharePoint SLO site for you to help you organize the implementation of the SLO process.

The address is: http://vmoss.venturacollege.edu/SLO . To logon to the SLO site, use your My.VCCCD.edu user name and password as shown below. Note: You must add @ad to your username "username@ad" OR use "ad\username". If you are unable to logon to the site, contact David Oliver at 654-6339.



To get to your SLO documents, click on the "Shared Documents" link at the left of the screen and select your folder. You will have full access to this folder and will be able to open, modify, add, and delete files. The folders are organized alphabetically by Department Chairs' name, programs. SLOs, Rubrics, Course-Level Summary forms will go in program folders. You may wish the organize your folder to match your specific needs and style by creating new folders within your program folder. The following will guide you through the basic functions of the SharePoint site.



The first time you run SharePoint on your computer, you will get the following message: Click on the message and select "Run Add-on on All Websites". This allows full use of SharePoint on your computer.

HOW TO:

Navigate to your folder: Click on "Shared Documents" and scroll down to the folder with your name and click on your folder.

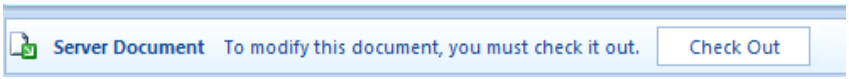
Create a New folder: Click on New and select New Folder from the drop down menu.

Upload a file: Click on Upload and select **"Upload Document"** or **"Upload Multiple Documents"**

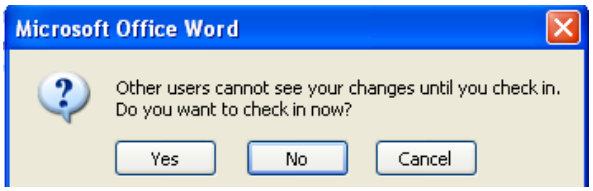
a) Upload Document: Select **"Browse"** and navigate to the location of the document on your computer. Click on the document and click Open. Then click OK. The file will be uploaded to the SharePoint folder currently selected.

b) Upload Multiple documents: Browse to the folder on your computer containing the documents you wish to upload. Click the box next to each file and click OK. The file will be uploaded to the SharePoint folder you have currently selected.

Open a file to Read Only: Click on the name of the file you want to open. The file will open in **Read Only** and cannot be edited. You may save the file to your computer and then edit the file.



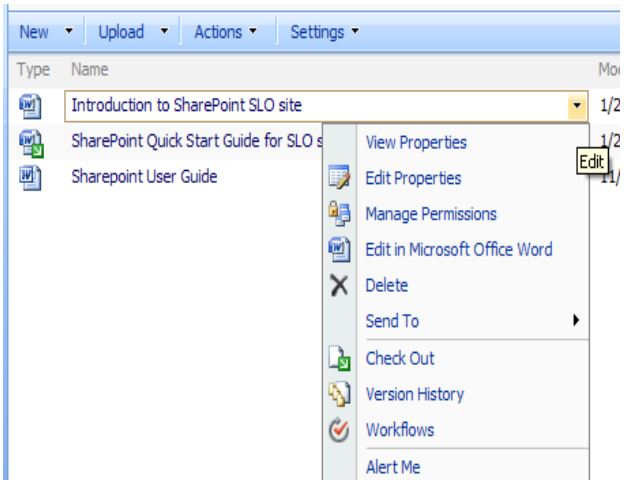
Open a File to Edit: Click on the file you would like to open. At the top of that document, the following message appears. Click "Check Out" at the top of the Read Only file to be able to edit.



Save your work: From your document, select **"Save"** or "**Ctrl S**" to save the file with the same file name or select "**Save As**" if you would like to change the name. When done editing and saving a file click the close button,  , on the document and then select yes from the following popup window.

Delete a File: When your pointer rolls over the file name, the outline of a drop down window appears. Click on the drop down window and several choices appear. Select "Delete" and the file will be deleted.

Other Options on this drop-down window: "View Properties" shows properties for the file. "Edit Properties" allows such things as renaming the file. "Manage permissions" allows you to see who has access to the file and to control that access. "Edit in Microsoft Word" allows you to edit a word file. "Send" to allow you to send the file as an attachment to an e-mail. "Check Out" allows you to edit the file and prevents others from having access to the file. Check In will automatically upload files after you are finished editing; other users can only edit the file after the file is "checked in" and if they have permission to edit the file.



Add a tab to your portal. 1) Log onto http://my.vcccd.edu and click on "Content Layout". 2) Click on the Add Tab. 3) Name the tab: SharePoint SLO. 4) Click the "Framed – URL:" button and enter the SharePoint web address http://vmoss.venturacollege.edu/SLO 5) Click Submit

File Naming Convention for SLO Project: We need to be consistent with our naming of the electronic forms for ease of identification of the particular form. Please use the following conventions.

Form	Naming Convention	Example
Individual Faculty Assessment	N/A	N/A
Course-Level SLO Assessment Summary	Course name + SLO + date.doc	Chem V01 SLO 02-05-2011.doc
Program-Level SLO	Program + PSLO+date.doc	Chemistry PSLO 02-10-2011.doc
Service Unit Outcome Assessment	N/A	N/A
Service Unit Outcome Assessment Summary	Service Unit+SUO+date.doc	Assessment SUO 02-05-2011.doc
Service Unit Program SUO	Service Unit+PSUO+date.doc	Assessment SUO 03-03-2011

APPENDIX 6: RESOURCE LIST

Academic Assessment: Advantages and Disadvantages of Various Assessment Methods. Morningside College.
www.morningside.edu/academics/research/assessment/documents/advantagesdisadvantages.pdf

Angelo, T.A. and Cross, K.P. Classroom Assessment Techniques. Jossey-Bass. San Francisco. Accessed from: http://www.siue.edu/~deder/assess/cats/

Wallace, Roslyn. Assessing the Effectiveness of Instructional Units. Austin Community College. http://www.austincc.edu/oiepub/pubs/effectiveness/iumanual.pdf

Assessment Methods Used by Academic Departments and Programs. University of Colorado, Boulder. http://www.colorado.edu/pba/outcomes/ovview/mwithin.htm

Classroom Assessment Techniques (CATs) Overview. Field-tested Learning Assessment Guide. http://www.flaguide.org/cat/cat.php

Collaborative Learning Projects. The College of Public and Community Service. University of Massachusetts, Boston.
http://www.cpcs.umb.edu/partners_projects/partners_projects_collaborations.htm

Frye, Richard. Assessment and Outcomes. Center for Instructional Innovation, Teaching & Learning Resources. Western Washington University
http://pandora.cii.wwu.edu/cii/resources/outcomes/default.asp

Fulks, Janet. Assessment Tools and Data. Assessing Student Learning in Higher Education. Bakersfield College.
http://online.bakersfieldcollege.edu/courseassessment/Section_4_Assessment_Tools/Section4_1.htm

Guidelines For The Assessment Of Learning Outcomes, Arizona State University
http://129.219.216.161/assess/assessguide.pdf

Index of Classroom Assessment Techniques. Southern Illinois University, Edwardsville
http://www.siue.edu/~deder/assess/cats/

Kinds of Concept Maps. University of Illinois at Urbana-Champaign.
http://classes.aces.uiuc.edu/ACES100/Mind/c-m2.html

McNeice-Stallard, Barbara. Focus Groups. Research Tips. Mt. San Antonio College.
http://www.mtsac.edu/administration/research/pdf/tips/ResearchTips%20v1n3%20focus%20groups.pdf

McNeice-Stallard, Barbara. Designing Surveys. Research Tips. Mt. San Antonio College.
http://www.mtsac.edu/administration/research/pdf/tips/ResearchTips%20v1n1%20designing%20surveys.pdf

Morante, Edward A. A Handbook on Outcomes Assessment for Two Year Colleges. College of the Desert.
http://www.laccd.edu/inst_effectiveness/Student_Learning/documents/AssessmentHandbookSpring.pdf

Mueller, Jon. Rubrics. Authentic Assessment Toolbox. North Central College.
http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm

Outcomes Assessment. Office of the Provost. University of Wisconsin
http://www.provost.wisc.edu/assessment/manual/manual2.html

Rhodes, Lynn K.; Nathenson-Mejia, Sally. Anecdotal Records: A Powerful Tool for Ongoing Literacy Assessment, *Reading Teacher*, v45 n7 p502-09 Mar 1992

Scroggins, Bill. The Teaching-Learning Cycle: Using Student Learning Outcome Results to Improve Teaching and Learning. Modesto Junior College. Accessed from:
http://www.smc.edu/research/SLO's/Teaching%20the%20TLC%20to%20the%20SLOs.doc

Varvel, Virgil E. Rubrics. Pointers and Clickers. Illinois Online Network. University of Illinois.
http://www.ion.uillinois.edu/resources/pointersclickers/2004_03/benefits.asp

Wright, Barbara D. Advantages and Disadvantages of Assessment Techniques. Accessed from:
http://cai.cc.ca.us/Resources/AssessmentMethods.doc