The following pages are a review of the Student Learning Outcome process. The main ideas have been condensed into comparisons between grades and outcomes. Please do a quick review, and if you have any questions, please don't hesitate to ask for assistance.

Grades based on Objectives	Outcomes based on SLO's
Objectives are intended results or consequences of instruction, curricula, programs or activities. **Grading** is the process of applying standardized measurements of varying levels of achievement in a course to all students. **Objectives define the key elements that must be taught *every time* the course is delivered.**	**Outcomes are achieved results of what was actually learned - the evidence that learning took place.** Learning outcomes are ***measurable statements*** that specify what learners will know or be able to do as a result of successfully completing a course. Course, Program and Institutional Student Learning Outcome (SLO) statements are the expected ***outcomes.***
Objectives are focused on performances ***that all students*** are expected to demonstrate at the end of instruction, for example "the objective is to get good ***grades***."	**Outcomes** are ***single student-centered*** and describe what it is that the student should learn. **SLOs are not grades, but observable skills.**
Because calculation of a course grade often involves a *combination of sources* such as class participation and other objectives, the **single course grade does not directly represent the student's achievement of a *specific* learning outcome or skill.**	Instead of how many students received A's or B's in the course, the SLO's are geared to **describe or demonstrate a specific skill or skills acquired that is central to the course.**
A student could have a ***test*** on the chemical interactions involved in baking. ***Field trips*** to a local bakery are required. ***Pop quizzes*** about baking are given.	**How many students were observed successfully baking a cake?** SLOs are meant to be **skill-specific**. From start to finish, was the student *observed* baking a cake from scratch?

There is a **research paper** assigned about the history of cake baking in medieval England.

Grades on these assignments are awarded to the student.

Grades are student-specific.

The tests, papers, quizzes and field trips that are graded are the *proof* of those grades, and is kept for a specific length of time.

Sometimes CTE courses have clear-cut SLO's that are identical skills that may be present on licensure or certification programs.

Academic courses also provide specific skills:

- solve a linear equation in algebra
- carry on a simple 2-minute conversion in a language course
- write a short economics paper on price determination in a market economy
- sight-reading a piece of music.

SLOs are meant to be **skill-specific**.

Assessments **scorecards** are *proof* that a skill was observed.

Objectives are put into the **Course Outline of Record (COR).**

Student Learning Outcomes for the COURSE must be on the **course syllabus** (CSLO's). They should also appear on the **COR.**

Program (for each Department/Discipline) and **Institutional Student Learning Outcomes** must be in the *Course Catalog.*

Grades and **Students** and **Courses** are stored in *Banner*

Course Outlines are stored in *CurricUNET*. ACCJC requires that CSLO's be here also, but the actual data management system at Oxnard College is still *eLumen.*

There is a program page in *CurricUNET* for PSLO's to be used when creating and revising programs.

Student Learning Outcomes are stored in *eLumen.*
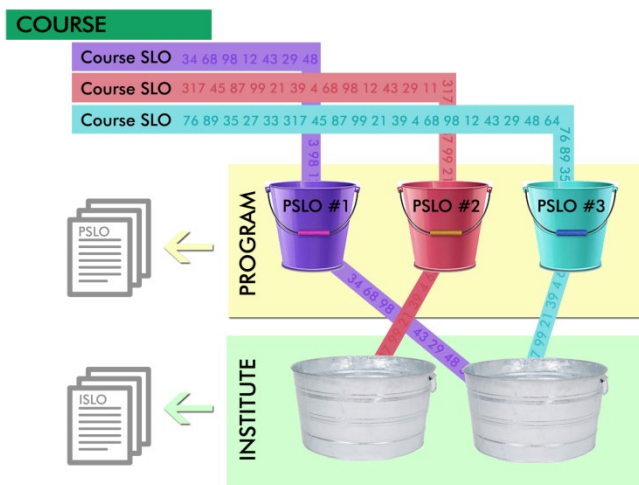
The SLO statements are developed by Faculty and Departments.

Once a term, the **Course SLO's** are paired with student *rosters* for active sections (from Banner), combined with a *rubric,* and sent out to Faculty in the form of *scorecards* (a.k.a. "assessments" or "doing my SLO's").

Assessment = Scorecard

What Is An Assessment?
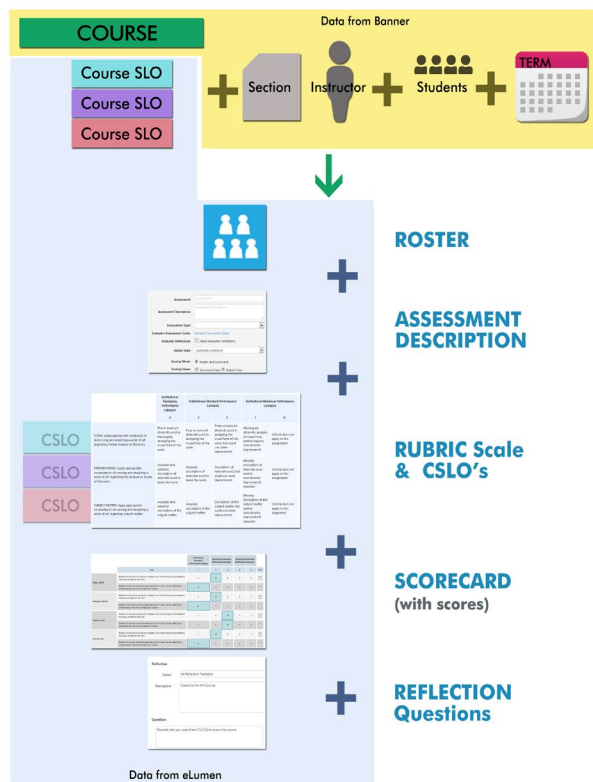
COURSE SLO's are *mapped* to PSLO's in *eLumen*.

The writing of COURSE and PROGRAM Student Learning Outcomes (PSLO's) are decided by the Department or Discipline. PSLO's must be in the *Course Catalog* for that department.

INSTITUTIONAL SLO's (ISLO's) are the product of the entire college. ISLO's must be in the *Course Catalog* for the college. PSLO's are *mapped to ISLO's* in *eLumen.*

Course SLO's should not describe *unmeasurable outcomes*. "Acquire an understanding of...." or "Gain an appreciation of ...." Understanding and appreciation are *not* measurable outcomes. Use verbs that imply measurement:

observe measure classify test hypotheses revise modify gather synthesize design select evaluate record interpret prove model formulate extract reason through algorithms infer initiate sustain describe define . . . .

Some good verbs that are specific to the course of study or discipline:

calculate translate conjugate compose administer troubleshoot program converse present bake prepare align repair paint draft sculpt draw decorate . . . .

Course SLO's should not be too general, and be identifiable to a specific course. They should have *academic rigor* – not be something the average person would be able to perform. Everybody knows about air pollution – academic rigor would be: "describe the six major air pollution particulates."

Program SLO's should be written to accommodate one or more Course SLO. CSLO's that describe skills related to baking should have an encompassing Program SLO's that describe the skills gained in baking bread, cake, cookies and so forth. PSLO's should also be engaging for prospective students as they are reading them in the *Course Catalogs.*

Poor PSLO: "Students will understand baking." Better PSLO: "Acquire skills in commercial baking techniques using industrial equipment designed for bread, pastry and meat preparation."

Further Reading and Helpful Links:

eLumen Link:	https://oxnard.elumenapp.com/elumen/	Towards the end of the Term the *eLumen* **scorecards** (a.k.a. assessments) will become available to all Faculty teaching at least one section. All SLO information is contained in *eLumen*. The credentials (login and password) for *eLumen* **are not the same** as other applications. Please contact the Data Steward to change your login and password to something that is more meaningful to you.

eLumen FAQ

1) **Aggregate (collective) scoring in *eLumen* is not available** because you cannot disaggregate the data into gender, ethnicity or other data points that are now required by Accreditation.

2) **Faculty-created Assessments are no longer allowed.** Departments will use their own custom-written Library Assessments (CSLO's + rubric + Reflection Questions) to create scorecards. In *eLumen,* scorecards are re-used term after term, using the same Course SLO's and rubric, but obviously using the student roster for the current term. Long-term outcome data analysis depends upon the same CSLO's being scored over time.

3) **ALL students on a scorecard must have a numbered score or an N/A in order to *get credit for a completed assessment*.** Scorecard icons are blue when incomplete, and green when all students are scored or N/A checkboxed.

4) **To add, change, edit or deactivate any SLO, please contact the Data Steward**. This will eliminate duplicate SLO's and a host of other issues including insuring that the *mapping* is done correctly. The Data Steward does not write SLO's, only enters them into *eLumen* after the Department has reviewed them and how they will be mapped to PSLO's and ISLO's. Faculty cannot create their own CSLO's in *eLumen* – but the Data Steward will be most happy to put them in exactly as they want and review their mappings to Program and Institutional SLO's.

5) **All *eLumen* data (sections, courses, students) comes from the Banner grading system.** Banner data is loaded into *eLumen* at the end of the term (in order not to upload too many students who have dropped or withdrawn). If you feel you have too many dropped students in your scorecards, please contact the Data Steward to have them removed. The Data Steward sends out scorecards/assessments towards the end of the term - after the Banner data has been loaded into *eLumen* .

	Oxnard college SharePoint Assessment Cycle, *eLumen* HELP Documents and INSTITUTIONAL PAPERS	You will need your user name and password to access SharePoint. This is your system, or Windows password.

White Papers and Other College Approaches to Student Learning Outcomes

Adelman, Clifford
> **To Imagine a Verb: The Language and Syntax of Learning Outcomes Statements**
> Occasional Paper #24, National Institute for Learning Outcomes Assessment.
> http://learningoutcomesassessment.org/documents/Occasional_Paper_24.pdf

Nunley, Charlene, Trudy Bers, and Terri Manning
> **Learning Outcomes Assessment in Community Colleges**
> Occasional Paper #10,   National Institute for Learning Outcomes Assessment
> http://www.learningoutcomesassessment.org/documents/CommunityCollege.pdf

Cañada College - A Guide to Developing Measurable Student Learning Outcomes
> https://www.canadacollege.edu/inside/research/slos/documents/STUDENT%20SERVICES%20SLO%20GUIDE%20BOOK.pdf

National Institute for Learning Outcomes Assessment - Student Learning Outcomes Statement Resources (excellent)
> http://www.learningoutcomesassessment.org/SLOSresources.html

Osters, Sandi, and F. Simone Tiu
> **Galivan College: Writing Measurable Learning Outcomes**
> http://www.gavilan.edu/research/spd/Writing-Measurable-Learning-Outcomes.pdf

University of West Florida - Bloom's Taxonomy Action Words
> http://uwf.edu/media/university-of-west-florida/offices/cutla/documents/Blooms-Taxonomy-Table-of-176-verbs-Stanny-2016.pdf

Tulane University - Student Learning Outcomes (unsigned and undated paper)
> https://tulane.edu/liberal-arts/upload/Student_Learning_Outcomes.pdf

University of Connecticut - How to Write Program Objectives/Outcomes
> http://assessment.uconn.edu/assessment-primer/assessment-primer-goals-objectives-and-outcomes

San Diego State 360 Action Verbs for Writing Student Learning Outcome Statements
> *Alphabetical verbs literally in your face*
> http://www.dartmouth.edu/~oir/pdfs/Action_verb_%20for_SLOs.pdf

Websites

National Institute for Learning Outcomes Assessment
NILOA – Established in 2008, the granddaddy of Learning Outcomes (University of Illinois at Urbana-Champaign)
Resources, mission, surveys of campus assessment efforts
http://www.learningoutcomeassessment.org/index.html

The Research & Planning Group for California Community Colleges
The RP Group utilizes perspectives of college researchers, faculty and administrators
http://rpgroup.org/

Academic Senate for California Community Colleges – Sharing Student Learning Outcomes with Community
Grades versus SLOs discussion → grades = student-specific, SLO's = skill-specific – Mt. San Antonio College
http://www.asccc.org/content/sharing-student-learning-outcomes-slos-your-college-community

Academic Senate for California Community Colleges – A Different Way of Thinking About SLOs
October 2016 Discussion by Jarek Janio, Santa Ana College
http://www.asccc.org/content/different-way-thinking-about-slos

University of Oregon Student Learning Outcomes
Uses the S.M.A.R.T. process, specific, measurable, attainable, results and tailored
https://cas.uoregon.edu/learning-outcomes/