

UCSB Council on Assessment

Annual Report 2021-2022

The Council on Assessment reviewed plans for 28 programs (from 16 departments) during the 2021-22 academic year. This report contains summaries of proposals, comments from the CoA, and approved plans. Prior to descriptions of each program's plans, we provide an overview of trends related to assessment design and implementation, outcomes of assessment findings, and changes that the CoA has made in the process of facilitating assessment based on departments' experiences.

Trends

DATA & EVALUATION:

Among both undergraduate and graduate plans for program learning outcome assessment, departments are collecting and evaluating student work such as (in order of prominence) writing as presentations that are part of exams, essays or other compositions turned in as assignments, final projects, and answers to targeted PLO-related exam questions. For undergraduate programs, most of these are being collected from upper-division course assignments; for graduate programs, most are being collected from qualifying exam and independent research materials. To evaluate these student artifacts, most programs will be using faculty-designed scoring guides (rubrics) looking at between 3 and 5 distinct criterion areas (e.g., ability to distinguish between high- and low-quality research, accuracy of statistical analysis, written organization and conciseness).

Additionally, a little over one-third of assessments are including surveys to gather further insight about the educational context and experience around directly evidenced student learning – for example, Global Studies (undergraduate) is conducting focus groups with various student demographic groups to disaggregate their experiences in the program, Political Science (graduate) is doing pre/post-course surveys to see how thoroughly they are preparing their grads for public presentations, Art (undergraduate) and History of Art and Architecture (graduate) are both polling students about the effectiveness of current course and exam structures.

FOCUS ON CORE COMPETENCIES:

The core competency most emphasized in undergraduate PLO assessments completed by this group in the prior cycle (2019-2022) was Critical Thinking (45% of plans: see *Figure 1*). Information Literacy was also the focus of many plans (30%), two thirds of these in conjunction with Critical Thinking. All assessments on Quantitative Reasoning (10% of plans) also included elements of Critical Thinking in their criteria. Written Communication was the sole focus of two programs (10%) and Oral Communication the focus of only one program: Spanish and Portuguese. Assessments at the graduate level focused mainly on scholarly communication and

independent research, with other programs collecting evidence around areas of academic writing and subject-matter expertise in an area of specialization. Only one graduate program in this prior cycle focused on each of these areas—field assessments, interdisciplinary collaboration, and pedagogy—though there is more interest in these areas in current plans.

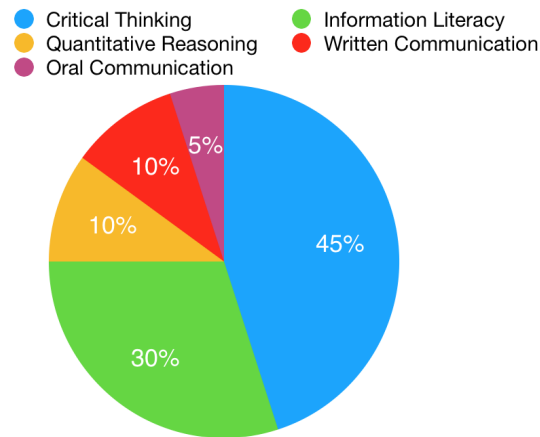


Figure 1: Core Competencies Assessed by Group 1 Programs, Cycle 2 (2019-2022)

In this coming cycle of assessments (2022-25), the focus of many undergraduate plans will again be on Critical Thinking and Information Literacy (34% and 29%: see *Figure 2* below), there is slightly more focus this cycle on Written Composition (14%) as well as Oral Composition and Quantitative Reasoning (11% each). Two thirds of these 2022 plans that focus on critical thinking topics—e.g., analyzing cultural contexts of artifacts, developing engineering solutions for real-world problems—are doing so in combination with Information Literacy criteria such as synthesizing literature findings or selecting appropriate methodologies, and one third additionally include Quantitative Reasoning elements such as developing process models from data or demonstrating facility with mathematics in applying physics knowledge to various phenomena. In graduate plans for this cycle—as mentioned above—pedagogy is now the top area of focus, alongside scholarly communication, with theory-building and research and writing/composing novel works being the focus of most other plans, while only one program (History of Art and Architecture) is focusing on subject-matter expertise exclusively, and one other (Counseling, Clinical, and School Psychology) continues to investigate skill at field assessments.

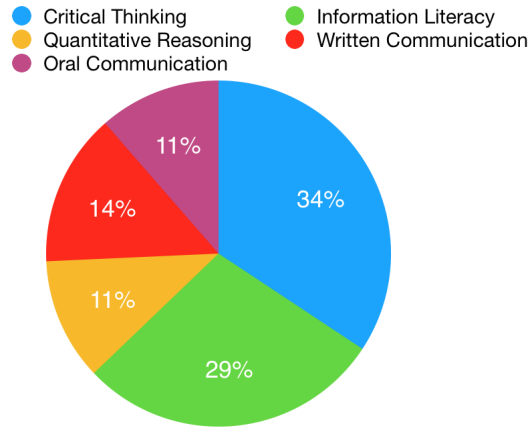


Figure 2: Core Competencies being Assessed by Group 1 Programs, Cycle 3 (2022-2025)

PURPOSES

Most departments are focusing their assessments—both graduate and undergraduate—on program outcomes that they see as fundamental for students’ success in later stages of the program (see *Figure 3*). For example, Asian American Studies and the College of Creative Studies (undergrad) are both investigating aspects of interdisciplinary, with the former focused specifically on research methods and the latter focused on conceptual awareness and communication. Ecology, Evolution, & Marine Biology and Geography (undergrad) are both looking at how well the program prepares students to integrate foundational knowledge-bases in department’s constituent fields. Political Science (undergrad) is examining students’ analytical and organizational writing skills, as they believe that students’ struggles with these skills may impact other PLOs’ achievement, while Chemical Engineering (graduate) is examining two areas of grads’ technical writing that they’ve found to be weakest: explaining potential pitfalls of proposed solutions and outlining specific expected results and their significance.

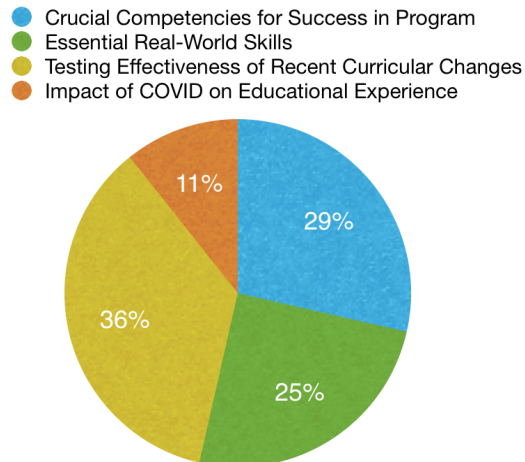


Figure 3: Purposes of Assessment Foci - Group 1 Programs, Cycle 3 (2022-2025)

Relatedly, other departments are focusing on later-stage achievements in their programs that will be crucial for jobs and real-world contexts beyond the university. Global Studies (undergraduate) is focusing on research-writing and use of evidence to determine how well their current curriculum helps students (specifically their growing demographics of first generation, underrepresented minority, and Pell grant recipient students) to build those research-related skills that will support them in postgraduate professions. Spanish (undergraduate) is focusing on oral aspects of language proficiency in upper division (where it's not currently assessed as intently as in lower division) to gauge their efficacy in preparing students for conversational contexts. At the graduate level, Communication and English (graduate) are both focusing on aspects of pedagogy for graduate students who are instructors of record for classes toward the end of their programs, since most of these grads are hired as assistant professors after graduation: the former examining whether their one-quarter teaching training is sufficient for preparing students to effectively lead stimulating and educational class discussions with students, and the latter seeing whether their students have received mentorship and skill-development opportunities sufficient to create successful syllabi for their 6-week summer sessions.

Several other programs are strategically focusing on testing effectiveness of recent curricular changes. Chemical Engineering (undergraduate) is assessing whether their introductory course's recently added hands-on active learning laboratory section will improve student retention and increase their ability to formulate and solve chemical engineering problems later in the curriculum. Physics (undergraduate) will be surveying lower division students to compare experiences of those who took their newly developed intro course versus those who skipped it, along with comparing upper division student scores on physics GRE questions in their capstone courses. Regarding a more major change, Counseling, Clinical, and School Psychology (graduate) has initiated two new PhD degree programs—whose results they'd like to compare with the baseline data from their currently combined PhD degree program—and so is assessing how confident students are in the essential skill of performing psychological assessments, how satisfied they are with their training in this area, and what percentage of them are meeting the minimum requirement within their program's assessment training.

Finally, three programs are focusing specifically on the impacts of COVID has had on educational experiences and on key learning outcomes. Communication (undergraduate) is particularly concerned about whether classes having reduced writing assignments or moving toward group papers during the pandemic has impacted students' abilities to write proficiently, and so will be examining writing samples' clarity, authority, logic, and appropriate (APA) style in courses with essay exams. Global Studies (graduate) is also tracking how new approaches to grad student needs during COVID have impacted students' field briefs, and will be examining this work to help faculty develop specific modules within their Research Design and Logics of Inquiry courses.

FINDINGS & ACTIONS:

Programs' responses to their findings in the assessment projects most recently completed (2019 January through 2022 January) fell into four general categories: disseminating assessment data within the program (with faculty, staff, and/or students) and discussing possible future responses, creating new courses or updating existing ones, making programmatic changes or adding resources to support student success, and increasing or refining departmental data-gathering about student learning.

Many programs were satisfied overall with the results of their assessments, finding their courses and other resources supported desired levels of student achievement related to the program learning outcomes in question. So about 40% of programs focused on sharing the data they'd collected and discussing possible areas for improvement or focused attention based on those data (see *Figure 4* below).

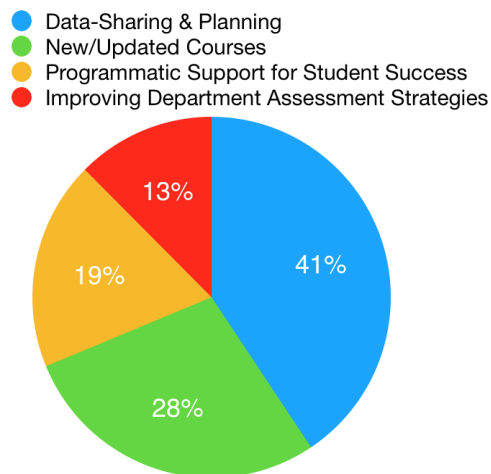


Figure 4: Actions based on Assessment Findings - Group 1, Cycle 2 (2019-2022)

For example, Communication found that their undergraduate students were scoring above proficient on the learning objectives of applying communication theories and concepts to the analysis of real-world events, presented these assessments of student writing on powerpoints at faculty meetings, and thereafter discussed the importance of making sure students have opportunities to participate in the research process outside of the coursework being offered (e.g., via independent study, research assistantships, internships, or their honors experience). Geography found that their curriculum is educating undergraduate students well in core concepts of the discipline, but with slightly weaker performance on portions of exams related to technical concepts as opposed to human or geographic concepts, so they are preparing to present recommendations to the curriculum committee informed by these report findings, to strengthen the curriculum's approach to educating about methods concepts. History of Art and Architecture found that the student-produced syllabi that graduate students created as part of

their minor exams were “very high” quality, but also that student perspectives varied on the educational utility of the exercise, so the program will be retaining the syllabus exercise but also sharing these anonymous poll results with faculty.

Approximately 28% of programs went further, either creating new courses or replacing/updating existing courses and milestones. Chemical Engineering replaced its undergraduate Current Events Course with a Technical Communications Seminar, plus incorporating a design project in their courses that requires technical writing skills, after their assessment revealed that sophomore students needed improvement in mechanics and grammar skills along with organization and presentation and that seniors rated their preparation in writing inconsistently (ranging from “adequate” to “excellent”). Earth Science has also proposed a new 4-unit course devoted to scientific writing, to take the burden off of their field studies course which currently gives students their primary practice and feedback in science writing, as well as to focus on more basic skills and principles of writing in the discipline, based on student feedback and assessment findings.

Additional courses being developed at the undergraduate level include a new methods class in History of Art and Architecture which will help students develop a firm grasp of critical terminology in the field and greater facility with applying it, an advanced methods course in Political Science that will contain a practical project component on research to develop students’ facility with using and evaluating statistical and other types of evidence in analyses and arguments, and an advanced-level Spanish course “Beyond Advanced Spanish Proficiency” which addresses key language skills (listening, speaking, reading and writing) and is based on American Council on the Teaching of Foreign Languages’ descriptors for advanced-high proficiency. At the graduate level, Counseling Clinical and School Psychology has added a new required course on administering and interpreting major tests of cognitive ability, as well as hired a new faculty member to specifically focus on the development of an assessment training clinic, in support of students’ preparedness to perform psychological assessments in the field.

Graduate programs in Spanish, Communication, and Earth Science have also made updates to their course-related milestones. To improve the professional delivery of students’ talks, Earth Science is now encouraging students to give talks for the first time in their 3rd or 4th year, rather than their 5th, and to give two talks instead of one. Likewise, Communication is aiming to further develop students’ presentation skills by having them give short course-end presentations to classmates for their classmates, present short research talks in the department colloquium, and participate in the university-wide Grad Slam competition. Relatedly, to increase students’ presence at conferences and in publications, Spanish and Portuguese will include more components geared towards improving the professional portfolio and working on their CVs.

Other programs, around 19%, put their efforts into increasing programmatic support for student success, either by responsively adjusting the curriculum or enhancing educational supports for students navigating it. Electrical Engineering’s assessment findings supported their restructuring of the undergraduate curriculum, removing some of the required courses and condensing topics into a single course in the lower division while allowing for interested students to pursue their

interest in upper division classes by introducing tracks. Similarly, Global Studies is holding workshops to address weaknesses in their curricular content regarding geography and institutions by aligning lower-division and upper-division courses around key content and reinforcing research and writing skills development.

At the graduate level, supportive enrichments made around curricula in response to assessment findings included clarifying program information, adding workshops and trainings, and organizing events for students. Chemical Engineering updated its graduate student handbook guidelines for research proposals with specific advice for areas of weakness. They also revised a second writing workshop to be more interactive and include real time revision activities. English moved to accommodate demand for increased professionalization by holding multiple workshops and symposia (topics have included “How to Present a Conference Paper,” “How to Publish an Article,” and “How to Apply for Grants”). Geography, seeing a need for more focused training on CV quality and content, organized a Career Services event to coach students on best practices for developing their CVs—though COVID delayed plans to host a full-day departmental symposium for all second-year graduate students to present their research. And Global Studies worked to strengthen specific areas of grad students’ research skills by improving training classes where MAs hone argument and case study selection, and by establishing a small group of faculty (independent of students’ advisors/committees) in collaboration with the Graduate Director to add workshops/training by junior faculty, to develop a clearer step-by-step process for MAs (selecting committee members, accessing research site info and internships, receiving financial support for research/internships abroad) plus calendars-of-progress and a thesis template for the thesis itself that has eliminated confusion pertaining to length and structure of the MA thesis, and to create a faculty position of MA coordinator.

Finally, about 13% of programs were motivated to adjust their assessment methods or increase data collection within their departments. For example, after seeing that the use of well vetted rubrics during the assessment generated high scores on research papers and greater satisfaction for both instructors and students, Ecology Evolution and Marine Biology will continue using such rubrics in their undergraduate program to increase the consistency of scoring and thus the overall quality of instruction. At the graduate level, following their assessment of core disciplinary knowledge, Electrical and Computer Engineering has decided to implement an annual department progress checkpoint for all PhD students, to identify and help students who may be struggling to achieve program learning objectives. Reports will be prepared by each student in consultation with their faculty advisor, documenting specific milestones (e.g. passing qualifying exams, completing coursework, and submitting publications).

ISSUES & RESPONSES - COHESION TABLE & EQUITY TRACK:

Plans from the prior cycle of assessments showed that some programs initially made questionable connections between their Program Learning Outcomes and their direct and indirect evidence. Sometimes these connections were clear among program faculty within the department, but unclear to the Council on Assessment, while at other times there were actual disjunctions between the research question and the data being collected to address that question. In response, the Assessment Council added a table to the PLO Assessment Report and Plan template for programs to fill in, to ensure that they were clear on the attributes of PLO achievement being assessed through their chosen data (see image below). We also sent this template to programs whose plans required revisions, to expedite their process of reviewing and revising—and our process of approving—plans for implementation in the coming (2022-2025) cycle.

Program Learning Outcome(s): <i>“By the end of the end of the program, students will _____.”</i>	Evidence of PLO Achievement:		Use of this Data: <i>How will these findings help to improve program structure, curriculum, resources, instruction, etc.?</i>
	Items to be collected: <i>What type of student work, from which course(s), at what point in the program?</i>	Attributes of PLO Achievement shown by these items: <i>What content knowledge, concepts, skills, etc.?</i>	
[PLOs Here.]	Direct (student work): [Direct Evidence Here.]	[Relevant Criteria Here.]	[Potential Use of Findings Here.]
	Indirect (student experiences, feedback) [Optional]: [Indirect Evidence Here.]	[Relevant Criteria Here.]	

Table: Core Elements Cohesion - PLO Assessment Plan Template

For programs who have excelled at assessing their Program Learning Outcomes and have an interest in exploring crucial contexts surrounding PLO achievement—specifically issues of equity regarding their students’ access to resources and patterns of success related to these outcomes—beginning in 2022-23 (the beginning of Group 2 programs’ third assessment cycle) programs may choose between two assessment tracks: Track 1 - PLO Assessment, or Track 2 - Equity Focused Assessment. For this second track, programs will work closely with UCSB’s assessment team to explore disaggregated departmental data about their student populations (specifically first generation, underrepresented minority, federal Pell grant recipient, and transfer students); develop questions related to their program- or institution-level goals; modify their systems, structures, and/or pedagogies to improve students’ achievement of program learning outcomes; and assess these equity-oriented activities and their impacts. Programs participating in the equity track will form a dedicated cohort who gather three times each quarter to study

data, gather additional input, implement and assess innovations, and will receive grant funding to support these activities.

CoA Processes

The CoA also continues to refine its process in response to exchanges with departments as they develop and revise assessment plans. This year, for instance:

- **Template updates:** as mentioned above, the templates are continuously being revised based on faculty feedback to facilitate their completion by faculty, maximizing clarity about what is desired in these plans, and utility of the finished product for each program. This year's changes include a table for checking plan cohesion, an information box explaining basic strategies for choosing the focus of a PLO assessment plan, and an alternative "Equity Track" template for those programs who have demonstrated excellence in their past PLO reviews and are interested in investigating specific equity issues around achievement of those PLOs.
- **Website updates:** we completely overhauled our [UCSB Assessment website](#) to make it more intuitively navigable and usefully informative for faculty. We added a How-To section covering all stages in the PLO assessment process, with guides for drafting PLOs, creating curriculum maps, writing successful plans, drafting rubrics, and applying for funding. We included a brief video version of our in-person introduction to PLO assessment at UCSB, examples of rubrics and other materials from standout programs, and group/timeline information to make process clear and transparent for everyone.
- **Workshop updates:** as UCSB is now back to live instruction, we are holding our yearly Assessment Introduction Workshop in person this October, after two years of holding it remotely. We will also be conducting our yearly rubric workshop in person again, specifically tailored to faculty working on program assessment plans.
- **Research grant/funding updates:** Departments can request funding for assessments easily, by submitting their approved plan along with a budget for those activities. 7 assessment grants were funded during the 2021-22 fiscal year, totaling \$9,775. The other 5 programs that have been awarded grants (Art, Chican@ Studies, East Asian Languages and Cultural Studies, Global Studies, Political Science) fall into the 2022-2023 fiscal year.
 - General Education: \$1,250 (July 26)
 - Philosophy: \$1,250 (Aug 25)
 - English: \$275 (Nov 10)
 - Math: \$2,550 (Dec 6)
 - Physics: \$1,200 (Dec 6)
 - History: \$2,500 (Dec 13)
 - History: \$750 (June 23).

The CoA will continue to revise and refine its practices as we work with departments in Group 2, Cycle 3. We have also received assessment updates from group 3 departments for this cycle (whose assessments are due in January 2024) between October and December 2022, and have been providing them with feedback and guidance as they adjust their data collection and

analysis in response to changes in departments and around UCSB (e.g., faculty changes, curricular adjustments, COVID-19).

As always, we appreciate the support of the Office of the Executive Vice Chancellor. We believe that UCSB's faculty-engaged, faculty-driven assessment is leading to new perspectives on teaching, learning and assessment that are improving the educational outcomes for UCSB students.

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CoA Summary: Plans approved 2021-22

Total plans for reviewed for Cycle 3, Group 1 (2022-2025) Assessments : 28

Approved: 10 (Undergrad – 7; Grad – 3)

Revisions required: 18 (Undergrad – 8; Grad – 10)

Art

Undergraduate program (B.A. in Art) (Approved)

Core Competencies: information literacy.

PLO: Art-Making Practices.

To assess students' understanding of art practices' history and theory, along with the social and societal conditions underpinning these practices, as they produce art works, the department plans to collect and rubric-score project assignments from students in their art production series. They will further distribute questionnaires to all students who have taken a lab course following this series, to gauge how well those courses prepared them for contextually informed art production. The CoA recommended approval, suggesting that the rubric be expanded to offer more action-informing data, but agreed the plan's focus has solid potential to be productive.

Graduate program (M.F.A. in Art) (Approved)

PLO: Historically and contextually informed art production.

To assess graduate students' proficiency in art-making practices—applying knowledge of context, historical, and contemporary materials and methods; accounting for politics of representation, class, gender and race—the department plans to evaluate MFA thesis projects (art work + written thesis) using a 6-criteria scoring guide, plus exit poll responses from graduating students. Given heightened awareness of DEI issues within and outside academia, the program wants to know if students are forming strategies for how to relate their practice to current events. The CoA recommended approval, encouraging the faculty to have all members of thesis committees (not just the chairs) to assess students' work.

Asian American Studies

Undergraduate program (B.A. in Asian American Studies) (Approved)

Core Competencies: information literacy; critical thinking.

PLO: Literacy in epistemological methods.

To assess whether students can identify and practice empirical methodologies appropriate to different disciplines and to interdisciplinarity, and whether their courses are supporting students in developing these understandings and skills, the department plans to include specific questions on examinations in their methods course that test student understanding of

interdisciplinarity. They will analyze students' answers to these questions directly to gauge their learning. The CoA recommended approval, commending the plan's focus on interdisciplinarity as especially relevant and encouraging them to develop a rubric to focus the analysis of test responses.

Chemical Engineering

Undergraduate program (B.S. in Chemical Engineering) (Approved)

Core Competencies: quantitative reasoning, critical thinking.

PLO: Identification, formulation, and solving of complex engineering problems.

To assess whether adding a hands-on active learning laboratory section to their introductory course early in the curriculum will improve student retention and increase their ability to formulate and solve chemical engineering problems, the department plans to administer targeted assignments in two classes that require complex engineering judgment, scoring these works with a rubric modeled on their prior successful rubrics. They will also examine data on student retention, and a pre-/post-course survey will be developed. The CoA recommended approval, looking forward eagerly to seeing what impact the hands-on lab will have on student learning in the curriculum.

Graduate program (Ph.D. in Chemical Engineering) (Approved)

PLO: Scholarly communication.

Building off of their prior assessment's focus on Scholarly communication and technical writing, the department plans to target two areas found to be weakest: describing potential pitfalls of and alternatives to proposed solutions, and outlining specifically detailed future plans including expected results and their significance. Their data on this topic will come from two mini-proposals written 6 months apart, scored on a 5-point Likert scale by their Grad Affairs committee. The CoA recommended approval, noting that reconsidering some changes to the plan—such as their removal of the student survey—could give them further evidence to ensure student success.

College of Creative Studies

Undergraduate program (B.A.s in Art, Biology, Marine Science, Music, Writing & Literature; B.A./B.S.s in Chem/Biochem, Mathematics, Physics; B.S. in Computing) (Approved)

Core Competencies: critical thinking; written communication

PLO: Communicate ideas and/or findings to multiple audiences using varied genres and modes of communication.

To assess students' awareness of and ability to communicate across disciplines, and to see whether students are practicing different disciplinary methods of thought and communication in their courses, the department plans to ask each year's graduating seniors (~100) to submit artifacts created for classes that illustrate 'the acquisition and practice of different methods of communication,' then analyze these data across majors to see which methods of communication students are learning and practicing in their classes. This will be the beginning of creating and assessing a set of shared general learning outcomes across the college's majors. The CoA recommended approval, recognizing the plan as a creative approach to coordinating assessment of their majors.

Communication

Undergraduate program (B.A. in Communication) (Approved)

Core Competencies: critical thinking; written communication

PLO: Write, synthesize other authors' ideas, formulate a coherent argument, and provide support.

To assess students' abilities to write with clarity, authority, logic, and in the appropriate style for communication literature (APA Style), the department plans to evaluate 100 samples of student writing from classes where written assignments are required or are part of the class, such as essay exams. The department hopes thereby to see whether it is still helping students to maintain proficient written communication after the Covid-19 pandemic, during which some classes may have reduced writing assignments or moved toward group papers. The CoA recommended approval, appreciating the department's exceptionally thorough reporting and use of results from the two prior assessments, and confident that applying the same methodology to this outcome, PLO 5, will likely provide them with useful data.

Graduate program (Ph.D. in Communication) (Approved)

PLO: Pedagogy.

To assess whether graduate students who are the instructor of record for a class (often in their last year or two in the program) are able to effectively lead stimulating and educational class discussions with students, the department plans to have two graduate committee members conduct class visits of Teaching Associates' courses, scoring their discussions using a rubric on instruction and class engagement. The department was drawn to this focus because most of their graduates are hired as assistant professors following graduation, and they have long wondered whether their one quarter of teaching training is sufficient for preparing students to be strong teachers. The CoA recommended approval, commending oral communication with undergraduates as an especially salient outcome for graduate students who seek to be future faculty.

Counseling, Clinical, & School Psychology

Graduate program (Ph.D. in Counseling, Clinical, & School Psychology) (Revised)

PLO: Performing psychological assessments.

To assess how confident students are in performing psychological assessments, how satisfied they are with their training in this area, and what percentage of students are meeting the minimum requirement in assessment training within their programs, the department plans to synthesize data from course grades, ratings from field supervisors, number of integrated psychological assessments completed by students prior to completion of PhD programs, and ratings on department's Psychological Assessment signature assignment. This assessment builds on questions asked in their previous cycle, re-examining them in light of new data (e.g., field supervisor ratings and the signature assignment) and in the context of the department initiating two new Ph.D. degree programs—whose results they'd like to compare with the baseline data from the (current) combined Ph.D. degree program. The CoA requested more direct evidence for this plan, and applauded their decision to add the signature assignment and rubric to enhance the indirect evidence collected in the first two questions. In light of these changes, the CoA approved the plan.

Earth Science

Undergraduate program (B.A. in Earth Science) (Approved)

Core Competencies: information literacy; written communication; oral communication

PLO: Scientific communication.

To assess students' proficiency in communicating results of scientific inquiries orally, visually, and in writing, as well as summarizing and evaluating primary geological literature, the department plans to assess student writing in Earth 104A in Spring 2022, followed by student writing in Earth 160W in 2023 (first availability as an optional elective), and again in 2024 (first year as a major requirement). The department has recently created this new course devoted to scientific writing, and so desires to evaluate the impact of the revised curriculum. The CoA recommended approval, recognizing the practical value of focusing this assessment on how their new course/proposed curriculum adjustments have, or have not, met the scientific writing needs of their students.

Graduate program (Ph.D. in Earth Science) (Revised)

PLO: Writing and hypothesis-building.

To investigate their focus on improving the writing and hypothesis-building skills of their newest first-year graduate students, the department plans to collect samples of student writing, namely the introduction of their eventual thesis, within the first several weeks of their 201A class (October of their first year), and at the termination of 201B. The CoA requested revision to their rubric to tie it more directly to their PLOs, and thereafter recommended approval.

Ecology, Evolution, & Marine Biology

Undergraduate program (B.S. in Ecology & Evolution) (Revised)

Core Competencies: information literacy; critical thinking

PLO: Knowledge of evolution, biodiversity, ecological interactions.

To assess student understanding of three core areas of ecology and evolution (principles and mechanisms of evolution, scope of biological diversity and phylogenetic relationships among organisms, interactions between organisms and their environments and ecological consequences of these interactions) which are covered across their four majors—and thus whether their 2 introductory biology courses are adequately preparing students for upper division courses that rely on and build upon these PLOs—the department plans to code questions on both summative and formative assessments to match the PLOs, combining these performance data with usage and viewing data from course websites to build a comprehensive student tracking system. The CoA requested clarification on the connection of course site data to the PLOs, as well as elaboration on how students' levels of performance on exam questions would be differentiated, and on receiving these details approved the plan, commending its the plan as ambitious and intriguing.

Graduate program – [Submits report with next group, in 2023]

Electrical & Computer Engineering

Undergraduate program (B.S. in Electrical Engineering) (Revised)

Core Competencies: information literacy; critical thinking;

PLO: Apply engineering design to produce solutions to public needs, work with team to achieve project goals.

To assess whether students can effectively apply engineering design principles to solve public needs and function collaboratively on a team, the department plans to analyze rubric-scored student assignment and exam data amassed in Gradescope specifically for courses revised in their newly approved curriculum (along with course-end surveys and senior exit surveys). The department hopes this data will help them to see whether (1) early exposure to electrical engineering courses and specialization within tracks is enabling students to learn the concepts better, and (2) coursework and lab projects that have a big-picture societal and global impact facilitates student learning and promotes inclusivity and diversity. The CoA required clarifications on how student work would be assessed in ways tied specifically to the PLOs prior to approval, reminding the department that the goal of this inquiry is to use its data to inform improvements to the program.

Graduate program (Ph.D. in Electrical & Computer Engineering) (Revised)

PLO: Original research and literature review.

To assess students' demonstrations of expertise—via critically analyzing technical literature, reviewing and synthesizing scholarship, planning and executing an original research project, and organizing their relevant findings into a coherent argument—the department plans to evaluate slides/presentations from PhD qualifying exams and collect exit survey responses from grads. The department has expanded their rubric from last cycle with a 6th criterion (“distinguish high from low quality research, including detecting flaws in methods that would limit generalizability or implications of a study”), and so is continuing to amass data in this area to ensure students are gaining technical expertise, understand the context and impact of their research, and have excellent presentation and reporting skills. The CoA suggested revisions to rubric language to make it more constructive, as well as requesting that all members of a student's committee rate their presentations, and in response to these refinements recommended approval.

English

Undergraduate program (B.A. in English) (Revised)

Core Competencies: information literacy; critical thinking

PLO: Rhetorical skills – compose interpretive essays that include close reading of primary texts and consideration of relevant literary, historical, cultural, political, or technological contexts.

To assess whether students have mastered argumentation regarding literary-critical and creative cultural works, the department plans to collect and rubric-score 100 essays written by English majors from those upper-division seminars that assign interpretive writing. The CoA requested clarification about which courses work would be collected from and by what criteria these works would be evaluated, then approved the plan contingent on the finalization of their rubric.

Graduate program (Ph.D. in English) (Revised)

PLO: Pedagogy.

To assess students' facility at designing and conducting their own classes—specifically whether grads appointed to Summer Associate positions have developed the skills and received mentorship sufficient to create successful syllabi for their 6-week sessions—the department plans to examine the syllabi created by Summer Associates, using a rubric (to be created in consultation with campus educational facilitators). The CoA requested clarification about how the syllabi were created (the product of a year-long pedagogical training program), and on the promise of their creating a rubric in conference with assessment specialists, approved this plan.

Geography

Undergraduate program (B.A. in Geography) (Revised)

Core Competencies: critical thinking

PLO: Describe interrelationships among various components of the earth system.

To assess students' facility with describing the interrelationships of physical, biological, socio-cultural, and economic components of the Earth system, the department plans to assess students' written work (short answer or essay format) in lower-division Geography courses. The CoA requested more information about how the department would distinguish majors from other lower division students and how they will translate the ways in which the PLO is differently achieved across courses, prior to approval, but appreciated the plan's promise to yield useful information for the program.

Graduate program (Ph.D. in Geography) (Revised)

PLO: Professionalism.

To assess graduate students' professionalism in preparing talks or posters suitable for presentation at a research conference—and their oral communication skills in those professional environments—the department plans to evaluate each student's presentations twice during the program: initially, during their 2nd year research talks, and again at their PhD defense. The CoA enthusiastically endorsed this proposed project, with the clarification that more than one faculty member should assess these students' presentations.

Global Studies

Undergraduate program (B.A. in Global Studies) (Revised)

Core Competencies: information literacy; quantitative reasoning; critical thinking; written communication; oral communication

PLO: Research analysis and writing.

To assess students' proficiency at (1) analyzing ways of addressing various social, cultural, political problems and (2) writing clearly and persuasively, the department plans to assess and aggregate data on students' written work in research and analysis from core courses, using rubric scores. This inquiry is intended to help the department determine how well their undergraduate curriculum helps students (specifically their growing demographics of 1st gen, URM, and Pell grant recipients) to gain research analysis and writing skills that will be useful to them in postgraduate professions. The CoA requested clarification on their secondary research question (examining students' expectations and experiences in learning research, writing and analysis skills), and thereafter approved this ambitious plan.

Graduate program (Ph.D. in Global Studies) (Revised)

PLO: Independent research.

To extend their assessment from the prior cycle, focusing on MA students' research performance on a pressing global issue, the department plans to evaluate MA program's field reports that students submit on their fieldwork/internship and global research projects, using the 5 criteria of argument clarity, methods development, case-study selection, archive/source identification, and skills development. The CoA would have liked to see the department shift their assessment to a different focus from their prior cycle, but on receiving further clarification for their reasons—that there is now a larger MA cohort, the program wishes to track how the new approaches to grad student needs during COVID have impacted the work in student Field Briefs, and this additional data will help faculty develop specific modules within the Research Design and Logics of Inquiry classes—the counsel approved this revised assessment plan.

History of Art & Architecture

Undergraduate program (B.A. in History of Art & Architecture) (Revised)

Core Competencies: information literacy; critical thinking

PLO: Analyzing cultural contexts of art works.

To assess whether students specifically in the Museum Studies emphasis demonstrate ability to analyze cultural contexts of artworks, architecture, and/or urbanism, and show adequate understanding of disciplinary historiography, the department plans to collect term papers from 6 upper division courses. They will focus on evaluating student discussions of how museums legitimize practices of display, the links between museums and colonization/imperialism, and political issues around museum display and contemporary debates about restitution. The CoA requested more detail regarding sample-size for essays to be collected, then approved the plan on condition that the rubric scores specify which criteria are lacking on those essays rated “fair” or “poor.”

Graduate program (Ph.D. in History of Art & Architecture) (Revised)

PLO: Core knowledge - general and specialized.

To assess students' broad knowledge across HAA fields (visual culture, painting, sculpture, architecture, urbanism), their in-depth understanding in a major and minor area of specialization within discipline, and their expertise in analysis of visual/textual art/architectural material, the department plans to collect closed-book essays from students' major exams (scoring sufficiency of students' command of field issues and perspectives, trends in recent scholarship, analysis of visual/textual materials). They will also poll students and faculty about the effectiveness of the exams, of which these 6-hour closed-book essays are a central component. The CoA asked for clarification on the criteria that would be included on the scoring guide, and after receiving this information, voted to approve the plan.

Physics

Undergraduate program (B.A. in Physics) (Revised)

Core Competencies: information literacy; quantitative reasoning; critical thinking

PLO: Analyzing physical phenomena.

To assess whether students show proficiency in applying mathematical concepts and knowledge of mechanics/electromagnetism/thermal physics to analyze variety of physical phenomena, the department plans to assess responses to physics GRE questions on final exams in each sequence-capstone course for the four pillars of their upper-division curriculum (classical mechanics, quantum mechanics, electromagnetism and thermal physics). They will also survey lower division students to compare experiences of those who took Physics 8 first versus those who skipped it, as this is a newly developed intro course at the core of their recent curriculum reform. The CoA requested further information about how the GRE data were to be used to inform program improvement, and thereafter approved this assessment plan.

Graduate program (Ph.D. in Physics) (Revised)

PLO: Professional communication - oral.

To assess how effectively students communicate results of their research to professionals within their subfield (and within broader physics community) through oral presentation, the department plans to rubric-test advancement to candidacy & PhD defense exams, studying the data both statistically and by following individual progress of students—with a special emphasis on those who have underperformed in their communication skills while advancing to candidacy. The department selected this focus because communication skills are the PLO for which they have the least data on student progress (as it happens mostly in times of individual research), and they noticed that many of the students underperforming in communication during advancement to candidacy had English as a second language, and may need additional support to help them excel in this area. The CoA recommended that the department focus their assessment from its original 4-PLO scope, and create a specific rubric for assessing student communication, after which they approved this plan.

Political Science

Undergraduate program (B.A. in Political Science) (Revised)

Core Competencies: information literacy; quantitative reasoning; critical thinking; written communication; oral communication

PLO: Writing clarity and conciseness.

To assess whether students write effectively to convey complex concepts and information clearly and concisely (specifically source selection and citation, critical analysis and synthesis of evidence, formal style and logical organization), the department plans to collect written work from lower-division classes that feed into the major, as well as from upper-division classes. They will deliberately sample to separately assess the work and writing progress of transfer students relative to students who entered as first-year students, and will also collect student

confidence surveys from lower- and upper-division courses. The program is focusing on this PLO because they think that students' struggles with writing may be undermining their assess to other PLOS. The CoA recommended that the program use Eli review software to assess those aspects of writing that Grammerly could not, and approved the plan once these changes were implemented.

Graduate program (Ph.D. in Political Science) (Revised)

PLO: Research methods, scholarly communication.

To assess students' application of qualitative and quantitative research methods—as well as critical literature review/synthesis, publication-level writing, and conveying findings to outside audiences—the department plans to collect final research study papers from a recently introduced two-course series on creating publishable work. Two faculty will rubric-score these papers' theoretical foundation, argument, research design, data analysis, and proof-reading; students will also be given a survey at the beginning and end of the two course-series about how well they think the class prepares them for publishing and presenting at conferences. The CoA required that the department create a rubric and assess students' written works directly, rather than relying on CV's and publication acceptances as a proxy for meeting standards of publishability, and after receiving these revisions, voted to approve this plan.

Spanish & Portuguese

Undergraduate program (B.A.s in Spanish, Portuguese) (Approved)

Core Competencies: oral communication

PLO: Language proficiency.

To assess students' level of oral proficiency—as defined “advanced” by ACTFL—and to explore differences between L2 non-native and native speakers, the department plans to assess recordings of oral presentations by students enrolled in 5 upper division courses. Half their sample will be native Spanish speakers, half 2nd language learners of Spanish, all evaluated using a rubric based on official ACTFL proficiency guidelines. The program has chosen this focus because oral skills are not formally assessed or addressed in any of their upper division courses except for the recently created SPAN 103, and they need to know if students are actually meeting this proficiency objective by the time they graduate. The CoA recommended approval, pleased to see this new plan dedicated to refining the first assessment that proved difficult due to Covid.

Graduate program (Ph.D. in Hispanic Languages & Literatures) (Revised)

PLO: Pedagogy, instructional skills.

To assess students' facility at preparing and planning courses both at undergraduate and graduate levels—and use current technologies to enhance the classroom experience—the

department plans to analyze students' self-authored undergraduate and graduate course syllabi, submitted as part of their research seminar, as well as students' responses to a teaching abilities questionnaire. The department is curious to see if their required pedagogy-related courses and workshops help students develop skills such as course-planning and critical discussion leadership, in ways that may improve their professional teaching portfolios, given the shrinking job market in academia and the fact that the majority of new positions for grads are in community colleges. The CoA requested that the department shift or bring further focus to its prior cycle's target PLO of "professionalism," and on receiving this more developed plan voted unanimous approval.

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Conclusion

The process established for program learning outcomes review at UC Santa Barbara continues to operate as a very successful faculty-driven, administratively supported effort. We look forward to receiving the assessment plans from Group 2 departments in January 2023, and updates from Group 1 departments in October 2023.

CoA Members, 2020-21

Linda Adler-Kassner (Writing Program/Undergraduate Education), **Co-Chair**

Amanda Brey (Director of Program Review & Accreditation, Associate ALO), **Co-Chair**

Tarek Azzam (Gevirtz Graduate School of Education)

Glenn Beltz (Mechanical Engineering/Associate Dean, College of Engineering)

Tengiz Bibilashvili (Physics, College of Creative Studies)

Norah Dunbar (Communication)

Brice Erickson (Classics)

Darby Feldwinn (Chemistry)

Mike Gordon (Chemical Engineering)

Rebecca Greer (Library)

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