SLOs: One Size Does Not Fit All

( Even within one department )

by Angela Burk-Herrick, Chaffey College Biology Department

The Biology department teaches a variety of classes to serve diverse student populations. Pre-nursing students (among others) enroll in pre-Allied Health courses in anatomy, physiology and microbiology, students planning to pursue a major in a biological science take three majors level courses, and students from every area of emphasis enroll in a variety of general education coursework. For this reason the department has developed three “strands” of program level SLOs under which individual course SLOs are nested.

Recently, sub-committees of biology faculty formulated assessment plans for each strand of courses. What developed were individualized plans best suited for each strand. Both the pre-allied health and the general education strands have large numbers of sections and are taught by both full-time and adjunct faculty. Because of these constraints, it was decided that it would most beneficial and logistically straightforward to administer committee written, common multiple-choice assessments every two years. Each assessment includes course specific questions addressing each SLO.

In contrast, few sections of majors level courses are offered each semester and these are taught by full-time faculty. As a result, embedded assessments addressing course SLOs seem to be a better fit. In this assessment model, faculty are free to utilize a variety of embedded SLOs assessment formats (e.g. lab reports, presentations, final exam questions) and are responsible for reporting and sharing both their assessment results and teaching strategies. As for “closing the loop” follow-up, assessment results are to be discussed in FLEX, biology department meetings and/or other creative venues.

In Spring 2011, an SLO Biology Brunch was hosted by RoseAnn Cobos (Biology Department Coordinator). Over brunch, SLO assessment results were used to start a fruitful discussion between full-time and adjunct instructors who teach general education classes. In addition to the variety of teaching strategies shared while enjoying delicious food, the discussion and sharing of teaching ideas materials continues electronically among participants. This was a particular rewarding experience as it generated academic discourse about improving student learning in topics directly related to specific course content.

One of the first assessment the Biology Department conducted was for Biology 10, that looked at how students recognized and understood theories of evolution in Biology.
Metric, Metric, Metric, Who's Got a Metric?

Dr. Brad C. Phillips, Executive Director of the California Partnership for Achieving Student Success (Cal-PASS)

The following article is from the January 2010 Academic Senate for California Community Colleges Newsletter: Senate Rostrum.

In education, accountability pressures are mounting, and higher education accreditation has been undergoing a gradual change in the level of scrutiny applied to institutions. Not that long ago, higher education regional accreditors focused on an institution’s mission, applied standards of good practice and assessed the degree to which an institution was fulfilling its mission within the standards. Now, in addition to institutional practices, the scrutiny is at the level of student outcomes. There are growing expectations that achievement of mission be demonstrated in part by providing evidence of student success and student learning. Today, increased accountability of our K-12 partners, especially in the age of “No Child Left Behind” legislation, has been the major driving force behind the push for increased accountability at all levels of education.

Some welcome the increased attention; others have pushed back. While the devil is in the details of exactly how accountability is applied, the pressure we are receiving can be a good thing. With grim statistics of our nation falling behind - from the percentage of adults with an earned certificate or degree (we are now 10th in the world), or data on our nation’s competitiveness, falling from first in 2008, to fifth in a recent 2011 report – we have cause to worry.

Metrics here, There And Everywhere

In response to increased scrutiny, we have a litany of performance measures – often referred to as metrics - proposed by the Federal Government, states, national organizations and foundations. The call by the Obama Administration and the Lumina Foundation for the doubling of degree and certificate completion adds to this powerful focus on community colleges. The nation cannot double completion without attention to this segment. Community colleges are in the cross hairs of the accountability movement.

The work done by Complete College America and their reports for 33 states has also increased attention on metrics. The reports focus on a number of student outcomes, including degree completion, transition through the basic skills sequence, course completion and other areas. California’s Community College Chancellor’s Office has recently published draft recommendations from its Taskforce on Student Success, including a call for the development of progression metrics and a student success scorecard. The Bill and Melinda Gates Foundation has also been a significant force behind metric development with substantial dollars focused on supporting and improving the success of community colleges. Metrics assessing the outcomes of the foundation’s efforts are embedded in the work.

“Achieving the Dream,” a national initiative that includes 160 institutions across the nation was the adrenaline shot that helped focus the nation on community colleges. Begun by the Lumina Foundation and now supported by foundations across the country, “Achieving the Dream” focuses on five key metrics: course completion; completion of basic skills coursework and transition through the sequence to degree level courses; completion of gatekeeper courses; persistence from semester to semester and year to year, and degree completion. Developed by community college experts from across the country, these five metrics often form the basis for more recent metric proposals. Metric development and the subsequent measuring of colleges on these and other proposed outcomes is not ending anytime soon and will likely be refined over time.

With all of this attention to measurement, where should a college start? Our work has demonstrated, and some notable experts agree, course success is the key metric. As Kay McClenny of the University of Texas states, “students complete college one course at a time.”

Continue on Page 3
HOW DOES A COLLEGE KNOW THAT IT IS DOING WELL?

Colleges can and do measure course success, but how do they know that they are doing well? Benchmarking is one way to assess this. Benchmarking is the process by which a college compares its rates with an accepted standard. The most common approaches include the use of historical data and comparisons with “like” colleges.

“Achieving the Dream” colleges, for example, have used historical baselines of their own data as their benchmark and have sought to improve their rates over time. Community college comparison data is available through the National Community College Benchmark project. Almost 300 institutions have participated in this service.

Colleges send their data and can set up comparisons with like institutions across the country. As the Complete College America work continues, comparison data should also become available from this source.

Given the possibility of benchmarking, what is a good target to achieve? Setting target goals is a combination of art and science. A college may want to improve success rates, but what is a reasonable year to year increase? We advise colleges to set an achievable increase and a stretch goal. In thinking about course success, if an average class size is 33, then one more student earning a successful course grade per section would be a 3% increase.

The question colleges have to ask is: is that a reasonable increase?

THE $64,000 QUESTION

What does this all mean for student learning? Our work in Cal-PASS has shown that bringing faculty together in a non-threatening environment to review data on student outcomes provides the space to move beyond the numbers and focus on what faculty, as collegial colleagues, want a student to know, understand and be able to do as a result of instruction in their classes. Course success data are merely the starting point that can lead to courageous, collaborative, rich discussions about curriculum. We have numerous examples demonstrating that when the faculty come together to improve course outcomes, the resulting discussions and changes in practice not only help to focus on the development of consistent student learning outcomes, but also lead to continuing improvements in course success rates.

In the end, the development and implementation of metrics has to inform practice and institutions’ course success rates have to have the capacity to “drill down” to a discipline and a course, or faculty will simply not be engaged in the work. If improvements are to be made, educators must trust the numbers and work together to improve student outcomes.

Not one size fits all continued from page 1

The following is the Reflective Dialog Report completed by the department for the Biology 10 assessment.

**Biology 10 – Concepts in Biology**

- **Core Competency:** Critical Thinking and Information Competency
- **Program SLO:** Recognize unifying theories and concepts in biology within an evolutionary context
- **Course SLO:** Recognize unifying theories and concepts in biology (e.g. structure & function, ecological relationships, organismal diversity, & inheritance) within an evolutionary context.
- **Means of Assessment:** Multiple Choice Exam
- **Date of Assessment:** Fall 2009
- **Criteria for Success:** 75% of students that pass with a C or better answer assessment questions correctly.
- **Summary of Evidence:** Assessment results are included for all students present on the day of the assessment (whether they passed the class or not). 79.7% of students were proficient at recognizing biological themes but only 55.9% answered the question related to natural selection correctly.
- **Use of Results:** Department meeting discussion about employing teaching strategies that will improve students' understanding of natural selection.
SLOs Links of the Month

- Cleveland State University Office of Student Learning Assessment
  - http://www.csuohio.edu/offices/assessment/
- Cal State University Fresno Learning Assessment Methods

SLO Down Contact Information

Marie Boyd, SLO Co-Coordinator  
Phone: 909.652.6968  
E-mail: marie.boyd@chaffey.edu

Tom Vitzelio, SLO Co-Coordinator  
Phone: 909.652.8152  
E-mail: tom.vitzelio@chaffey.edu

Interested in assisting with the S.L.O. Down? Contact either Marie Boyd or Tom Vitzelio.

Giovanni Sosa, SLO Assessment Coordinator, Institutional Research  
Phone: 909.652.6464  
E-mail: giovanni.sosa@chaffey.edu

Monica Han, Administrative Assistant II  
Phone: 909.652.6132  
E-mail: monica.han@chaffey.edu

The Chaffey College SLO Committee

SLO Committee Members for 2010-2011

Co-Chairs
- Marie Boyd, Curriculum Chair
- Tom Vitzelio, Instructional Specialist Success Centers

Committee Members
- Mamta Agarwal, Chemistry
- Graciela Arriaga, EOPS
- Sid Burks, Dean of Business and Applied Technology
- Misty Burrell, Art
- Merrill Deming, Dean of Math and Sciences
- Shelley Eckvahl, Nursing
- Jim Fillpot, Director, Institutional Research
- Sherrie Guerrero, Vice President of Instruction
- Annette Henry, Physical Education
- Laura Hope, Dean of Instructional Support

Support Staff
- Monica Han, Instructional Support
- Giovanni Sosa, Institutional Research

Committee Members
- Sonia Juarez, Student Activities
- Dave Karp, Business
- Daniel Kern, Philosophy
- Gail Keith-Gibson, Psychology
- Christine Lively, Modern Languages ASL
- Bruce Osburn, Automotive Technology
- Carli Straight, Institutional Research
- Victoria Tirado, Spanish