

Closing the Loop University Summary Report

COLLEGE SUMMARIES

College of Business and Economics (CBE)

The College of Business and Economics had three one-hour virtual meetings to discuss the results of quantitative reasoning and critical thinking. All faculty members who have taught courses relevant to this Institutional Learning Outcome were invited to attend the meetings. We also used shared documents on Google Drive to collect thoughts,

CLASS (Alexander, Nielsen) also planned and facilitated two sessions to discuss the ILO data on critical thinking with college regular and lecturer faculty. The two sessions were offered on different days and times to increase the likelihood that faculty would be available to attend one session. Alexander and Nielsen also organized one session focused on CLASS results from the survey conducted by sociology faculty about student experience during the pandemic. No CLASS faculty participated in the quantitative reasoning, but a review of program-level assessment was conducted.

The ILO sharing sessions on critical thinking lasted 50-60 minutes and were held via Zoom. Sessions began with introductions of participants and an overview of the ILO assessment process on our campus and other available institutional data. For the open discussion part of the sessions, guiding questions were provided as were slides of CLASS ILO data and NSSE data related to critical thinking. The sharing session on the CLASS survey data on student pandemic experience used a similar format with Professor Carl Stemple presenting the data and leading the discussion.

Fifteen faculty attended one of the critical thinking sessions, and eleven attended the pandemic survey results session. Faculty from the following departments were represented: AGES, art, communication, criminal justice, English, history, human development, modern languages and literatures, philosophy, political science, public administration, social work, and sociology.

Tuesday 10/27/20 12:15-1:15pm	Critical thinking results	7	English, History, Philosophy, Social Work, Sociology
Wednesday 10/28/20 4:00-5:00pm	Critical thinking results	8	AGES, Art, Criminal Justice, English, History, MLL, Philosophy, Political Science, Sociology
Tuesday 11/10/20 4:00-5:00pm	Student experience during the pandemic/CLASS results	11	Communication, Criminal Justice, English, History, Human Development, PUAD, Sociology

Both CLASS chairs and faculty who attended the open sessions were encouraged to see that CLASS students scored above the university average in all rubric criteria for the ILO in critical thinking. There was general consensus that the social science and letters disciplines in the college put a lot of emphasis on developing and supporting a point of view which takes context and multiple perspectives into account. There was also general consensus that the areas where CLASS students scored the lowest (i.e., context, alternative views) are areas where faculty members often see students struggle because it is challenging to integrate context and alternative views in support of one's own idea project. A number of themes emerged from the critical thinking sharing sessions: observations about the ILO assessment process itself; implications for teaching and learning; and ideas for closing the loop.

With regard to the campus ILO assessment process in general, many new faculty in attendance had questions about how courses are chosen for participation in ILO assessment, how assignments are developed, and how the student artifacts are assessed. This was a good opportunity to raise awareness of and interest in assessment on our campus among new faculty. Faculty also raised questions about the varied nature of assignments used for ILO assessment and how that might impact the validity of the results. It was noted that the interrater reliability for the critical thinking assessment was lower than for the written communication assessment in AY 2019-2020, underscoring wider disciplinary differences in how critical thinking is understood. A positive outcome, however, is that the critical thinking assessment sharing sessions provided an opportunity to further develop a shared vocabulary around describing and assessing critical thinking. Another issue about the assessment process that faculty raised was critical thinking abilities since they are not always fully evident in student work. Approaches to further documenting critical thinking outcomes, especially at the program level, included portfolios of student artifacts that were representative of the program. A representative sample of student artifacts was also raised as was the need for assessment data to be disaggregated by race/ethnicity, gender, and PELL Grant status.

With regard to teaching and learning implications, faculty made a number of suggestions about types of assignments and activities that could address some of the weaker areas for CLASS students (i.e., context, alternative views). These suggestions included reflective assignments that encourage metacognition; wider use of the ILO critical thinking rubric (or similar disciplinary-focused rubrics) in designing, explaining, and evaluating assignments to highlight context and alternative views; individualized feedback as students develop responses to assignments that require a discussion of multiple perspectives; peer tutoring around critical thinking; and sets of scaffolded assignments to support students in understanding and communicating about views that are different from their own.

With regard to closing the loop, faculty made a number of suggestions. One suggestion was to provide disaggregated ILO results data by race/ethnicity, gender, and Pell Grant status so that we can have more insight into how to target our attempts to improve outcomes for our students in general and for particular groups where we see differences in outcomes. Another suggestion was to seek additional ways to raise awareness about and socialize new faculty into the assessment culture on campus in order to encourage wider participation across the college. Many new faculty in attendance appreciated their introduction to ILO assessment at Back to the Bay, but CLASS can do more to promote a culture of assessment in the college. Approaches will include reestablishing the CLASS EEC, increasing communication about assessment resources that are already available, and adding an assessment component to new faculty events sponsored by the college. An additional suggestion was to collaborate with SCAA so that tutors know about the critical thinking rubric and can help with campus efforts to develop shared language to talk about critical thinking across disciplines. Finally, there was interest in exploring approaches to program-level assessment of critical thinking that use portfolios and other types of assessment that are more formative and ongoing through multiple formal and informal assignments/activities.

In the sharing session on CLASS data from the student experience during the pandemic survey, Professor of Sociology Carl Stemple presented the college data on behalf of the team of sociologists who developed and analyzed the data from the survey. There were 639 CLASS undergraduates who completed the survey just after final exams in spring 2020. As in the larger sample, students reported high levels of depression and difficulty concentrating, leading to more challenges academically. With regard to perceived support, Latinx and African American students reported feeling less supported than other groups, for example, thinking they could not reach out to professors when they encountered academic or other difficulties that impacted their learning. Another area of concern uncovered in the survey was students reporting various kinds of mental health issues, trying to find support on campus, and being unable to do so. Faculty at the session discussed what actions we could take based on these results. One suggestion was to add links to campus resources in all BlackBoard courses and in Bay Advisor. Related to this is the idea for a single platform where students could book appointments for tutoring, advising, counseling, basic needs intake, and other campus resources. Another suggestion was to adjust expectations in terms of what is pedagogically possible (*e.g.*, reducing the amount of content in a course, being supportive in feedback and grading), given the severe challenges many of our students and faculty continue to face.

Dr. Stemple and others are planning for another survey on student pandemic experience during this academic year. In related research, Dr. Elizabeth McGuire from the Department of History is developing a focus group protocol as part of her integrative student success pilot, which is looking at student need and

opportunities for CLASS departments to align with parts of the rubric for the next round of QR assessment at the program and university level.

College of Science (CSCI)

The College of Science held two virtual 1.5 hour meetings, one each for Quantitative Reasoning and Critical Thinking, for discussion of the results. Additionally, comments were collected via shared Google docs. The entire faculty was invited with efforts made such that each department be represented by at least one faculty member. assessments. For instance, with the context of the College of Sciences, particularly in disciplines that are data driven. The question was raised as to how assessment is being conducted at the community colleges, given that the majority of our students are transfer students. Concerns were raised that the majority of data collected for the Quantitative Reasoning assessment came from students majoring in a College of Science program which may bias the results if used to understand the whole CSUEB undergraduate population.

Faculty offered examples of practices at the course and curriculum levels that are working well in terms of full years of Advanced Lab, which provides tremendous opportunity to develop Critical Thinking skills. A strategy being used in a lower division Physics lecture and lab course is the use of flow charts to guide the student through revising their mental models as they work to integrate their experimental results with theories. Another strategy that has proven useful in a Statistics course is having students peer-review. helps the reviewing internalize the elements of a strong argument.

Faculty acknowledged challenges. Students find significant results and make the calculations, but are challenged with understanding the implications of their data. Questions were raised as to how student confidence and time devoted may be improved. Unlike with the assignments used for the Written Communication assessment, most of the assignments used for Quantitative Reasoning and Critical Thinking were not iterative so students did not have the chance to improve upon it with feedback. Also, for those assignments that were in class, students had less time to mentally process and make use of the arguably higher order thinking skills. It was noted that areas of weakness for our students were also areas with fewer assignments assessed, i.e. more faculty chose not to assess these rubric elements so perhaps they may not be routinely included in instruction and assessment. Several faculty noted a gap between their expectations and those of the students with respect to what constitutes

2018-2019 where many programs suggested solutions that could be implemented at the University level. If similarities in closing the loop strategies could be identified, perhaps the university could provide support for cross-discipline programs to improve Quantitative Reasoning and Critical Thinking skills. It was noted also that providing a database of effective closing the loop strategies, whether discipline-specific or universal, would be very helpful to programs working to improve support to their students in the assessed areas.

Summary of actions proposed/implemented: In response to the first discussion topic, the Director of Graduate Studies has compiled a list of proposed assessment policy changes and provided them to the Dean of Academic Programs and Services. The Dean is working with CAPR to update their policy to streamline the assessment data submission process, make responsibilities more clear, address the submission timing issue, and suggest mappings of criteria for programs with outside accreditation. These changes should be put in place in time to improve the ILO assessment being done for 2021-2022.

In response to the second discussion item, the Office of Graduate Studies will compile a list of proposed closing the loop responses submitted by programs in annual reports for 2019-2020 assessment, and make them available on the Graduate Advisory Council Google team drive. As later cycles of assessment are completed, this database will be expanded to include additional proposed strategies.

Office of Educational Effectiveness: Institutional Learning Outcomes Assessment

Summary of discussion: The two [University Summary Reports](#) for Quantitative Reasoning and Critical Thinking posted in September, 2020, and distributed to the Educational Effectiveness Council which includes college assessment leadership for campus-wide discussions and decision making. The summary of the recommendations and actions taken is being presented and discussed during the spring 2021 term university-wide in a variety of faculty forums including EEC meetings, the ILO Subcommittee, the Committee on Academic Planning and Review (CAPR) and Academic Senate.

Summary of actions proposed/implemented:

Ongoing support for faculty includes the availability of ILO [Quantitative Reasoning](#) and [Critical Thinking](#) Assignment Guides developed by and for faculty to better craft assignments that help students demonstrate their achievement of the Institutional Learning Outcomes as they apply to specific disciplines and programs. Faculty materials are available in [The Idea Book: Teaching Tips](#) and [Rubrics Library](#) in a shared online space and organized by Institutional Learning Outcome.

Some of the discussions in the Educational Effectiveness meetings about improving the process include the desire to make the process more meaningful to faculty by assessing fewer rubric categories, having deeper discussions, and assessing these core competencies at the ILO and GE level more frequently than the five year cycle. This has come up for other core competencies and will be addressed in 2021-22 when the EEC will have a Core Competency Advisory Group examine the rubrics and provide recommended changes.

General Education

General Education (GE) assessment has progressed as a series of pilot projects that, to date, have focused on the essential skills areas (also known as the [fi«Yj a' «Cfil '\(x@±Fα°αj fil š--j--©j a°-@œ--'3 j 2j >j j a 'š' j '°«'](#) identify the core skills and knowledge that we value most for our students, then set forth to measure what we

value. The GE assessment process has also provided faculty with the time, space, resources, and support for meaningful discussion and self-

The collection and evaluation of student work for GE Area A3 Critical Thinking was delayed from 2020 due to COVID-19 issues but is scheduled to be completed by the end of Spring 2021. Two rounds of collection and evaluation (Fall 2019 and Fall 2020) were completed, and a preliminary report of these data has been provided to the Department of Mathematics and the Department of Statistics and Biostatistics. A final report will be disseminated by the end of Spring 2021.

Summary of discussion: To date, the faculty involved in the B4 evaluation discussed and made improvements to the key assignment and discussed how to increase/incentivize the number of students completing the key assignment used for the assessment. This discussion is critical, as one of the major goals for GE assessment is to increase sample sizes, in order to improve the robustness of and confidence that increasing sample size necessitates increased number of assessment artifacts (more student work collected from more sections) and increased number of faculty evaluators (more faculty-hours dedicated to evaluating the assessment artifacts). APS, the Office of GE, and the participating departments are discussing and implementing ways of bolstering this phase of GE assessment.

Summary of actions proposed/implemented: As mentioned previously, the GE assessment process has catalyzed area, because the process brings faculty together to dig into how we can change what we do to make things better for our students. There have been extraordinary efforts to support students in their B4 courses, with particular active, collaborative learning. Actions that have been implemented are in the areas of co-requisite support, embedded peer support, a community learning space (i.e., the [Math Lab](#)), and a community of practice for B4 instructors.

hear more about what math and statistics courses view as critical thinking in order to include that information into the training.