Committee on Educational Policy Annual Report 2006-07

To the Academic Senate, Santa Cruz Division:

Committee on Educational Policy's (CEP) work can be roughly divided into two categories. There is the work the Committee carries out as a matter of course, including reviews of campus programs, approval of program statements and of new and revised courses, consultations with other committees and administrative units, and consideration of student petitions. Then there are policy initiatives raised by CEP (sometimes in tandem with other bodies). CEP undertook work on several initiatives this year, in areas including general education reform, honors, and academic integrity. Our report begins with discussion of these initiatives.

I. Larger CEP Initiatives

General Education

UCSC's current general education framework was largely put in place in 1984. An attempt at comprehensive reform was narrowly voted down in the late 1990s. In an oral report to the Senate last fall, CEP articulated reasons why our campus needs general education reform. (A slideshow of that talk can be found at http://senate.ucsc.edu/cep/reportsindex.html.) There are external reasons, particularly expectations of Western Association of Schools and Colleges (WASC), UCSC's accreditation agency, but the most compelling reasons are internal. Across higher education, thinking about the meaning and functioning of general education has changed dramatically over the past decades. At the same time, our own general education objectives have lost focus.\(^1\) A re-evaluation of the *subject areas* required ("what do we think graduates should know in the new millennium?") is overdue. Going further, CEP suggests that in reforming general education we place more emphasis than we currently do on what is arguably even more important than the content of subject areas: the intellectual *skills*, ways of learning, values, etc., that we wish to impart. These could include critical thinking; writing and other communication skills; quantitative/formal reasoning; research experience; understanding of different cultures; civic engagement; and ethical exploration.

The most pressing problem in the area of general education last year concerned our writing-intensive "W" requirement, and CEP devoted the most time to researching and attempting to resolve this issue. For the past few years that campus has not been able to provide enough writing-intensive courses to enable all students to satisfy the requirement on time. Writing-based courses have particular resource needs, and it has never been clear who is responsible for paying for W courses. As units have become pressed they have begun to eliminate or restrict enrollment in their W offerings. CEP was eager to examine the W requirement in any case, because in our view the requirement does not live up to its purposes in two respects. First, it is unnecessarily

¹ It is difficult, for example, to confidently infer the purpose or definition of a UCSC "topical" course by observing courses having this designation, or to find a reliable distinction between some existing "topical" and "introductory" general education courses; on our "writing-intensive" requirement see below.

narrow in focusing purely on writing, when students in many disciplines need to become proficient at other forms of disciplinary communication, e.g. poster presentation, speaking. Second, in spite of original intentions, the Santa Cruz Regulations (SCR) do not require students to fulfill W in a manner pertinent to their own or a related discipline. CEP would like to see these pedagogical issues addressed.

In a report to the spring quarter Senate Meeting CEP made the following recommendations:

- 1. Restore the Peer Writing Assistant Program.
- 2. Provide FTE for professional writing instructors to support writing in the disciplines.
- 3. Provide Temporary Academic Staffing (TAS) funds to targeted departments or divisions where the need for W support is greatest.
- 4. Reformulate W as a requirement that students learn to write according to the conventions of their own academic field.
- 5. Broaden W to a "Disciplinary Communications" requirement encompassing not only writing but other forms of communication.

These recommendations were first aired in an oral report to the winter 2007 Senate Meeting. (CEP's written report and a slideshow of the oral report are both available at the URL given above.) At that same meeting CEP proposed that the Senate resolve to call on "the Central and Divisional administration to work with departments and with the Senate committees to find a solution to the W crisis and to allocate the funding needed for it". This Resolution was made in the context of an assumption that the funding required would be in the hundreds of thousands of dollars, and it passed unanimously. Since then CEP has begun working with individual departments to pilot new discipline-based writing-intensive programs. Together with the Committee on Planning and Budget (CPB) and with the Graduate Council (GC), the coming year's CEP plans to write a formal proposal to the administration to fund discipline-based writing along the lines of 1-3 above.

CEP intends to continue campus discussion of general education this year, collaborating with departments, other Senate committees, and the administration, towards a goal of substantial reform.

Honors

The previous year's CEP had initiated a plan to survey all campus departments and colleges about their practices and criteria for selection in determining honors in the major, pursuant to SCR 11.3:

In accordance with SR 640, each agency that has an approved major that elects to award Honors shall submit the criteria for such an award to the Committee on Educational Policy for its review, approval, and permanent record. Any change in criteria will require resubmittal.

This survey was sent out early last fall, and CEP studied responses from campus units in the winter and spring quarter. From this starting point, and with much encouragement from the

Committee on Admissions and Financial Aid (CAFA), CEP began discussing a full range of honors topics.

The issue of honors at UCSC has been addressed repeatedly in recent years. The most comprehensive study was conducted by an ad-hoc Honors Committee, which in 2004 issued a detailed analysis with recommendations. Since those recommendations emerged, the campus has learned, through a careful study of retention carried out by the Office of Institutional Research and Policy Studies with guidance from the Vice Provost and Dean of Undergraduate Education (VPDUE) and CEP, that UCSC has particular difficulty retaining its academically strongest students. (See the report at http://senate.ucsc.edu/cep/CEPretention1495.pdf.) More action on honors programs and honors designations is now needed. In the view of CEP, the recommendations of the Honors Committee are excellent and should be pursued, through whatever further discussion and amending is needed, with a goal of implementation.

Our discussions made a distinction between honors *programs* and honors *designations*. By "honors programs" we refer to a wide variety of enrichment programs and perquisites for matriculating and continuing students. UCSC currently distinguishes itself as being the only UC campus with no substantial honors program of this sort (though we note the important but much more limited Regents Scholars program). The campus VPDUE, campus admissions officers, and CAFA are unanimous in stating that the absence of any honors programs is a deterrent to some prospective students considering UCSC. We are very happy to have learned that significant funding has now been provided for the initiation of honors programs, through the office of the VPDUE. CEP intends to work with the VPDUE and CAFA in shepherding such a program into place this coming year.

"Honors designations" refers to forms of recognition based on academic excellence: departmental honors, University honors, deans' lists, and so on. After a good deal of discussion CEP offers the recommendations detailed below concerning honors designations at UCSC, many adapted from the Honors Committee report. Because they cost little but can have a significant effect in attracting and retaining students, these should be implemented as soon as possible. This will be a task for this coming year's CEP.

Whether at the departmental, college, or University level, we believe that the minimum criteria for determining honors designations should be made explicit and public. Next year CEP plans to ensure that honors criteria at all levels are included in the UCSC General Catalog.

Honors in the major

As noted above, CEP surveyed all departments and colleges on campus this past year on their policies for awarding honors designations. Currently, the criteria established by departments for honors in the major vary widely. Of greatest concern, the percentage of students receiving honors ranges from 8 percent to 45 percent according to the department. In our view, this discrepancy is difficult to justify.

² Establishing a UC Santa Cruz Campuswide Honors Program: a Report to the Academic Senate from the Honors Committee, June 2004.

While some departmental honors designations are GPA-based, others are not. Some departments consider all courses in the major for honors, others look only at the upper-division courses in the major; yet other departments count all the courses across the campuswide curriculum, a practice that strikes us as inappropriate. Many departments take into account additional criteria for honors (senior projects, recitals, etc). Unlike the disparity in percentages of awarded honors, however, the diversity of criteria for choosing the honorees appropriately reflects the specifics of individual departments.

We recommend that no more than 15 pecent of graduating students be awarded honors in any major, and no more than 5 percent be awarded highest honors. The 15 percent number should include both honors and highest honors. While these benchmarks are a recommendation rather than a requirement, CEP intends to review percentages of students granted departmental honors annually and express concern to the departments where those percentages significantly exceed the recommended maximum.

CEP will notify all departments of the new 5 percent and 15 percent criteria early in the 2007-08 academic year and work with them to have minimum eligibility criteria published in the General Catalog.

College honors

College honors are awarded with more consistency at UCSC. Once again we recommend that no more than 15 percent of graduating students be awarded honors in the college.

CEP will notify all colleges of the new 15 percent criterion early next academic year and work with them to have minimum eligibility criteria published in the General Catalog.

University honors

Because they are rooted in individual colleges, "college honors" designations can vary according to college philosophy, and their importance for students is bound up with students' identification with their colleges. These are particular strengths of college honors.

However, a drawback of the "college honors" designation is its relative unfamiliarity to employers and graduate schools outside of UCSC, where our college system may not be well understood. This unfamiliarity may put our graduates at a disadvantage when they compete with graduates from other institutions. Similarly, the current absence of any University honors designation can be a deterrent to some prospective students.

Therefore we propose to institute a new level of "University honors" based on familiar Latin honors designations: cum laude, magna cum laude, and summa cum laude. Due to the need for a standard that is simple to implement and as consistent as possible, University honors should be based solely on cumulative GPA, though defined by percentage thresholds along the lines shown below. For similar reasons, while percentage thresholds given above for departmental and college honors are CEP recommendations, thresholds for University honors would be strictly enforced.

Top 2 percent Summa Cum Laude
Below 2 percent through 5 percent Magna Cum Laude
Below 5 percent through 15 percent Cum Laude

The Honors Committee report raises an important and difficult issue regarding University honors. Departments vary widely in the rigor of their grading. If the percentage thresholds defined above are reckoned over the entire campus, then some students will fail to receive honors designations based on the major they choose. To some extent issues like this of potential unfairness are an inevitable concomitant of any system of evaluation. Addressing them may have to be part of a larger campuswide conversation about grading standards. Based on the grading data provided in the Honors Committee report, it is not obvious that it would help to determine honors within divisions, since even within divisions there is much variation in grade distributions. But this question should be studied further, perhaps with more recent data. We note that graduating students tend to compete for jobs or graduate school places with peers in similar disciplines. For those purposes, at least, differences by discipline may matter less than one would assume.

Establishment of University honors will require a change in SC Regulations. CEP plans to propose the appropriate change this fall.

Deans' Honors

CEP proposes to revive the Deans' Honors ("Deans' List") designation effective next year. This change should be noted in the Regulations.

Honors and academic integrity

CEP agreed on a couple of principles and suggested that this issue be further discussed:

- 1. There are academic integrity violations serious enough to disqualify a student (who otherwise qualifies) from getting honors designations.
- 2. In order for departments, colleges, or the Registrar to take such violations into consideration when determining honors, the relevant information must be made available to them. This is not currently done for departments.

Academic Integrity

CEP's interest in issues of academic integrity in 2006-07 arose for several reasons, including a concern that integrity violations are on the rise and that sanctions may not be applied consistently. Based on discussions this year, and a consultation with the Council of Provosts, CEP recommends that the following actions be taken. This coming year CEP will work with the college Provosts and VPDUE in pursuing these issues.

Educate faculty

Anecdotal observations suggest that faculty are far from fully and equally informed about approved policy for handling suspected violations of academic integrity. For example, faculty may refrain from reporting violations because they assume that a student will be barred from the University after any offense, however serious; faculty do not know about the option of re-adding students who drop their class after being challenged for an integrity violation; and so on.

A statement of "principles and procedures" for academic integrity (when the students in question are undergraduates) exists at this site:

http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/

A web resource is important for keeping faculty informed, but this site needs improvement on several counts. First, it is now relatively "buried", located under "difficult teaching situations" in the "teaching toolbox" at the Center for Teaching Excellence web site. **We propose adding a link to the faculty portal page**, called something like "Teaching-related policy", that would link to information not only on academic integrity but on final exam policy, grading and honors policy, etc.

Second, the existing web site is limited to a rather succinct statement of official policy. **We propose expanding it to include some** *guidance* **to faculty.** Faculty would benefit from learning more about the range of their options, likely consequences for students, and so on. Such a site should also include a range of model syllabus statements on integrity (reflecting diverse faculty approaches to the issue), and any recommendations CEP would like to make.

However good this web site becomes, we think that faculty would also benefit from having academic integrity issues and policy brought to their attention explicitly from time to time. We propose that CEP send a letter to departments at least once a year.

Educate students

Though all frosh receive orientation to integrity issues in the context of the core classes, how thoroughly this happens may depend on the course. Furthermore, core course discussions do not benefit transfer students. Students would also benefit from a web site improved as discussed above.

However, the needs of students are obviously different from those of faculty. We recommend that CEP consult with leaders of the Student Union Association (SUA) as it develops student-directed components of the web site.

Excellent web-based resources already exist outside of UCSC (such as the "Bruin Success with Less Stress" site at UCLA), and we should find a way to capitalize on these.

Finally, we recommend that CEP study the efficacy of student honor codes and pursue adopting one if the case seems compelling.

II. Other CEP work

Draft Academic Plan

CEP provided feedback on two drafts of the campus Strategic Academic Plan. The CEP chair also took part in meetings this past summer where implementation of the Plan was discussed. In its response to the second draft Plan, the Committee expressed support for the Plan's principles. It raised concerns about specific matters, however. These are laid out below.

Professional Schools

CEP looks forward to concrete proposals for professional schools that would 1) synergize well with current campus philosophy and programs, and 2) come with sufficient dedicated funding (such as from development campaigns) to require *little or no* diversion of funds from current campus programs apart from faculty FTE already provisionally allocated. Until such a time comes, a choice to pursue no professional schools should remain clearly on the table. Indeed, since there are other good uses the campus might envisage for FTE currently allocated for a professional school, the senate and administration should agree on a concrete time window within which professional school proposals will be entertained. There are two reasons for doing this. First, having such a deadline might spur on proposals that would otherwise be slower in coming. Second, we need to know when it is time to put aside discussion of a professional school and devote our scarce resources to programs of current promise and strength. CEP suggests that this window extend to no more than one year from now.

Bases for decisions

Though CEP supports a policy of "differential investment" (i.e., making targeted choices for funding rather than spreading scarce funds indiscriminately), such a policy is most likely to succeed in the context of a very open campus discussion about the bases for our choices. Here we mention just a few questions we would like to have frank discussion about. First, in making funding decisions does the campus assume differences in faculty-student or teaching assistant-student ratio by division, and if so, why? Second, is our Humanities division under-resourced in comparison to similar units at other UC campuses, as argued in detail by CPB?³ If so, what are the arguments in favor of continuing this situation? Third, in view of its continued huge loses, should we seriously curtail or abolish University Extension?

Resources and the undergraduate mission

CEP was glad to see affirmations in the Plan of UCSC's commitment to excellent undergraduate education, and to see acknowledgement (in several places) that current capacity issues must be addressed at least in part by means of permanently allocated FTE.

³ Committee on Planning & Budget Addendum to Comments on the Ten-Year Academic Plans, at http://senate.ucsc.edu/cpb/indexplan.html.

Conditions for UCSC Growth

At the spring Senate Meeting CPB submitted a Report on Conditions and Strategies for Growth (available at http://senate.ucsc.edu/cpb/.) CEP was invited to respond to this document. Because we think the issues raised in our response are important, and the data we present are interesting, we include this response in full as Appendix II. The report highlights the effect of recent campus growth on class size and capacity issues.

Retention

In the academic year 2005-06 the Senate passed a Resolution called for (among other things) "the Chancellor and Executive Vice Chancellor [to] work with the Division to establish a task force on retention that brings together those with interests and with authorities related to retention and graduation". In response to this Resolution, at the end of fall quarter 2006 CEP received a request from the Senate Chair to propose a charge and membership for such a joint task force. After extensive consultations with Senate Executive Committee, the Campus Provost and Executive Vice Chancellor (EVC), the VPDUE, Deans and other members of the administration, CEP offered the proposal given below in Appendix I. This proposal is currently under review at the CP/EVC's office.

Legislation

<u>Topical Transfer</u>

CEP proposed a change to SCR 10.2.2.3 that passed by majority vote at the fall Senate Meeting. The change eliminated a prohibition against using courses taken at other institutions to satisfy UCSC's Topical "T" general education requirement. It also removed a policy of waiving the T requirement for transfer students (depending on the number of credits transferred). The effect of this change is to "regularize" policies regarding transfer of Topical courses credit with respect to those concerning transfer of most other general education courses. CEP has since been working with the campus Articulation Officer and the Acting Director of Admissions to clarify criteria for determining satisfaction of the T requirement through courses taken elsewhere.

University Extension

CEP proposed changes to Santa Cruz Bylaw (SCB) 13.17.6, concerning the charge of CEP, which passed by majority vote in the spring Senate Meeting. The main result of the change is to clarify that CEP's powers and responsibilities vis-à-vis University Extension (UNEX) Santa Cruz Division are analogous to its powers and responsibilities vis-à-vis the rest of the University. Among other particulars, the change removes oversight of the UNEX budget from CEP's charge, since this is more appropriately overseen by CPB. In addition, CEP remains the "default" committee for UNEX matters that do not fall within the purview of any other Senate committee.

Graduate Student Instructors

CEP revised its policies relating to the appointment of graduate students as primary course instructors (i.e., as Teaching Fellows or Associates In --; this discussion did not concern Teaching Assistants). Our main goal in making these changes was to simplify the approval process where possible while maintaining the oversight mandated by Senate Regulation (SR) 750. After consulting with campus units, the major outcomes of this policy review were the following. (See the full policy statement at http://senate.ucsc.edu/cep/ceppolicyindex.html.)

- 1. CEP will no longer review appointments for lower-division courses, so long as the proposed graduate student instructor has advanced to candidacy and meets other basic requirements. (SR 750 requires CEP oversight of appointments in the case of upper-division courses.)
- 2. The lead time required for approval by CEP has been considerably shortened.

Enforcement of C1/C2 Requirements

SCR 10.2.2.1.d states that classes satisfying the C1/C2 requirements "shall usually be taken in a student's first year and must be completed before the student enrolls in the 7th quarter." Most students who are on the typical schedule will complete online enrollment for their seventh quarter during the spring term of their second year. Given class capacity issues, disallowing online enrollment for students who are enrolled in their C2 class during the spring or summer term of their second year can create severe difficulties for these students in securing space in fall classes. In formulating this Regulation, CEP's original intent had been to allow students to complete this class the summer after their sophomore year at the latest.

For these reasons CEP approved the following interpretation of the Regulation: students who have not completed the C1/C2 requirements will be allowed to pre-enroll in their seventh quarter classes but will be required to complete the requirements prior to actually beginning their seventh term. The Registrar's Office will drop students from classes at the beginning of the seventh term if they fail to meet these requirements. Students dropped in this way will not be allowed to return to UCSC until they have shown proof that they completed these requirements elsewhere.

In consultation with the campus Academic Advising Coordinator and the Council of Preceptors CEP recommended policies of student advisement and of details of enforcement.

External Reviews

The Committee commented on four external reviews (Latin American and Latino Studies; Art; Electrical Engineering; Molecular, Cell, and Developmental Biology).

The Committee commented on charges for six external reviews (Community Studies, Anthropology, History of Arts and Visual Culture, Philosophy, the Writing Program, Environmental Toxicology).

Programs

CEP provided feedback on, and eventually approved, a new BS degree in Biomedical Engineering. This program is notably interdisciplinary and will depend on a charter agreement among the relevant campus units.

For the first time, CEP also began reviewing proposed University Extension proposals. CEP reviewed proposals for, and eventually approved, certificate programs in Alternative Education, Early Childhood Special Education, Personal Physical Fitness, and Software Development for Aerospace and Defense Applications. It is worth noting that, according to CEP policy, at least one UCSC faculty member must be involved in proposing a new UNEX certificate program.

Other

CEP approved new policies for the awarding of posthumous UCSC degrees and certificates (these can be found at http://senate.ucsc.edu/cep/ceppolicyindex.html); reviewed and approved UCSC's 2007-08 academic calendar; and sent representatives to participate in UCSC's Pandemic Planning Committee.

CEP consulted with the campus Health Center to provide faculty input on an important policy change: the Health Center will no longer routinely provide "sick notes" to students. CEP's report on this matter (submitted for the spring Senate Meeting) can be found at http://senate.ucsc.edu/cep/reportsindex.html.

CEP Subcommittees reviewed 238 new courses, 590 course revisions/substitutions/cancellations, 64 program statements, and 26 individual majors (new and revised). The full Committee discussed many of the significant proposed degree changes, all of which were approved, though some after revision to address issues raised by the Committee.

The Chair reviewed 636 petitions. Major categories included:

- Writing-Intensive Course substitutions (181). CEP is grateful to Sarah-Hope Parmeter, the Non-Senate Faculty representative to the Committee, who assisted a great deal in reviewing these petitions.
- Other general education waivers and substitutions (117). Most often involving the Topical or Introduction to the Discipline courses. [94]
- Modification of letter-grade option to meet the 75 percent requirement (16). Students were required to fully change the most recent quarter(s) that would address this problem.
- Miscellaneous other requests to change the grade option (57).
- Requests for a grade change (52). A number of these involve situations where the student received an incomplete although they were not passing the course as specified in SCR 9.1.6.
- Late add and drop requests (199).
- Miscellaneous other petitions (14). This number is down from the year before, most likely due to having enabled that 179.5 units be rounded to 180 units by the Registrar without involving CEP.

Thanks

CEP would function poorly without the participation of its guests. For their dedication, expertise, and friendly patience we thank Acting Director of Admissions Michael McCawley; Articulation Officer Barbara Love; Stacey Sketo-Rosener of the Council of College Preceptors; and Academic Editor Margie Claxton. Vice Provost and Dean of Undergraduate Education Bill Ladusaw's great understanding of issues in undergraduate education, and his dedication to the cause, were continual assets to the Committee.

Without the CEP Analyst CEP could not function at all. Roxanne Monnet is a model of organization and attention to detail, and her experience and frequent insights about policy and procedure are indispensable. We are very grateful for her efforts and her dedication.

Respectfully submitted,

COMMITTEE ON EDUCATIONAL POLICY

Heather Bullock Russ Flegal David Helmbold Pamela Hunt-Carter, *ex-officio* Anatole Leikin Loisa Nygaard Jaye Padgett, Chair

Flori Lima, SUA representative Joel Ferguson, Provosts' representative Sarah-Hope Parmeter, NSTF representative George Zhang, SUA representative

August 31, 2007

Appendix I: Proposal for Administrative Task Force on Retention and Graduation

Despite recent improvements, UCSC's graduation rates remain below the UC average. The attrition rate of first and second year students is a primary cause of this problem. No single solution can increase retention and graduation rates, and UCSC's success in this area will require ongoing monitoring and innovation. For this reason, the Academic Senate passed a resolution on retention and graduation in May 2006 that included the following charge:

"That the Santa Cruz Division requests the Chancellor and Executive Vice Chancellor work with the Division to establish a task force on retention that brings together those with interests and with authorities related to retention and graduation."

Core Task Force Membership

Chair: Vice Provost and Dean of Undergraduate Education Co-Chair: CEP Chair or Representative Director of Institutional Research Director of Admissions Representative for Vice Chancellor, Student Affairs SUA Representative

Consulting Members

College Academic Preceptor
College Provost
Department Chair
Dean Representative
Director, Learning Support Services
Chair, CAFA (or representative)
Registrar

Core Task Force Members will meet once each quarter with Consulting Members to review progress toward benchmark retention and graduation goals.

Charge

The Task Force will collect, analyze, and publicize data on retention and graduation rates. The Task Force will also encourage the adoption of strategies for improving UCSC's retention and graduation rates.

Specifically, the Task Force will be charged with:

- identifying and promoting strategies for improving retention and graduation rates particularly among lower division students who seek academic challenge (e.g., honors programs)
- examining how various aspects of the first-year experience (e.g., college core courses, campus engagement) are related to student retention
- working with programs and departments to clarify degree objectives and opportunities that foster early engagement and retention in the major
- investigating how performance in major preparation and gateway courses, including writing, mathematics, languages, physics, and chemistry, is related to retention and graduation
- setting benchmark graduation rates and reviewing progress toward these goals
- obtaining information from continuing and departing students about their commitment to graduating from UCSC and their reasons for remaining at or leaving UCSC
- identifying necessary data for tracking retention (e.g., time series analyses across divisions and majors, involvement across programs)
- fostering effective coalitions and information sharing among campus groups, student, staff, and faculty involved in undergraduate retention
- designing and assessing pilot studies of how campus, academic divisions, colleges, student affairs, departments, and other units can increase retention

Reporting

The Task Force will report annually to the Campus Provost and Executive Vice Chancellor in May, who will ensure proper consultation with the Academic Senate.

Appendix II: CEP's Response to CPB's Conditions for Growth Report (Addressed to Senate Chair Crosby)

CEP has reviewed and discussed the Committee on Planning and Budget's (CPB) Report on Conditions and Strategies for Growth, and we take this opportunity to provide our feedback on it.

First of all, we would like to thank CBP for its considerable work in formulating this report, and for consulting with CEP along the way. We see this as part of an effort by our leadership—Senate and Administration—to base planning more effectively on academic goals and data-driven assessment.

The CPB report reaffirms the previously established goals of bringing graduate students to 15 percent of the student population and increasing Instruction and Research space on campus. Regarding the first goal, we strongly agree with CPB that graduate growth should be approached in ways that maximally benefit undergraduate education, and that reaching the 15 percent goal in this way is more important than reaching the goal soon. The most obvious way to synergize graduate and undergraduate education, as CPB notes, would be to synchronize graduate and undergraduate growth within disciplines so that undergraduates could benefit from the TAships and research opportunities that follow. This implies not only that we consider effects on undergraduate programs when we plan graduate growth, but that we also consider ways of encouraging undergraduate enrollment where graduate resources already exist. It seems to us that this latter strategy, of shaping disciplinary undergraduate enrollment trends, should be an important theme in future discussions of growth and planning.

A major point of the CPB report is that planning should be based on data by division and program so that we are in a position "to accommodate and distribute our undergraduate student population". Furthermore, planning should be guided in part by enrollment targets by division or program. We agree with CPB that this should not imply a "false symmetry" across divisions and programs. However, it does imply that the campus should have a transparent and informed discussion about the bases—pedagogical and other—of our targets and the reasons for differences between units.

The CPB report also stresses the need to redress undergraduate resource and capacity issues that have arisen in our period of growth. Whether we return to something like the "Managing Faculty Resources" model or not, it is imperative that we find ways of better aligning faculty and undergraduate populations. Though Instructional Workload allocations will play a role in doing this, the health and stability of undergraduate programs depends crucially on senate faculty presence. Once again, aligning resources and students needn't be a matter simply of allocating faculty where capacity is an issue; it could be as much a matter of *guiding* enrollment distribution. Having said this, we must acknowledge that we have only so much power to do the latter. In line with its desire to do data-driven planning, the campus would do well to study trends in student majors at similar universities across the country, in order to place us in a better position to anticipate needs.

CPB suggests a range of criteria by which we might assess the effects of growth, and react accordingly. The report proposes as central criteria *time to degree* and *retention rates*. CEP

agrees. Note however that time to degree and 6-year retention rates are both lagging indicators of institutional success. For this reason CEP agrees with Vice Provost/Dean for Undergraduate Education Bill Ladusaw that we must include first- or second-year retention as central measures of success as well. Given recent data from the Committee on Admissions and Financial Aid strongly suggesting that next year's entering frosh cohort will be less prepared than that of past years, there is more reason than ever to find early measures of success that will allow the campus to respond to needs as quickly as possible.

Perhaps in response to suggestions from CEP, the CPB report also suggests *class size* and *faculty-student ratios* (among others) as measures of success. It is worth considering how measures like these differ from time to degree and retention rates. The latter measures, and particularly retention rates, are arguably the most valuable in providing a kind of 'bottom line' summary of quality: what matters most, one might argue, is whether students remain and get the degree. Though this is true, there are many factors that affect retention and time to degree, and without an equal consideration of other factors it may be impossible to know what measures to take in order to *improve* retention and time to degree. Furthermore, though retention is indeed important, retained students might differ enormously in how satisfied they are with their experience at UC Santa Cruz. Factors such as class size and faculty-student ratios, as well as TA-student ratios, are from this perspective at least as important. In what follows we present some data and discussion on class size and, indirectly, faculty-student ratios.

Figure 3 (appended to this report) provides data on the change in number of courses taught at UCSC since 1999-00, broken down by division and by level: graduate vs. undergraduate. All data discussed in this report exclude lab courses, since enrollments in those courses are necessarily restricted and so more straightforwardly tied to enrollment. The major trend that stands out across all divisions except PB Sci is that the number of graduate-level offerings has increased faster than the number of undergraduate offerings (which in the case of PB Sci and Humanities have not increased at all). Since this has been happening at a time when undergraduate enrollments have grown far faster, one might suppose that this trend could have negative consequences for undergraduate capacity, course size, or both.

The data in Figure 4 attempt to relate increases in course offerings to trends in student workload FTE over the same period, again by division and by course level (graduate vs. undergraduate). Changes are now stated in terms of percentage of 1999-00 figures, in order to make this comparison. Comparing these two trends allows us to make more confident inferences about likely impacts on course size and capacity. We note, first, that growth in graduate course offerings has outpaced growth in graduate student workload FTE in three divisions: in Engineering and more dramatically in Arts and Social Sciences. In contrast, workload far outpaced growth in graduate course offerings in Humanities and PB Sc. On the other hand, at the undergraduate level, growth in course offerings lagged behind workload increases in *every* division for this period. The data are summarized in Figure 1 below for 1999-00 vs. 2005-6. (Shading indicates areas in which course offerings lagged behind workload.)

⁴ All data presented here are based on reports provided to CEP by the Office of Institutional Research and Policy Studies. The data on number of classes by level, division, and class size were provided to CEP at CEP's request. Student workload FTE and enrollment data are available on the IRPS web site. All graphs were done by CEP.

Figure 1

Percent increase in number of courses taught vs. student workload FTE, 1999-00 through 2005-06

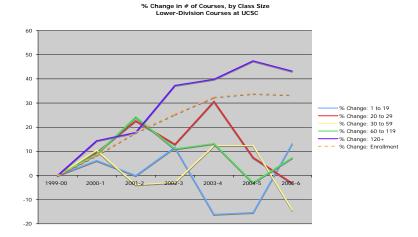
	Undergraduate		Graduate	
	# Courses	Workload	# Courses	Workload
Arts	4	28	383	150
Engineering	48	59	136	96
Humanities	-1	31	16	64
PB Sci	-4	38	-8	49
Soc Sci	14	33	99	50

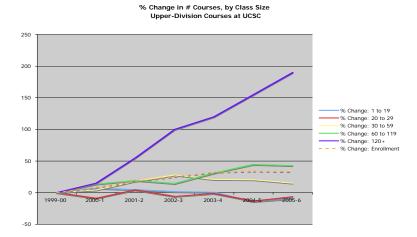
The graphs below, copied from Figure 5, focus on undergraduate course offerings. This time the data are for the whole campus, but now broken down by lower- vs. upper-division course levels. In addition, the data are now further broken down into five class size categories (1-19; 20-29; 30-59; 60-119; and 120+). The dependent variable is once again percent increase in number of courses taught, and for comparison purposes we include the percent increase in campus undergraduate enrollment over the same period. (We use the same enrollment data for both graphs.) As can be seen, the only size category that has kept pace with enrollment increases, and in fact far exceeded them at the upper-division level, is the 120+ class size category.

Figure 2

Percent Change in Number of Courses Taught at UCSC

By Class Size and Level (Lower-Division vs. Upper-Division)
(Excludes labs)





What have these trends meant for the proportion of classes offered within each size category over this period? Figure 6 compares 1999-00 proportions to those of 2005-06, for the whole campus again. (The reader can find the same data broken down by division in Figure 7.) At the lower-division level the proportion of classes of size 120+ increased from 12 percent to 16 percent, a one-third increase; that of the next size category, 59-119, remained flat, while all other size categories fell. At the upper-division level, the proportion of classes smaller than 30 fell, while the larger categories grew. The largest category grew from 2 percent to 6 percent of the total, a threefold increase.

In the above discussion we have deliberately avoided reporting or normalizing data in terms of budgeted faculty FTE, instead focusing on the number of classes taught and class size. This is because we are interested in assessing not abstract budgetary outcomes but the quality of the undergraduate experience. Number of courses offered (vis-à-vis workload) and class size are relevant to quality, and ultimately to retention and satisfaction with the undergraduate experience, in several well understood ways. First, when growth in enrollment outpaces growth in course offerings we see an increase in capacity problems, as has indeed occurred in recent years. Second, when students do succeed in getting needed classes, these classes are on the whole bigger. There is certainly a place for large classes at the University. Nevertheless: student-faculty contact has an important effect on retention and success; in smaller classes faculty are more likely to assign and evaluate tasks that are time-intensive but require deeper engagement with material; large classes necessitate reliance on lectures and minimize opportunities for active engagement of students; at the same time, delivering lectures is perhaps the worst way known to impart knowledge and learning; for certain kinds of class, such as foreign language classes and those with an emphasis on writing, there are intrinsic reasons why class size limits are indispensable; and so on. We should recognize that increasing the proportion of large classes (all else equal) can do little to improve education, and could possibly do much to degrade it. This fact can be only somewhat ameliorated by reliance on more teaching assistants.

On the other hand, our focus on these particular measures (number of courses vis-à-vis workload, and class size) is not meant to imply that others may not be as good or better for assessing the quality of undergraduate education. Our main goal here is to raise the question of how we might

most directly or helpfully measure undergraduate educational quality; our goal should be to agree on what to measure and where the benchmarks or "triggers" are. We invite CPB and the administration to continue this discussion with us.

Summary of Recommendations

We conclude with a summary of our recommendations:

- We strongly endorse CPB's recommendation that planning be based on nuanced data obtained by division or program, and that the campus take strong action to bring permanent faculty resources and undergraduate enrollment into better alignment.
- With CBP, we reaffirm the importance of the I&R space and 15% graduate growth targets. The latter target should be met in a way that preserves or enhances excellence at the undergraduate level.
- We recommend adding 1- or 2-year retention to 6-year retention and time to degree as new measures of success.
- We strongly recommend developing other explicit, data-based measures of success that we can use to assess the quality of the undergraduate experience and to plan for the future. These may include but should not be limited to measures of class size and facultystudent ratio.

Sincerely,

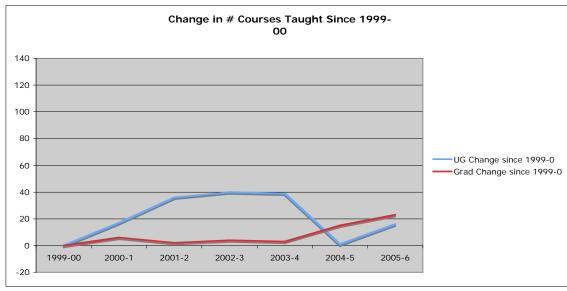
Committee on Educational Policy

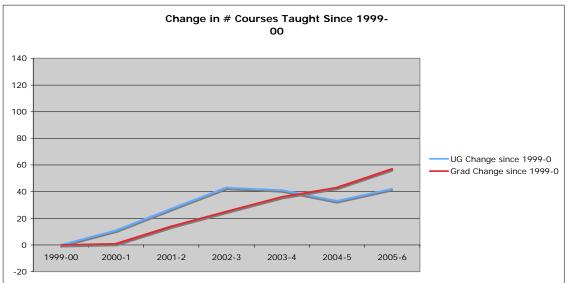
Heather Bullock Russ Flegal David Helmbold Pamela Hunt-Carter, ex officio Anatole Leikin Loisa Nygaard Jaye Padgett, Chair

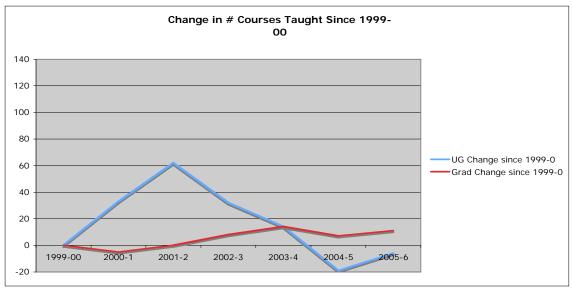
Joel Ferguson, Provosts' Representative Flori Lima, SUA Representative Sarah-Hope Parmeter, NSTF Representative George Zhang, SUA Representative

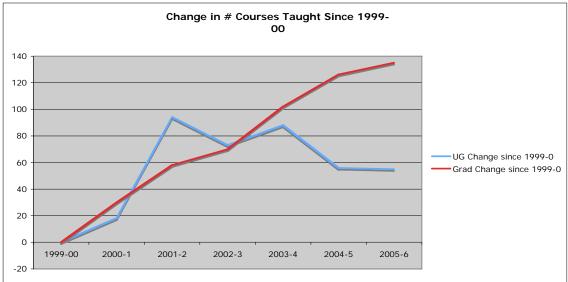
Figure 3

Change in Number of Courses Taught Since 1999-00
By level (Grad vs. Undergrad) and Division
(Excludes labs)









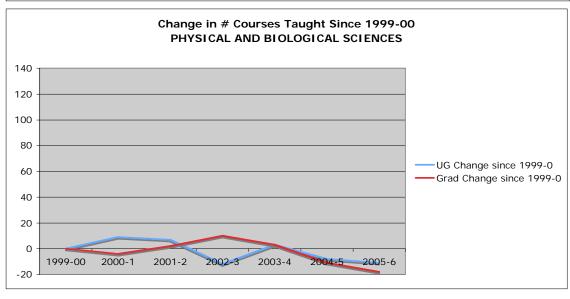
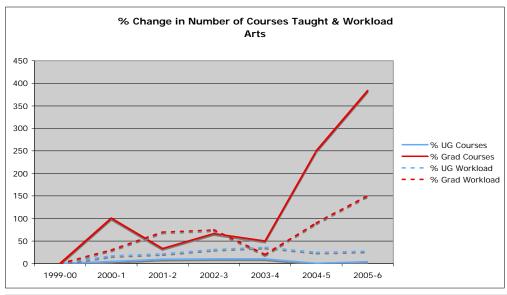
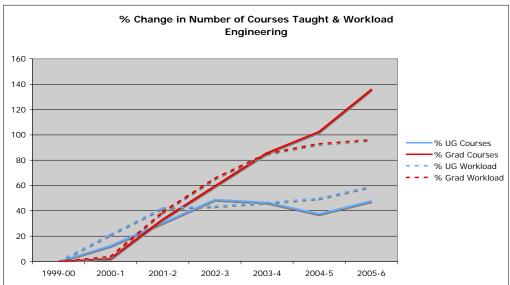


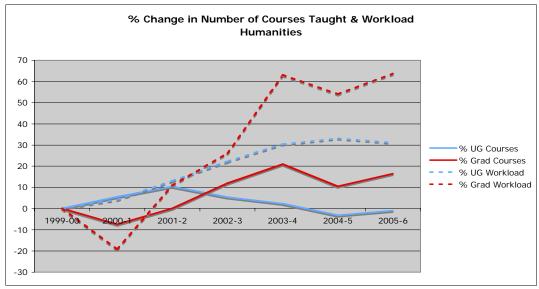
Figure 4

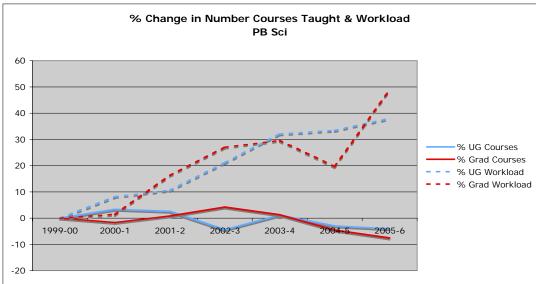
Percent Change in the Number of Courses Taught Compare

Percent Change in the Number of Courses Taught Compared to Workload By level (Grad vs. Undergrad) and Division (Excludes labs)









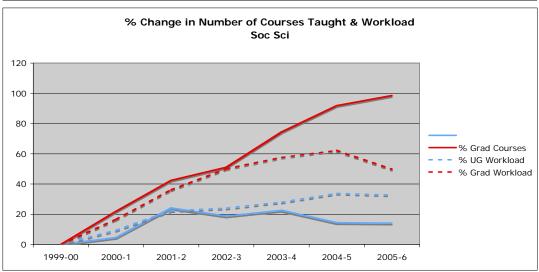
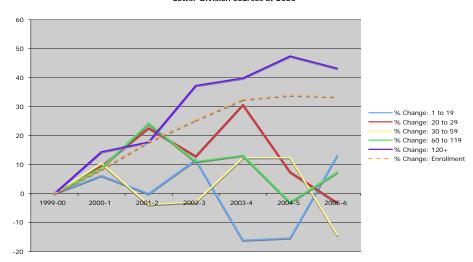


Figure 5

Percent Change in Number of Courses Taught at UCSC By Class Size and Level (Lower-Division vs. Upper-Division) (Excludes labs)





% Change in # Courses, by Class Size Upper-Division Courses at UCSC

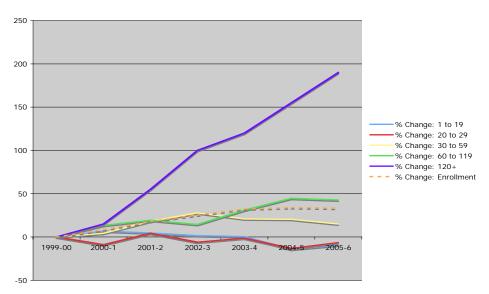


Figure 6

Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size and Level (Lower-Division vs. Upper-Division)
(Excludes labs)

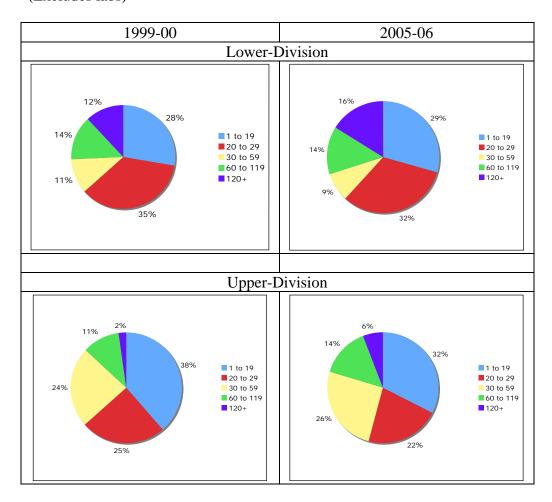
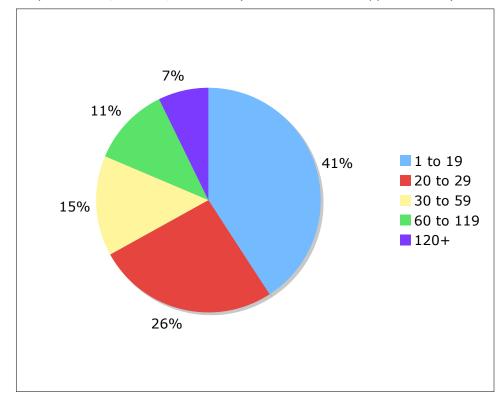


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Arts

Lower-Div

1999-00



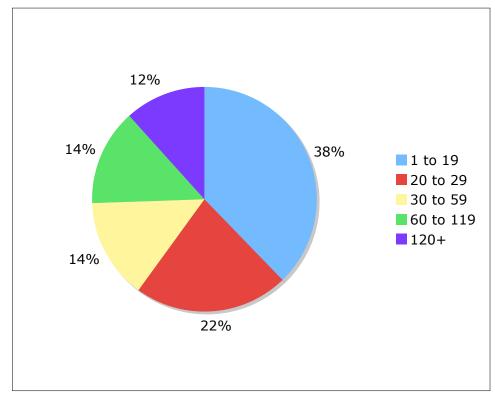
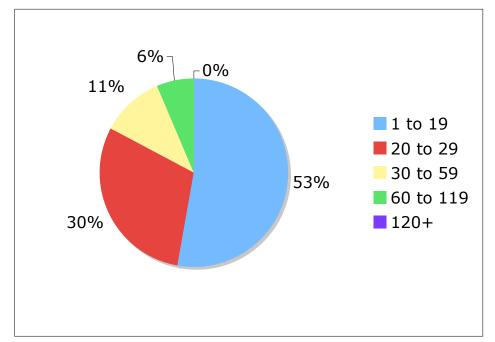


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Arts

Upper-Div 1999-00





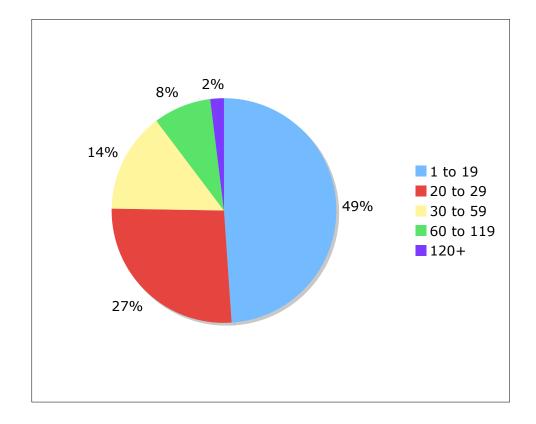
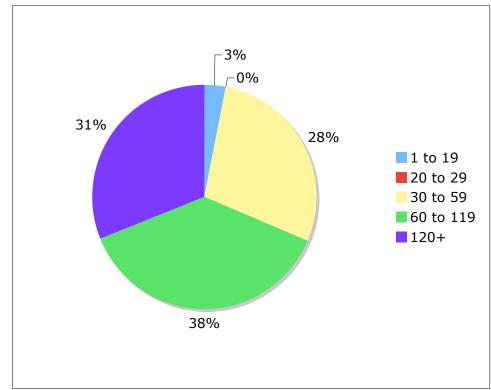


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Engineering

Lower-Div

1999-00



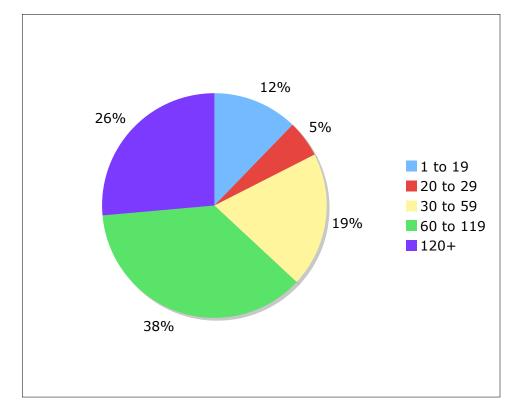
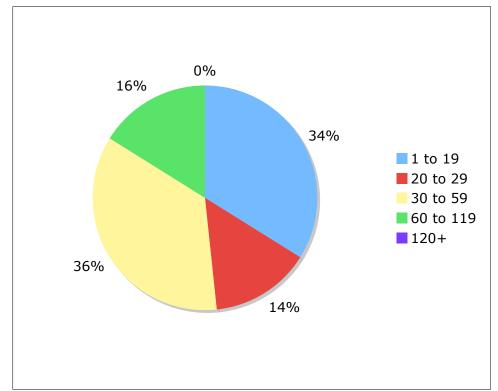


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Engineering

Upper-Div 1999-00



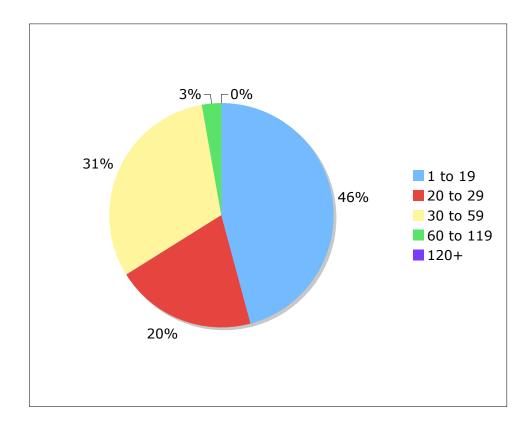
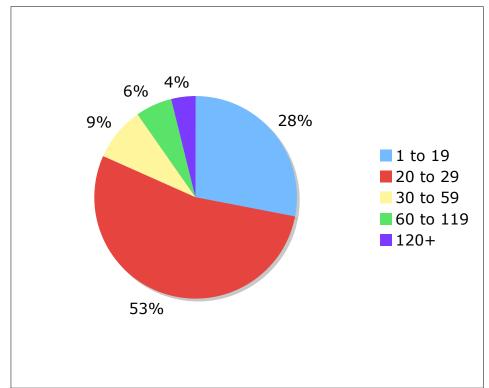


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Humanities

Lower-Div 1999-00



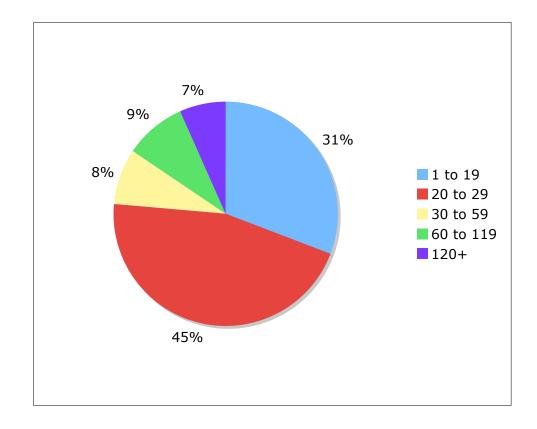
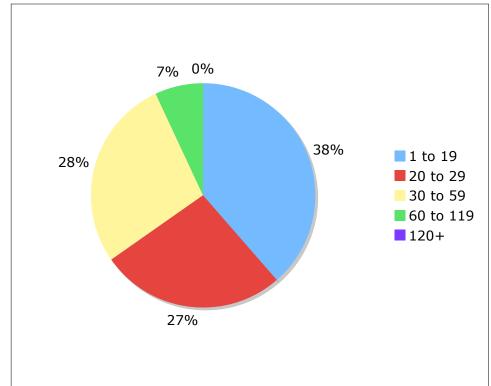


Figure 7 Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06 By Class Size, Division, and Level (Lower-Division vs. Upper-Division)



Upper-Div





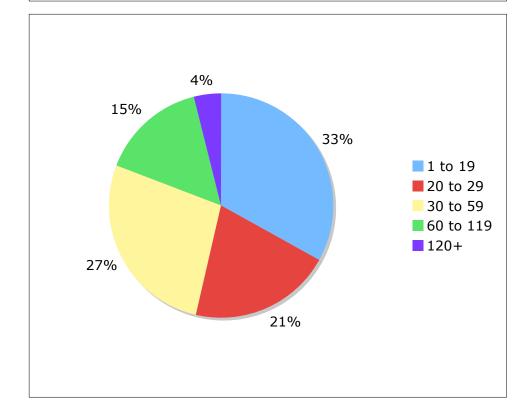
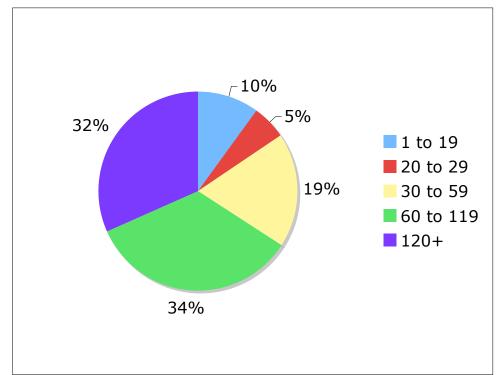


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

PB Sci Lower-Div 1999-00





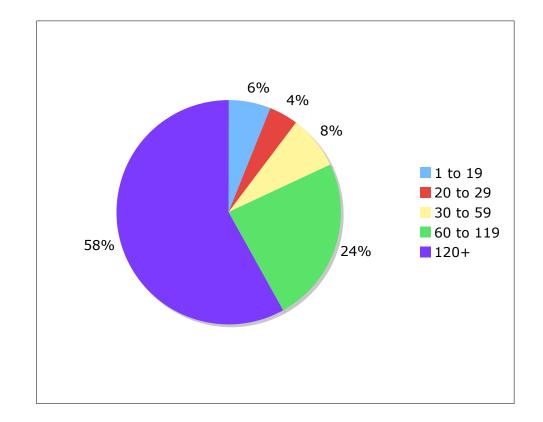
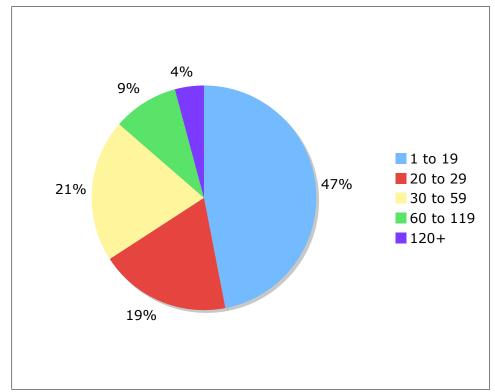


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

PB Sci Upper-Div 1999-00



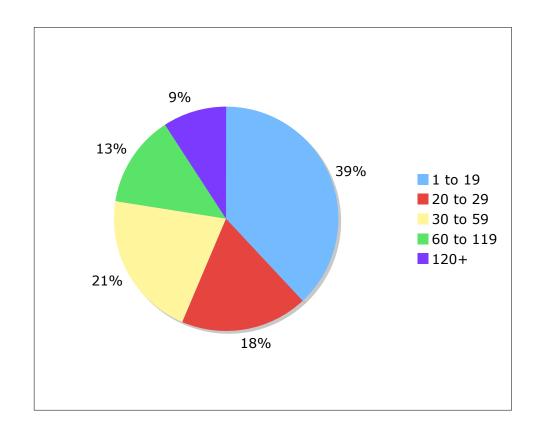
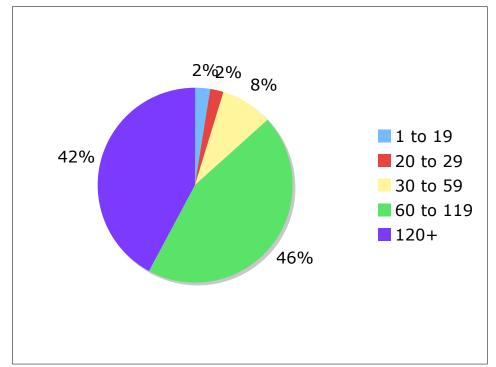


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)

Soc Sci Lower-Div 1999-00





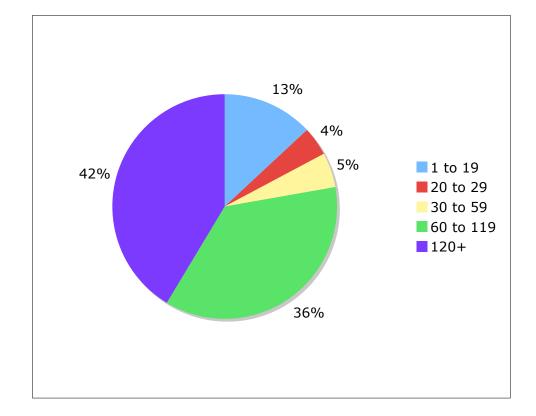


Figure 7
Proportion of Classes Taught at UCSC in 1999-00 vs. 2005-06
By Class Size, Division, and Level (Lower-Division vs. Upper-Division)



