A Guidebook to

Student Learning Outcomes

And

Administrative Unit Outcomes

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Background

A Brief History

George Chaffey and his brothers realized great opportunities as they set out from their Canadian homeland to establish a "Model Colony" in Southern California. Of all the contemporary issues facing Southern California in the 1880's, the Chaffey Brothers chose founding principles which included a water distribution system throughout their Model colony, a "grand thoroughfare" which would serve as a point of civic pride, the prohibition of selling "intoxicating liquor in order to attract the best possible type of settler," and the establishment of an agricultural college which would provide general education.

Chaffey believed in bettering oneself and the quest for life-long learning. Without realizing the far-reaching effects, Chaffey set the platform for a learning-centered Chaffey College in the 21st century. Celebrating its 125th anniversary in 2008, Chaffey College finds itself grounded in a student learning environment, carrying forth the goals and values of George Chaffey himself.

With the implementation of the ACCJC guidelines in 2004, Chaffey College began it's journey to plan, assess, evaluate and respond to the learning outcomes environment. Along the way, faculty dialogue has been robust and vibrant.

SLO or AUO?

Introduction

Chaffey College follows a dual approach to learning outcomes. Student Learning Outcomes (SLOs) are statements about what students will think, know, feel or be able to do as a result of an educational experience. At Chaffey College, SLOs exist at the course, program and institutional (General Education) level. Assessment is done at the course level, with curriculum maps demonstrating alignment from the course up through program and institutional levels. Campus-wide institutional assessments are conducted each spring semester.

AUOs are statements describing what the administrative units intend to accomplish or achieve in support of student learning. Assessment of AUOs often comes in the form of surveys across administrative units related to "client satisfaction."

Assessment is the continuous process of collecting, evaluating, and using information to determine if and how well performance matches learning or service expectations. For assessment to be truly effective, it must be authentic, meaningful, reflective and self-regulated. The purpose of assessment is to use the results, positive or negative, to inform meaningful dialogue about how instruction and instructional and non-instructional services can be modified to engage students in the learning process and sustain institutional effectiveness.

The following diagram aims to help you and your department decide the type of assessment in which to engage.
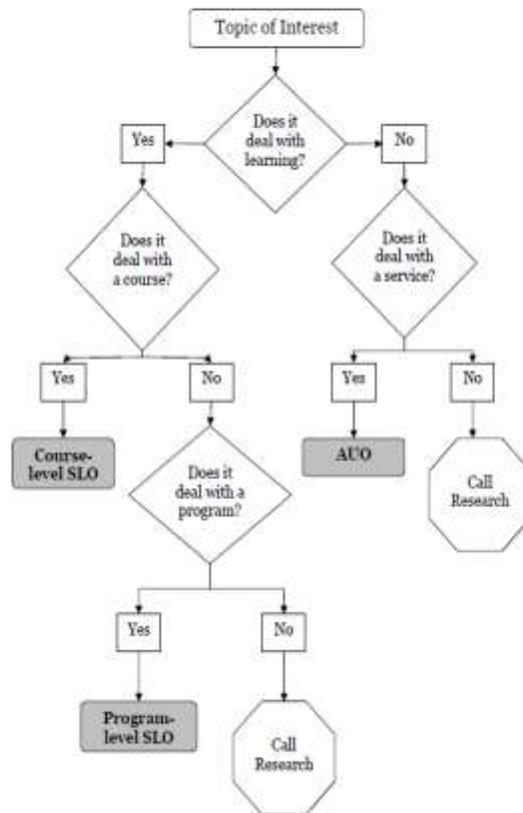
STUDENT LEARNING OUTCOMES

What is a Student Learning Outcome?

A Student Learning Outcome is a clear statement of what a student should learn and be able to demonstrate upon completing a course or program. It describes the assessable and measurable **knowledge**, **skills**, **abilities** or **attitudes** that students should attain by the end of a learning process. Please refer to the Glossary, approved by the Academic Senate, and found on Chaffey's SLO page for more definitions.(http://www1.chaffey.edu/slo/glossary.html#A)

A "student" can include anyone engaged in learning, including:

> Chaffey students
> Chaffey faculty
> Chaffey staff
> Chaffey Community members

A "Learning process" can include:

> A topic or unit
> A course
> A program
> A certificate

It is imperative to note here that faculty have the responsibility for SLOs, and thus, the authority on how they will be developed and assessed.

SLOs and Grades

Occasionally the question will arise, "Why aren't grades considered learning outcomes?" This chart demonstrates the difference between and SLO and a grade:

Criteria	Student 1	Student 2	Student 3	Student 4	AVG. SLO Assessment
Interviews and Participant Observation: 15 hours (up to 4 points)	4	4	2	2	3
Library and Internet Resources (up to 4 points)	3	3	1	1	2
Content (up to 2 points)	2	1	2	1	1.5
Mechanics (up to 2 points)	2	0	2	0	1
Assignment totals:	11	8	7	4	
Grades:	A	B	C	D	

In summary, the grade is the indicator of the student's overall achievement at the end of the course. The SLO assessment, on the other hand, indicates at a more micro-level how learning went over on specific criteria, enabling the faculty member to proceed with interventions as necessary.

SLOs and Course Objectives

Another question that arises occasionally is, "Aren't course objectives the same thing as course learning outcomes?"
As our accrediting body, the Accrediting Commission for Community and Junior Colleges (ACCJC) has reminded us, (http://www.accjc.org/pdf/March%202009%20newsletter.pdf),
"the "course" objectives specified by the California public college system's Academic Senate, for example, are defined as follows: "Objectives are the key elements which must be taught each time the course is taught."(The Course Outline of Record: A Curriculum Reference Guide, adopted Spring 2008 by the Academic Senate for California Community Colleges.)
Course SLOs are the intended learning outcomes; objectives are the things that must be taught/covered in order to achieve those learning outcomes. Sometimes, these things are very close; often, they are quite distinct." (March, 2009 ACCJC Newsletter, p. 3).

Must SLOs be consistent across all sections?
Again, to quote from the ACCJC, **"**With SLOs defined in part as the foundation of a course, the ACCJC requirement is that each course has a single set of SLOs that is common to all sections/classes of the course, no matter who teaches the section or class (Standards II.A.6 and II.A.6.c.). This assures that all students will know what to expect as the potential outcomes of completing a course successfully. (March, 2009 ACCJC Newsletter, p. 3).

Writing S.M.A.R.T. SLOs

- **S**pecific – clear, definite terms describing the abilities, knowledge, values, attitudes and performance desired. Use action words or concrete verbs.
- **M**easurable – Your SLO should have a measurable outcome and a target can be set, so that you can determine when you have reached it.
- **A**chievable – Know the outcome is something your students can accomplish
- **R**ealistic – make sure the outcome is practical in that it can be achieved in a reasonable time frame
- **T**ime-bound – When will the outcome be done? Identify a specific timeframe.

Writing SMART SLOs:

To write SMART student learning outcomes, the following approach is recommended:

Condition	Audience	Behavior	Degree

http://www.dartmouth.edu/~supersloos/Outcome%20Development.pdf

EXAMPLES OF COURSE AND PROGRAM LEVEL SLOs

Course level SLOs – Can you pick out the Knowledge, Skills, Ability or Attitude?

- ➤ By successfully completing CHEM 21 (Grade of 'C' or higher); students will demonstrate the ability to analyze sample laboratory data.
- ➤ Students who successfully complete Anthro 3 (Grade of 'C' or higher) will be able to collect, describe, use and interpret the data from anthropological methodologies including participant observation and ethnography.
- ➤ By successfully completing (Grade 'C') or higher, Communications 2, students will be able to perform basic speech delivery skills.
- ➤ By successfully completing (Grade 'C' or higher) Math 425, students will feel more confident about their ability to solve quadratic equations.
- ➤ ESL students exiting ESL 554 will be able to report orally the results of an interview with native English speaker in the community or in the workplace.
- ➤ Microbiology 23 students are able to demonstrate aseptic techniques that are appropriate for the Allied Health field.
- ➤ Students who successfully complete (grade 'C' or higher) Music 3A will be able to perform the twelve scales on their instrument.
- ➤ Studens who successfully complete (Grade 'C' or higher) Accounting 1A will be able to communicate financial information analyzing financial statements.
- ➤ Students who successfully complete AMT 21 (grade 'C' or higher) will be able to analyze and service a turbine aircraft engine according to FAA standards.
- ➤ Students who successfully complete AUTOTECH 418 (grade 'C' or higher) will be able to service a suspension system on a four-wheel drive.
- ➤ Students who successfully complete Sociology 16 (grade 'C' or higher) will be able to state the relationship between social class and marriage.
- ➤ Students who successfully complete CDE 1 (grade 'C' or higher) will be able to state the responsibilities of teachers in early childhood programs.

Program level SLOs

- ➤ Students who complete the major requirements for an A.S. degree in Chemistry will be able to employ the scientific method of inquiry in a laboratory setting.
- ➤ Students in the anthropology program will demonstrate an understanding of humans in an evolutionary context using a scientific approach.
- ➤ Students in the Communication Studies program will be able to communicate their ability to think critically through problem solving and decision making.
- ➤ Students in the foundation Math program will develop more confident about their math skills.
- ➤ Students in the ESL program will acquire stronger English language skills, allowing them to participate more fully in their workplace and in their community.
- ➤ Students in the Biology program will achieve level of comprehension of human biology, health and disease that prepares them for success in allied health programs.
- ➤ Students in the Music program will apply critical thinking in the creation, analysis and interpretation of music.
- ➤ Students in the Accounting program will analyze business information and infer the resolution of key issues.
- ➤ Students who graduate from the Aviation Maintenance Technology program will exhibit professional analysis and repair skills required on a Powerplant Mechanic.

SLO ASSESSMENT PROCESS

ASSESSMENT ALIGNMENT

Courses ⟹ **Programs** ⟹ **Course Competencies**

Chaffey College assesses all student learning outcomes at the course level.

Assessments take several forms, with the pre/post test being the most regular used form of assessment. Other forms of assessments include the embedded assessment, capstone, portfolios, word clouds and student rubric.

The Office of Institutional Research bears the primary responsibility for assessments, when individual faculty need assistance. The SLO Coordinators assist with the SLO cycle before and after the assessment.

The course level SLO follows the five-column Nichols Model. This evidence is housed in several areas:

- ➢ Course outline of Record – Learning Outcomes page on Curricunet
- ➢ Wurtz Wheel – Z drive
- ➢ SLO website www.chaffey1.edu/slo
- ➢ Institutional Research – SLO web page

Course Outline of Record - Curricunet

Wurtz Wheel

Wurtz Wheel: *Is a tool developed by the Chaffey College Institutional Research Department* to help understand and track student learning outcomes, and visualize the SLO Assessment Cycle. The Wurtz Wheel was adapted from the Nichols Five Column model, the SLO Diagram provides a visual representation of each of the five steps involved in the SLO Assessment Cycle, and can be used to assess SLOs or Administrative Unit Outcomes (AUOs) at the course, program, or institutional level.
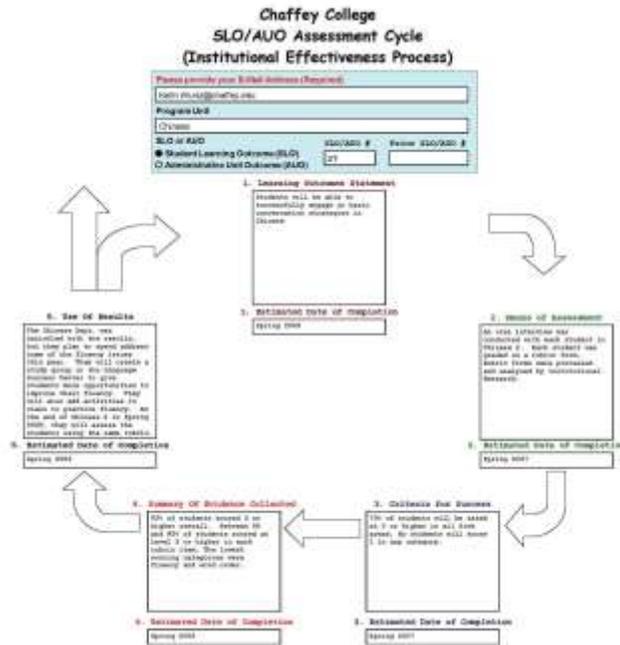
Program SLOs

Curriculum maps are used to align course SLOs to program level SLOs. Program SLOs are housed in the Program and Services Review (PSR) portion of Curricunet
Matrix – check on this

Core Competencies (Institutional SLOS)

An outcome matrix aligns program SLOs to the Core Competencies (Institutional level SLOs)

These matrices are housed on the College's Intranet and on the College's SLO website (www.chaffey.edu/slo)

PROGRAM SLOs & CORE COMPETENCIES WORKSHEET

Program Name:_____

Semester:_____

Program Coordinator:_____

Directions:

Column 1. Write one SLO in each row (samples on page 2). For most programs, 3-6 SLOs are recommended.

Column 2. Write your measurement method(s) and progress indicator(s) in each row for each SLO.

Column 3. Using the list of Core Competencies on pages 3 & 4, list the Core Competency or Core Competencies addressed by each SLO in each row.

Column 4. Choosing from the list of "Expected Exit Levels" of Competency (below), write the appropriate overall level for each SLO.

1 = Knowledge/Comprehension	2 = Application	3 = Analysis	4 = Synthesis	5 = Evaluation

Student Learning Outcome	Assessment Method(s) and/or Progress Indicator(s)	Core Competency (or Competencies)	Expected Exit Level

Administrative Unit Outcomes

What is an Administrative Unit Outcome?

An administrative unit objective (AUO) is a statement about what **a client** will *experience, receive, or understand* as a result of **a given service**.

A client can be anyone receiving a service, including:
Chaffey students
Chaffey faculty
Chaffey staff
Chaffey Community members

A service can include the following:
Training sessions
Development of facilities
Professional development

AUOs are statements that identify client responses to a certain service that your department provides. They identify activities that are critical and central to the unit. Designed and developed by your department, these statements provide evidence that positive client reaction has occurred as a result of a specific service. These statements are very similar to SLOs in that they examine the result of an experience but AUOs deal exclusively with non-instructional services provided to students or other members of the campus community. The Printing Services department has the following AUO: "Faculty will experience improved access to Printing Services by making it easy to submit print jobs via the web."

It is imperative to note here that your department (faculty, managers and classified staff) has the responsibility for AUOs, how they are designed, developed and how they are assessed.

AUOs are connected to planning (see section on Planning and Institutional Effectiveness). The objective is developed and assessed. Then, the data is collected, summarized and analyzed. From the results, the unit plans for improvement. Improvements could include increased staff development, equipment purchases, software modifications, and process development.

AUOs are generally tied to the non-instructional areas of student support services but can include any unit, office, or department that provides any service to any individuals (whether they are students or not) in order to directly or indirectly maximize student success.

Must AUOs be consistent across all services?
Although ACCJC has developed rubrics to measure institutional effectiveness, planning and learning outcomes, AUOs, specifically, have not yet been addressed (or required) by ACCJC.

Examples of AUOs

- **ESL**: The Student Data Team (ESL) will improve the percentage of complete data sets (intake, test, and update forms) required to report benchmark gains to CASAS (Federal Grant).
- **Library**: Patrons will be satisfied with the library facilities.
- **Food Services**: Dining Services will increase student usage of the Dining Services card.
- **Academic Technology Support Group**: The AUTOTECH department will invent in [their] employees through education and training leading to technical certification.
- **Admissions and Records**: The successful application, registration, fee payment and record maintenance of students are all critical elements of a student's success while attending Chaffey. Students will demonstrate an increased usage of technology through the provision of information and services to students regarding these functions showcasing the importance and ease of using current technology related to the services and programs we provide.
- **Bridge Program**: Students enrolled in two additional English clusters added to Summer Bridge 2008 will have an increase retention rate of 30% above a stand alone English 67 and 68 courses.
- **Career/Transfer Services**: Increase student, faculty and staff awareness of Career Placement and Transfer activities, events and services.
- **Center of Excellence**: Regional administrators and faculty members will be satisfied with the quality of information provided to them by the center.
- **College Information Services**: The CIS department will provide education and training for our employees.
- **Library & Learning Resources Division Office**: Improve communication between the Division office and departments within Division. Division staff will be satisfied with quality of communication.
- **Mailroom**: The Mail Services unit will provide timely and accurate mail services campus-wide.

Planning for Institutional Effectiveness

What does "institutional effectiveness" mean?

"The institution demonstrates a conscious effort to produce and support student learning, measures that learning, assesses how well learning is occurring, and makes changes to improve student learning. The institution also organizes its key process and allocates its resources to effectively support student learning. The institution demonstrates its effectiveness by providing 1) evidence of the achievement of student learning outcomes and 2) evidence of institution and program performance. The institution uses ongoing and systematic evaluation and planning to refine its key processes and improve student learning."

ACCJC Standard I B

Chaffey College's Strategic Planning Framework for Institutional Effectiveness
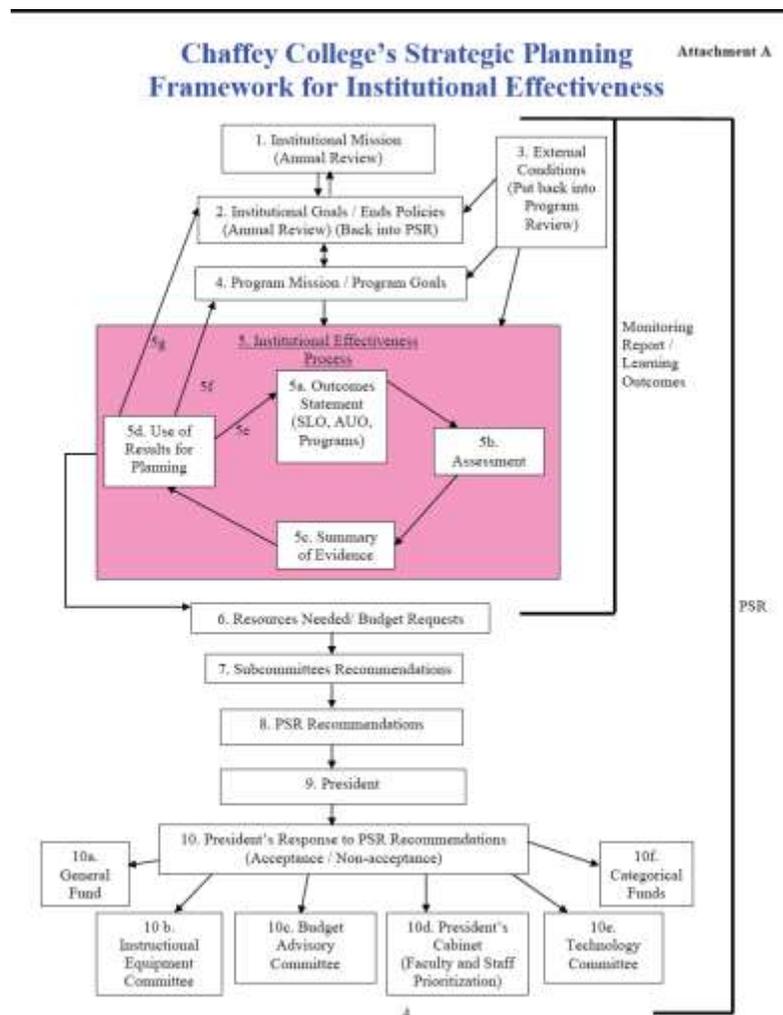
In other words, an effective institution includes:

- High-quality instructional programs in recognized and emerging fields of study that culminate in identified student outcomes leading to degrees, certificates, employment, or transfer to other higher education institutions or programs consistent with its mission.
- Recruitment and admission of diverse students who are able to benefit from the institution's programs, consistent wit h the institution's mission.
- Student services which address the identified needs of the students and enhance a supportive learning environment.
- A student pathway through the institutional experience which is characterized by a concern for student access, progress, learning and success.
- A Library and other learning support services such as supplemental learning, computer laboratories, and other learning technology and training, for students which is sufficient to support the institution's instructional programs and intellectual, aesthetic, and cultural activities in whatever format or wherever they are offered.
- A Human Resources consisting of qualified personnel to support student learning programs and services wherever offered and by whatever means delivered, and stresses that the institution's personnel are treated equitably, are evaluated regularly and systematically, and are provided with opportunities for professional development.
- Physical resources, which include facilities, equipment, land and other assets that support student learning programs and services.
- Technology resources that are used to support student learning programs and services, as well as improve institutional effectiveness.
- Financial resources which are sufficient to support student learning programs and services as well as improve institutional effectiveness.
- Institutional leadership that recognizes and utilizes the contributions of all members, acknowledges the role of shared governance designed to facilitate decisions that support student learning programs and services and improve institutional effectiveness, and that acknowledged the designated responsibilities of the governing board and chief administrator.
- Designated responsibilities of the governing board for setting policies and of the chief administrator for the effective operation of the institution.

How does an institution "plan" for institutional effectiveness?

- By providing for ongoing, collegial, self-reflective dialogue about the continuous improvement of student learning and institutional processes.
- By setting goals to improve institutional effectiveness consistent with the institution's stated purposes.
- By articulating institutional goals and stating objectives derived from theses goals in measureable terms so that the degree to which they are achieved can be determined and widely discussed.
- By assuring that institutional members understand these goals and work collaboratively toward their achievement.
- By assessing progress towards achieving the institution's stated goals and makes decisions regarding the improvement of institutional effectiveness in an ongoing and systematic cycle of evaluation, integrated planning, resources allocation, implementation, and re-evaluation.
- By conducting evaluations based on analyses of both qualitative and quantitative data.

- By providing evidence that the planning process is broad-based, offering opportunities for input by appropriate constituencies, and allocating necessary resources that lead to improvement of institutional effectiveness.
- By using documented assessment results to communicate matters of quality assurance to appropriate constituencies.
- By assuring the effectiveness of the institution's ongoing planning and resource allocation processes by systematically reviewing and modifying, as appropriate, all parts of the cycle, including institutional and other research efforts.
- By assessing the institution's evaluation and mechanisms through a systematic review of their effectiveness in improving instructional programs, student support services, and library and other learning support services.

How would you measure institutional effectiveness?
A college can measure its institutional effectiveness through a continuous cycle of planning, assessing, and improvement, set in motion by measurable college goals (designed for problem solving or quality improvement) that are derived from the college mission.

Based on the college's mission statement, planning involves deciding the college's focus/ priorities, setting institutional goals, developing institutional/ departmental strategies, outlining tasks and creating schedules to measure if the goals are reached, evaluating the outcome and doing it all again (i.e., think, plan, do, and evaluate cycle).

Assessment efforts including SLOs and AUOs can be documented in accreditation reports as well as the strategic planning process.

Each program, department and service on campus completes this annual Program and Services Review (PSR) document to record the environmental conditions, short-term and long-term goals, assessment efforts, and resources required to function as efficiently and effectively as possible. Though it is submitted once a year during the spring, it is intended to be a living document that should be continuously referred to, modified, and updated. It can be completed electronically through Curricunet.

The next page displays the Institutional Planning Framework. It displays the components of the strategic planning process and the connection between this process and campus decisions.

Strategic Planning Framework

What is strategic planning and how does it differ from planning for institutional effectiveness?

How Program SLOs/AUOs Fit into the Institutional Effectiveness Process
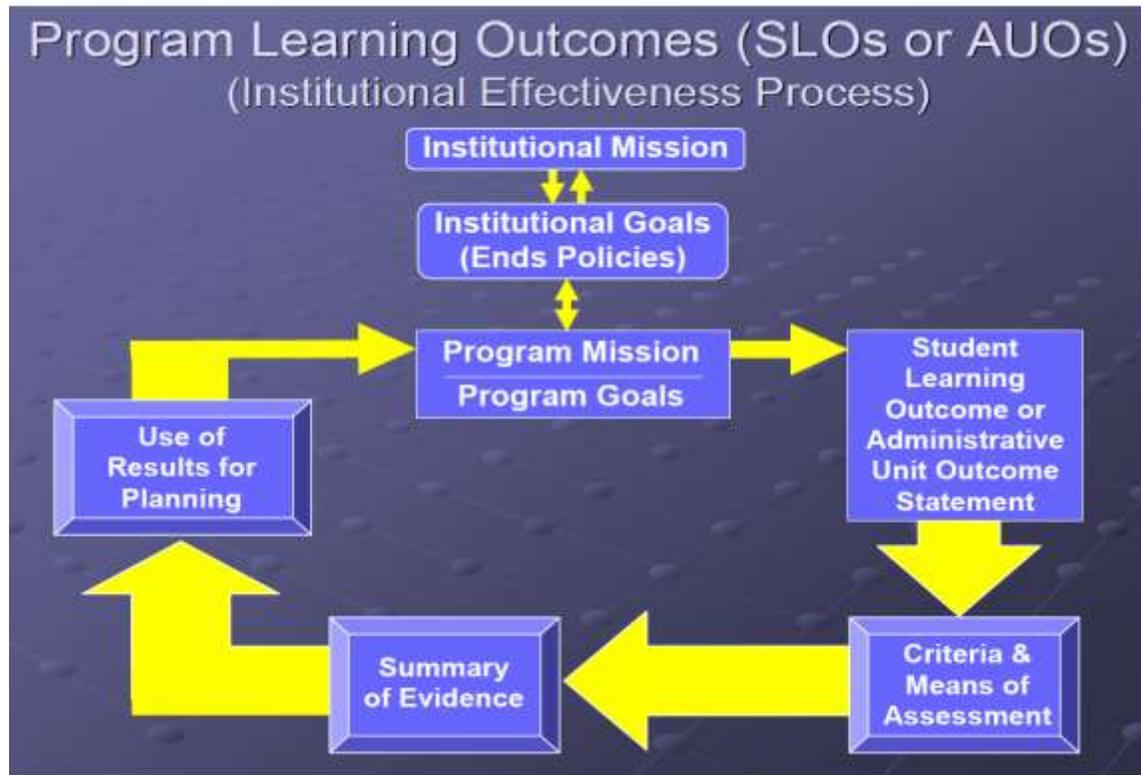
THE EIGHT-STEP PROCESS, INCLUDING THE NICHOLS MODEL, FOR SLOS AND AUOS

Getting started is the hardest part but just remember that you have been doing a portion of this all along. While Chaffey College has adopted the Nichols five column model for the actual outcome assessment, the **entire** process, from start to finish, includes eight steps. The Eight-Step Process outlined below provides a clear and tangible way to articulate your efforts.

The intention of the process is to provide a step-by-step layout of how to develop SLOs and AUOs, how to assess them, what to do with the data, and how to use the findings. It also explains how to document your efforts with the model that is used by the campus. By establishing and maintaining a documentation process, it is easier for you and your department to see what work has been done, how it went, and what actions need to be taken to meet the goals and needs of your department.

Developing and assessing SLOs and AUOs is a process and the following steps are intended to serve as a set of guidelines. It is imperative to look at the culture within your department or program to determine how this process will best be implemented.

The Eight-Step Process for developing SLOs and AUOs is listed below: (in progress)

SLOs and Program Review

Why Do We Do Program Review?
Program Review, which is required by the Higher Education Act that was passed in 1965, amended several times, and just renewed in fall 2008, is intended to engage colleges in a careful evaluation of how effective their educational and student support programs are, and how well students are succeeding. Colleges must use information gleaned from such ongoing evaluation to make improvements to educational quality and student success. (*ACCJC Newsletter, Summer, 2009, p. 1)* Short answer: we do program review (Chaffey speak = "PSR") because it provides some measurement of our institutional, program and course effectiveness.

Accrediting Commission for Community and Junior Colleges
Western Association of Schools and Colleges

Rubric for Evaluating Institutional Effectiveness – Part I: Program Review
(See cover letter for how to use this rubric.)

Levels of Implementation	Characteristics of Institutional Effectiveness in Program Review *(Sample institutional behaviors)*
Awareness	• There is preliminary investigative dialogue at the institution or within some departments about what data or process should be used for program review. • There is recognition of existing practices and models in program review that make use of institutional research. • There is exploration of program review models by various departments or individuals. • The college is implementing pilot program review models in a few programs/operational units.
Development	• Program review is embedded in practice across the institution using qualitative and quantitative data to improve program effectiveness. • Dialogue about the results of program review is evident within the program as part of discussion of program effectiveness. • Leadership groups throughout the institution accept responsibility for program review framework development (Senate, Admin. Etc.) • Appropriate resources are allocated to conducting program review of meaningful quality. • Development of a framework for linking results of program review to planning for improvement. • Development of a framework to align results of program review to resource allocation.
Proficiency	• Program review processes are in place and implemented regularly. • Results of all program reviews are integrated into institution-wide planning for improvement and informed decision-making. • The program review framework is established and implemented. • Dialogue about the results of all program reviews is evident throughout the institution as part of discussion of institutional effectiveness. • Results of program review are clearly and consistently linked to institutional planning processes and resource allocation processes; college can demonstrate or provide specific examples. • The institution evaluates the effectiveness of its program review processes in supporting and improving student achievement and student learning outcomes.
Sustainable Continuous Quality Improvement	• Program review processes are ongoing, systematic and used to assess and improve student learning and achievement. • The institution reviews and refines its program review processes to improve institutional effectiveness. • The results of program review are used to continually refine and improve program practices resulting in appropriate improvements in student achievement and learning.

Program review is the process through which constituencies (not only faculty) on a campus take stock of their successes and shortcomings and seek to identify ways in which they can meet their goals more effectively. It is important to note here that the task of identifying evidence-based successful practices, and sharing these practices college-wide, is far more important than the negative perspective of trying to ferret out ineffective practices. Program review should model a miniature accreditation self-study process within a designated area of the campus. In essence it provides a model and practice that generates an analysis of evidence about specific programs. (*The Academic Senate for California Community Colleges. Program Review: Setting a Standard*, date? p. 6).

After defining a program and writing a goal for the program, program stakeholders should develop locally appropriate student learning outcomes for the program. Program SLOs should reflect the program's vision, mission and goals, student needs and goals, related professional expectations, Chaffey College's mission, vision and goals, and community expectations when appropriate.

Program review provides an opportunity to align courses and services with program outcomes. In addition, program review provides an opportunity to align program outcomes with institutional outcomes, referred to as the Core Competencies at Chaffey College.

SLOs and Curriculum

Curriculum and student learning outcomes have become increasingly intertwined at Chaffey College. As added rigor is encouraged from the Chancellor's Office and as accountability to prove measurable student learning has occurred, the Course Outline of Record (COR), which is the official document of Chaffey College stating what is to be included in each course, has become the focus of much thought and reflection.

The Course Outline of Record (COR) must include all the elements specified in Title 5 55002 (a), (b), or (c): Unit value, contact hours, requisites, catalog description, objectives, and content. The outline must also include types or examples of assignments, instructional methodology, and methods of evaluation. The course outline must be rigorous and effective in integrating the required components of critical thinking, essay writing/problem solving, college-level skills, and vocabulary throughout. (The Academic Senate for California Community Colleges. *The Course Outline of Record: A Curriculum Reference Guide, Spring, 2008, p. 5)*

The obvious point of entry in the COR for student learning outcomes would be at the course objective level. However, as previously outlined in this document (see section xx on page xx), ACCJC has specifically stated there is to be a difference between the course objectives and the course student learning outcomes.

ACCJC has developed a rubric for institutional effectiveness which is specifically geared towards student learning outcomes.

Insert rubric

Chaffey College uses the software, Curricunet, for tracking its curriculum. As of Fall semester, 2009, Chaffey has utilized a locally designed "Learning Outcomes" page as part of their Course Checklist.

Insert Curricunet Course checklist

As of the Spring, 2010 semester, course modifications will not receive a 2nd and final approval from the Curriculum Committee unless the Learning Outcomes page has been completed as part of the regular six year update.

Please see the Chaffey College Curriculum website for further information regarding Student Learning Outcomes and Curriculum.
(still waiting for the web address from Ben).

Chaffey College
Student Learning Outcomes Timeline

Spring 2004 – Building Awareness

- Student Learning Outcome Taskforce is formed to begin preliminary, investigative dialogue about student learning outcomes at Chaffey College.
- The taskforce recognized that existing practices such as course objectives and how they relate to student learning outcomes.
- Flex sessions regarding SLOs are offered for the first time at Chaffey.
- There is an exploration of models, definitions, and issues taking place on campus.
- SLO Co-coordinators Laura Hope and Sid Burks draft plans to begin SLO work at the program level.
- Five pilot projects were selected to develop program level SLOs and spread the information among colleagues campus-wide. The pilot projects the Economics Degree Program, the Communication Studies Program, Business and Office Management Certificate and Degree Program,, English Developmental Composition Program, and the Sequential Chemistry Course Program.
- Fall Flex, 2005, these five pilot projects presented to faculty.
- The pilot projects begin assessments on program-level SLOs in 2006.
- The SLO Taskforce begins work drafting Institutional level SLOs during Spring 2008.
- Program-level SLO development continues campus wide throughout Spring, 2008.

Fall 2008 – Development

- The College appoints two new SLO Co-coordinators, Tom Vitzelio and Marie Boyd. Marie Boyd also serves as the Interim Curriculum Chair, providing many opportunities of cross-pollenization of curriculum development and SLO activity. Giovanni Sosa, Institutional Researcher, joins SLO team.
- The Core Competencies (Institutional SLOs) begin the shared governance process, culminating with Board of Trustees approval in January, 2009.
- The Curriculum Committee begins composing "institutional definitions" of the Core Competencies.
- Program level SLOs continued to be refined. Assessments begin of some program-level SLOs during Fall 2008 and Spring 2009.
- Curriculum mapping of courses is generated by Program Coordinators. This work also including linking program SLOs to the Core Competencies.
- Alignment of Core Competencies, program-level SLOs and course-level SLOs begins during Spring 2009.
- Institutional Research works closely with faculty in developing pre/post tests – the preferred assessment model for the first cycle.
- Existing organizational structure (e.g., the Faculty Senate and the Curriculum Committee) support strategies for student learning outcomes definition and assessment.
- The SLO taskforce becomes a standing committee under the Faculty Senate. The SLO Committee is made up of faculty, adjunct faculty, staff and administrators.

- Leadership groups (e.g. Faculty Senate and Administration) have accepted responsibility for student learning outcome implementation.
- The College Library initiates pre/post testing for information competency.
- Student Services continues to "close the loop" in many areas.
- Appropriate resources, including budget, staffing and training conferences are allocated to support student learning outcomes. The SLO Co-coordinators attended the two WASC training workshops during Fall 2008. The co-coordinators took advantage of several other training opportunities, which they shared with colleagues on campus.
- Flex sessions regarding SLOs are offered in both Fall 2008 and Spring 2009 Flex.
- The debut of the SLO newsletter, SLO-Down, generated much interest campus wide.
- Associated Students from Chaffey College (ASCC) are folded into planning and general dialog regarding SLOs. One idea which will be pursued is to create a YouTube video featuring students in regards to SLOs.
- Course-level SLOs begin to be developed during Spring 2009. The General Education pattern of courses are primarily targeted for this first effort of developing course-level SLOs.
- The Wurtz Wheel, an in-house tool to track SLOs through the five part Nichols Model is utilized widely across campus.
- Pre/post tests are developed for course-level SLOs for this first pass at course-level assessments.
- Three-ring binders are created and distributed across campus to house SLO evidence consistently and obviously.
- Co-coordinator Vitzelio developed a calendaring tool for programs to chart out their assessment strategies for the next 3-5 years.
- A campus-wide assessment is administered on critical thinking, one of the College's Core Competencies. This assessment will be followed by a Fall Flex 2009 conversation amongst the faculty participants.
- Discussion is begun campus-wide regarding housing SLOs on an addendum attached to the Course Outline of Record on Curricunet. The syllabus-producing feature of Curricunet is examined in regards to producing syllabi which include SLOs and course objectives.
- The College's Program and Services Review, which is housed on Curricunet, includes all program-level SLO and AUOs for the first time. The SLO Committee was tasked with reviewing these SLOs and critiquing according to an evlaution sheet normed to the Nichols model. For the first time, the college has an accurate read on the number of SLOs and AUOs and has made substantial progress towards quality control of these SLOs and AUOs.
- Discussion regarding alignment of course-level, program-level and the Core Competencies (institutional SLOs) has begun in earnest.
- Major curriculum modifications begin, establishing the difference between course objectives and critical thinking. In addition, course are scrutinized for appropriate rigor and critical thinking. One fourth of the college's curriculum had been initiated into this process as the of the end of Spring 2009 semester.

Fall 2009 and Beyond – Developing Proficiency
- There is widespread dialogue about the results of SLO assessments.

- The Fall 2009 Flex Institute will have a strand of programs and discussions devoted entirely to SLOs.
- Decision-making includes dialogue on the results of assessment and is purposeful directed toward improving student learning. Faculty receive analysis from program and course-level SLOs for analysis and review.
- Comprehensive assessment reports exist in several areas of public access. The Chaffey SLO website is online beginning Summer 2009; the Colleges Program and Services Report on Curricunet includes program-level SLOs for public review; the Wurtz Wheel is completed for all SLOs and AUOs and is available on the college's intranet.
- Continue with spring campus-wide assessment of one of the College's Core Competencies.
- Continuing assisting faculty in establishing assessment timelines.
- Explore other assessment formats.
- Continue dialoging with students regarding SLOs.
- Explore faculty SLO portfolio approach.

Chaffey College Core Competencies (Institutional SLOs)

Chaffey College drafted a set of overarching learning outcomes, which serve as institutional, general education outcomes. Through the alignment process, and with the use of curriculum mapping and matrices, the college makes its case for the achievement of these overarching outcomes from course-level SLO assessments. The Core competencies were developed through an extensive shared governance process. The following outlines these Core Competencies:

Chaffey College strives to develop lifelong learners who exhibit the following:

Communication
Students will demonstrate effective communication and comprehensions skills. Examples will include, but are not limited to the following:
- Comprehend, analyze, and respond appropriately to oral, written, and visual information.
- Effectively communicate/express information through speaking, writing, visual, and other appropriate modes of communication/expression.

Critical Thinking and Information Competency
Students will demonstrate critical thinking skills in problem solving across the disciplines and in daily life. Examples will include, but are not limited to the following:
- Identify vital questions, problems, or issues and evaluate the plausibility of a solution.
- Analyze, compose, and assess the validity of an argument.
- Compute and analyze multiple representations of quantitative information, including graphical, formulaic, numerical, verbal, and visual.
- Compare, contrast and analyze scientific CONCEPTS and scientific observation.
- Select, analyze and evaluate the accuracy, credibility, relevance and reasonableness of information and its sources.

Community/Global Awareness and Responsibility
Students will demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives. Examples will include, but are not limited to the following:
- Identify the social and ethical responsibilities of the individual in society.
- Demonstrate commitment to active citizenship by recognizing and evaluating important social, ecological, economical, and political issues.
- Demonstrate an understanding and appreciation for individual, social, and cultural diversity.

Personal, Academic, and Career Development
Students will assess their own knowledge, skills and abilities; set personal, educational, and career goals; work independently and in group settings; identify lifestyle choices that promote

self reliance, financial literacy and physical, mental and social health. Examples will include, but are not limited to the following:

- Demonstrate professional and ethical responsibilities of the individual.
- Identify personal, academic, psychological, and social needs, determine resources and access appropriate services.
- Develop, implement, and evaluate progress towards achieving personal goals, academic goals, career goals, and career resilience.

Appendix A – WASC Rubrics
Appendix B -