Examples of how assessment data were used in course or program revision

The use of assessment data for improvement happens on multiple levels, often with larger cross-faculty interaction and at the individual level.

Some colleges, such as Ka Haka ʻUla o Keʻelikōlani (College of Hawaiian Language), consider assessment as a larger group: "The results of assessments conducted . . . go through several steps of analysis. After the instructor collects the results and does an initial evaluation, the results are sent to the academic division chair, the department chair, and other coordinators of various programs (Linguistics, Kahuawaiola, Hawaiian Studies) for further analysis. Strategies based on the gathered evidence are developed by this group are then further discussed with the faculty in a college-wide meeting. The department chair and program coordinators follow up with instructors to undertake curricular or instructional changes. Assessment are redeployed with the results and the possibility of future strategies again going back through the feedback loop. On specific example is the assessment of KHWS 465 in 2017 when data showed more emphasis was needed in "language (pronunciation and intonation) and delivery (delivery techniques/body language) as the areas that need most improvement." Results were conveyed to instructors in the 100-, 200-, and 300-level Hawaiian language courses, who then built further emphasis in these two areas. The college will reassess this when the next core competency assessment (written communication) takes place.

At the level of departments, chairs use assessment to facilitate group conversations and to review the overall curriculum while overseeing the quality of learning for their majors and identifying clear gaps in student performance:

- "Assessment has helped us improve our curriculum is that the assessment process itself forces us to think collectively and reevaluate our teaching methods on an ongoing basis. I can't cite any ways that an assessment result induced us to make substantial changes in our curricula, but doing the writing evaluations led us to normalize our grades to make sure all members of the department were grading work of equal caliber equally. Similarly, the assessment opportunity on information literacy reminded us to emphasize these skills when we were assigning papers. Often, these small tweaks to successful pedagogical practices are more valuable than starting over with completely new teaching methods." (Department of Philosophy, CAS)
- "We are currently revising our hardware courses to meet ACM/IEEE curriculum requirements based on lower than average MFAT scores (48th percentile nationwide) for the past two years. The faculty who previously taught the course had high skills in the area, but low skills in instructional design that resulted in students not meeting learning outcomes as well as they should." (Department of Computer Science, CHNS)
- The Mathematics department assessed Line of Reasoning and Written communication in their MATH 314 Topology class Spring 2014. This class is generally taken by junior level Mathematics majors before their year-long senior classes in Real Analysis and Algebra. The MATH 314 assessment concluded that overall students completing the class were able to identify an appropriate method of proof for a given problem, use it to solve the problem, and able to adequately communicate their solution in writing. This outcome was encouraging as a number of these students had little to no formal training in mathematical proof writing before the class (Calculus III was the only prerequisite). This assessment provided evidence that MATH 314

could be used as an alternative to MATH 310 (the historical class) as a prerequisite for senior level classes in the Mathematics curriculum. This change, among others similar to this, became part of the Mathematics program starting Fall 2019 and reduced scheduling bottlenecks with MATH 310, providing an alternative pathway to the 400 level classes. (Department of Mathematics, CNHS)

- "Assessment, as a component of program review, helped our department identify gaps in the curriculum. For example, the curriculum matrix helped us to identify how the alpha numbering of courses was inconsistent with our expectations of student performance and difficulty of the material. Assessment of one of those required major classes also showed that some of our upperclassmen seemed to have forgotten the basics of citating secondary sources. The instructor of the 300-level course decided to revise a series of handouts on citations and quotes from ENG 100 (Freshman Composition) for use prior to the submission of papers at the 300-level." (Department of English, CAS)

The last example shows how "closing the loop" seems most effective at the level of individual faculty given that assessment data often leads to improvement in the classroom. Many below reported introducing more scaffolding of assignments, increased and/or targeted feedback, alignment of teacher expectations of student work, and revamping assignments:

- "The results of the writing intensive assessment from our college prompted two of us in lower division courses to decide to embed more feedbacks (more then the minimum number of feedbacks the WI certifications requires) to students written assignments in the future. Feedback will include how to synthesize theories and concepts presented from lectures. It will also include how these concepts apply to other activities they've done from experience or those of other practices observed in similar situations." (Professor of Horticulture, CAFNRM)
- "I regularly conduct 'temperature' checks, to see how they are doing. On April 6th, 2020, I conducted a midsemester course evaluation to get a better understanding of how the conversion to online was going for students. Not surprisingly, a majority reported overwhelming feelings of stress and anxiety. Three factors that were prevalent to most of my students that were at the epicenter of this were the lack of consistency, compassion, and communication between themselves and faculty. In response, I adapted in several ways. Prior to online conversion, but more recently during online conversion, I have increasingly used software, web tools, and applications to help supplement online learning. To provide as much availability as possible, and a simple way to set up an appointment with me, I use the productivity web application Calendly for students to make Zoom appointments with me. Calendly syncs to my Google calendar, as well as my iCalendar, which offers a parsimonious way to organize my schedule. Most importantly, at the beginning of every Zoom session I now always ask two questions: 1) How are you doing today? 2) How can I help? I always follow-up with students' responses. I shared these techniques with a colleague in the department—that individual is looking to adopt some of these practices." (Instructor, Department of Communication, CAS)
- "Upon doing assessment of a few lower division courses, I decided to incorporate more instruction in class on reliable and credible sources. I also decided to do a separate assignment with its own assessment devoted only to the use of secondary sources. Prior to this, I had only relied of students completing an outline with references. I include much more focused feedback

on students' use of resources as opposed to global comments which only targeted the overall presentation." (Assistant Professor, Department of Communication, CAS)

- "A few years ago, the department ran an assessment of Information Literacy comparing POLS 101G and POLS 322 that showed majors were writing at or near competency in comparison to the lower division. The scores from 322 were then weighed against the assessments in POLS 470S, which is the capstone for the Political Science major. While the assessments across the board didn't reveal any gaps in the sequencing of the curriculum, the assessments themselves (rubrics and discussions of data) helped to align faculty expectations of writing in the program. This look at sequencing and scaffolding generated interest in establishing a similar capstone in the Administration of Justice program in our department." (Professor, Department of Political Science, CAS)

- Assessment of written communication of LING 490, which is the capstone for the Linguistics major, showed that while the course is supposed to be the culmination of the students' progress through the program, there were areas that clearly needed more emphasis. In fact, the lowest scores were in the area of organization and structure, which suggested that more effort was needed and has now been put into lower-level Linguistic courses." (Professor of Linguistics, College of Hawaiian language)

- "Assessment helped us ensure written communication as a minimum core competency in our major. After the first assessment, MUS 465 was reconfigured and certified for WI with students completed writing assignments weekly throughout the semester. An unexpected benefit was that students majoring in Hawaiian Studies enrolled in the course and provided critical analysis of the connection between opera and chant. Both Performing Arts and Hawaiian studies majors are both equally meeting our standards of writing." (Instructor, Department of Performing Arts, CAS)

- "Faculty working on the curriculum matrix and embedded rubrics led to better alignment among the faculty teaching the studio classes. Core competency data on written communication led to discussions about how writing that the majors need to do in their exiting portfolio didn't align with the writing assignments undertaken for art history. This led to recent changes in the Senior Exhibition and the writing (i.e. artist statement) needed for that course. The department is also developing a portfolio course to act as a capstone." (Professor, Department of Art, CAS)

- "In Fall 2018 the Anthropology Department discussed the results of the Written Communication assessment, and agreed that the evaluated assignment (a life history) was not an appropriate choice for the assessment (and a key factor in our difficulty evaluating the papers for line of reasoning). However, we only offered one 400-level course in spring 2018, and had no other option for this assessment. We believe a standard research paper would have allowed for clearer evaluation of student writing. However, we see that Organization & Structure and Language/Prose/Syntax could be improved upon, and we will continue to work on appropriate next steps to enhance students' written communication skills." (Professor, Department of Anthropology, CAS)

- "CHEM 431 was assessed for written communication in 2018. The chosen artifact was a two to four page report which was to include information from peer-reviewed scientific journals. The area with the lowest score was organization content (2.54 mean based on a 4-point scale). Upon review of the data, the department surmised that the low scores were a result of student's tendency to repeat or rephrase arguments that were already provided in the

laboratory procedure handout and laboratory introductory lecture. While the papers cited quality peer-review journal articles, they did not utilize this information in supporting the main argument. To alleviate this issue, students were instructed to deemphasize arguments already used in the laboratory handout while emphasizing content discovered during their literature review of secondary sources." (Professor, Department of Chemistry, CNHS)