LAMC LEARNING OUTCOMES ASSESSMENT COMMITTEE (LOAC)

March 26, 2014
1:30 p.m. – 3:00 p.m., CAI Conference Room

AGENDA

1. Review and approval of minutes of March 12, 2014 meeting

2. Assessment Retreat

3. Assessment of the Information Competency ILO

4. ACCJC Annual Report – SLO Section due March 31, 2014

5. Mission Learning Report – Tentative Outline

6. Next meeting – Date and Time: Wednesday, April 16, 1:30 to 3:00, CAI Conference Room
Student Learning Outcomes and Assessment Section

1. a. Describe your activities to analyze and implement alignment in the planning of curriculum and delivery of instruction.

To accommodate the different learning styles for students and assure consistency in delivery pace and content for instructors, the math department created master courses using online courseware for all developmental math courses. The math department updated the Math 115 and 125 curriculum to include the requirement that homework must be graded either by the online courseware or by hand to encourage instructors to learn how to use the courseware efficiently. Workshops on how to use the courseware have been offered a few times before and during the regular semesters for the past two years. For each course, the department assigned at least one full-time faculty as a course coordinator to provide faculty support and oversee the contents and activities in the course. If the SLO results were a small percentage below the expected 70%, the course coordinator will adjust the master course assignment contents such as online homework and practice test to bridge the deficiency.

The courseware provides PowerPoint, Video Lectures with closed captioning, Animation, and immediate tutorial feedback per HW question to allow students to choose the online presentation that meets their learning style. Face-to-face tutorial service between students and well trained tutors is provided by the STEM center which is open Monday to Saturday.

After two years of technology training for faculty, almost 80% of the math faculty members know how to incorporate technology in their teaching and assignments. The math department has been tracking the SLO data, course completion data, and progression data (success rate for students who progressed to the next semester’s subsequent math course). The data was used to decide whether the department needs to revise a course curriculum and delivery of instruction. The creation of master courses and the scheduling of having the same instructor with the same time slot for sequential courses were based on the SLO and progression rate analysis.

b. Discuss how the alignment effort has resulted in changes of expected outcomes and/or how students' programs of study have been clarified.

The faculty training for courseware, common syllabi with expected delivery pace, and the selection of exercises per online assignment, were geared to higher SLO results with better course success rate and progression rate. Having some faculty changing their delivery of instruction to include the use of technology was a bigger challenge than teaching students how to utilize all the tools provided by the courseware. The math department expected the SLO scores might fluctuate slightly due to the implementation of the new delivery of instruction as indicated by the below SLO results comparison with the exception of the significant improvement for Math 125 SLO assessment. The true effectiveness of the master courses will require one to two years adjustment time for both the instructors and students.
Math 105

Math 105 is the lowest math course (Arithmetic) offered by the math department. Most students come from disadvantaged backgrounds. Some students had no experience in using technology which is an important part of today’s world. The introduction of the use of technology will allow students to become comfortable with online resources that can enrich their computer literacy.

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improving the layout of the courses, and the common final exam. The significant improvement for Math 125 SLO is the payoff for a dedicated faculty.

The math department has been tracking the success rate of students who progressed from Math 115 to Math 125 from Fall 2009 to present. Math 125 is the minimum math graduation requirement for the AA and AS degree. Before creating the master courses, the average success rate of students who progressed from Math 115 to Math 125 was below 30% as indicated by table shown below. After using the master courses with online courseware, the average success rate of students who progressed from Math 115 to Math 125 jumped to 45% which is a significant improvement within a year period.

Success Rate for students who continued from Math 115 to Math 125 on the next semester.

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2. a. Describe the various communication strategies your department uses to share SLO assessment results for usage by internal and external audiences.

The math department formed a SLO sub-committee last May that meets on a regular basis to discuss SLO assessment results, SLO question pools, rubrics, benchmarks, strategies, implementation, and indicator of effectiveness. The math department shared their SLO assessment methods, results, and data tracking with the college SLO committee, SLO retreats, and AtD (Achieving the Dream) committee.

b. Explain how communications take into account how the information is expected to influence the behavior or decisions of particular audiences. Discuss how communication of student learning outcomes assessment information and results impacts student behavior and achievement.

The progression rate was a positive impact for the master courses using online courseware. The math department scheduled the same instructor with the same time slot for sequential courses for allowing students to form a study group and be familiar with the same instruction format. Students often cannot register for the class of the same instructor due to their low priority registration. The math department requested administrators to allow priority registration be given to students who want to take the subsequent math course with the same instructor. The math department hopes the request will be granted in the near future to support student success.
Students are aware of the expected outcomes of passing a course. All SLO questions are included in the online practice tests and practice final exam. Students know they need to practice in order to achieve success. They are familiar with the online courseware help and feel comfortable doing their homework in the STEM computer labs with well-trained tutors around them.

3. a. Explain how dialog and reporting of SLO assessment results takes place at the departmental level.
   Since the math department assessed all sections and all students of selected courses per semester for the past 5 years, dialog and reporting became a routine for each assessment cycle. The SLO question pools per course have been posted on the department website. Two to three weeks before the final exam period, the math department will email the instructors the actual SLO assessment questions and the instructors are required to put them on their final exam. After grading the SLO assessment questions with a given rubric, instructors will email the department secretary or the course coordinator their Excel spreadsheet for each SLO score per student. The course coordinator will compile and analyze all the scores and write an SLO report analysis with recommendations. At least one member of the department SLO committee will review the report and will discuss with the course coordinator regarding the report if necessary. All instructors can have access to the SLO website to view the submitted SLO reports.

The suggested benchmarks follow:
If the average of a given SLO is ≥ 70%, then the SLO is met.
If the average of a given SLO is between 60% and 70%, then the course coordinator will look at the possible source and implement necessary changes (such as changing time allotted for the SLO topic, more online assignment, creating worksheets on the topic in question...).
If the average is between 40% and 60%, then a committee will be formed with faculty who taught the course and will investigate possible interventions to implement (curriculum change, textbook change,...).
If the average is less than 40%, the whole department will be involved in the process of identifying a possible implementation plan (such as complete curriculum revamp, adding a lab component, ...).

b. Illustrate how dialog and reporting impact program review, institutional planning, resource allocation, and institutional effectiveness.

1) Due to the intensive use of technology to provide online resources for students and interactive tools for faculty, the recently submitted math program review emphasized on incorporating technology in teaching, the importance of IT support, and the continuous software/equipment upgrade for the computer labs. After the Educational Planning Committee approves the submitted program review from the math department, the budget committee should allocate resources for hiring IT personnel to oversee the instructional technical support and paying the maintenance and replacement of equipment and software periodically.

2) Most of our students come from low-income families and are 1st-generation college students. The STEM tutorial center is the only place that they can seek free academic
support for all levels of mathematics. The STEM tutorial service support is currently funded by STEM grant which will end in two years. The STEM Director is working with the administrators to institutionalize the funding for tutorial service.

3) Revising the priority registration based on continuation of the next semester's subsequent courses has to be done from the top administration or district level.

Curriculum development is provided by faculty. Poor SLO assessment results can be an indication for curriculum revision.

Program review is provided by the Department Chair who oversees all levels of the department instructions, changes in practice or teaching, changes in articulation and workforce, grants, and tutorial services. The Department Chair works with faculty and staff for resources enquiry to achieve the goals and objectives of the department including improvement on SLO assessment.

If the department can provide proven data for their request, institutional planning should support the request by providing policies, personnel, facilities, and resources. If all units work together to support the Mission statements, institutional effectiveness is accomplished.

4. Please share one success story about the impact of SLO practices on student learning, achievement, and institutional effectiveness. Describe the practices which led to the success.

Story 1:
A student came to USA in 2009 and worked at a minimum wage job. She decided to quit her job and attended LAMC to get a college education. She started at the lowest math level, Math 105, and Dev Com 1 in Fall 2010. She thought she was going to be an accountant major but after taking a personal development course that widened her career choices, she changed her major to Aerospace. She is a visual learner so she liked taking math courses with a user friendly online courseware that provides video explanations. Master courses with online courseware were the results of SLO assessment. All math courses she took (Math 105, 112, 115, 125, 240, 265, 266, & 267) in LAMC provided challenging questions that intrigued her curiosity. She said each math course set a good foundation for her subsequent math course and that was how she aced every math course at LAMC without obstacles. Math SLO assessment ensures the college level curriculum is implemented and all topics are covered. She started college in Fall 2010 and she is now ready to transfer by the end of this semester. She is looking forward to taking her major classes at Cal State Northridge.

Education is the key to transform a person's life from poverty to a high paid job with many opportunities for growth.

Story 2:
After reviewing the SLO assessment analysis along with course success rate the math department observed that students who did not pass Math 115 and Math 125 in high school have low motivation and incentive of learning the same materials again. They kept failing or dropping Math 115 or Math 125. The math department addressed this group of students by creating a Pre-Statistics course called Math 137 which is our pilot course for this year. Two sections of Math 137 will be offered next semester. The math department predicts at least 6 sections of Math 137 will be offered in 2 to 3 years. Professor Bamdad, who is an excellent instructor and student oriented faculty, developed this Math 137 course. He attended many workshops and visited COC (College of the Canyon), which offers a similar course in
LAMC's proximity, since 2011. The course focuses on data exploration and teaching the algebra as needed. Students will read the lecture online and work on their online homework before coming to class. Based on the overall HW score, instructors will select certain topics to go over in class. A big portion of the time is devoted to hands-on projects. Students will learn how to use statistics software to analyze data, display graphs, summarize the results, and draw scientifically-based inference. Conceptual thinking about basic statistics is taught through this course.

A student who failed Math 115 three times took this alternative Math 137 course last Spring semester and passed it with an A. She continued to take Math 227 (transferrable Statistics) during the past Winter session which is a 5 week session versus 15 week regular semester length. She also earned an A for the short-term Math 227. After completing both courses, she is very confident in her basic statistics analysis and she volunteered to tutor others for Math 137 and Math 227 in the LRC (Learning Resource Center) this semester. Now she is ready to transfer to a four year university.

The creation of Math 137 is the by-product of SLO assessment but this Math 137 course will allow students to learn real life data exploration that they can connect with and use in any career fields.
THE MISSION LEARNING REPORT

Tentative Outline of Contents

March 26, 2014

Purpose: To report annually on Los Angeles Mission College's overall progress in improving student learning at all levels through the outcomes cycle

I. Institutional Standards for Student Achievement and Learning

II. Summary of the Results of Learning Outcomes Assessments
   A. Course level assessment results
   B. Program level assessment results
   C. Institutional level assessment results
   D. Improvements planned on the basis of results
   E. Resources allocated
   F. Improvements implemented during the following year
   F. Subsequent reevaluations of performance.

III. Student Services Progress on Service Area Outcome Assessments (SAOs)

IV. Administrative Services progress on Service Area Outcome Assessments

V. Comparison with the Previous Year's Data as It Becomes Available
1. a. Describe your activities to analyze and implement alignment in the planning of curriculum and delivery of instruction.
   - At beginning of each semester during Fall 2013 and Spring 2014, faculty in the department met and discussed the SLOs for each course and the plans for assessment during the semester. Based on discussions within each discipline, SLOs for courses were revised to better reflect current teaching methods and assessment plans.
   - Faculty in the department again met at end of Fall 2013 and plan to meet at end of Spring 2014 semesters to review the progress of SLOs assessed during each semester and discuss changes in curriculum and delivery of instruction based on these assessments.

b. Discuss how the alignment effort has resulted in changes of expected outcomes and/or how students' programs of study have been clarified.
   - Based on assessment of SLOs in several chemistry courses during the past 2 semesters, laboratory instruction in several courses have been modified to better inform students on expected outcomes and provide them with more clear criteria for evaluation and assessment of their laboratory work.
   - In addition, delivery of instruction in lecture in Chemistry 101 and 102 courses have been augmented to provide more direction and exercise for students in areas deemed necessary based on assessment of SLOs.

2. a. Describe the various communication strategies your department uses to share SLO assessment results for usage by internal and external audiences.
   - SLOs for all active courses in the department are listed on the course syllabi and are also posted on the SLO website. Faculty in the department are encouraged to discuss course SLOs with their students in their classes at the beginning as well as during each semester's instruction.
   - Faculty in each discipline discuss progress of assessments by email and informal meetings during the semester and summarize their findings and modifications at end of each semester during department meetings.

b. Explain how communications take into account how the information is expected to influence the behavior or decisions of particular audiences. Discuss how communication of student learning outcomes assessment information and results impacts student behavior and achievement.
   - Review of student success and retention rates in various courses within the department have led to providing and institutionalizing of support services such as tutoring for students in these areas. Faculty in these courses work closely with director of Science Success Center to coordinate tutoring services and provide various instructional supplements for students to improve success rates.
3. a. Explain how dialog and reporting of SLO assessment results takes place at the departmental level.
   - Faculty within each discipline meet and discuss plans for SLO assessments at the beginning of each semester, and communicate their progress in these plans during the semester be email or in person through informal meetings.
   - At end of each semester, faculty summarize their assessment results and communicate with other disciplines in the department at a joint meeting.

b. Illustrate how dialog and reporting impact program review, institutional planning, resource allocation, and institutional effectiveness.
   - Based on assessments performed during the past year, modifications to lecture and laboratory instruction in several chemistry classes have been made and as a result have greatly improved student success rates in these courses. Based on these results, these modifications have been incorporated in other courses and are expected to similarly improve outcomes during assessment.
   - The department is currently reviewing these best practices and plans to evaluate other similar modifications to further improve student learning outcomes.

4. Please share one success story about the impact of SLO practices on student learning, achievement, and institutional effectiveness. Describe the practices which led to the success.
   - Laboratory instruction in chemistry classes is an important and critical component of instruction in these courses. During the past several semesters, assessment of SLOs in this area has resulted in modification of laboratory procedure in courses that have greatly enhanced the learning outcome of students in this area. Traditional laboratory procedures of cook-book chemistry experiments have been modified into inquiry based instruction that allows students to explore scientific principles in these courses. More work in this area is continuing based on current assessments and their results.
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To accommodate the different learning styles for students and assure consistency in delivery pace and content for instructors, the math department created master courses using online courseware for all developmental math courses. The math department updated the Math 115 and 125 curriculum to include the requirement that homework must be graded either by the online courseware or by hand to encourage instructors to learn how to use the courseware efficiently. Workshops on how to use the courseware have been offered a few times before and during the regular semesters for the past two years. For each course, the department assigned at least one full-time faculty as a course coordinator to provide faculty support and oversee the contents and activities in the course. If the SLO results were a small percentage below the expected 70%, the course coordinator will adjust the master course assignment contents such as online homework and practice test to bridge the deficiency.

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support for all levels of mathematics. The STEM tutorial service support is currently funded by STEM grant which will end in two years. The STEM Director is working with the administrators to institutionalize the funding for tutorial service.

3) Revising the priority registration based on continuation of the next semester's subsequent courses has to be done from the top administration or district level.

Curriculum development is provided by faculty. Poor SLO assessment results can be an indication for curriculum revision. Program review is provided by the Department Chair who oversees all levels of the department instructions, changes in practice or teaching, changes in articulation and workforce, grants, and tutorial services. The Department Chair works with faculty and staff for resources enquiry to achieve the goals and objectives of the department including improvement on SLO assessment. If the department can provide proven data for their request, institutional planning should support the request by providing policies, personnel, facilities, and resources. If all units work together to support the Mission statements, institutional effectiveness is accomplished.

4. Please share one success story about the impact of SLO practices on student learning, achievement, and institutional effectiveness. Describe the practices which led to the success.

Story 1:
A student came to USA in 2009 and worked at a minimum wage job. She decided to quit her job and attended LAMC to get a college education. She started at the lowest math level, Math 105, and Dev Com 1 in Fall 2010. She thought she was going to be an accountant major but after taking a personal development course that widened her career choices, she changed her major to Aerospace. She is a visual learner so she liked taking math courses with a user friendly online courseware that provides video explanations. Master courses with online courseware were the results of SLO assessment. All math courses she took (Math 105, 112, 115, 125, 240, 265, 266, & 267) in LAMC provided challenging questions that intrigued her curiosity. She said each math course set a good foundation for her subsequent math course and that was how she aced every math course at LAMC without obstacles. Math SLO assessment ensures the college level curriculum is implemented and all topics are covered. She started college in Fall 2010 and she is now ready to transfer by the end of this semester. She is looking forward to taking her major classes at Cal State Northridge. Education is the key to transform a person's life from poverty to a high paid job with many opportunities for growth.

Story 2:
After reviewing the SLO assessment analysis along with course success rate the math department observed that students who did not pass Math 115 and Math 125 in high school have low motivation and incentive of learning the same materials again. They kept failing or dropping Math 115 or Math 125. The math department addressed this group of students by creating a Pre-Statistics course called Math 137 which is our pilot course for this year. Two sections of Math 137 will be offered next semester. The math department predicts at least 6 sections of Math 137 will be offered in 2 to 3 years. Professor Bamdad, who is an excellent instructor and student oriented faculty, developed this Math 137 course. He attended many workshops and visited COC (College of the Canyon), which offers a similar course in
LAMC's proximity, since 2011. The course focuses on data exploration and teaching the algebra as needed. Students will read the lecture online and work on their online homework before coming to class. Based on the overall HW score, instructors will select certain topics to go over in class. A big portion of the time is devoted to hands-on projects. Students will learn how to use statistics software to analyze data, display graphs, summarize the results, and draw scientifically-based inference. Conceptual thinking about basic statistics is taught through this course.

A student who failed Math 115 three times took this alternative Math 137 course last Spring semester and passed it with an A. She continued to take Math 227 (transferrable Statistics) during the past Winter session which is a 5 week session versus 15 week regular semester length. She also earned an A for the short-term Math 227. After completing both courses, she is very confident in her basic statistics analysis and she volunteered to tutor others for Math 137 and Math 227 in the LRC (Learning Resource Center) this semester. Now she is ready to transfer to a four year university.

The creation of Math 137 is the by-product of SLO assessment but this Math 137 course will allow students to learn real life data exploration that they can connect with and use in any career fields.