To: Henning Bohn, Divisional Chair  
Academic Senate

Academic Deans

John Talbott, Associate Vice Chancellor  
Academic Personnel

Fr: Carol Genetti, Associate Dean  
Division of Humanities and Fine Arts

George H. Michaels, Executive Director  
Instructional Development

Via: Gene Lucas, Executive Vice Chancellor

Re: Online Delivery of Course Evaluations

In January of this year, EVC Lucas formed a work group to develop a plan for delivering course evaluations online. The work group is co-chaired by Carol Genetti and George Michaels, and includes representatives from the EVC's office, the College of Engineering, Academic Personnel, Letters and Science IT, and campus IT. The purpose of this memorandum is to inform the Senate of the need for this transition, its potential benefits, and to solicit any suggestions, questions or concerns that the campus leadership might have about this change and its potential implications. Feedback will be carefully considered in the planning and implementation process.

Background

The ESCI system was originally designed in the late 1970's in direct response to undergraduate student outcry over the quality of undergraduate instruction in the UC system at the time, and the lack of any mechanism for providing faculty members with student feedback on courses and instruction. The student protests resulted in the formation of the Instructional Improvement Program, the allocation of a line item in the State budget to address these issues, and a study commissioned by the Office of the President on the need for course evaluation systems on the UC campuses. The Instructional Improvement Program took different forms on each campus; UC Santa Barbara created Instructional Development, whose first Dean was Brian Fagan. Its mission was to develop a flexible system for providing timely feedback to faculty members on courses and instruction, and to develop and administer a grants program to support course design and development. The student feedback survey system became the Evaluation System for Courses and Instruction (ESCI), and the grants program became the Instructional Improvement Grant Program.

The entire ESCI system was developed by Dr. Stan Nicholson, an expert in educational psychology with an emphasis on evaluation and assessment, and Mr. Rick Johnson, an expert in survey design and analysis. The original system was hosted on the campus mainframe computer for the processing and printing of reports, and relied on preprinted data collection sheets for collecting student responses to individual
end-of-course surveys. Course surveys were designed in consultation with individual faculty members and/or departments, with questions for the surveys being drawn from an item pool consisting of questions that had been vetted for clarity and appropriateness of the accompanying response scales (since different response scales could be used for every question). From the beginning, the intent of the system was to allow faculty members or departments to modify the questionnaire from quarter to quarter so that the questionnaire was always asking questions of interest to the faculty member. Another hallmark was the premise that the results of ESCI surveys were the property of the individual faculty member, and could only be shared with the faculty member’s permission. Over time, departmental policies and practice required a standard departmental set of questions to be reported to the department for purposes of curricular analysis and academic personnel responsibilities. Eventually the Senate approved the adoption of campus-wide standard items A & B for inclusion in all ESCI surveys to for purposes of standardized curricular analysis and academic personnel reporting. In addition, the system was designed to report normed results within a running five year window for the same course over time, for that question within the department, for that question within the division or college, and for that question across the campus. For the time, it was the most complete, flexible, and rigorous course evaluation tool in the country. Remarkably, it still is, thanks to the solid underlying architecture of the system.

In the late 1990s, the system was migrated from the mainframe to run on a database system on a local server; quarterly results were printed on locally attached high-capacity laser printers. Dr. Michaels and Ms. Mary Lou Ramos were responsible for that substantial effort. The transition off the mainframe made it easier to catch and correct errors, run custom reports for faculty members, and generate aggregated reports for faculty members and departments. The system has been continuously updated and upgraded since that time.

**Problems**

While the ESCI system is remarkable for its flexible questionnaire design, rapid processing of the survey data, and stellar reporting capabilities, there is one glaring problem with the system as it currently functions: the now antiquated and labor-intensive manner in which the survey data is gathered, following practices established in the 1970’s. The issues with our current delivery system can be grouped into three main areas.

First, the process is labor intensive and substantially dependent on individual staff members following a multi-step process on a rigid timeline every quarter. Specifically, it requires the following steps:

- Departmental staff members inform ID as to which questionnaire each lecture and discussion section will use in the current quarter;
- ID staff match up data on the courses, instructors, and TA’s with the questionnaire information from each department;
- ID staff print scannable header sheets for each course and section, matching them with the correct number of scantron forms for each class, then deliver them to departments;
- Department staff assemble packets containing a header sheet and the appropriate numbers of printed questionnaires and scantron sheets for each class being reviewed, then distribute them to faculty members and TA’s, together with the department-specific surveys designed to elicit narrative evaluations;
- Faculty administer the surveys, asking student volunteers to return the completed evaluation forms to the department office;
- Department staff receive the packets from the students, then collect and organize the stacks of scantrons, header sheets, and narrative evaluations;
• Scantron and header sheets are returned to the ESCI Office in ID, while narrative evaluations are either compiled in binders to be stored in the department office, typed up, or delivered to faculty members to keep;
• At ID, the scantron and header sheets for each course are scanned for inclusion in the ESCI response database;
• ESCI results are computed and final reports for the quarter are generated;
• Up until last year, those reports were printed, collated, and then returned to the departments for distribution to the faculty and TAs, typically after departments create a photocopy to be kept in the instructor’s personnel file; now ID generates password-protected pdf files for each report and posts them on a secure website;
• Department staff download zip files of the reports for a given quarter and sends them electronically to the faculty and TAs, keeping a copy for departmental records; narrative evaluations are distributed, processed, and stored following a range of department practices.

The inefficiency of this system has become especially untenable in the face of recent reductions in staffing. There is also a level of frustration created by the obvious advancements in technologies that have made such methods obsolescent.

The second problematic area concerns security of the documents. The entire set of evaluations is in student custody from the time of collection in the classroom until the delivery of the evaluations to the departments. There is also a period when the forms are in department offices and frequently are not secured. Over the years various problems have arisen as a result. These have included whole stacks of forms being lost or misplaced, forms being modified after the fact, forms being ruined by exposure to rain or water from broken pipes, and header sheets being switched between stacks of forms, so that the responses are tied to the wrong set of questions, instructor, section, or course. There have also been cases of narrative evaluations being lost, fabricated, or removed from the original set.

The third set of problems revolves around the collection of handwritten narrative evaluations in class. The current ESCI system can accommodate questions that require a narrative response, but the system can not process nor store them. Departments or faculty members who want to collect narrative responses must process and report those separately from the main ESCI processing a reporting system. This adds an additional burden to departmental staff. There are also issues with handwritten responses. Some students are concerned about the lack of anonymity of their handwritten responses so don’t write anything or temper their responses. Also, the allocated class time is sometimes too short to allow students to write a thoughtful response. Finally, some handwritten responses are illegible.

The task of the current work group is to determine how to use Internet technologies to solve these problems. By making course evaluations available to students online, all of the aforementioned issues would be resolved:

• The workload of departmental and ID staff would be substantially reduced as the logistical issues of transporting, organizing, distributing, collecting, reorganizing, and returning all of those forms would be eliminated;
• The system would be secure, with students logging in to a secure website and the responses feeding directly into the ESCI database, thus preventing the possibility of loss or tampering;
• Students would have a greater sense of assurance of anonymity as their responses would not be written by hand;
• And, students would have the time to provide thoughtful responses on both sets of questions.
Other advantages would be the saving of class time that is now devoted to the collection of the evaluations at the end of each quarter, as well as a significant improvement in reporting, as the system would generate a single, cohesive (and legible) report, inclusive of both quantitative and discursive data.

The Proposal
The work group has developed a multi-phase plan for implementing online course evaluations. We seek the Senate’s comments on the outline of the plan, reaction to the proposed timeline, and any suggestions, questions or concerns that may be raised by the Senate membership in response to this change in procedure.

Phase One - Awareness
This is the current phase. In addition to requesting input from the Senate and Deans, we have contacted the Registrar’s Office, Student Affairs, and the Gauchospace team for information on ways in which online survey delivery can leverage current campus systems and processes, and to find out if there are any negative impacts to their systems that need to be considered and avoided during the design process. We will also be requesting faculty input via a survey. This will serve to make the faculty aware that this effort is underway and to elicit faculty input on future system enhancements. Current ideas are to make individual access to ESCI reports available online and to create a web interface that will allow faculty to redesign their questionnaires at the beginning of each quarter. This phase will continue through Spring quarter 2011.

Phase Two - Technical Design and Implementation
This phase will primarily involve the work group, Instructional Development staff, and potentially members of the Student Affairs IT staff and the Gauchospace team. In this phase we will finalize the technical design for the delivery system, acquire any additional hardware necessary, implement the survey delivery system code, and do preliminary testing. Initial design meetings have already occurred and have been very productive. Significant portions of the necessary elements are already in place in the existing ESCI system, including the question pool, the survey definitions for all courses, and the mechanisms for correctly connecting questionnaires with the courses and instructors. The following functions remain to be developed: authentication of students using their UCSB NetID; connection of students with the list of courses for which they are enrolled; the association of a particular survey with the course it is submitted for; delivery of the questionnaire as a web form; submission of responses to the ESCI server; notification for the student that the survey has been completed. In addition the system will need to have a timed script that automatically sends students a weekly reminder email during the survey period, for as long as they have uncompleted surveys pending. We anticipate completing this work during the summer of 2011.

During Phase Two, we will also establish a subcommittee of faculty members to work in conjunction with the Instructional Development staff to assess the question pool. In addition to weeding and streamlining the current question bank, this group will consider adding new questions that embody current approaches to evaluation, including those that prompt students to reflect and report on their learning and skills development. This activity will take place either in the summer or early fall of 2011, depending on faculty availability. This is independent of the technical work, so the two activities to be contemporaneous.

Phase Three - Piloting
The EVC has requested that the online survey system be piloted during Fall quarter 2011. We are confident that this is feasible and plan on proceeding toward that goal. For the pilot, we will solicit participation by a small set of departments that are willing to have all of their course evaluations distributed on-
line. We seek a mix of departments in terms of size and discipline, and intend to include one department each from Engineering, Education, and the three L&S divisions. We believe that a pilot with five departments will be manageable and sufficient to provide significant information on peak loads, student and faculty reactions, and other pertinent issues. Departments not in the pilot will follow traditional course-evaluation practices.

**Phase Four - Adoption**

We anticipate that the adoption phase will extend over the next three to five quarters, at which point the system will be universal. Entire departments will be brought online in a given quarter in order to keep the logistics manageable. If all goes smoothly, we could have full implementation as early as Fall Quarter 2012, no later than Spring 2013.

During Phase Four we will also be working on increasing the ways in which faculty can individually tailor the evaluations to best receive input on their course design and teaching, as well as how they access and evaluate survey results. Mechanisms for faculty input and feedback will be available throughout the process and this information will be weighed and incorporated into the system design if feasible. We plan to make ESCI reports available to faculty at anytime, via a web-based interface accessible by UCSB NetID and password. Each of these enhancements will have its own development cycle, and will be rolled out when ready throughout Phase Four.

**Incentives for Student Participation**

One of the main issues that other campuses have faced in moving to online course evaluations is a reduction in levels of student participation. Currently, more than 90% of our students complete course evaluations on average and we would like to ensure similar high levels of participation in the online environment. After surveying and discussing the literature on the subject, the work group determined that the following measures are likely to be most effective: (1) raise student awareness on the importance of course evaluation and demonstrate that student input results in positive change in instructional practice; (2) extend the period of submission to the last four weeks of the quarter; (3) construct an automated system that sends reminder emails at periods of increasing frequency; (4) allow early access to course grades for students who have completed evaluations for all of their courses (until the date that grades are due, at which point all students would have access).

**Faculty Issues and Academic Personnel**

Course evaluations are a significant component of faculty personnel cases and many faculty members are understandably sensitive about the evaluation process. It will be important to illustrate the benefits to the system for faculty members, including the savings in class time, better reporting, permanent accessibility, and the introduction of an efficient process by which they can tailor evaluations to particular classes.

The professional literature is mixed as to whether students evaluate courses more harshly in online environments than they do in class, with some studies reporting one way and other studies reporting the opposite. (The discrepancies are at least partially based on the quantitative design of the study.) It will be critical for the campus to acknowledge that the shift to the online environment may require a recalibration in our quantitative assessment of the quantitative data. In other words, the implications of a given ESCI result on Question A may change in the new environment. This fact will need to be explicitly acknowledged by all agencies that evaluate personnel decisions, including departments, deans, and the Committee on Academic Personnel. The quarter in which the new evaluation system was implemented for the de-
partment of a given candidate will need to be highlighted on the bio-bibliography and in the written documents that accompany each case. These measures should help to reassure faculty members that their personnel cases won’t be disadvantaged as a result of this technological shift.

Conclusion

ESCI was designed to fill a sorely needed gap in UC’s approach to undergraduate instruction. It has served the campus well over the years, but changes in technologies have alleviated the need for the labor-intensive and fallible techniques of data collection. We hope that the plan put forth for addressing that shortcoming meets with the approval of the Senate. The purpose of the ESCI system has always been to provide UCSB faculty and TAs with meaningful, reliable, and understandable feedback on their courses and instructional strategies. We hope that the improved method of delivery, faculty interface, and question bank will provide faculty members with new ways to effectively improve instruction. In addition, this system will boost efficiency, reduce stress for our lean departmental and ID staff, and increase cost effectiveness and environmental sustainability.

Please share this document with any of the Councils or Committees within whose portfolio this proposal would logically fall. We look forward to responses, welcome discussion, and are eager to incorporate input. Thank you for your attention to this important matter.

cc:  Tom Putnam, Associate Vice Chancellor for Information Technology
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     Toby Lazarowitz, Executive Assistant to the EVC
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