COMMITTEE ON TEACHING
Annual Report 2018-19

To: Academic Senate, Santa Cruz Division

The Committee on Teaching (COT) met every other week throughout the academic year to conduct business regarding their charge to foster and promote effective teaching. COT revised processes surrounding its annual student-nominated, Excellence in Teaching Award and began the process of creating a campus-wide faculty-nominated award, The Distinguished Teaching Prize.

A significant amount of time was dedicated to the replacement of the campus’s Student Evaluation of Teaching (SET), which COT renamed as Student Experience of Teaching (SET). COT also participated with the working group overseeing the administration of the What Do You Think (WDYT) platform. Chair Helmer met weekly with this working group throughout the academic year, which included Associate Vice Provost for Teaching and Learning (AVPTL), Center for Innovations in Teaching and Learning (CITL) Director Greene, and Director for Learning Technologies, Jim Phillips.

This workgroup focused on keeping abreast of and problem-solving SET and WDTY issues, messaging to students and faculty regarding SETs administration and student participation, creating on-line materials to help teachers use the WDTY system, selecting a WDTY replacement, and presenting a WDTY training at a Senate Town Hall Meeting, led by COT member Nicholas Brummell, Rebecca Peet, SET Service Manager from Information Technology Services (ITS), and AVPTL and CITL Director Greene. (see link).

In sum, it was a highly productive year for the committee. Below includes a more detailed description of the year’s achievements. Outreach and Consultation with key stakeholders and committees was a major focus throughout the SET replacement and WDTY administrative processes. In 2018-2019 Chair Helmer and committee members consulted regularly with the AVPTL and CITL Director Greene, as well as key Senate committees including Academic Personnel (CAP), Affirmative Action and Diversity (CAAD); and Rebecca Peet, the WDTY administrator, regarding WDTY messaging, support materials, revised SET questions, and SET administration and piloting of the new SET instrument. Chair Helmer and AVPTL Greene also presented the revised SET instrument to the Senate Executive Committee (SEC) for feedback before presenting the new SET to the larger Senate. Chair Helmer gave a more formal version of this presentation at the February 6th Senate meeting for campus comment; AVPTL and CITL Director Greene and Rebecca Peet were also present to answer questions.

I. SETs Revision and Fall 2019 Quarter Implementation
The 2017-18 COT Annual Report provides background information regarding the initial charge and impetus for revising SETs, including initial faculty surveys to assess faculty needs. During AY 2017-18, the first iteration of the revised SET was created and piloted spring 2018 by COT members. With this pilot information, and additional feedback from academic units, the 2018-19 academic year began the final SET revision process; its implementation initially planned for spring 2019, but rescheduled for fall 2018 due to WDTY technical difficulties.
The SET revision process was a major undertaking that entailed: continuing to revise SET and finalize SET questions that included stakeholder consultations, piloting revised drafts with COT members to check instrument validity, and working collaboratively with CAP to create a revised “Teaching Table” for personnel reviews (see below). Throughout this process, COT and AVPTL Greene shared instrument iterations with Institutional Research, Assessment and Policy Studies (IRAPS), Academic Personnel Office (APO), CAAD and CAP. The second phase of this process will begin AY 2019-2020 to include further piloting of the SET instrument with the aim of measuring SET validity. COT and IRAPS need to ensure that the new SET questions measure what the questions were designed to elicit.

This second phase needs to be further planned and developed during the fall 2019 COT meetings in collaboration with IRAPS. COT discussed that either whole departments or randomly selected faculty across divisions, who agree to participate, could take part in a validity study similar to the one conducted by IRAPS with COT members (see Appendix 1 for this report). The number of faculty participants would depend on IRAPS capacity. Additionally, a qualitative study could be conducted with faculty, using focus groups to discuss how faculty are experiencing the new instrument. Follow-up questions could ask faculty if they are experiencing the new SET, including if they are experiencing bias, how useful they find the new instrument for informing teaching in comparison to the older instrument, or if they found any particular questions problematic and or useful. These interviews should be videotaped for further reference and conducted with standard questions across focus groups.

A. The Revised SET Instrument

After COT (including SET executive sponsor AVPTL Greene) and IRAPS reviewed the fall 2018 COT-member SET pilot, we concluded that the primarily open-ended format would not work well for all campus units, including CAP’s ability to manage personnel reviews (See Appendix 2 for first SET iteration). COT and IRAPS then worked through numerous SET drafts, with over 150 revisions. The final version comprises 80 percent Likert-scaled questions and 20 percent open-ended. The Likert-scaled questions largely use a frequency scale (i.e., Never---Very Frequently, including “unable to comment”) as opposed to an agreement scale (i.e., Disagree Very Strongly---Agree Very Strongly). The revised questions fell into the following domains (See Appendix 3 for the revised SET instrument):

1. STUDENT INFORMATION (Questions 1-4) (i.e., Student’s major, percentage of classes attended, including if the student had withdrawn from the course, and the amount of hours per week devoted to the class.)
2. FEEDBACK ON INSTRUCTION (Questions 5-10) (Question 10 is open-ended)
3. FEEDBACK ON COURSE (Questions 11-20) (Questions 16, 17, 18, & 20 are open-ended)
4. PREPARATION FOR THE COURSE: A subsection of “Feedback on Course” (Questions 19 & 20; 20 is open-ended)

Within the above domains, we designed SET questions to reflect more direct student learning experience, eliminating questions that had students assess pedagogical approach or teacher effectiveness, as students are not pedagogy experts. However, students are able to assess their
experience with specific course elements and design. Thus, in order for the SETs to be more useful to faculty, we designed the questions to be as specific as possible so faculty would be better able to pinpoint and assess what was working in their courses and what was not. Through this specificity, we intended to help reduce positive or negative biases related to faculty personality, gender, student grade expectation, and so forth. Of course, these biases will persist no matter the quality of SET questions and thus, all faculty who review other faculty must be mindful of SET limitations. COT and CITL would recommend that faculty provide more reliable artifacts of their teaching for personnel reviews and that personnel reviewers heed these sources of teaching evidence with greater weight and attention.

The domain, “Feedback on Instruction” (Qs 5-10), using a frequency scale, asks students specific questions regarding their instructor. These include: instructor’s use of time to support learning; the instructor’s ability to communicate and explain course concepts; the instructor’s feedback usefulness (if applicable); the instructor’s ability to communicate evaluation expectations; and the instructor’s ability to help students engage with course content, followed by an open-ended field for students to explain how this engagement was or was not actualized.

The domain, “Feedback on Course” (Qs 11-15), primarily using a frequency scale, asks students specific questions regarding course elements such as the students’ understanding of the course’s learning goals; lecture/presentation clarity (if applicable); in-class activity structure and purpose (if applicable); usefulness of low-stake assignments to prepare for high stakes examinations, papers, and projects (if applicable); usefulness of assigned reading (if applicable). Questions 16-18 ask related open-ended questions, described below, and Q19 and Q20, also described below, ask about students’ prior preparation for the course. For all of these questions students can select “unable to comment” if the question is not applicable. Though the majority of the new SET contain Likert-scaled items, it still retains five open-ended questions. Two of these, Q10 and Q20, follow a Likert-scaled question, asking students to explain their answers to Q9 and Q19. Question 10 asks students to explain how the instructor helped them engage with course content while Q20 asks students about their degree of preparation before entering the course, including high school work, if relevant. Question 20 came out of consultation with CAAD with the purpose of contextualizing students’ previous knowledge vis-à-vis their SET question responses while also providing curricular information. For example, if a student were taking a course series or curriculum (e.g., College 1, Writing 1, Writing 2), department/program chairs or provosts could see by students’ responses if prior coursework was adequately preparing students for the course series. If not, revisions to the curriculum could be made. The Q10 follow-up originally was part of the COT-member SET pilot study to check to see if students understood Q9 (i.e., if low stake assignments help with high stakes assignments). We found student responses enlightening for this question and thus chose to adopt it as part of the standard campus SET instrument. Open-ended Q16 asks students to provide explicit examples of helpful or unhelpful teaching practices and materials, while Q17 asks students to provide suggestions for course improvement and Q18 asks if students have “anything else to add.”

As may be apparent by the above SET description, COT (with AVPTL Greene) and IRAPS also decided to eliminate the two “omnibus” questions in the previous SET that asked students to rate
“overall teacher effectiveness” and “overall course experience.” These two questions had been part of the “Teaching Table” used in personnel reviews. We made this decision to eliminate these two questions because the SET literature explains that student responses to such broad overarching questions cannot accurately measure or capture what students actually mean when they rate professors; students could be referring to any number of things. The questions’ lack of specificity renders them ineffectual for assessing or improving teaching. If faculty were to receive either high or low marks, they would not know what caused that particular rating. Further, SET research in two large-scale studies (see Appendix 4 for the annotated bibliography of SET research) found that low marks actually indicated good teaching as the most demanding teachers received low marks because students’ grades were lower than the students had expected; these same students, however, performed better in their subsequent classes in the course series. Related, such hard-to-interpret questions have been found to also correlate with gender (i.e., biased toward males), physical attractiveness, enthusiastic affect, student ability (similar to grade expectation), weather conditions (!), and so forth.

COT piloted these revisions winter quarter 2019, with special attention to SET items that faculty, who provided feedback, found questionable, including COT-member concerns. To test these concerns, the winter pilot included additional open-ended questions following these potentially problematic SET items to check for validity, as mentioned above. Student written responses allowed us to see if students were answering these questions in the ways intended. For example, faculty had raised the question if students would be able to understand the difference between low stakes and high stakes assignments when answering the following question, using a frequency scale: “Problem sets, writing assignments, and other homework, over the course of the quarter, helped me feel prepared for examinations, papers, and projects” (Question 14). Student responses indicated that they were able to distinguish between preparatory work (e.g., practice exercises, journal entries) and culminating work (e.g., exams, research papers). Additionally, the analysis showed that we could consolidate two of the questions into one that asked students very similar questions. This became Q16, an open-ended question that combined “teaching practices and materials.” On revision it reads: “Please describe any specific teaching practices and materials (lectures, seminar discussions, small group activities, demonstrations, instructional videos, homework, individual conferences, study guides, papers, etc.) the instructor used that you found helpful or unhelpful to your learning in this course.”

For full validity analysis, please consult IRAPS’ report (Appendix 1) and/or the footnoted version of the final SET (Appendix 3).

B. Return Rates
Throughout the academic year, COT and the WDYT working group monitored student return rates, which ranged from an overall rate of 47.2% in fall to 38.2% in spring (see Table 1 below). The major challenge to overcome were TA response rates, which were very low due in part to issues with the WDYT platform: Students had difficulty locating their TAs’ names. Eventually Rebecca Peet was able to reconcile these issues by the end of winter quarter.
Table 1: SET Return Rates AY 2018-19

<table>
<thead>
<tr>
<th>Standard SET Form</th>
<th>Overall</th>
<th>Colleges</th>
<th>Arts</th>
<th>SoE</th>
<th>Humanities</th>
<th>PBSci</th>
<th>SocSci</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2018</td>
<td>47.2</td>
<td>54.95</td>
<td>44.47</td>
<td>40.19</td>
<td>53.57</td>
<td>46.95</td>
<td>52.05</td>
</tr>
<tr>
<td>Winter 2019</td>
<td>42.9</td>
<td>44.38</td>
<td>40.4</td>
<td>35.68</td>
<td>48.76</td>
<td>41.12</td>
<td>53.08</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>38.2</td>
<td>33.9</td>
<td>35.48</td>
<td>35.34</td>
<td>41.85</td>
<td>35.02</td>
<td>46.98</td>
</tr>
</tbody>
</table>

Relatedly, with SETs executive sponsor AVPTL Greene, we worked on better messaging to students regarding SET’s importance for improving courses and SET’s role in the personnel process, which was included in student emails and part of the SET survey’s opening instructions. Faculty, primarily through CITL outreach, have also been told that they should explain to students how SETs are used for improving teaching and how they are used in personnel decisions, while also explaining SET’s inherent biases. We believe these efforts will help students to take their commenting more seriously. Additionally, spring quarter, students received “Game of Thrones” memes with messages reminding them to participate and submit their SET responses (see Appendix 5). Our aim was to make email announcements and reminders less text dense and more appealing for students during exam periods. However, return rates remained around 38%. Despite this lower than expected response rate, COT would recommend this approach with future messaging to students as it is a “friendlier” communication style.

In communication with faculty, COT has recommended that faculty provide incentives for increasing response rates. COT members this year experimented with telling students if they had met X% response rate, that the entire class would receive extra credit points. All COT-members found that their response rates rose after providing this grade incentive. Faculty can monitor response rate through the WDYT/Canvas portal. This suggestion could be more widely presented to faculty as it proved effective, if, of course, the new platform to replace WDYT affords response-rate checking.

II. COT-CAP-IRAPS Negotiated Teaching Table for Personnel Reviews

As explained above, research shows that overarching “omnibus” questions are problematic. However, providing a snapshot of teaching through such a table can be useful when assessing personnel files. Thus, COT and IRAPS worked with CAP to ultimately agree upon a set of questions from the revised SET instrument that would be most useful for this purpose. At the initiation of this process, AVPTL and CITL Director Greene and Chair Helmer compiled an annotated bibliography and its full-text articles regarding SET omnibus question validity and other related problems, to prepare CAP for our initial consult on March 7, 2019 (See Appendix 4). At the consultation, COT suggested that CAP consider using the final revised SET to select one or two questions to form a new teaching table as a compromise in lieu of retaining the omnibus questions that we found problematic. We planned to meet again to further discuss the issue once the SET had been finalized, which we did.
Toward the end of spring quarter, once COT had reached its final SET version (with explanatory footnotes), we shared it with CAP (See Appendix 3). After reviewing the final SET, CAP Chair Westerkamp consulted with COT (including SET executive sponsor AVPTL Greene), IRAPS (Anna Sher), and APO (Cris Imai). In that consultation, we selected the following three SET questions that both committees believed would best indicate an instructor’s teaching performance. The scale for Q5 and Q6 is: unable to comment/never/occasionally/somewhat frequently/frequently/very frequently.

- The instructor used class time effectively to support my learning. (Question 5)
- The instructor communicated clearly and explained concepts effectively. (Question 6)

The scale for Q12 is: unable to comment/never/occasionally/somewhat frequently/frequently/very frequently. With the following instruction to the student: Please only comment if the course contained the specific activity addressed in questions 12-14. Otherwise select “unable to comment.”

- Lectures and other instructor-led presentations were well structured and had clear goals. (Question 12)

Of course, with time and experience, this Teaching Table could be revised once CAP has had experience with the actual new SET instrument.

III. WDYT and WDYT Platform Change
A. Senate Town Hall
On November 7, COT with VPAA Greene and WDYT Program Administrator Rebecca Peet, held an instructional Town Hall to introduce WDYT, present SET best practices, and the value of collecting midterm and end-of-term feedback and how WDYT can assist. A WDYT feature allows instructors to create custom questions at midterm and end-of-term, which can only be viewed by the instructor. These questions are instructor-designed so that they can better target their specific courses and teaching styles. (Links for the slides for this presentation or click to view the video.) In the Town Hall, we also explained how to best form these questions to elicit student information (see slides). Later in the academic year, with WDYT manager Rebecca Peet, Chair Helmer produced a scripted screencast tutorial for how to use the platform for midterm feedback linked here.

B. WDYT Platform Change
Soon after the rollout of WDYT, it became evident that the parent company CollegeNet decided to no longer develop the WDYT product. Further, CollegeNet indicated that they are no longer actively selling the WDYT platform. ITS continues to work with CollegeNet to determine if they have any intentions to “end-of-life” WDYT. The business risk associated with continuing to use WDYT has increased. This prompted the campus to consider other alternatives in anticipation that there may be a need to move to a replacement for WDYT should CollegeNet decide to discontinue the WDYT service permanently. Currently, a committee has formed to investigate alternative platforms to replace WDYT, including the collection and analysis of “user stories” of various campus units and their managers. Included in this assessment, during the 2019 winter
quarter, Chair Helmer, Rebecca Peet, and Cris Imai (Academic Personnel Systems Manager), met with CAP, to elicit their “user story,” to elicit their needs with the new platform.

IV. Excellence in Teaching Awards
COT is charged with the administrative oversight of the Excellence in Teaching Awards (ETA). In adjudicating these awards, we look for evidence that the nominee has thought deeply about teaching and learning and effectively applies that thinking in the classroom. ETA winners are based on student nominations, augmented by statements of teaching approach and letters of support from department chairs or another faculty member who can speak to the nominee’s teaching. COT reviews these materials to create a short list of finalists. In 2018-19 COT evaluated nominations by 450 students, for over 250 different instructors. We see this as evidence of the extraordinarily strong commitment by UCSC faculty and instructors to students and their learning. COT and UCSC Chancellor present the inscribed award at a spring-quarter luncheon, this year held in the Sentinel Room at the University Center. Faculty also received a $400 cash award. The recipient of the Ron Ruby award from PBSci received $750.

A. Development of Revised Selection Process and Messaging for the Excellence in Teaching Award
As COT had not reflected upon its nomination and selection process over the past several years, we believed that it was time to rethink our work in order to improve upon. We also considered if the selection process included any inherent biases related to discipline, class size, or gender. As a result, we modified some of our practices, described below.

To begin, COT members created a list of criteria of what we considered “good” teaching (e.g., active learning, mentoring students and colleagues, revisions or innovations in teaching, etc.) to help us clarify our vision of exemplary teaching during the selection process. We also examined our prompts given to nominating students, nominees, and their faculty recommenders, and we determined that they needed revising. For example, we believed the student prompt to be too vague. We revised the prompt and asked students:

Dear Students,
Every year, UC Santa Cruz wants to hear from you, the students, about an instructor who had a positive influence on you, your learning, and your overall educational experience. We want to hear from you about UCSC instructors who should be recognized and applauded for a job well done. Please take the time to nominate an instructor who challenged you and who made you a better student during fall quarter 2018. Nominate an instructor who shows a commitment to teaching and works to create a supportive classroom environment. Take the time to recognize an instructor who has positively impacted your learning and nominate this person TODAY for the Teaching Excellence award.

Click here to submit your nomination.

Guidelines for nominations submissions:
- Only current UCSC students are eligible to vote.
- Graduate students cannot nominate their advisors.
- OPERS instructors are not eligible to receive an award.
- Faculty and instructors who have won an award within the last five years are not eligible to win an award, please see the list of recent winners.

Please submit your nomination by Sunday, Month, Day 2019. Thank you for taking the time to recognize your instructor!

Thank you,
Committee on Teaching

This prompt elicited greater specificity and examples than we had received in previous years. We then asked nominated faculty not to write an abstract “teaching philosophy” but instead a “teaching statement” that more concretely showed how their teaching was distinct from others in their unit or how their teaching went above “normal expectations.” This prompt again was designed to help instructors write with greater specificity about their teaching—mentoring practices—a statement that “showed more than told.” Through these prompt changes, COT intended that they would help us to better narrow and discriminate amongst nominees, which we believe they did.

COT also decided to broaden possible faculty recommenders who write the nominees’ letters of support. In the past, department/program chairs or college provosts were asked to write nominees’ letters of support. For this year’s ETA we gave nominees the option to select any faculty colleague whom they believed to have the best knowledge of their teaching to write in support of them. Nominees can continue to ask their chairs or provosts to write letters, but we wanted nominees to have more choices while also potentially diminishing chair/provost workload.

Finally, COT decided on a new way to sort nominees in order to eliminate any potential biases according to class size—a bias that we could greater control. In the past, faculty who taught larger class sizes would receive a greater number of student nominations and thus garnered a greater degree of attention in the selection process. That being the case, COT decided to sort nominees into three short lists, sorted by class size: small (50 students or fewer), medium (51-100 students), and large (100+). These short lists were compiled in Google Docs tables with each COT members name. Chair Helmer then tabulated “the votes” of the selected faculty by class-size category. The refined lists of nominees were then discussed and ranked in person at an in-person COT meeting. During this ranking, we also looked at parity representation across divisions as well as gender for determining finalists. In the past, the selection process was rather cumbersome and time consuming. COT determined the new process to be more democratic and efficient while providing a more representative sample of award winners across class size.

In the end, through the above process, based on student nominations, teaching statements and faculty support letters, COT created a short list of fourteen instructors. From these, COT selected seven to receive 2019 teaching awards, with an additional two chosen to receive letters of Honorable Mention. Chancellor Blumenthal presented the awards to the ETA recipients at a June 7, 2019 luncheon hosted by the Chancellor’s Office at the University Center. Below is the list of award recipients:
2018-19 Excellence in Teaching Award Recipients (in alphabetical order):
1. Noriko Aso, History
2. Nathaniel Berman, Music
3. Rebecca Covarrubias, Psychology
4. Robin Dunkin, Ecology and Evolutionary Biology
5. Sean Keilen, Literature
6. Adam Millard-Ball, Environmental Studies
7. Shelley Stamp, Film and Digital Media

Honorable Mention
1. Peter Alvaro, Computer Science and Engineering
2. Jerry Zee, Anthropology

V. Create and Fund New Campus Teaching Prize: The Distinguished Teaching Award
This past year, COT decided to create a campus-wide faculty-nominated teaching award in addition to the student-nominated Excellence in Teaching Award. COT will award “The Distinguished Teaching Award” to a single instructor. The details are still being determined, but tentatively, the winner will receive an inscribed award and a thousand-dollar prize. Additionally, the winner will also deliver a Distinguished Teaching Award Public Talk. The details of this public talk are still to be worked out, though the following ideas have been discussed:
1. The DTA Talk would be delivered during alumni weekend as a fund-raising event that includes a dinner. This fund-raiser could be done in conjunction with another campus unit (potential fundraising had been raised in the 2017-18 annual report);
2. The DTA Talk would be delivered at a campus faculty breakfast or other meal in which the winner would start off or cap off a day of pedagogy workshops presented by faculty volunteers, prior ETA recipients, or CITL Fellows, which could be co-sponsored with CITL;
3. The DTA Talk would also include an invited outside speaker, speaking on a related topic, which could also be co-sponsored with CITL.

In order to raise money for the award, the DTA sub-committee, led by COT member Jim Phillips (Director of Learner Technologies), participated in campus’s Giving Day. In order to participate in Giving Day, a video explaining the campus organization and its financial request needed to be produced. Jim Phillips, working with a student videographer, produced an effective video that included CITL Director Greene and Chancellor George Blumenthal (see linked video). This Giving Day “ask” yielded close to 500 dollars and the Senate will make up the difference per Chair Helmer’s discussion with Senate Director, Matthew Mednick, once event details have been established. COT will also pursue additional funding through the UCSC Foundation who provide grants year-round. It was decided however, that the amount of work needed to produce the video may yield too little reward for the amount of effort required. It was discussed that asking funds from the UCSC Foundation may be a better avenue.

An initial award’s call has been drafted by CITL Director Greene, but the finer details and award’s processes need to be worked out in the following academic year.
V. Campus Strategic Academic Plan (SAP)
In February 2019 COT responded to the Vice Provost for Academic Affairs (VPAA) request for Senate feedback regarding the rewrite of the SAP’s Design Principles. In relation to the scope of COT, the committee found that none of the principles directly involved teaching and learning, and recommended that the SAP’s pedagogical principles should provide more ambitious goals and integrate UCSC’s teaching-learning mission with the same transformative aims that the SAP puts forth. Additionally, the committee found that the development of Academic Priority Areas (APAs) were another location where teaching-learning should play a critical and imperative role in further developing interdisciplinarity.

COT remarked that, Design Principle 2: Creating Enriching Experiential Learning and Research Opportunities for Students, had too narrow of a definition of “experiential learning” with its primary focus on internships. Design Principle 4: Support Generative Interdisciplinary Connections in Research and Teaching, also questioned how team teaching would work in practice. COT suggested that campus also research other models, including Learning Communities.

In May 2019, COT responded to the review of the Final Draft of the SAP. COT remarked that their previous suggestions were not included in the final draft and that this was a missed opportunity. The committee again reiterated the importance of them in strengthening the teaching vision for UCSC. COT further recommended that CITL and COT be included in the conceptualization and assessment of what constitutes high impact teaching practices, including the implementation of, and innovations in instructional technology.

VI. Upcoming Proactive Agenda for 2018-19
Though our major initiative of revising SET was accomplished this year, there is still work to be completed once the SET instrument goes “live.” This would include further instrument validity testing, as mentioned above. Also, finalizing the Distinguished Teaching Award (DTA) documents and processes needs to be central goals of 2019-20 proactive agenda. Depending on time constraints, the actual call for the DTA may have to occur AY 2020-21. Specific action items discussed by COT members included:

- Determine with IRAPS the best and most efficient SET reliability-validity study, with the possible inclusion of qualitative measures (see above)
- Use SET study results and findings to further refine the SET instrument in collaboration with IRAPS and Director Greene.
- Develop Distinguished Teaching Award:
  - Finalize “call” for soliciting DTA nominees (begun by Dir. Greene)
  - Write grant proposal to UCSC Foundation, requesting funds for the award and related events
  - Seek funds from Senate for the award and related events
  - Develop and plan DTA event-talk (discussed above)
- Continue in progress sub-committee work:
  - New SET platform search. John MacMillan will represent COT in the new platform selection. COT Chair most likely will also take part in this sub-committee.
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- **Student Response System (chaired by Lesley Kern):** Nicholas Brummell will continue to represent COT on this committee charged with evaluating current “iClicker” devices and platforms with the aim of selecting a “universal” system, making it less burdensome and complicated for students.

- Update COT website: Note, work on creating additional materials for SETs and WDYT were put on hold as WDYT would become obsolete. COT hopes to collaborate with a FITC student worker to develop a stronger web presence and resource materials for the upcoming new SET platform. A COT sub-committee may want to form regarding an updated website.

- Continue to discuss COT’s next “project”: Possible future work could center on possible collaborations with DRC and CITL surrounding best practices with working with students with accommodations. However, many students who need accommodations do not seek them in college for various reasons, thus educating faculty around student disability is important. COT could launch a study around best practices in working with students who have various learning and psychological needs. This work could coincide with CITL’s third cohort of CITL Fellows who will be working in these areas. A possible “roundtable” featuring CITL Fellows or white paper could come from this collaboration. There is student interest to work with COT to educate faculty on accommodation issues from the students’ point of view. A DRC student representative met with Chair Helmer spring quarter to discuss student concerns.

- As mentioned in the COT 2017-18 report, understanding how COT and CITL can best complement one another should be considered and discussed. The above initiative could be a good opportunity for understanding various roles. The final COT meeting made it clear that COT does not want to only participate in policy related matters, but would like to have a more active role with pedagogy initiatives.

Respectfully Submitted;
COMMITTEE ON TEACHING
Nicholas Brummell
Sylvanna Falcón
John MacMillan
Boreth Ly (W,S)
Kimberly Adilia Helmer, Chair

Stephanie Bailey (NSTF)
Jim Phillips, sits with, Director of Learning Technologies
Jody Greene, sits with, CITL Director
Chessa Adsit-Morris, Graduate Student Rep

August 31, 2019
Appendix 1. COT SET questions administered in Winter 2019

METHODS
IRAPS survey and assessment analyst conducted statistical data analysis. The goals of the analyses were two-fold: to verify that the new SET questions have reliability (same or similar courses produce similar SET results), and to verify that the new SET questions have validity (questions measure what we expect them to).

Reliability of the new SET questions can only be measured based on SETs done in two sections of the same course taught by the same instructor (since we cannot ask students to evaluate the same course twice). We examined SETs results from two sections of a large course taught by the same instructor in the same quarter. We found the results to be very similar (based on chi-squared tests).

Validity of the new SET questions is established when we find consistency (1) across quantitative questions, (2) in relation to the class type (subject) or size, and (3) in the interpretation of the quantitative questions by students based on follow-up questions. We compared the results of two relatively large STEM courses, math (M) and physics (P), as well as a small writing class (W). A total of 181 students submitted SETs for M course, 152 students – for P course, and 14 students – for W course. It is important to note that these courses were taught by different instructors, and had different student populations, both in terms of their class level and their preparation.

KEY FINDINGS
● The new SET questions (quantitative) have reliability in terms of producing consistent results for similarly taught courses (in our case, the same course by the same instructor in the same quarter).
● Quantitative analyses of the new SET questions examined how students’ responses were distributed in each course (frequencies and cross-tabulations) and the relations between different questions (crosstabulations and correlations). These analyses did not reveal any anomalies. This suggests that the new SET questions have a reasonable degree of validity, including convergent validity (the questions we expect to have consistent responses are indeed significantly correlated).
● Analyses of follow-up explanations for several questions found that students responded consistently with their quantitative responses. Based on the qualitative analyses, COT made a few minor revisions to improve clarity (for example, Q21) and to shorten the form (by combining two open-ended questions Q16 and Q17 in one).
● In selecting questions for a teaching table, we recommend to consider Q5, Q6, and Q12, which focus on the instructor’s overall organization of class time (Q5), clear communication of disciplinary knowledge (Q6), and delivery of instructor-led in-class activities (lectures, demonstrations etc.) (Q12) respectively. All three questions are well correlated, which is a good indicator of the questions’ quality and consistency in students’ responses. One or two of these questions could be sufficient.
● We also considered Q13 a possible candidate for a teaching table. The analysis shows that Q13 is distinct from Q12, and more useful for instructors of courses with elements of active learning during class time (in other words, may be not uniformly useful for all class types).
● All three background questions are sufficiently clearly articulated, produce meaningful responses, and have a sufficient number of response options (very few students selected “other”).
● All three student engagement questions are sufficiently clearly articulated, produce meaningful responses, and have a sufficient number of response options.

CONSISTENCY IN QUESTIONS BASED ON TWO SECTIONS TAUGHT BY THE SAME INSTRUCTOR
We examined the reliability of the new SET: whether students responded similarly in two sections taught by the same instructor in the same quarter. Two sections of the course included very similar students in
terms of their class level and reasons for taking the course. We compared student responses in section one with section two using chi-squared analysis. We analyzed every question in the three sections of the SET: student background, student engagement, and instructor/instruction questions.

We found that students in two sections responded to each question similarly, which suggests that the new SET questions are reliable. There were no statistically significant differences among students in the two sections of the course.

**BACKGROUND QUESTIONS**

There are three questions that provide information on student background:

- student’s current class standing (Q1),
- reason for taking the class (Q2), and
- feeling prepared for the work in the course by their previous coursework (Q21); this question may also provide feedback on curricular cohesion in the major (depending on the course).

Based on our analysis summarized below, we concluded that all three background questions are sufficiently clearly articulated, produce meaningful responses, and have a sufficient number of response options (very few students select “other”).

**Q1. What is your current class standing at UCSC?**

The composition of two courses differed significantly. The majority of students in course M were freshmen and sophomores (77%), whereas in course P the majority (90%) were juniors and seniors.

**Q2. Why are you taking this class?**

Almost all (90-94%) students in P and M courses are taking the course because it is required for the major. The list of reasons seems to be comprehensive; every option was selected, and overall, very few students in each course (1-7%) selected “other.”

**Q21. Did you feel prepared, by prerequisites or prior coursework, for the work required in this course?**

Almost all students (89%) in M course felt at least somewhat prepared for this course, compared to 77% of students in P course. The differences in these results reflect the type of course P, which is a considerably more self-contained, difficult course, than M course. Based on the analysis of the follow-up responses from students we made a small revision to the phrasing of the question.

<table>
<thead>
<tr>
<th>Course M</th>
<th>Course P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to comment</td>
<td>9%</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>2%</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>29%</td>
</tr>
<tr>
<td>Prepared</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>178</td>
</tr>
</tbody>
</table>

**STUDENT ENGAGEMENT QUESTIONS**

They include three questions:

- about class attendance (Q3),
- hours spent on studying for the course outside of class (Q4), and
- readings completed for the course (part of Q16).

Our analysis focused on finding meaningful patterns in student responses to examine validity of these questions and of the questions about the instructor.

**Q3. What percentage of class meetings taught by this instructor (in person or remotely, not counting sections or labs taught by others) did you attend? (Note: 1 week = 10%)**

For example, we found that exactly the same proportion of students (59%) of both large STEM courses attended 75-100% of classes, but over a quarter (28%) of students in P course and only 15% in M course attended under 50% of classes. This seems to be a reasonable variation given both similarities (large STEM lecture courses) and differences between the two courses, possibly related to student engagement as P course had more seniors than M course.
More importantly, the amount of classes attended (Q3) was significantly related to how students responded to questions about the instructor: Q5 (effective use of class time) and Q6 (communicated clearly). Students who attended fewer than 50% of class meetings were significantly less likely to rate highly the instructor’s use of class time and communication skills than students who attended 75-100% of class meetings (p<.001). The same pattern was found in their ratings of instructor-led presentations (Q12) and in-class activities (Q13). Low class attendance also reduced the instructor’s impact on student engagement (Q9) (p=0.56).

Table 2. Percentage of class meetings attended and ratings of the instructor (Q5 and Q6), instructor-led presentations (Q12) and in-class activities (Q13) in large STEM courses, N=333

<table>
<thead>
<tr>
<th>Percentage of class meetings attended</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5. The instructor used class time effectively to support my learning. Very frequently</td>
<td>15%</td>
<td>23%</td>
<td>33%</td>
<td>41%</td>
</tr>
<tr>
<td>Q6. The instructor communicated and explained concepts clearly. Very frequently</td>
<td>13%</td>
<td>19%</td>
<td>42%</td>
<td>37%</td>
</tr>
<tr>
<td>Q12. Lectures and other instructor-led presentations were well structured and had clear goals. Very frequently</td>
<td>15%</td>
<td>19%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Q13. In-class activities were well structured and had clear goals. Very frequently</td>
<td>13%</td>
<td>13%</td>
<td>34%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Q4. About how many total hours per week, outside of class meetings, did you spend on work for this course?
There were course-specific differences in the number of hours spent on studying outside of class: 22% of course M students and 43% of course P students spent 7 or more hours studying outside of class weekly. Yet a similar proportion (20-23%) spent only 0-3 hours.

Table 3. Number of hours spent weekly on studying outside of class

<table>
<thead>
<tr>
<th>Course M</th>
<th>Course P</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 hours</td>
<td>23%</td>
</tr>
<tr>
<td>4-6 hours</td>
<td>55%</td>
</tr>
<tr>
<td>7-9 hours</td>
<td>17%</td>
</tr>
<tr>
<td>10-12 hours</td>
<td>4%</td>
</tr>
<tr>
<td>13 hours or more</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
</tr>
</tbody>
</table>

Q16. I found the assigned reading I completed to be useful to my learning in the course.
Students varied in their evaluation of assigned readings. Students in M course were more likely to find the readings useful/very useful than in P course. Yet, 55% of students in P course and 50% in M course did not do the readings or said there were no assigned readings. (These results are not shown in tables). Students who found the assigned reading useful or very useful were significantly more likely to rate highly the instructor’s use of class time compared to students who did little to none of the assigned reading (see Table 4).

Table 4. Completing the assigned reading and % of “very frequent” use of class time and clear communication

<table>
<thead>
<tr>
<th>Reading completed</th>
<th>No assigned reading</th>
<th>I did little to none of the assigned reading</th>
<th>I found the reading somewhat useful</th>
<th>I found the reading useful</th>
<th>I found the reading very useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5. The instructor used class time effectively to support my learning. Very frequently</td>
<td>33%</td>
<td>27%</td>
<td>21%</td>
<td>49%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Q6. The instructor communicated and explained concepts clearly. **Very frequently**

36% 16% 27% 39% 73%

**QUESTIONS ABOUT THE INSTRUCTOR AND INSTRUCTION**

They included two sets of questions, with all questions on a 5-point scale, and an option “unable to respond” (don’t know or not applicable). Please note that the **scale is designed to measure the frequency** with which the instructor had done X or a given activity has occurred. The 5-point scale has a balanced range with two low ratings (“never” and “occasionally”), one rating in the middle (“somewhat frequently”), and two high ratings (“frequently” and “very frequently”) to allow students respond without forcing them to select a too high or a too low response.

Set 1.

Q5. The instructor used class time effectively to support my learning.
Q6. The instructor communicated and explained concepts clearly.
Q7. The instructor provided useful feedback on my assigned work (put “unable to comment” if you received feedback on your assignments only from a Teaching Assistant).
Q8. The instructor clearly communicated how assignments would be evaluated and/or graded.
Q9. The instructor helped me find ways to engage with the course materials. (*with follow-up).

Set 2.

Q11. I understood the learning goals or learning objectives of the course. (*has a different set of responses)
Q12. Lectures and other instructor-led presentations were well structured and had clear goals.
Q13. In-class activities were well structured and had clear goals.
Q14. Problem sets, writing assignments, and other homework, over the course of the quarter, helped me feel prepared for examinations, papers, and projects. (*with a follow-up).

**CORRELATION ANALYSIS OF Q5, Q6, Q12, and OTHER QUESTIONS**

We conducted correlation analyses of the SET questions to explore whether students tended to respond similarly, but not identically which would be redundant (identical items have correlation r=1.00). Please note that we need the questions to be correlated because they are measuring different aspects of teaching. Only questions with the same scales were included in this analysis.

We found that **Q5 and Q6 are well correlated with each other (r=0.8) and with Q12 (r=0.7)**. The next level of correlations is around r=0.5: Q5 and Q6 are correlated with Q12 and Q14.

Table 5. Correlation analyses (all significant at p<.001), M, P, and W courses, N=343.

<table>
<thead>
<tr>
<th>Question</th>
<th>Q5</th>
<th>Q6</th>
<th>Q8</th>
<th>Q9</th>
<th>Q12</th>
<th>Q13</th>
<th>Q14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5 Use of class time</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6 Communicated concepts clearly</td>
<td>0.82</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8 Communicated grading policy</td>
<td>0.45</td>
<td>0.47</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9 Helped engage with course</td>
<td>0.52</td>
<td>0.54</td>
<td>0.49</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12 Instructor-led presentations</td>
<td>0.69</td>
<td>0.69</td>
<td>0.41</td>
<td>0.51</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13 In-class activities</td>
<td>0.42</td>
<td>0.43</td>
<td>0.30</td>
<td>0.39</td>
<td>0.51</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Q14 Low stakes assignments helped prepare for high stakes</td>
<td>0.53</td>
<td>0.55</td>
<td>0.37</td>
<td>0.44</td>
<td>0.57</td>
<td>0.37</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Another way to **examine relations between the questions is to look at the discriminatory power of an individual question**: for example, do students with low responses to Q5 also give low ratings across the board, not just to one question? So for our purposes, we examined the responses of a subsample of students (from two courses) who gave low ratings. The second column in Table 6 shows the responses of students who selected “never” or “occasionally” about the instructor using class time effectively. The majority of these students (80%) gave the same low rating to Q6 (effective communication) and 73% to Q12 (instructor-led presentations).
This finding suggests that if there were more unsatisfied students like these 12%, the majority of them would give low ratings to Q5, Q6, and Q12. To confirm this we would need a more diverse selection of courses.

Table 6. Analysis of low ratings across the questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Q5 responses: Never or occasionally (n=46)</th>
<th>Q6 responses: Never or occasionally (n=47)</th>
<th>Q12 responses: Never or occasionally (n=49)</th>
<th>Q13 responses: Never or occasionally (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5 Use of class time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6 Communicated concepts clearly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8 Communicated grading policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9 Helped engage with course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12 Instructor-led presentations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13 In-class activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, we also calculated Cronbach’s alpha, a measure used to identify survey items with internal consistency describing one broad characteristic of a phenomenon. If considered as a set, Q5, Q6, and Q12 have the highest Cronbach’s alpha (0.893). At the same, Q13 is also closely related to this set but in a distinct way, measuring a different aspect, the one that is more dependent on the students own engagement. For example, only 60% of students who rated low the instructor’s use of time would also rate low how the in-class activities were organized (See Table 6).

Q7: USEFUL FEEDBACK ON ASSIGNMENT BY CLASS SIZE

We analyzed students’ responses to Q7 (useful feedback on assigned work). We found that students in the small class where the instructor rather than the TA was providing feedback responded to the question as expected. In this case, the vast majority of students (93%) received useful feedback throughout the course. This finding suggests that this question is useful for small classes where the instructor grades student work. It is not useful for classes where TAs grade student work.

Table 7. Useful feedback on assigned work

<table>
<thead>
<tr>
<th></th>
<th>W (N=14)</th>
<th>M (N=180)</th>
<th>P (N=140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very frequently</td>
<td>79%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Frequently</td>
<td>14%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td>Somewhat frequently</td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>0%</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Never</td>
<td>0%</td>
<td>4%</td>
<td>21%</td>
</tr>
<tr>
<td>Unable to comment</td>
<td>0%</td>
<td>53%</td>
<td>48%</td>
</tr>
</tbody>
</table>

Q9: USEFUL FEEDBACK ON ENGAGING PRACTICES

We analyzed the follow-up responses to Q9. The instructor helped me find ways to engage with the course materials. Most students provided short, reflective comments on what aspects of the instructor’s teaching style (e.g., enthusiasm for the subject, caring about students), assignments, and projects they enjoyed or increased their enthusiasm for the course. These comments were distinct from all other follow-up questions (e.g., about helpful aspects of the course or what needs to improve). Q9 (with quantitative responses) will allow instructors to compare their results over time; but without the qualitative detail (Q10), it won’t be useful for identifying practices that work particularly well in respect to increasing student engagement. We recommend keeping both Q9 and Q10 to support instructor’s improvement of teaching.

Q14. Problem sets, writing assignments, and other homework, over the course of the quarter, helped me feel prepared for examinations, papers, and projects.
Students provided short thoughtful responses regarding low stakes assignments vis-a-vis high stakes assignments.

Open-ended questions Q16, Q17, Q18 at the end of the SET

A close reading of student comments provided in Q16 and Q17 revealed that students could consistently distinguish teaching practices and course elements. For example, they would comment about in-class demonstrations in both questions. At the same time, the comments overall provided a lot of useful detail about what worked for students.

Here is the revised, consolidated question to replace Q16 and Q17:
Please describe any specific teaching practices and materials (lectures, seminar discussions, small group activities, demonstrations, instructional videos, homework, individual conferences, study guides, papers, etc.) the instructor used that you found helpful or unhelpful to your learning in this course.

Q18. “Is there anything else you would like to add?” provided distinct comments about the instructor and instruction. Many students thanked the instructor for doing a very good job while others expressed their frustration. Overall, it contained potentially very useful information that could provide context for student responses in the rest of the SET form. We recommend to keep the question as is.

Q20 (test Q21). Did you feel prepared, by prerequisites or prior coursework, for the work required in this course?

Analysis of the follow-up responses show that some (about 2%) students did not understand the question. They said that the course had no prerequisites while other students in the same class responded that they felt prepared by the AP course they took in high school.
Since the analysis shows this question to be informative (it shows whether students feel similarly or differently prepared to do the work in the class, as well as the extent to which the prerequisites and other courses in the curriculum prepare students to do the work), I suggest to revise the question as follows:

Did you feel prepared, by prerequisite or prior coursework at UCSC, community college, or high school, for the work required in this course?

- 1. Unable to comment
- 2. Not at all prepared
- 3. Somewhat prepared
- 4. Prepared
Appendix 2. Pilot Version of the SETs Administered in Fall 2018

Note: In this pilot we decided to focus on the learner and their learning experience and have omitted one question on instruction and replaced it with student’s experience of intellectual challenge as a measure of teaching quality and student engagement.

Another change, in an attempt to separate students’ dissatisfaction with grading and conflating those comments with their learning experiences, we have created a separate question at the end. These changes are a pilot.

CLASS LEVEL
Q1. What is your current class standing at UCSC based on your units?

• Freshman/first year
• Sophomore/second year
• Junior/third year
• Senior/fourth year
• Fifth-year senior or more
• Master’s student
• PhD student
• Other, please explain ____________

MOTIVATION

Q2. Are you taking this class to meet one of the following requirements?

• Required for major/minor
• Elective for major/minor
• GE requirement
• I need units to graduate
• None of the above

Q3. Do you have other reasons for taking this class? If yes, select the most important reason.

• No
• Yes, to prepare for job market or graduate school
• Yes, because of personal interest in this topic
• Yes, to get a good grade
• Other, please explain ____________

If you answered "Other" please explain: ______________

PERCENTAGE OF CLASSES ATTENDED

Q4. What percentage of class meetings (in person or remotely) did you attend?
• 75-100%
• 50-74%
• 25-49%
• 0-24%

TOTAL HOURS, OUTSIDE OF CLASS MEETINGS

Q5. About how many total hours a week, outside of class meetings, did you put into this course?

• 0 hours
• 1-3 hours
• 4-6 hours
• 7-9 hours
• 10-12 hours
• 13 hours or more

LEARNING: MAIN SKILLS AND KNOWLEDGE

Q6. What main skills and/or knowledge did you learn or improve in this course?

INSTRUCTION: SPECIFIC COURSE ELEMENTS

Q7. Please comment on specific learning elements of the course such as lectures, syllabus, films, in-class activities, field trips, homework, or projects (excluding grading scheme). Which was the most effective/helpful for your learning?

LEARNING: AMOUNT

Q8. How intellectually challenging was your learning experience in this course?

• Exceptionally challenging
• Very challenging
• Moderately challenging
• A little challenging
• Not challenging

Q9. Please restate your answer and briefly explain it. For example, “My learning experience was very intellectually challenging because …”

Q10. How much do you feel you learned in this course, including in-class activities and learning you did on your own?

• Exceptional amount
• A lot
• A moderate amount

• A little
• Almost nothing
Q11. Please restate your answer and briefly explain it. For example, “I learned a lot because …”

SUGGESTIONS

Q12. Do you have any suggestions for improving specific course elements to help students like you learn in this course (excluding grading)?

Q13. If you have any comments regarding how your performance was graded in this course, please explain below.
Appendix 3. Final SET 5/21/19

**Student Experience of Teaching (SET) Survey**  
*A Collaboration of COT and CITL, in consultation with IRAPS,  
Incorporating input from CAAD, CAP, CEP, APO, and SEC*

Please note that bolded questions 5, 6, and 12 were selected for the Teaching Table. Footnotes should be eliminated for students, but are preserved here as a record.

**The purpose of this anonymous survey is:**

1. To give you a chance to reflect on how your experience with your instructor influenced your learning in the course;
2. To give your instructor feedback that may be helpful in improving the effectiveness of their *instruction* or the *design* of this course.
3. To give university administration and instructor’s department/program/college evidence of your instructor’s teaching effectiveness for their personnel reviews.

The instructor will not see responses until after grades have been submitted.

Please *only comment on your experience with the primary instructor*. Please fill out a *separate survey for any teaching assistants* for this course.

**STUDENT INFORMATION**

1. What is your current class standing at UCSC?
   - Freshman/first year
   - Sophomore/second year
   - Junior/third year
   - Senior/fourth year
   - Fifth-year senior or more
   - Master’s student
   - PhD student
   - Other

2. Why are you taking this class?
   - Required for my major/minor
   - Elective for my major/minor
   - Part of a proposed major/minor I am exploring
   - To fulfill a GE requirement (outside my major/minor)
   - General interest in the topic
   - Other reasons
3. What percentage of class meetings taught by this instructor (in person or remotely, not counting sections or labs taught by others) did you attend? (Note: 1 week = 10%)
   - I withdrew from the course.
   - 0-24%
   - 25-49%
   - 50-74%
   - 75-100%

4. About how many total hours per week, outside of class meetings, did you spend on work for this course?
   - 0-3 hours
   - 4-6 hours
   - 7-9 hours
   - 10-12 hours
   - 13 hours or more

**FEEDBACK ON INSTRUCTION:**

*Instructions to students:* Please respond as to how frequently the instructor did each of the following.

(Scale for 5-9 is: unable to comment/never/occasionally/somewhat frequently/frequently/very frequently)

5. The instructor used class time effectively to support my learning.

6. The instructor communicated clearly and explained concepts effectively.

7. The instructor provided useful feedback on my assigned work (put "unable to comment" if you received feedback on your assignments only from a Teaching Assistant).

8. The instructor clearly communicated how assignments would be evaluated and/or graded.

9. The instructor helped me find ways to engage with course content.

**Comments** (OPEN ENDED)

---

1. IRAPS report suggests that Q5 could be a possible teaching table question based on correlation (convergent validity) and qualitative analysis.
2. IRAPS report suggests that Q6 could be a possible teaching table question based on correlation (convergent validity) and qualitative analysis. At COT’s 5.21.19 meeting, this question was further refined (i.e., communicated clearly, explained concepts effectively).
3. IRAPS report recommends that if Q9 remains that it should be followed by its explanation in Q10 because students responded in a variety of ways; qualitative detail is needed for the question to be useful to instructor. Question 9 could be useful for tracking improvement over time. Changes cannot be made unless you have specific qualitative feedback. Students understood the word “engaged.” At the COT 5.21.19 meeting "materials" was replaced with "content."
10. Please restate your answer to Question 9 and explain it. For example, the instructor helped me engage with the course materials “somewhat frequently” because….

**FEEDBACK ON COURSE:**

(Scale for 11: never understood the goals/at the beginning of the course/at the end of the course)

11. I understood the learning goals or learning objectives of the course.

(Scale for 12-14 is: unable to comment/never/occasionally/somewhat frequently/frequently/very frequently)

*Instructions to students:* Please only comment if the course contained the specific activity addressed in questions 12-14. Otherwise select “unable to comment.”

12. Lectures and other instructor-led presentations were well structured and had clear goals.

13. In-class activities were well structured and had clear goals.

14. Problem sets, writing assignments, and other homework, over the course of the quarter, helped me feel prepared for examinations, papers, and projects.

(Scale for question 15 is: no assigned reading/I did little to none of the assigned reading/I found the reading somewhat useful/I found the reading useful/I found the reading very useful)

15. I found the assigned reading I completed to be useful to my learning in the course.

**Comments** OPEN-ENDED

16. Please describe any specific teaching practices and materials (lectures, seminar discussions, small group activities, demonstrations, instructional videos, homework, individual conferences, study guides, papers, etc.) the instructor used that you found helpful or unhelpful to your learning in this course.

17. What suggestions, if any, do you have to improve this course? Please be as specific as possible.

18. Is there anything else you would like to add?

---

4 Students provided short thoughtful responses regarding low stakes assignments vis-a-vis high stakes assignments.

5 Question 16 is now a consolidation of two former questions: “teaching practices” and “course elements.” Many students could not differentiate between teaching practices and course elements in their comments. Please see the IRAPS report. As a result we combined these questions.
Preparation for the Course
19. Did you feel prepared, by prior coursework at UCSC, community college, or high school, for the work required in this course?
   - Unable to comment
   - Not at all prepared
   - Somewhat prepared
   - Prepared
   - Very prepared

Comments  OPEN-ENDED
20. Please restate your answer to Question 19 and explain it. For example, I felt somewhat prepared because .... . .

---

6 Question 19 has been made more specific based on the IRAPS study.
Appendix 4. Literature Review on SET Summary Questions

**Abbreviated Literature Review on SET Summary Questions**

Below and attached are five articles that can ground our conversation about the validity of summary questions regarding teaching effectiveness and course quality. Some articles deal directly with the validity of summary questions. Others consider the definition of teaching effectiveness. Still others consider the relationship between SET results and other indicators of student learning.

We hope that CAP will find these useful.

1. **Summary questions and teaching effectiveness**


   *The top three items in the recap:*
   a. SET does not measure teaching effectiveness.
   b. Controlled, randomized experiments find that SET ratings are negatively associated with direct measures of effectiveness. SET seems to be influenced by the gender, ethnicity, and attractiveness of the instructor.
   c. **Summary items such as “overall effectiveness” seem most influenced by “irrelevant factors.”**

2. **Relationship between SET results and actual learning**
   Kornell, Nate, and Hannah Hausman, “Do the Best Teachers Get the Best Ratings?” *Frontiers in Psychology* 7 (April 2016), Article 570.


   This is a relatively well known study of the existing studies, and includes important information about the correlation between SET scores and first course performance vs subsequent course performance:

   “Two recent studies found that when learning was measured as performance in subsequent related courses (i.e., when deep learning was measured), teachers who made relatively large contributions to student learning received relatively low teacher ratings (Carrell and West, 2010; Braga et al., 2014). **If a college’s main goal is to instill deep, long-term learning, then teacher ratings have serious limitations.**” (6)
3. Definition of “effective teaching”


There is no consensus among scholars concerning the definition of “effective teaching” or teaching competence (Spooren et al., 2013), so how is it reasonable to expect students who have little to no content knowledge to be able to evaluate it? Yet university administrators, and tenure and promotion committees act as if the relationship between SET and competent teaching is clear and unequivocal, and that therefore it is reasonable to require faculty to obtain “high” SET scores because that means that their teaching performance is superior. In fact, this relationship is anything but unequivocal (for example, Langbein, 2008).

4. Validity of summary questions

https://search.proquest.com/docview/614331247/fulltext/A9917674253C4E58PQ/3?accountid=14523

The authors recommend rejecting a narrow criterion-related approach to validity and adopting a broad construct-validation approach, recognizing that effective teaching and SETs that reflect teaching effectiveness are multidimensional; no single criterion of effective teaching is sufficient; and tentative interpretations of relations with validity criteria and potential biases should be evaluated critically in different contexts, in relation to multiple criteria of effective teaching, theory, and existing knowledge. (PsycINFO Database Record (c) 2016 APA, all rights reserved) (Source: journal abstract)
Marsh and Roche explain: “Global or overall ratings cannot adequately represent the multidimensionality of teaching. They also may be more susceptible to context, mood, and other potential biases than are specific items that are more closely tied to actual teaching behaviors, leading Frey (1978) to argue that they should be excluded” (1188, par.5).

5. Evaluating students’ evaluations of professors

This paper contrasts measures of teacher effectiveness with the students’ evaluations for the same teachers using administrative data from Bocconi University. The effectiveness measures are estimated by comparing the performance in follow-on coursework of students who are randomly assigned to teachers. We find that teacher quality matters
substantially and that our measure of effectiveness is negatively correlated with the students’ evaluations of professors. (Source: journal abstract)

“The interpretation of the students’ evaluations as measures of the quality of teaching rests on the – explicit or implicit – view that the students observe the quality of teaching in the classroom and, when asked to report it in the questionnaire, they do so truthfully. Our results, however, contradict this view and seem more consistent with the idea that students evaluate teachers on the basis of their enjoyment of the course or, in the words of economists, on the basis of their realized utility… In order to support the claim that the students’ questionnaires reflect the students’ enjoyment of the class experience rather than the quality of teaching, Table 10 shows that the evaluations are significantly affected by weather conditions on the day in which they were filled. There is ample evidence that people’s utility (or welfare, happiness, satisfaction) improves with good meteorological conditions.” (84)
Appendix 5. Memes to Encourage SET Response

Test NEW Survey Messaging

course-evals@ucsc.edu
to me

IT’S YOUR TURN

Dear Kimberly,

Your voice matters! Go to sets.ucsc.edu and click the login button.

or you can access your surveys by clicking on the "SETS - was course evals" link in any Canvas site.

The following course surveys are available for you to complete in WDYT.
TESTTEST - TEST : Rebecca Poet

Surveys close on 12:45 AM on Fri, May 17, 2019 PDT.
course-evals@ucsc.edu
to me

DID YOU NEED A REMINDER?

The following course surveys are available for you to complete.
TESTTEST - TEST : Rebecca Peet

Go to [sets.ucsc.edu](http://sets.ucsc.edu) and click the login button.
or click on the "Sets - was course evals" link in any Canvas site.

Surveys close on 12:45 AM on Fri, May 17, 2019 PDT.