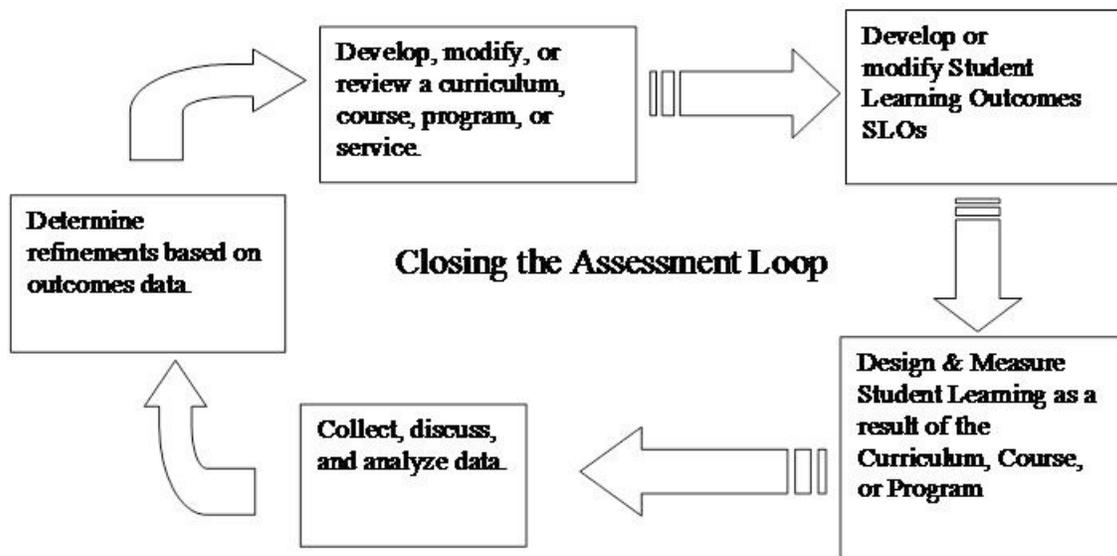
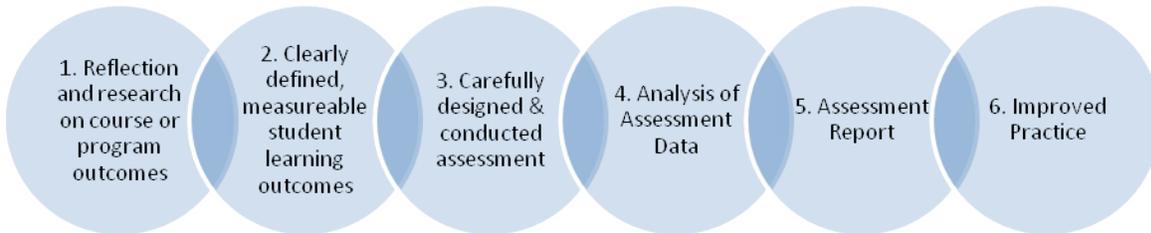


## Closing the Assessment Loop

Adapted from the Reedley College Assessment Workbook

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**Assessment Cycle.** The assessment cycle refers to the process called closing the loop and is figuratively represented above.

**Closing the Loop.** Closing the loop refers to the use of assessment results to improve student learning through collegial dialogue informed by the results of student service or instructional learning outcome assessment. It is part of the continuous cycle of collecting assessment results, evaluating them, using the evaluations to identify actions that will improve student learning, implementing those actions, and then cycling back to collecting assessment results, etc.

## Closing the Loop Leads to Improved Practice

In general, the process of closing the loop:

- Helps to improve teaching practices
- Formalizes thoughts about courses and provides a holistic picture of the course from beginning to end
- Focuses teaching practices, syllabi, daily activities, and assessments on a single target--SLOs
- Improves feedback to students which powerfully improves success
- Validates both what we are teaching and why we are teaching it
- Promotes robust dialogue among the faculty & stimulates productive departmental conversations
- Reduces departmental favoritism because it is based on performance
- Enhances interdisciplinary cooperation
- Produces useful discussions concerning sequential courses
- Contributes to more rigorous curriculum review with a focus on outcomes
- Encourages consistency of standards between sections
- Maintains high standards
- Directs teaching to be more learning---centered
- Improves student learning by focusing on good practice

### Examples of Improved Practice through Course Assessment

#### ***Spanish at Glendale College***

One example of changes at the course level include work done by **Stacy Jazan** at Glendale Community College. Stacy Jazan began in 2007 with an assessment report that primarily used grade distribution as an indication that students achieved stated course learning outcomes if they received a C or better. She realized that using grades didn't provide insight into why students received a C in the course, or what could be done to improve outcomes overall. Through subsequent assessment, she eventually found that "Generally, the students did worse on the questions that had to do with the vocabulary related to the chapter themes than the vocabulary that dealt with calcos, idiomatic expressions, "Spanglish," and homophones, This tells me that the students were paying attention to the problems that heritage speakers tend to have (which is a primary objective of Spanish 115 and a stated SLO) and that homework and in class activities were generally effective, but perhaps they didn't spend as much time studying the general vocabulary." With this knowledge, the emphasis in the course was changed to encourage students to spend time on chapter vocabulary, leading to improvements in student outcomes.

#### ***Barstow College Anatomy and Physiology***

Dr. Robert Stinson has excelled in researching, assessing and promoting SLOs in his Anatomy and Physiology course at Barstow College. He assesses every SLO in multiple methods every semester, and keeps a running tally of his results and the changes he has made. He is continually altering that way he teaches concepts and the method of assessment. In addition,

he has discovered many things about his students and their test taking skills e.g. certain types of questions (True/False) actually generate more wrong answers than most other types of questions.

### **Examples of Improved Practice at the Program level**

#### ***Athletic program College of Marin***

College of Marin's athletic program is an excellent example of how reframing the purpose of the program can and did change the culture for students. The historical record of success for student athletes was dismal. Most athletes were heavy on the athletic commitment and light on the student commitment, having come to play a sport. They pattern was that the student athlete took as few units as possible and they took classes they were not likely to fail. Many did not complete the school year and others likely moved on to another school to continue playing sports. Student athletes left with few completed units on their transcripts. The new athletic director was anxious to reverse this trend and the pathways/ output measures model gave him the opportunity to reframe the purpose of the athletic program and provide interventions to make sure the focus was on *student* athletes and not simply athletes. The athletic program instituted student benchmarks to help ensure student success:

- All athletes are required to take English and Math
- All athletes attend a mandatory study hall
- Instructors of athletes are queried regularly about attendance and performance of athletes in their classes
- Coaches emphasize student-first by not allowing playing time to those who miss study halls or classes
- The various sports programs are partnering with the English and English Skills departments to provide Learning Communities courses specifically for athletes.

This was a program in desperate need of intervention and our change in thinking about performance measures for the college gave the program an opportunity to make critical changes on behalf of students.

#### ***Bakersfield College Biology Program***

The Bakersfield College biology department, which was organized as a single academic program by discipline, began examining the program and curriculum using student learning outcomes. This "outcomes perspective" guided faculty to conclude that the biology department really served three significant pathways which were programs of study contributing to different outcomes (Table 1).

The outcomes of these pathways prompted the biology department to re-evaluate the degrees awarded. In fact, the majority of students taking biology were pre-allied health, followed by the next largest number of students which were only taking a single course for general education and this was distantly followed by a handful of Biology majors, most of which never completed any degree. The outcomes and expectations for students taking only one course to meet a general education science requirement differed significantly from expectations for pre-allied health students and biology majors. It was evident that a single set of outcomes and a single degree for all students taking biology was not reasonable. The intensity, breadth, focus and depth of study varied significantly. The Biology Associate of Science degree was reframed to be a degree which students could reach through various pathways determined by the area of emphasis. The old Biology degree was

modified into two degree pathways: a Biology Associate of Science degree with an emphasis in Human Biology (the pre-allied health track) or a Biology Associate of Science Degree with an emphasis in Biology (for majors). The course requirements for these degrees differed significantly due to the different student goals. The program assessments were different because the final outcomes were very specialized to assess the student pathway and terminal goal. Data was used to improve all three biology pathways.

**Table 1. Three Goals of Students Taking Biology Courses**

<b>Biology major outcomes</b>	<b>Pre-allied health outcomes</b>	<b>General education outcomes</b>
<ul style="list-style-type: none"> <li>• pre- and co- requisites included college-level-reading, transfer-level math, chemistry, physics,</li> <li>• biology course requirements emphasized core global and organismal biological concepts with less content focused on humans</li> <li>• the goal, unit load and course sophistication was heavy, appropriate to transfer biology</li> </ul>	<ul style="list-style-type: none"> <li>• pre-requisites included pre-transfer-level math and a brief chemistry course</li> <li>• included intensive human biology courses (anatomy, physiology, microbiology) focused on core human biological concepts with far less organismal and global emphasis</li> <li>• the goal of the pathway was a vocational program and eventual external certification</li> </ul>	<ul style="list-style-type: none"> <li>• prerequisites only college-level reading</li> <li>• served as the only science portion for many student's general education briefly touching all core biological concepts human, organismal, and global</li> <li>• the goal was a liberal studies degree primarily in education or transfer in another area of emphasis</li> </ul>
<p><b>Conclusions:</b></p> <p>Few students could complete the Biology AA degree and GE requirements prior to transfer, particularly in light of the number of units that can be transferred.</p> <p>Historically this was the main emphasis of the biology department to make biologists. But this pathway was intensive and the number of students was shrinking.</p>	<p><b>Conclusions:</b></p> <p>Many students went this pathway.</p> <p>Too many students never actually completed the vocational program.</p> <p>The human biology courses are not transferable as Biology degree electives.</p> <p>These students had nothing to show for the course success except a transcript, they had completed no degree.</p>	<p><b>Conclusions:</b></p> <p>The biology portion of this pathway was easily accomplished by students seeking transfer and GE requirements only.</p> <p>Many of these were headed towards K-12 education majors.</p> <p>It was essential they had a grasp of scientific thinking as well as a global understanding of biology.</p> <p>The liberal studies degree with an area of emphasis represented the greatest number of single degrees awarded</p>

Next the biology department began to reconsider these program pathways in order to more effectively organize the curriculum. All the pre-allied health courses were rewritten integrating anatomy and physiology and creating a capstone course in Pathophysiology. The program and service to students was redesigned based on data from relevant program assessments and the needs of students along the pathway. The new degree, emphasizing human biology, allowed students a milestone after completion of the pre-allied health pathway (2 or more years of intensive education) and prior to completion of additional specific allied health degrees such as nursing, radiology, etc. Achieving the Biology AS degree with emphasis in Human Biology enabled students waiting to get into programs the opportunity to get better and higher paying jobs because they now had a degree indicating their ability to complete a program in contrast to a transcript that simply indicated they had taken a lot of biology courses. The capstone course provided a means of remediation for those students who did not make the cut-off formula for the nursing program and for those struggling in the nursing program to get a refresher.

The number of biology degrees awarded increased ten-fold as seen in the table below. Students expressed extreme satisfaction in graduating and being awarded a degree for completing an educational pathway which truly represented an accomplishment and completion of a course of study.

<u>Old Biology Program</u> Required: Courses in Chemistry, Math, Biology Target: Only Transfer as a Biology Major		<u>New Biology Program</u> Emphasis in Biology Required: Courses in Chemistry, Math, Biology Target: Only Transfer as a Biology Major <u>Emphasis in Human Biology</u> Required: One course in Chemistry, one course in Math, Biology courses related to the Human Biology Target: Students seeking multiple local Allied Health Pathways including transfer in Allied Health areas								
<u>Award Program</u>	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
<u>Biology</u>	9	10	7	5	12	18	46	58	56	87

***Dance at Glendale College***

Dora Krannig’s program assessment at Glendale College resulted in two new courses and a new certificate (Dance Teaching Certificate) to bring the program up to the level of today’s industry requirements. At the course level writing and evaluating the course outcomes led to the revision of all the dance courses. The ongoing assessment process encourages updating of courses to keep up with the industry. The process of writing the SLO’s for the course outlines, department, AA Degree, and the certificates has led to a much deeper understanding of the student and dance industry requirements. Besides the revision of all courses, new courses have been added, the existing certificate has been streamlined and also a new Dance Teaching Certificate was written. Industry internships are now up and running and the dance department is well on the way to be well respected internationally.

***Allied Health Program at Glendale***

Kathy McNeese is another Glendale Community College faculty in Health Science. She embraced the SLO philosophy by reviewing outside sources, and participating in college SLO activities. Kathy has mentored the entire faculty in the Health Science Division as they created their SLO’s and

completed their SLOAC's (SLO assessments) with appropriate Course upgrades. She devised a grading rubric for care plans, across all nursing courses, to assist with the launching of the eLumen software to track student success for SLOAC in nursing courses.

This work addressed important aspects of student success in nursing courses by applying good nursing care practices to students and effective student assessment to our teaching. Through sharing ideas and statistics that reflect the success of different interventions that can help students succeed and energize faculty about planning successful strategies to aid students' success.

## **Examples of Improved Practice at the Institutional level**

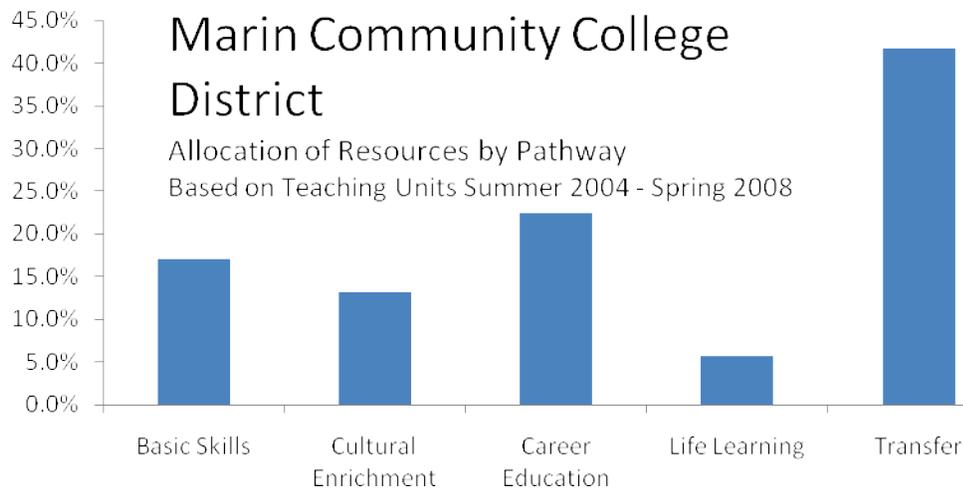
### ***College of Marin***

Research at College of the Marin led the entire college to re-think the use of "butts in seats" measures and to look instead at what each program was trying to achieve for students and align measurable goals with outcome assessment. As a result of the research and vision, Marin re-organized the college around student pathways --- basic skills/ESL; transfer; career & occupational training; personal growth & enrichment. Outcomes were written for each, e.g. "Full-time transfer students will be able to complete their programs and transfer within two years." Baseline data and longitudinal data track the progress of each pathway to show us our success (and not).

Three years ago, the College of Marin Academic Senate went through a radical transformation in thinking about the way we measured our success. We had traditionally looked to input measures to determine the success of our programs: head count, WSCH/FTE (load), class size. Research prepared by faculty member Robert Kennedy and presented to the Senate led us to understand that we would better capture the effectiveness of our programs if we looked at output measures including: job placement, number of transfers, the success of our transfers, the number of degrees granted, the efficiency of programs, completion rates, ESL transitioning, and student satisfaction.

### **Student Pathways**

In looking at these data we realized that the output measures used to determine success depended upon the goals of a particular cohort of students. This led us to completely rethink the way we organized the college. We designed an organization model based upon student goals. In doing so, we developed, with the cooperation of the administration and most specifically the college president and the vice president of student learning, five student pathways:



Each pathway defines its own goals for students and its own measures of success. These are reflected in the program reviews and the student learning outcomes presented by the programs in each pathway. If programs have students from more than one pathway, such as art or physical education, they address separate cohort needs, goals, and benchmarks in the program review and SLOs.

This transformation to a student-centered approach has led to interesting, often revolutionary changes in the college. For one, the concept of pathways has permeated the vocabulary and the thinking of faculty, staff, and administration. We no longer have conversations about what is good for *my* program or *my* discipline. The conversation is about students within a pathway and how our program or discipline blends with other programs and disciplines to meet the needs of students within a particular pathway.