



Course and Program Student Learning Outcomes Assessment Handbook

Course and Program Level Principles and Practices

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o **TABLE OF CONTENTS**

TABLE OF CONTENTS.....	2
I. Mission Statement.....	3
II. Why Engage in Outcomes Assessment?.....	3
III. How is SRJC Approaching the Assessment Process?	3
Assessment at the Course Level	3
Assessment at the Program Level	4
Assessment at the Institutional Level.....	4
IV. Principles of Assessment at SRJC	4
V. Developing an Assessment Project.....	5
Five Row Model	5
Step-By-Step Guide to the SRJC Five Row Model	6
SLO Assessment Form	6
VI. Instructions for Using the Five Row Model	6
VI. Instructions for Using the Five Row Model	7
Step 1: Formulate intended Student Learning Outcomes for Course or Program	7
Step 2: Determine the method of assessment for each Program or Course SLO and the criteria for success.	9
Step 3: Conduct and document assessment activities.....	12
Step 4: Use the results of assessment for program or course improvement.	12
Step 5: Conduct follow-up assessment to determine effectiveness of program or course improvement. (This step is optional.)	13
Suggested Student Learning Outcomes assessment Project Timeline for Courses, Certificates and Majors	14
Appendix.....	15
I. Accrediting Commission Statement	15
II. Nine Principles of Good Practice for Assessing Student Learning (AAHE) ...	15
III. FAQs	17
IV. Generating program outcomes	20
V. Tips for writing student learning outcomes	23
VI. Writing Student Learning Outcomes.....	27
VII. Student Learning Outcomes Checklist	29
VIII. Active Verbs list	30
VIII. Learning Assessment Project Proposal Form (LAP)	32
X. Assessment methods examples.....	355
XII. PowerPoint presentation: It's All About the Outcomes: How to Write SLOs for the New Curriculum Database	356

I. Mission Statement

The mission of Project LEARN at Santa Rosa Junior College is to support collaborative inquiry into and conversation about the learning process. Through outcomes assessment we demonstrate a common commitment to academic excellence and ongoing improvement in the way we provide education and services to our students.

II. Why Engage in Outcomes Assessment?

Throughout the nation, community college accrediting agencies have increasingly called for the use of broad-based assessment to more objectively measure student achievement of learning outcomes. Our local accrediting body, the Western Association of Schools and Colleges (WASC), has elected to use SLO assessment as an integral part of its accrediting standards. This is, in large part, a response to the U.S. Department of Education's call for colleges and universities to engage in a process of continual self-examination and reflection with the goal of improvement. As a result, Santa Rosa Junior College is now implementing a comprehensive student learning outcomes assessment program, the results of which will be reviewed during the next accreditation visit in spring 2009. The self-study report for that visit will be drafted in fall 2007 and spring 2008. However, for this program to be successful it must not be done simply as an "exercise" for accreditation purposes. Continual self-evaluation and the resulting curricular innovation will promote both academic excellence and institutional effectiveness.

Although all educators engage in a practice of defining objectives and measuring outcomes in one form or another, many of us do not approach the process in a systematic or collaborative fashion. And perhaps more of us do not have in place a shared, structured procedure to analyze the results and modify our curricula or approach. By being more transparent and systematic in defining and measuring achievement of objectives, we have an opportunity to:

- *Enhance student learning*
- *Provide guidance to instructors, especially new faculty*
- *Identify and overcome barriers to effective teaching*
- *Facilitate collaboration within and among departments*
- *Improve student learning, retention and program completion*

III. How is SRJC Approaching the Assessment Process?

Project LEARN has set up three work groups to facilitate assessment at the course, program, and institutional levels: c-LEARN, pro-LEARN, and i-LEARN.

Assessment at the Course Level

Assessment of student learning begins in the classroom where instructors can evaluate learning, analyze results, and improve instruction. At the course level, assessment projects are structured to determine whether the student learning outcomes are being achieved at the completion of a course.

c-LEARN, which focuses on course-level learning outcomes, has been developing appropriate assessment policies and procedures, and is acting as a mentoring body aiding faculty, departments, and programs in developing and implementing their own learning outcomes assessment projects.

Assessment at the Program Level

At the program level, faculty collaborate to identify program learning outcomes and then design assessment plans to evaluate the critical learning outcomes students should be able to demonstrate as a result of completing the program.

pro-LEARN is the subcommittee of Project LEARN charged with helping programs and departments to articulate and assess the more broad-based program-level learning outcomes. For the purposes of Project LEARN, an instructional program is defined as the following: an occupational certificate, an occupational degree, a transfer major, or a group of connected courses leading to a defined goal.

Assessment at the Institutional Level

The goal at the institutional level is to elicit input from faculty, staff and managers district wide to gain consensus on what it is we wish all of our students to know or be able to do as a result of being a student at SRJC.

i-LEARN is the subcommittee of Project LEARN charged with developing and assessing institutional learning outcomes.

Membership in the work groups is evenly divided between faculty and administrators. Project LEARN members are involved in helping faculty, administrators, and staff set up and implement the assessment process. Please contact members of the appropriate Project LEARN subcommittee if you need assistance in developing your outcome assessment project or if you want to become involved in Project LEARN.

IV. Principles of Assessment at SRJC

- Faculty members identify learning outcomes, specify the means of assessment and decide what to do with the results in order to improve or enhance instruction.
- Assessment is an ongoing process. Instructors, as well as college service personnel, assess achievement of outcomes on a regular basis.
- Assessment continues after and apart from visits of accrediting agencies in order to use assessment for improvement.
- Assessment focuses institutional attention on quality.
- Assessment results are not and should not be associated with individual faculty or staff evaluation.
- Assessment analyzes the learning process, not the individual student, faculty member, or course.

V. Developing an Assessment Project

An SRJC assessment project consists of five steps, which create ongoing opportunities improvement that supports our quest for excellence.

Five Row Model

The Five Row model is based on work developed by Dr. James Nichols and Karen Nichols of Institutional Effectiveness Associates and will be used for the development and reporting of course and program level SLOs and assessment results across campus. The forms and procedures outlined in this handbook are intended to facilitate the assessment process.

Blank forms are available online at www.santrrosa.edu/projectlearn. A description of how to complete each of the Rows follows. Examples of completed forms appear in the Appendix.

Please be aware that it will take some time and collaboration to complete all five rows of the form. Project LEARN team members will be working directly with departments and faculty members throughout the coming years to assist them in developing their outcomes, determining the means of assessment, and compiling the results of that assessment in order to improve student learning.

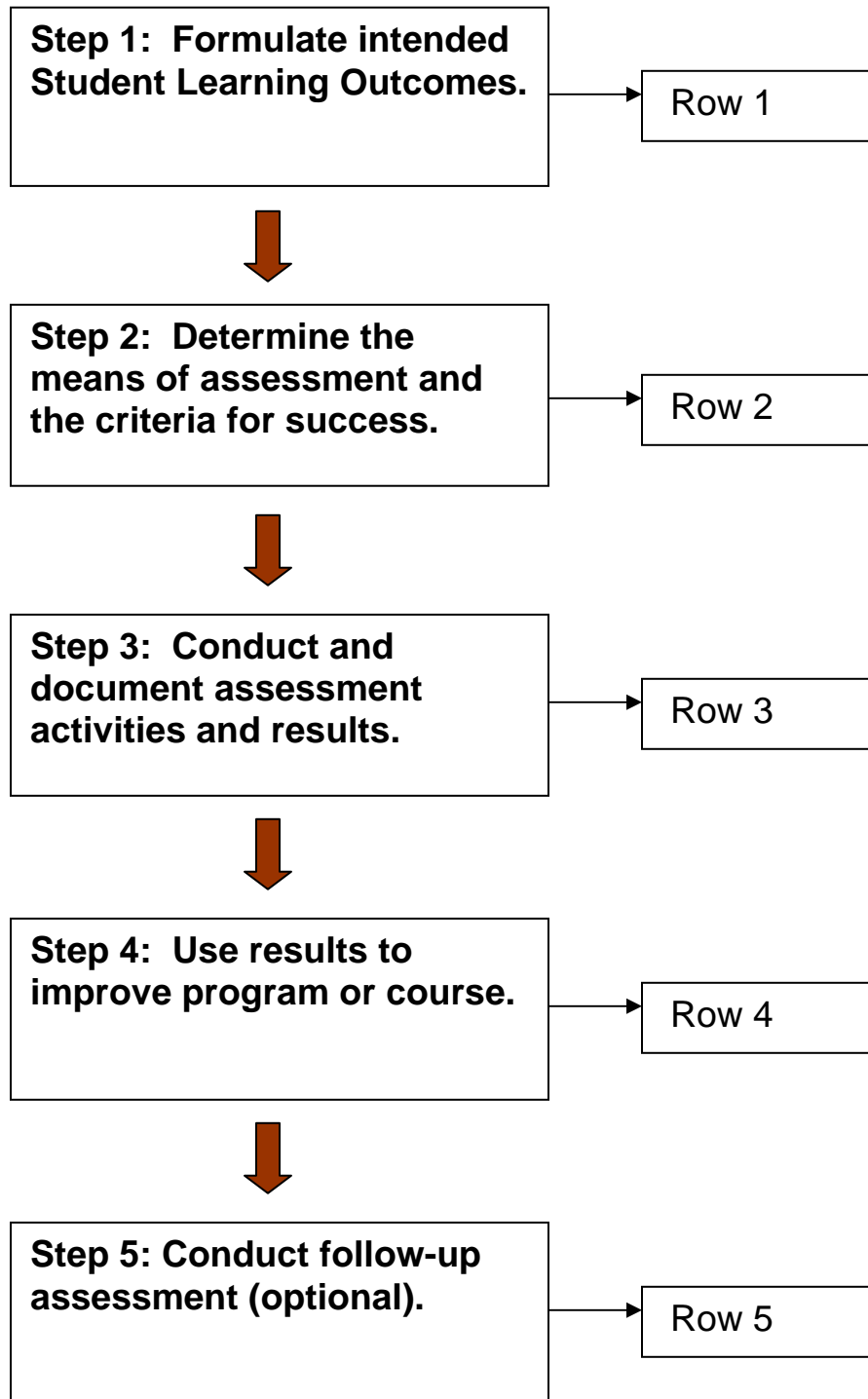
As you develop your project, keep in mind . . .

1. Focus on assessment as a tool for improving the quality of students' educational experiences.
2. Add minimally to already heavy workloads by doing the following:
 - Refer to existing program documents and course outlines of record when formulating the outcomes to be assessed.
 - Use existing assessment instruments and data whenever possible.
 - Incorporate assessment procedures into the routine operation of the course or program.
 - Use a cycle of assessment that corresponds to the Program Review process.
 - Coordinate assessment efforts. There may be opportunities to assess both course and program outcomes at the same time.
3. Be sensitive to the implications of assessment. Data reported insensitively may do more harm than good. Internally, results of assessment are intended to be formative, not punitive.

Instructions for using the SRJC Five-row model SLO Assessment Process

On the next page is a graphic depiction of the steps of the assessment process. This five-step model can be used for assessment projects at either the course level or the program level. Each step of the process corresponds to a row number in the SLO Assessment Form (see page 31). You will use the SLO Assessment Form to record your outcomes, assessment methods, and results.

Step-By-Step Guide to the SRJC Five Row Model SLO Assessment Form



VI. Instructions for Using the Five Row Model

Step 1: Formulate intended Student Learning Outcomes for Course or Program

A Student Learning Outcome is a statement of the knowledge, skills, abilities, or values students should acquire in the course. A Student Learning Outcome often subsumes multiple objectives, allows direct assessment, and anticipates the application of learning outside of the classroom or in future educational contexts. Usually a course will have one to five SLOs.

For the Program Level: Faculty within a department or program meet to discuss the expected learning outcomes for students who complete a particular group of courses, such as those required for a certificate, an AA/AS degree, or for transfer. For the purposes of assessment no more than three to five outcomes should be selected.

For the Course Level: Faculty collaborating on course level student learning outcomes assessment meet to review the SLOs for the course. If there are no SLOs on the existing course outline of record, now is the time to write them. For the purposes of an assessment project, consider selecting one or two of them.

For either level: List the outcomes in Row 1 of the SLO Assessment Form, using a separate page for each of the outcomes selected.

Writing measurable outcomes is a skill that takes time to master. When writing SLOs:

- Focus on what the student should be able to do at the end of the program or course. Consider how students will demonstrate the knowledge, skills, abilities, or values you expect students to develop. (See Appendix C for more information on writing SLOs).
- Use active verbs. Active verbs specify definite, observable and measurable behaviors. When crafting SLOs, use verbs that reflect the highest levels of thinking required by a course. Keep in mind that, according to Title 5, all college courses, and particularly transfer level courses, should involve a high degree of critical thinking. For instance, while an SLO might state that ". . . students will be able to choose appropriate plants for a garden," an SLO reflecting the critical thinking process involved might be worded: "students will be able to evaluate and select plants according to their suitability for various soil and light conditions." This outcome both expresses criteria and measures ability. (See Appendix for list of action verbs.)
- Share the outcomes with faculty within your own discipline and from other disciplines. When focusing on SLOs at the program level, it is important to come to a consensus on which SLOs are important for the program as a whole. Sharing across disciplines also helps focus the meaning of the statements. When focusing on SLOs at the course level, it is important to come to consensus about which SLOs represent the broad outcomes for the course.
- Share the outcomes with your students. Students need to clearly understand what is expected of them. They are usually unfamiliar with the discipline specific language, so they can help in clarifying the outcomes as well.

- Modify as you learn from experience. As you begin the actual assessment, sometimes flaws will be identified in the SLO itself. Upon completion of your assessment project, you may discover that revision of the SLO is necessary.

Below are examples of well-written program SLOs:

Art History

1. Place a work of art in its historical and stylistic context.
2. Identify major monuments and movements in the history of art.
3. Develop a vocabulary to discuss art in aesthetic terms.
4. Demonstrate skills in visual analysis by identifying specific formal elements.
5. Refine critical analysis skills in comparing works of art.
6. Achieve greater awareness of global traditions.
7. Identify cultural artistic characteristics.
8. Recognize basic methods and materials used in architecture, painting, sculpture, print-making, ceramics, metalwork and textiles.

Restaurant Management

1. Effectively manage a restaurant or other culinary service operation;
2. Exhibit, recognize, motivate & develop employee professionalism in a management capacity;
3. Create an atmosphere conducive to excellent guest service;
4. Communicate effectively with customers and employees;
5. Apply knowledge and skills to all aspects of restaurant operations;
6. Succeed in the restaurant or other culinary service business.

Music

1. (Through *music theory*) demonstrate an understanding of the fundamental melodic, harmonic, and rhythmic structure of music.
2. (Through *musicianship*) Demonstrate fluency with the language of music in written and aural form.
3. (Through *applied music*) Perform on their instrument (or voice) at college sophomore level.
4. (Through their *major performing ensemble*) Perform effectively in a musical ensemble.
5. (Through *piano proficiency*) Utilize the piano keyboard to demonstrate and apply musical concepts.
6. (Through *music history*) Demonstrate a broad-based understanding of the historical and aesthetic development of music.

Below are examples of well-written course SLOs:

DH 82: Advanced Clinical Dental Hygiene Care

Students will be able to correctly interpret symptoms and select appropriate intervention to manage patient fear, anxiety, and/or pain in a dental clinic setting.

PSYCH 4: Child and Adolescent Psychology

Students will be able to analyze and apply biological and environmental principles to explain cognitive, physical, emotional and social development of the individual from the pre-natal period through childhood and adolescence.

Students will be able to describe and apply the research methods used to study child and adolescent psychology.

APGR 50: Introduction to Typography

Students will apply professional typography skills using a personal computer to create effective design projects.

ENGL 302: Improvement of College Reading and Writing

Students will demonstrate proficiency in writing a variety of types of essays in response to readings and other materials at a level required for success in ENGL 100 and other AA/AS degree-applicable courses.

Students will select and evaluate source materials and incorporate them correctly into written assignments.

Step 2: Determine the method of assessment for each Program or Course Student Learning Outcome and the criteria for success.

After you create your SLOs, determine how you will assess them and what criteria you will use for success. There are two kinds of assessment: direct assessment methods and indirect assessment methods. Direct assessment methods require students to demonstrate knowledge and skills and provide data that directly measure achievement of expected outcomes. Indirect assessment methods require that faculty infer actual student skills, abilities, knowledge, and values from sources other than observable, direct evidence.

Both are valid, although indirect methods alone are not considered to provide sufficient evidence. In many cases, you may be able to use or modify existing assessment instruments. Many of you may already be using one or more of the assessment methods listed below.

Examples of direct methods of assessment include:

- Capstone Course Evaluation: Capstone courses integrate knowledge, concepts, and skills associated with an entire sequence of study in a program. This method of assessment is unique because the courses themselves become the instruments for assessing student teaching and learning. Evaluation of students' work in these courses is used as a means of assessing student outcomes. For academic units where a single capstone course is not feasible or desirable, a department may designate a small group of courses where competencies of completing majors will be measured.
- Collective Portfolios: Faculty assemble samples of student work from various classes and use the "collective" to assess specific program learning outcomes.
- Commercially Produced or Standardized Tests: Commercially generated or standardized tests are used to measure student competencies under controlled conditions. Tests are developed and measured nationally to determine the level of learning that students have acquired in specific fields of study. For example, nationally standardized multiple-choice tests are widely used and assist departments in determining programmatic strengths and weaknesses when compared to other programs and national data.
- Embedded Questions on Assignments or Exams: Questions related to program learning outcomes can be embedded within course assignments or exams. For example, all sections of "research methods" could include a question or set of questions relating to your program SLOs. Faculty grade the exams as usual and then separate exam questions that are linked to the program SLOs for analysis. The findings are reported as an aggregate.
- Locally Developed Final Exams: Faculty can create an objective exam for graduating students that is aligned with the program SLOs. Performance expectations should be delineated prior to obtaining results.
- Pre-Test/Post-Test Evaluations: Pre-test/post test assessment is a method used by academic units where locally developed tests and examinations are administered at the beginning and at the end of courses or academic programs. These test results enable faculty to monitor student progression and learning throughout prescribed periods of time. The results are often useful for determining where skills and knowledge deficiencies exist and most frequently develop.
- Student Presentations: Observations of any behavior such as performance, projects; artwork can be used for assessment. These presentations or performances can be evaluated using a narrative or in a structured format, such as a rubric.
- Scoring Rubrics: Rubrics can be used to score any product or performance such as essays, portfolios, recitals, oral exams, etc. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring. Generally two raters are used to review each product and a third rater is used to resolve discrepancies.

- Videotape or Audiotape Evaluations: Videotapes and audiotapes have been used by faculty as a kind of pre-test/post-test assessment of student skills and knowledge. Disciplines, such as theatre, music, art, and communication, which have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes and audiotapes as assessment tools.

Examples of indirect methods of assessment include:

- Alumni Surveys: Surveying of alumni is a useful assessment tool for generating data about student preparation for professional work, program satisfaction, and curriculum relevancy. As an assessment supplement, alumni surveying provides departments with a variety of information that can highlight program areas that need to be expanded or enhanced.
- Employer Surveys: Employer surveys can provide information about the curriculum, programs, and students that other forms of assessment cannot produce. Through surveys, departments traditionally seek employer satisfaction levels with the abilities and skills of recent graduates. Employers also assess programmatic characteristics by addressing the success of students in a continuously evolving job market.
- External Reviewers: Peer review of academic programs is a widely accepted method for assessing curricular sequences, course development and delivery, and the effectiveness of faculty. Using external reviewers is a useful way of analyzing whether student achievement correlates appropriately with departmental goals and objectives.
- Student Exit Interviews/Surveys: Students leaving the college are interviewed or surveyed to obtain feedback. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, theories or skills.

In Row 2 of the SLO Assessment Form, list the specific method(s) of assessment you will use for each of the SLOs listed, to whom and when the assessments will be administered, by whom and how the results will be judged, and how well the group of participants are expected to do.

The Office of Institutional Research is available to assist faculty and staff in creating and conducting assessments.

Below are examples of possible assessment methods and criteria for the listed SLO:

ESL 312

Desired SLO: Students will be able to write a well organized, grammatically correct paragraph in response to a reading selection.

Assessment Methodology: As part of the final exam, all 312 students will do an in-class writing sample in response to a prompt based on a reading selection. The sample will be marked by instructors using a rubric developed within the department.

BIO 10

Desired SLO: Students will be able to apply the scientific method to new circumstances and information in order to evaluate the quality of scientific hypotheses

Assessment Methodology: A scientific method problem given as part of final exam. The problem will be scored using a rubric.

POLS 1

Desired SLOs:

1. Students will be able to demonstrate knowledge of basic ideas and concepts in American politics
2. Students will be able to apply political science concepts to hypothetical or real-world situations

Assessment methodology: Students are given a pre and post test of multiple choice questions. Questions are selected from a bank of questions in the general categories agreed-upon by the political science instructors.

Step 3: Conduct and document assessment activities.

Conducting assessment activities is probably the most difficult and time-consuming portion of the process. Be sure to select assessment techniques that are reasonable based on the resources (time, technology, and budget) available for your program and for the College.

List the results of each assessment method in Row 3 of the SLO Assessment Form. Assessment results should be derived directly from the method listed in Row III, highlight the extent to which the outcome was accomplished, and be in sufficient detail to inform the reader of the most significant results of that assessment.

Step 4: Use the results of assessment for program or course improvement.

Once the results of assessment have been collected, faculty in the program should meet to discuss what the results reveal about areas in which the program or course succeeds and about areas in which improvements can be made. Determinations will then be made on what action should be taken.

In Row 4 of the SLO Assessment Form, state exactly how and with whom the results are shared, the improvements that have been planned or implemented, and who is responsible for implementation and follow up. The actions should generally be substantive and detailed (list, for example, the specific course number in which changes to the curriculum were made), although there are times when no action is necessary and this can be stated as well.

Step 5: Conduct follow-up assessment to determine effectiveness of program or course improvement. (This step is optional.)

The curricular changes inspired by the initial assessment may be followed up by a second identical assessment to verify their effectiveness. If our goal is to improve student learning, then we must determine if our instructional changes had the positive impact that we desired. To do so, it is necessary to administer the same instruments in the same way to the same or an equivalent group of students.

As before, the findings of the follow-up assessment should be closely analyzed and widely discussed by the assessment project team members, other department members (instructors and instructional aides alike) and other concerned members of the college community.

Outcomes assessment is an ongoing process. When you compile the findings of your follow-up assessment, you will of course want to compare them to the initial assessment. Think about what worked and what can still be improved, in terms of the curriculum and of the creation and design of the assessment itself.

Suggested Student Learning Outcomes assessment Project Timeline for Courses, Certificates and Majors

Goal: Begin one course and one certificate assessment project every year.

PROJECT STEPS

SUBMISSIONS/DUE DATES

First Year: Planning & Preparation

Form assessment team
Write outcomes & plan project
Identify or create assessment instruments

Fall & Spring

**Project Proposal to Dean/SA & Victor Cummings(C-LEARN) for review & approval for courses or Stephanie Thompson (Pro-LEARN) for certificates & majors
March 1**

Assessment materials attached to program review submission

**Program Review to Dean/SA & VPAA
April**

Second Year: Implementation, Analysis, Response

Administer Assessment Instruments

Fall & Spring

Fall

Analyze, discuss, disseminate results
Develop & communicate response – curricular or methodological adjustment

Spring

Assessment report & analysis attached to program review submission

**Program Review to Dean/SA & VPAA
April**

Third Year –Implement Response

Fall & Spring

Curricular or methodological change –
Continue the SLO dialogue

Reassessment (Optional) – Did changes have desired effect?

Summary & Analysis of response

Program Review to Dean/SA &

Attached to program review submission

**VPAA
April**

Appendix

I. Accrediting Commission Statement

The Accrediting Commission for Community and Junior Colleges (ACCJC) changed its accreditation standards in 2002 to include an emphasis on student learning outcomes. In its training materials and introduction to the standards, the commission offered the following explanation:

“The 2002 Standards require institutions to define expected student learning outcomes and assess them in order to improve learning at the course, program, and degree or institutional level...The primary purpose of an ACCJC-accredited institution is to foster learning in its students. An effective institution ensures that its resources and processes support student learning, continuously assesses that learning, and pursues institutional excellence and improvement. An effective institution maintains an ongoing, self-reflective dialogue about its quality and improvement.”

II. Nine Principles of Good Practice for Assessing Student Learning (AAHE)

1. The assessment of student learning begins with educational values. Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strives to help them achieve. Educational values should drive not only *what* we choose to assess but also *how* we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.
2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time. Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.
3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes. Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and

expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes. Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. Assessment works best when it is ongoing not episodic. Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. Assessment fosters wider improvement when representatives from across the educational community are involved. Student learning is a [district-wide] responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about. Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and

return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change. Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. Through assessment, educators meet responsibilities to students and to the public. There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

III. FAQs

Question #1: What makes outcomes assessment different from typical grading practices?

The learning of a large student cohort is the focus, not individual students or instructors. Focus on what students will be able to do at the end of course or program. Learning outcomes are collaboratively developed. Student performance is consistently assessed through common criteria and norming. Results are used to motivate instructional change and improvement.

Question #2: What do we have to do at SRJC to improve learning through assessment?

Conduct multiple, interrelated course and program assessment projects and use results to identify curricular areas that offer opportunities for collaborative instructional improvement. To achieve stronger results, we must use our collective energy, commitment and talent to devise innovative instructional approaches.

Question #3: How do we collect meaningful learning data when there's limited time or energy for extra work?

Rely on embedded assessment procedures, common assignments or tests used by all instructors that already exist or that could readily be added.

Question #4: Does everyone have to start giving standardized tests?

Absolutely not --The possibilities are endless: tests, essay exams, term papers, performance, interviews, focus groups, etc.

Question #5: How can we quantify complex courses in a global and manageable way?

Assessment rubrics are a time-tested flexible tool. Instructors familiar with holistic writing assessment are well aware of this method, a qualitative/quantitative hybrid.

Question #6: But aren't Title V objectives the same as student learning outcomes?

Not always...outcomes are far broader, focused on the knowledge, skills, abilities, or values students will be able to demonstrate as a result of their learning at the end of a course or program.

Question #7: Aren't instructors going to be identified if their classes and students do not do well?

Performance data will be collected and judged through an anonymous process totally distinct from routine required student and course grading. All identifying information will be removed from student work and data will be reported by course or program only (unless requested by individual instructors). The purpose of outcomes assessment is to analyze the learning of large student cohorts so that groups of instructors can devise ways to improve learning.

Question #8: What do I get out of all this?

Most departments have ongoing pedagogical differences, questions about some aspect of the program or problematic courses. Design your assessment projects to gather information that can help you with you with curricular issues so that you can use the resources provided for the Project LEARN to help you address your concerns. Ultimately students will be more successful when we are sure that they have achieved the outcomes we have defined. Students then will be better prepared for all of our classes, making our work more effective and rewarding.

Question #9: Won't all instructors be forced to teach from fixed syllabi as is the case in public schools?

Absolutely not—you will continue to have the freedom to develop course syllabi based upon the course outlines of record. Different teaching techniques can be used to achieve the same outcomes. All instructors are expected to use their own talents, creativity and skills to facilitate student learning that is focused by the shared learning outcomes.

Question #10: We're already working to the limit, especially after recent budget cuts. Will there be additional compensation or reassigned time?

The administration knows that significant resources will have to be dedicated to learning outcomes assessment. Funds to support reassigned time for a faculty

coordinator, some clerical help and small financial incentives for faculty on assessment teams are available, but other approaches are being planned. Faculty members can get flex credit for their work on an assessment projects, and Project LEARN is working towards PGI for assessment work.

Question #11: We've had several PDA theme days, but I still don't really know what is supposed to be happening.

If you have questions about the outcomes assessment process after reading this handbook, contact one of the Student Learning Outcomes Coordinators. The new *Curriculum Writer's Handbook* also explains how to write good SLO statements when revising or developing course curricula. In addition, check with your department chair for the PDA binder that is full of materials developed by Mary Allen, guest speaker in August 2004.

Question #12: I've worked on writing SLO's for one of my courses and assessed students last year. Am I done?

Not completely, you must also use assessment results to change or improve instruction. Remember that there are more than 2500 District courses. Less than 50 have SLOs; eventually all full time faculty will have to get involved with multiple learning assessment projects.

Question #13: What do I have to do about program assessment?

Since WASC requires that we assess the student learning outcomes for all degree and certificate programs, we have to begin planning those broader assessment projects since we started at SRJC at the course level. With your departments you should decide which programs should be assessed first and get started by writing outcomes at a meeting. Invite one of the faculty outcome assessment coordinators to get started with your planning.

Question #14: How's SRJC doing with SLOs?

Both good and bad – we have a good system in place, but a relatively small number of courses actually have SLO statements. We've only assessed a small percentage of our courses; many, many more have to be done. We've also put more focus on the actual assessment of students than some other colleges that have just concentrated on the writing of SLO statements.

Question #15: Do we have to assess all SLOs for all courses all the time?

Right now we're only asking departments to begin 1-2 course assessment projects a year. And all outcomes do not have to be assessed at once. You may choose to assess all of the outcomes; however, you may want to focus on one or two that are most crucial to determining whether students are achieving the defined outcomes.

IV. Generating program outcomes

Once you have written your program outcomes, it is helpful to evaluate where and at what level they are taught in the course sequence. The following curriculum alignment matrix demonstrates how to verify that all program outcomes are addressed at all levels (Introduced, Practiced, Demonstrated) by courses in the program.

<p>Mission Statement: The Restaurant Management Major is designed to train individuals in all aspects of food service management. Successful students will be prepared to work in a variety of managerial roles in restaurants, hotels, catering companies and other food service businesses.</p> <p>Program Outcomes I = Introduced P = Practiced D = Demonstrated</p>					
	1. Manage a restaurant to ensure compliance with safety & sanitation regulations.	2. Apply background, culture & history of culinary arts and terminology in a food service business setting.	3. Possess basic math skills to accomplish cash management and labor & food costing.	4. Exhibit, recognize, motivate & develop employee professionalism in a restaurant setting.	5. Know federal and state wage and labor laws.
CUL 250 Sanitation & Safety	I			P, D	
CUL 250.1 Culinary Arts Survey		I, P, D	I, P	I	
CUL/HOSP 70 Restaurant Operations	I,P,D	P,D	P,D	I,P,D	I,P,D
CUL 256 Front House Operations	I, P, D	P	P, D	P, D	I
CUL 256.8 Beverage Management		D	D		
CUL 256.9 Introduction to Wine in the Restaurant		D			
CUL 99I Internship	D	D	D	D	D

Restaurant Management Major

Program Outcomes

I = Introduced

P = Practiced

D = Demonstrated

	6. Hire & effectively manage and lead a cohesive front house team.	7. Effectively create an atmosphere conducive to excellent guest service.	8. Perform basic cost control & profit & loss calculations within a standard operating budget.	9. Have product knowledge & know legal aspects of alcoholic beverage sales & service.	10. Have knowledge of wine and its place in a restaurant setting.
CUL 250 Sanitation & Safety					
CUL 250.1 Culinary Arts Survey			I		I
CUL/HOSP 70 Restaurant Operations	I, P,D	P,D	I,P,D	P,D	D
CUL 256 Front House Operations	I	I	P, D		
CUL 256.8 Beverage Management		P		I, P D	I, P, D
CUL 256.9 Introduction to Wine in the Restaurant		P		I, P, D	I,P,D
CUL 99I Internship	D	D	D	D	D

Blank Curriculum Alignment Matrix

Program Title: Mission Statement: Program Outcomes I = Introduced P = Practiced D = Demonstrated					
	Outcome 1. (Write outcome statement here)	Outcome 2. (Write outcome statement here)	Outcome 3. (Write outcome statement here)	Outcome 4. (Write outcome statement here)	Outcome 5. (Write outcome statement here)
Course Number & Title	I			P, D	
Course Number & Title		I, P, D	I, P	I	
Course Number & Title	I,P,D	P,D	P,D	I,P,D	I,P,D
Course Number & Title	I, P, D	P	P, D	P, D	I
Course Number & Title		D	D		
Course Number & Title		D			
Course Number & Title	D	D	D	D	D

V. Tips for writing student learning outcomes

Questions to ask when writing student learning outcomes for a new course:

1. What are the core/overarching concepts or knowledge students should develop as a result of taking this course? (cognitive)
2. What are the core/overarching skills or performance abilities students should develop as a result of taking the course? (psychomotor)
3. What are the core/overarching attitudes or values students should develop as a result of taking this course? (affective)

Once the global competencies that students will possess at the end of the course have been identified, draft student learning outcomes, and apply the checklist below to refine them, if necessary.

Hints for writing Student Learning Outcome statements for existing courses:

1. Components of and/or concepts for SLOs may already be in the course outlines for the existing courses.
2. Look at the catalog description for the course. Student Learning Outcomes may be suggested or articulated there.
3. Consider which existing outcomes can be used in their current form or revised to become SLOs.
4. Consider whether several existing objectives might "add up" to one or more SLOs. Write the SLO to subsume those objectives.
5. Consider current testing practices, exams and major summative assignments, which probably indicate important outcomes.

ADDITIONAL EXAMPLES:

A. Business Management example of SLOs suggested in the course catalog description:

BMG 53: Oral Communication in Organizations catalog description:

Develop speaking skills to effectively and confidently deliver oral presentations in organizational settings. Analyze audiences, research topics, and prepare and deliver presentations.

Student Learning Outcomes (new):

1. The student will prepare clear, comprehensive informational and persuasive oral presentations for organizational settings.
2. The student will effectively and confidently deliver oral presentations in organizational settings.

B. Dental Hygiene example of existing objectives "adding up" to create an SLO:

Objectives are required by the discipline's accrediting body. Instructors are working to create a student learning outcome for each set of topical objectives.

Objectives (Existing)

Pain Management

1. Explain various strategies for reducing apprehension and fear.
2. Assess patient's needs for pain control procedures.
3. Administer such procedures and identify complications that may occur.
4. Administer the entire range of local anesthesia injections in the correct manner.
5. Perform the proper chart documentation of pain control choices, including informed consent.

Outcome (new) that subsumes the existing objectives:

Correctly interpret symptoms and select appropriate intervention to manage patient fear, anxiety, and/or pain in a dental clinic setting.

C. English Composition example of a course where student learning outcomes statements were developed based on existing objectives

Pre SLO OUTCOMES & OBJECTIVES:

COURSE CONTENT

Outcomes and Objectives:

READING:

Upon completion of this course, students will be able to:

1. Read and analyze selected works from the major literary genres: fiction, poetry and drama.
2. Identify and analyze those elements that help define each genre, such as meter in poetry.
3. Examine and interpret a variety of critical approaches toward interpreting texts.
4. Examine and apply historical, cultural, psychological, biographical and other contexts in interpreting works of literature.

WRITING:

Students will:

1. Apply the elements of effective writing (e.g., a clear thesis, sound organization, and sufficient development) to the writing of expository and argumentative essays on literature and/or literary topics.
2. Integrate literary criticism into an essay to support an interpretation.
3. Apply various critical approaches in developing written responses to texts.
4. Apply MLA style to manuscript form and citations.
5. Describe the values, themes, methods, and history of the discipline and identify realistic career objectives related to a course of study in the major.
6. Perform research specific to the discipline and use appropriate citation style, if different than MLA.

POST SLO OUTCOMES & OBJECTIVES:

COURSE CONTENT

Outcomes and Objectives:

Student Learning Outcomes

1. Students will be able to comprehend, analyze and interpret works of fiction, literary non-fiction, poetry and drama.
2. Students will be able to apply one or more critical approaches to literature in well-developed, logically organized and thesis-driven interpretive and analytical essays on widely recognized works of literature.
3. Students will be able to identify and distinguish among the elements of a successful summary, response, analysis and interpretation.
4. Students will be able to demonstrate an appreciation of literary works whose aesthetic treatment of enduring human questions distinguishes them from those whose focus and purpose are primarily commercial.

Objectives

READING:

Upon completion of this course, students will be able to:

1. Read and analyze selected works from the major literary genres: fiction, poetry and drama.
2. Identify and analyze those elements that help define each genre, such as meter in poetry.
3. Examine and interpret a variety of critical approaches toward interpreting texts.
4. Examine and apply historical, cultural, psychological, biographical and other contexts in interpreting works of literature.

WRITING:

1. Apply the elements of effective writing (e.g., a clear thesis, sound organization, and sufficient development) to the writing of expository and argumentative

essays on literature and/or literary topics.

2. Integrate literary criticism into an essay to support an interpretation.

3. Apply various critical approaches in developing written responses to texts.

4. Apply MLA style to manuscript form and citations.

5. Write literary analysis essays, revealing their ability to effectively interpret literature, integrate outside criticism and apply the MLA format for citations and works cited.

VI. Writing Student Learning Outcomes

Course Outcomes
Name a specific course
Are there any prerequisites or advisories for this course? List.
Does this course serve as a prerequisite or advisory for any other course? List.
Course Purpose:
Look at the list of existing outcomes and objectives in the COR. <ul style="list-style-type: none"> • Are there any that can be used or revised? • Are there several objectives that would add up to an outcome? • Is there anything missing?

BRAINSTORM: In the boxes below briefly list words or descriptions of attitudes, skills, or knowledge that you would like your students to have or do as a result of this course.

Attitudes or values developed as a result of this course	
Skills or performance ability acquired as a result of this course	
Knowledge and concepts students will have as a result of this course	

Draft your Outcomes:

DRAFT OUTCOMES (typically 1 - 5):

1.

2.

3.

4.

5.

VII. Student Learning Outcomes Checklist

	Yes	No
Do the SLOs include active verbs?		
Do the SLOs address the expected level of learning for the course using Bloom's and Anderson's and Krathwohl's Taxonomy (Action Verbs) as a guideline? http://www.uwsp.edu/education/lwilson/curric/newtaxonomy.htm		
Are the SLOs written as outcomes rather than objectives? <ul style="list-style-type: none"> • Language indicates important overarching concepts versus small lessons or nuts and bolts objectives. • Outcomes address what student will be able to do at the completion of the course beyond the specific class section. • SLOs address competency rather than content coverage. 		
Are the SLOs appropriate for the course? <ul style="list-style-type: none"> • Consistent with the COR? • Represent fundamental results of the course • Align with other courses in a sequence, if applicable 		
Are the SLOs assessable?		
Do the SLOs address multiple domains (cognitive, psychomotor, and affective) as appropriate?		
Will students understand the SLOs?		

As discuss & develop SLOs, bare in mind that:

- Each course and classroom has unique factors.
- Disciplines have unique language and culture.
- Cross-disciplinary conversations are invaluable.
- Ultimately, discipline-specific collaborative conversations lead to the most productive definitions of student learning outcomes.
- Everyone is a learner when it comes to outcomes assessment.
- As professionals, we are guided by the principles of academic freedom.

While some contrasting emphases are present, the Bakersfield College site has a very thorough presentation of SLO Assessment that is definitely worth reviewing:

http://online.bakersfieldcollege.edu/courseassessment/Section_3_SLOs/Section3_1.htm

VIII. Active Verbs list

Curriculum Writer's Handbook: ACTION VERBS
 Adapted from Bloom's Taxonomy of Educational Objectives, 1956 (1st ed.) and other sources.

			CRITICAL THINKING		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Arrange	Account for	Add	Analyze	Arrange	Accept
Choose	Alter	Adopt	Appraise	Assemble	Appraise
Cite	Annotate	Apply	Arrange	Blend	Assess
Count	Calculate	Calculate	Audit	Build	Award
Define	Choose	Capitalize	Break down	Categorize	Censure
Describe	Cite examples of	Change	Calculate	Collect	Choose
Draw	Comment	Choose	Categorize	Combine	Classify
Duplicate	Compute	Classify	Check	Compile	Compare
Find	Convert	Complete	Combine	Compose	Conclude
Group	Defend	Compute	Compare	Conceive	Contrast
Identify	Define	Construct	Contrast	Construct	Criticize
Label	Demonstrate	Demonstrate	Criticize	Create	Critique
List	Describe	Develop	Debate	Design	Decide
Locate	Differentiate	Discover	Deduce	Develop	Decree
Match	Discriminate	Divide	Design	Devise	Defend
Memorize	Discuss	Dramatize	Detect	Drive	Determine
Name	Distinguish	Draw	Develop	Effect	Estimate
Outline	Estimate	Employ	Diagram	Explain	Evaluate
Pick	Expand	Examine	Differentiate	Form	Grade
Point to	Explain	Exercise	Discriminate	Formulate	Interpret
Quote	Expound	Generalize	Dissect	Generate	Judge
Read	Express	Graph	Distinguish	Group	Justify
Recall	Extend	Illustrate	Evaluate	Hypothesize	Measure
Recite	Extrapolate	Interpret	Examine	Integrate	Prioritize
Recognize	Generalize	Interpolate	Experiment	Make	Rank
Record	Give examples	Interview	Identify	Make up	Rate
Relate	Identify	Make use of	Illustrate	Manage	Recommend
Repeat	Illustrate	Manipulate	Include	Modify	Reject
Reproduce	Indicate	Modify	Infer	Order	Revise
Say	Infer	Operate	Inspect	Organize	Rule on
Select	Interpret	Organize	Inventory	Originate	Score
Show	Locate	Perform	Look into	Outline	Select
Sort	Paraphrase	Practice	Outline	Plan	Settle
Spell	Predict	Predict	Point out	Predict	Summarize
State	Project	Prepare	Put into list	Prepare	Support
Summarize	Propose	Produce	Question	Prescribe	Test
Tally	Qualify	Put in action	Reason	Produce	Validate
Tell	Rearrange	Put to use	Relate	Propose	Value
Underline	Recognize	Relate	Screen	Rearrange	Weigh
Write	Report	Schedule	Search	Reconstruct	
	Restate	Shop	Section	Relate	
	Review	Show	Select	Reorganize	
	Rewrite	Sketch	Separate	Restructure	
	Select	Solve	Sift	Revise	
	Spell out	Subtract	Simplify	Rewrite	

(con't)

			CRITICAL THINKING		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
	Submit Summarize Tell Transform Translate	Translate Try Use Utilize	Solve Study Subdivide Summarize Survey Take apart Test Test for Utilize	Set up Show relationship Specify Structure Summarize Synthesize Transform Write Yield	

See also Beyond Bloom - A new Version of the Cognitive Taxonomy
<http://www.uwsp.edu/education/lwilson/curric/newtaxonomy.htm>

IX. Examples of complete SLO Assessment Forms

Forms are also available at www.santarosa.edu/projectlearn.



Learning Assessment Project (LAP)
Process & Directions

Project Leader:

Phone:

Major/Certificate/Course:

Student learning outcomes assessment projects are integrate with yearly program review reporting. Use the attached SLO Assessment Project Form to record project design, progress and results. During program review, also attach assessment instruments, rubrics, score summaries or any other documents you create to disseminate the results of your project to colleagues.

Getting your Project Approved:

After you collaborate with colleagues and devise your LAP methodology, forward this cover sheet and the SLO Assessment Project Form with appropriate information for rows 1 & 2 to your Dean/SA for approval before it is reviewed by the c-LEARN subcommittee of Project LEARN. One of the Faculty Outcomes Assessment Coordinators will contact you to discuss your project and opportunities for strengthening your plan.

Once your project is approved, you will be able to access available project support funds.

Thank you for your continued attention to SLO assessment and the success of our students. Good luck with all your assessment activities.

Signatures: Dept. Chair _____ Date: _____

Dean/SA _____ Date: _____

(Submit this page with the SLO Assessment Form electronically to Marie Cuneo, LAAF Dean’s Office (mcuneo@santarosa.edu). Dean will forward signed hard copy.)

C-LEARN REVIEW COMMENTS:

Approved by _____ Date: _____
(Review Committee Signature) (Print Name)

(Print Name)

SLO Assessment Form

Department: _____ Team Members: _____ Date: _____

Program/Course: _____

1	Student Learning Outcome Statements	
2	Assessment Method & Criteria for Success	
3	Assessment Results	
4	Changes/Improvements Implemented	
5	Results of Follow-Up Assessment (Optional)	

SLO ASSESSMENT PROJECT FORM

Santa Rosa Junior College: Student Learning Outcomes

DEPARTMENT:

COURSES

Course	SLO Identified	SLOs on COR	Assessment Developed	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented

CERTIFICATE/MAJOR

Certificate/Major	SLO Defined	SLOs on COR	Assessment Defined	Student Assessment Implemented	Assessment Analyzed	Change Implemented

GENERAL EDUCATION

GE Area	SLO Defined	SLOs on COR	Assessment Defined	Student Assessment Implemented	Assessment Analyzed	Change Implemented

STUDENT & INSTRUCTIONAL SUPPORT SERVICES & PROGRAMS

Services/Program	SLOs Defined	SLOs on COR	Assessment Defined	Student Assessment Implemented	Assessment Analyzed	Change Implemented

Rev

X. Assessment methods examples

The following link will take you to examples of assessment tools and practices from hundreds of colleges in a variety of different disciplines. Definitely take a look as you begin your SLO assessment work:

Assessment Link Clearinghouse

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

XII. PowerPoint presentation: It's All About the Outcomes: How to Write SLOs for the New Curriculum Database

Available from Media Services and online at _____