## CATSS DIVISION SLO Liaison report by Akihiko Hirose

The Division of Computing, Applied Technology and Social Sciences (CATSS) consists of eleven programs (i.e., Anthropology, Automotive, Computer Studies, Early Childhood Development, History, Library, Political Science, Psychology, Sociology, Welding, and Women's Studies). Focusing on part III (Assessment Results) of their Program Review Updates (PRUs) 2016-2017, this report summarizes the progress made by the CATSS. Part III of the PRUs shows how the programs used Course Level Student Learning Outcomes (CSLO) and Program Level Student Learning Outcomes (PSLO) to help student learning and achievement in AY 2015-2016.

## **Progress using CSLO**

While some programs (e.g. Anthropology, History, Political Science, Sociology) either did not report their assessment results or specifically address progress related to the SLO assessment mainly due to a lack of sufficient data, some other programs (e.g., Library, Psychology, Welding) report the results of their SLO assessment indicating learning outcome improvements that are attributable to the active usage of SLO. Two programs (Computer Studies, ECD) report some changes in their teaching from which some improvement in assessment results are expected even though the data are not yet available.

Psychology cites an example from PSYC 12 Lifespan Psychology. The assessment using a PSY12 SLO (Analyze the ways in which psychological principles and research apply to realworld problems and issues across the lifespan) shows an increase in students who scored 2-4 (Average to Mastery) from 47.62% in Spring 2016 to 65.3% in Fall 2016. This improvement seems to be the result of the creation of a new lecture for Fall 2016 relating to the learning area measured by the specific CSLO. With this result in mind, plans for future curriculum updates for Psychology include adapting new lectures to the online sections (DE) of PSYC 12.

The Library reports that in using CSLO of LIBR 7 (i.e., Students will develop and refine search strategies to locate eight appropriate information sources using the Internet for an approved topic), the assessment results show an increase in student engagement, and student outcome shows a 100% success rate on this specific SLO. This is due to the purchase of white boards by Library to visually represent the research process, including developing search strategies based on a topic. These white boards were purchased with instructional equipment funds. Library's plans include expanding the use of white boards from just in the classroom to library orientations.

The Welding program update states that based on a CSLO for WLDT 70 Introduction to Welding (Identify welding electrodes used for common industrial welding processes/applications), the assessment scores have shown "a marginal increase over time." The report suggests that this increase is because "a deliberate attempt was made to increase the usage of the electrodes and terminology in the class environment." Although the data were not inputted in eLumen, it is a noteworthy increase.

Computer Studies reports that by using CSLO for Course: CNT 51 (Assembling, configuring a functional computer), some positive learning outcomes were observed. To maintain the increase in successful student learning that was observed, "15 computers were purchased to be used for students to assemble and disassemble." The reason for the purchase is to help ensure more consistent learning outcomes for the students by providing consistency derived from standardized components.

Early Childhood Development also reports that they anticipate an increase in positive learning outcome in the future for ECD 63 (Design and implement developmentally appropriate inclusive curriculum based on observation and assessment of young children to support play and learning in all developmental domains). Even though the data are not yet available since the assessment will start after Fall 2016, the added lab component of the course (4 units to a 3-unit lecture and a 1-unit lab) is a change made to improve their SLO assessment data by increasing "observational opportunities for students working within the lab."

## **Progress using PSLO**

Computer Studies indicates positive outcomes at the program level. The AS in Computer Programming (PSLO: Students will be able to direct computer operations by writing detailed instructions using computer programming languages) "observed increased student interest and engagement when robotic technologies were introduced into Computer Science courses." The program plans to increase "the use of robotic technologies to enhance the learning environment in CS courses." The AS in Computer Science (PSLO: Students will be able to direct computer operations by writing detailed instructions using computer programming languages) notes that the addition of a second full-time instructor further stimulated dialogue about the student experience and active engagement with part-time instructors.

Another example of results from using PSLO to assess the program comes from the program of Psychology AA-T (Demonstrate an understanding of and apply basic research methods in psychology including research design, hypothesis testing, and data interpretation). Their assessment results show that students who scored between 2 or Average and 4 or Mastery increased from 77% in Spring 2014, 78% in Fall 2014, 91% in Spring 2015, and 91% in Fall 2015. Their report attributes the increase in proficiency based on the PSLO to their curriculum modification. Psychology added a 3-hour lab to its Research Methods course to help "students to gain a better understanding of research methodology."

A few other programs did not specify their data, but signs of progress based on the use of PSLOs are implied. ECD certificate and degree programs reports that even though they are planning on implementing new strategies, such as observation as an integral part of the coursework for certificate and degree completion and a portfolio for a future capstone event, the data are not yet

inputted. Welding Technology AS & Certificate states that their PSLO (Demonstrates safety awareness in the welding workplace) witnessed significant success (99% Success vs. 1% No Success). The program will continue to emphasize safety as the "most important task" for students.

## Summary

As discussed earlier, there are some programs (e.g., Anthropology, ECD, History, Political Science, Sociology) that did not report or elaborate on their SLO assessment results due to insufficient data collected to generate meaningful assessment results. The lack of sufficient data among many programs might be related to the fact that during AY 2015-2016 the new eLumen system was introduced. The confusion associated with the transition into the new system not only contributed to a lack of data being inputted to the system but also contributed to the lack of familiarity in using the new system. For some programs, the transition to the new system coincided with the change in their curriculum, delaying the data collection. For instance, for the Automotive program, this is the first semester (Fall 2016) when they begin collecting data for their significantly renewed program and started rewriting CSLOs.

At the same time, some programs have already implemented specific measures to improve their methods of data collection and the quality of data. For example, the History program determined that the reason the SLO for History 7 did not show the significant improvement is because the course only had one SLO. Such a one-dimensional measure of student learning resulted in an inconclusive assessment. The discipline of History already met in August to begin putting together additional SLOs for all courses. The result of this change is not reflected for the current SLO, but it is expected to emerge in upcoming years.

In conclusion, even though many disciplines and programs appeared to face a major challenge in learning the new system, there are notable improvement in Student Learning Outcomes and the discussion around how to approach the process more efficiently. An important and visible effect of the transition is that almost all programs formed specific plans to improve their future data collection and analyses. More meaningful assessments using CSLO and PSLO are expected in the upcoming years for all programs.