

ATTACHMENT 4.4
Graduate Council Meeting
December 13, 2004

Small Graduate Programs – CAPBR memo

In October 2004, the Graduate Council received the attached memo from the Academic Senate Committee on Academic Planning and Budget Review (CAPBR), which asks whether UCD should discourage the existence of small graduate groups. Last year's Graduate Council considered the minimum viable size for a graduate program. Materials from last year's review are enclosed as background for Council's discussion.

UCDAVIS: ACADEMIC SENATE

October 13, 2004

TRISH BERGER, Chair
Graduate Council

Dear Professor Berger:

CAPBR has reviewed several proposals to establish new graduate groups and new programs this year. Using the proposed new group in Animal Biology as a positive example of what might be beneficial, we find ourselves asking whether UCD should be actively discouraging the existence of small graduate groups, often with highly redundant membership rosters, and whether such small groups are an efficient use of the available resources, both budgetary and pedagogical. We wondered if Graduate Council's review of programs and groups might routinely ask whether consolidation of two or more small programs should be a recommendation. As new graduate programs proliferate, it might strengthen the overall academic program if some older, smaller programs were ended or, where appropriate, merged with others to make room for them. This is especially relevant in an era of steady state (or worse) resources to finance graduate education at UCD. Perhaps exploration of divisions or sections of existing graduate groups with similar core course requirements but different elective course requirements could facilitate this process.

Sincerely,

RANDOLPH M. SIVERSON, Chair
Committee on Academic Planning & Budget Review

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**Excerpt: Graduate Council approved minutes of the meeting of December 13, 2004
(page 4)**

Small Graduate Programs – CAPBR memo

Last year, Council discussed the minimum viable size for a graduate program. Key issues included:

1. Quality of the graduate program: The results of the National Research Council survey suggest that larger graduate programs tend to rank higher.
2. The level of resources that is required to maintain a small program to educate a few students: In the case of limited or declining resources, the fact that small programs require a disproportionate share of resources to educate a student must be considered.
3. The educational experience of students in the program: When the entering cohort has too few students, the opportunity to learn from colleagues is diminished and the availability of needed courses is jeopardized.

The discussion noted that the disproportionate use of resources by smaller programs includes faculty and Graduate Council time. So the resources include faculty outside the program and also include Graduate Studies resources in the case of small graduate groups.

Dean Gibeling responded to questions about financial resources: the Block Grant never goes below the minimum, which currently is \$15,000. The history has been that Graduate Studies has always provided a minimum block grant with the theory that when program enrollment moves toward “0,” the money should not decrease towards “0” because there is a point where you do not have enough money to do any one thing. If a program has at least \$15,000, it can offer at least one NRT fellowship or fees for one or two students, but it is hard to have an impact with \$2,000 or \$3,000. A second issue is graduate group administrative support: There is a base line of funding that increases with increasing enrollment. The amount of money that goes into a small program is out of proportion compared with that of a large program.

A Council member suggested that the base line funds disappear and that funds be allocated down to “0”. This would give very small groups an incentive to either become larger or combine with other groups to gain enough administrative support to be able to function. However, most discussion focused on size related to quality. One Council member suggested that in general a significant size was a good idea, but in certain cases, very good reasons exist to have very small programs. 1) Some fields are just small fields and have been for a long time. 2) An emergent field might begin as a very small program. When a program is being proposed, consideration should include whether it is redundant or too expensive per student and the same question should be asked when it is reviewed. In both cases the programs might function as subdivisions of larger umbrella programs.

Associate Dean Caswell-Chen noted that one issue that has not been addressed is what our ideal vision of what graduate education at UC Davis should be and how much breadth do we want. It could be shortsighted to discourage smaller programs in the sense of the breadth that some of them provide to the atmosphere on the campus. It was suggested that Council needs to provide further guidance to allow the Program Review Committee to consider some metric for size and quality relative to the recommendations that are made about the program. We could put specific language in to watch particularly small programs and programs that have declined in numbers of students since the last review. It is appropriate to compare the size and scope of the program with national competition. In cases where there may be a very big impact but small numbers we should not have an arbitrary cutoff. However, if we have small programs that have been that way a long time and are not competitive, then the program and Graduate Council should be aware of that. Dean Gibeling noted that the only non-arbitrary number to define "small" is 4 students. Currently graduate courses are not typically offered with fewer than 4 students.

Following further discussion, Dean Gibeling made the motion that when the entering cohort of a program averages fewer than 4 students per year, the program will be asked to pay special attention in its program review to justifying its quality, use of limited resources, and a comparison of its size with that of the national competition. The motion was seconded and approved, to be implemented for 2005-2006 reviews.

Excerpt of Minutes of February 23, 2004 Graduate Council meeting.

ACTION ITEMS

Minimum Viable Size for a Graduate Program – APD Report

APD Chair Prof. Meeks reported that APD thought that PRC was the most appropriate group to look at the minimum viable size for a particular graduate program. Prof. Kavvas suggested that the Program Review Closure Committee (PRCC), a subcommittee of PRC, might be the best committee to consider this issue. Prof. Meeks reported that APD benefited from the insight of Prof. André Knoesen, the former PRC Chair, who is an APD member this year. In its evaluation, the APD chose Avian Sciences and German, two of the ten highlighted small programs, as examples of successful programs based on their recent reviews.

Dean Gibeling brought the 1995 National Research Council's (NRC's) report on its last survey, entitled *Research-Doctorate Programs in the United States, Continuity and Change*, and distributed two figures from the report showing the (1) average number of program faculty and (2) average number of students enrolled, by broad field and quality grouping. Dean Gibeling pointed out that size was important. In each of the five broad fields, the top ranked programs have the largest number of faculty and the largest number of enrolled students. This is one piece of evidence that size is important. Dean Gibeling added the caveat that the NRC sometimes lumps several programs together in its survey because its program fields do not always match those at any particular institution. There is also the question of whether ranking relates to quality. The perception is that reputation is important. Larger programs tend to be more successful. In contrast to the two examples cited by APD, Dean Gibeling mentioned a small graduate program that appears to be on its way down. It has reported that it does not have enough faculty to prepare its self-review document for its upcoming program review. If that is the case, it may not have enough faculty to offer the graduate program.

Prof. Meeks said that APD could not suggest an arbitrary number of enrolled students as the minimum viable size for a graduate program. However, there are some guidelines at the bottom of the APD report. One suggestion, from an intellectual perspective, was that PRC could review some programs at the same time. Another suggestion, from an administrative perspective, was that programs could be clustered together. These could be small and large programs that are co-located. Prof. Meeks conceded that each program might lose some direct services related to no longer having its own graduate program staff person.

Prof. Alan Conley, the PRC liaison for the review of Avian Sciences, reported that all of the members of the ad hoc committee (AHC) that conducted the review initially had a negative view of the program's small size. However, they all changed their minds because the program was effective in relation to the quality of its graduates. Prof. Conley suggested that if the concern with program size was related to financial pressures, then that should be stated directly and that

faculty could accept that. Dean Gibeling responded that there is a finite amount of money and that every program receives at least the minimum amount regardless of size. He added that Chair Hastings and he also were concerned about cohort size for core courses. If a program is too small, graduate courses sometimes are dropped or not taught. The Dean agreed with Prof. Conley that reviewing academic quality was Graduate Council's role but pointed out that Council is disconnected from resources. Weighing academic quality against resources is difficult when decisions must be made. Prof. Conley reiterated that if the issue is money, it needs to be stated. Chair Hastings suggested that currently there is a national push in biological sciences for broader, less narrow, programs and that programs might be combined.

Prof. Conley reported that Avian Sciences is essentially departmentally based and has an *esprit de corps*. He added that large graduate groups sometimes do not have that because they have small numbers of students spread across campus. Ms. Ellen Pyatt mentioned her program, Hydrologic Sciences, as an example.

Prof. Kavvas reminded Council that its recommendations will affect how reviews are conducted. At the moment, PRC is looking at the nominations for the ad hoc committees that will conduct next year's reviews. Ms. Kathy Garcia, the committee analyst, reported that in next couple of weeks the Program Review Closure Committee will re-arrange the timeline for some reviews so that the 20 programs due for review in 2008-2009 would not all be reviewed during that academic year. Therefore, there is this opportunity to select which programs might be reviewed at the same time. Prof. Kavvas pointed out that next year, a number of humanities programs will be reviewed; they will have separate review committees but the reviews would be conducted concurrently. Dean Gibeling said that in the past PRC has reviewed programs in affinity groups but that these reviews tend to get off schedule over time.

Dean Gibeling requested Council's consideration of this topic because he wanted its guidance regarding whether or not to support some programs. He said Council reviews programs and tends to assume that they all can improve. Chair Hastings pointed out that it also was easier to create new programs than to close existing programs. Prof. Kavvas thought that PRCC might be able to provide the best perspective on this issue.

Chair Hastings emphasized that size *per se* is not the single criterion. Prof. Meeks suggested that since the administrative level of support does not drop to zero but to some minimum level for any given program, perhaps Council could try to affect the administrative costs of programs. For example, Council could recommend combining programs or the administration of programs.

Chair Hastings also raised the cohort size and program quality issue. Prof. Conley reminded Council that the AHC that reviews a program cannot make the administrative decision to financially support or not support a program. Dean Gibeling suggested that there may be a bigger benefit to get stellar students in bigger programs than good students in smaller programs although there are some programs that comprehensive universities must offer. He added that costs are becoming a bigger reality that must be considered. Prof. Watkins suggested that Graduate Council might look at significant decreases in a program's enrollment over time as that might be an indicator of a problem with a program. Prof. Steven Crum thought that one indicator is enrollments, whether they increase, decrease, or remain consistent over time.

Chair Hastings concluded the discussion by saying that Council was not going to reach a consensus beyond the recommendation that PRC take program size into account in its reviews.

SELECTED FINDINGS

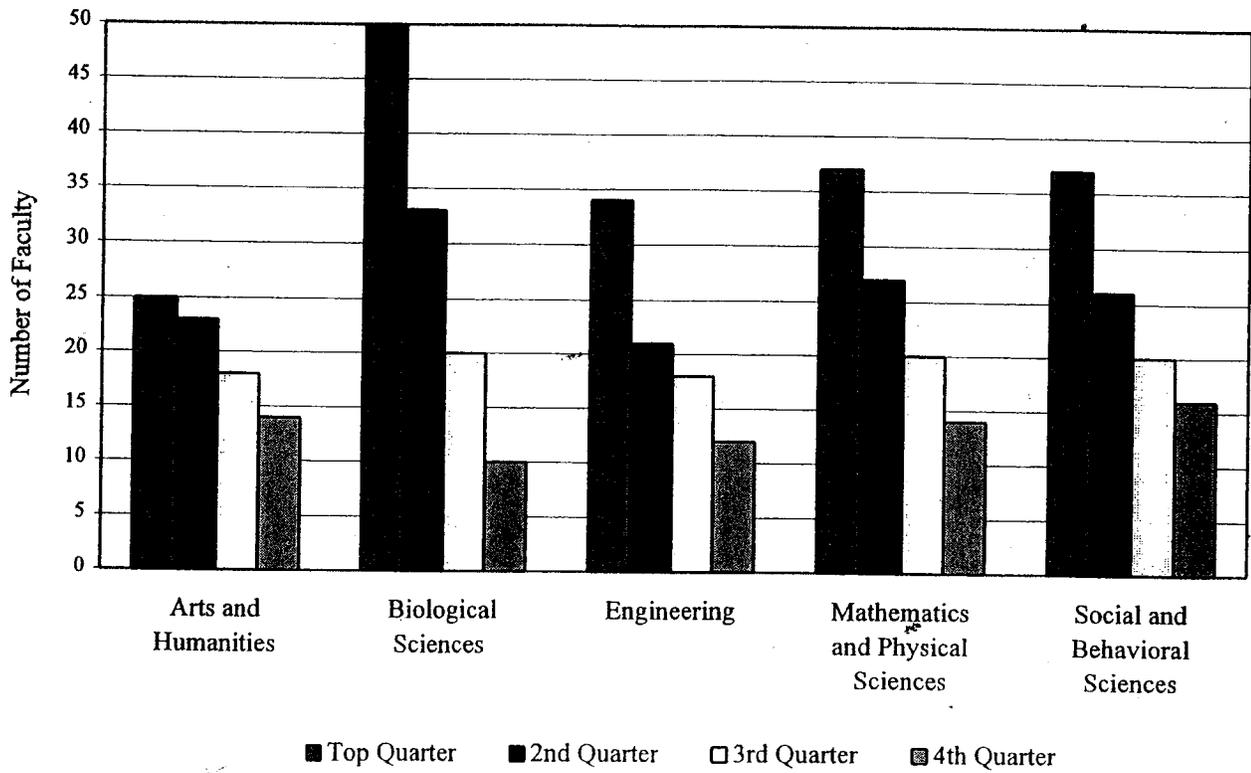


FIGURE 3-2 Average number of program faculty by quality grouping and broad field. Based on the "Scholarly Quality of Program Faculty." See Appendixes J-N.

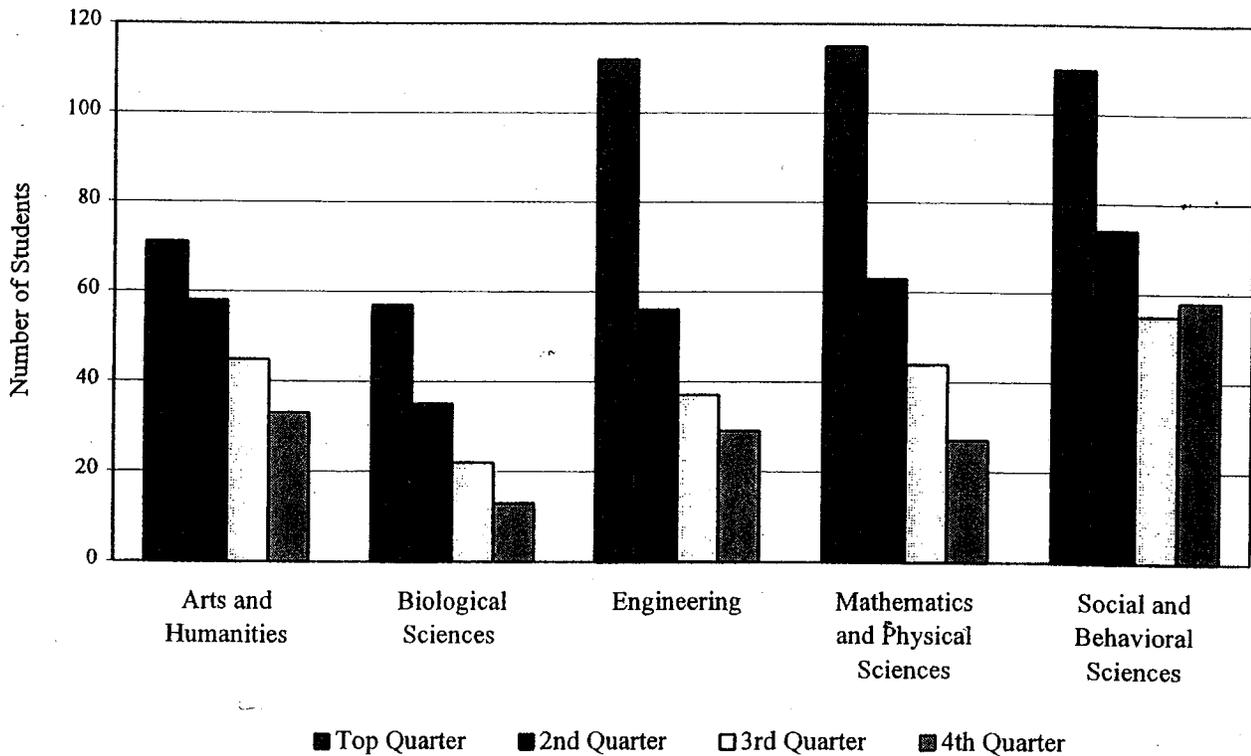


FIGURE 3-3 Average number of students enrolled by broad field and quality grouping. Based on the "Scholarly Quality of Program Faculty." See Appendixes J-N.

Minimum Viable Size for a Graduate Program – APD report

Graduate Council charged the Academic Planning and Development (APD) Committee with consideration of the issue of a minimum viable size for graduate programs.

Attached for your review:

- Graduate Council's charge to the APD Committee, taken from the approved minutes of Council's November 17, 2003 meeting. (pasted below)
 - APD's report
 - Table of "Numeric Information," a list of all the graduate programs and their current student enrollment
 - Spreadsheets of "Benchmark Statistics" for 10 small graduate programs
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Minimum viable size for a graduate program

Chair Hastings asked Council to discuss the minimum viable size for a graduate program. Some graduate programs have very small numbers of enrolled students, admitting just one to three students per year. Council needs to be aware and careful of differences between disciplines, where the appropriate minimum cohort size for student interactions may vary. Chair Hastings said that financial savings was not the primary rationale for raising the topic. There also are issues in terms of the time required for program review. He asked Council to have a brief discussion of the topic.

Dean Gibeling said that economic factors have to be considered since there are finite resources for graduate education. All graduate programs, even small ones, require financial support for the graduate program staff person, the program's block grant, and the cost and workload to conduct the graduate program's review. Associate Dean FitzGerald emphasized that cohort size is important to the quality of the student's education.

Chair Hastings pointed out that we subdivide the graduate pie particularly fine at UCD. Council discussed some solutions to small size. Some graduate programs could be broader and include others. Smaller programs could combine or share administrative support. Also, the actual number of students in a program may vary and be flexible depending on the discipline. Chair Hastings will charge APD with the examination of this topic and with developing a draft statement or policy for Council's consideration. The Office of Graduate Studies can provide the committee with the numbers of new and enrolled students for each of the programs.

Report of the APD on the issue of the minimal viable size of a graduate program. 1-26-04

The Academic Planning and Development (APD) committee met on January 23, 2004 to discuss the issue of a minimum viable size of a graduate program. Present for discussion were six representatives of the academic senate, one of the academic federation, one of the postdoctoral association, and one of the graduate students association.

The committee recognized the intellectual and interactive limitations of a numerically small student cohort in the training process. The committee was also cognizant of the potentially higher administrative costs of small, relative to large, programs. However, following a thorough discussion, members of the APD concluded that the underlying issue to be addressed was that of an ineffective and perhaps unproductive versus an effective, productive graduate program, whatever its size. The committee was not convinced that a blanket regulation based on minimal size alone adequately addresses the fundamental problem of an ineffective graduate program. Effective use of resources to advance graduate education (e.g., productivity), not size as such, is the key issue.

In their evaluation, the committee took as examples two of the ten highlighted programs, Avian Sciences (13 total students, 5 new in 2003) and German (6 total students, 3 new in 2003). Both of these groups recently emerged from the Program Review processes with a positive recommendation, convincing the evaluators that their specific training program, and the students that emerged, provided a valuable asset to the campus and state. Although laborious, the committee concluded that the Program Review process remains the most appropriate mechanism for identifying poorly functioning graduate programs, including those hobbled by training a small cohort. Graduate programs with training limitations that are a consequence of student population size will emerge in such a review, and such programs could be revised, consolidated or terminated, based on an evaluated contribution to the respective discipline. Conversely, exemplary small programs could be penalized by an arbitrary numerical mechanism. Granted, such negative decisions could be overturned on appeal, but this simply adds an unnecessary layer of bureaucracy to the process.

The committee offers the following concepts that could be incorporated in the Program Review guidelines.

1. Even though a graduate program may have small numbers of faculty and students, the committee anticipates that it will: (1) have a defined graduate curriculum, and (2) a discipline-specific curriculum utilizing neither that of a related graduate program nor that of the same or a related undergraduate program.
2. Upon inspection, closely related small and large graduate programs are likely to exist in many disciplinary areas; an example based on the Avian Sciences program noted earlier would be its relation to Animal Science. The committee recommends that Program Reviews be scheduled along disciplinary lines when appropriate, so that closely related programs, one or more with small enrollments, could be reviewed at the same time, by the same review committee. Compelling reasons for or against consolidation or termination should emerge from concurrent evaluations.

In regard to the issue of the administrative costs of small programs, the committee endorses the possibility of an administrative center for clusters of broad disciplinarily related graduate programs. This is not necessarily the optimum administrative model for the vast majority of programs or groups. Consolidation of administrative functions may lead to a lower level of historically direct personal service to both faculty and students, but for small programs it may have advantages, such as tracking student progress, fellowship applications and clerical aspects of student admission and recruitment.