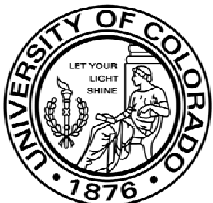


A REPORT of the

VICE CHANCELLOR'S TASK FORCE ON
GRADUATE TUITION AND ENROLLMENT
MANAGEMENT STRATEGY AT CU-BOULDER

April 28, 2004



University of Colorado at Boulder
Office of the Vice Chancellor for Research
and Dean of The Graduate School



Preface

The Task Force was given the charge to evaluate graduate tuition and enrollment levels and to formulate a proposal for a coherent campus-wide strategy for addressing related concerns.

The attached report of the GTEMS Task Force consists of a preamble, summarizing the results of a campus survey; the report, consisting of four assumptions and nine recommendations; and appendices, containing documentation generated on behalf of GTEMS.

Three issues of concern to the task force, although not written up as separate recommendations, are also addressed in this preface. The first is the problem arising in large programs that are stressed by the processing of hundreds of applications. While most programs indicate a desire and a capacity to grow, some experience difficulties in the admissions process due to lack of staffing. GTEMS urges that future consideration of growth issues address the needs of departments that currently are not adequately staffed to process admissions. The campus is moving to an on-line application system called ApplyYourself, beginning in 2005, and this change could offer some improvement. The fact remains, however, that while many programs continue to grow and indicate a desire to grow even more, resources at the unit level at best remain static, and in some cases actually decrease.

A second issue of concern is tuition revenue generated by Master's programs with considerable numbers of students who pay their own tuition. If the existence of such programs is to be encouraged, in keeping with national trends toward professional Master's and toward free-standing Master's more generally, then the campus needs to articulate a policy for channeling a portion of tuition revenue back to the unit for graduate investment. In the absence of such a policy, stresses will arise between the Master's and the Doctorate, with units opting to invest where the rewards are, namely, at the doctoral level. Associate Vice Chancellor Del Caro and Associate Vice Chancellor Kaempfer should coordinate a campus response to this issue.

A third issue of concern, and one related to the larger problem of declining applicant pools of international students, is the absence of support for international students on stipends, e.g. Fulbright scholarships. At some peer institutions, a fund exists to guarantee support to students who come to the United States on international stipends. Such a funding pool makes up for tuition differential, which is particularly troublesome at CU, and thereby ensures that highly qualified, meritorious foreign students will apply to CU and experience the aggressive recruiting they deserve. As you know from your own high level of engagement in national initiatives pertaining to graduate education, the United States is losing highly qualified students to Australia, Canada, and Europe.

On behalf of the GTEMS task force I present the attached report in fulfillment of the charge given to us in fall semester 2003. We request that you share our findings immediately with the Provost.

Comments and inquiries on the material contained in this document may be addressed to Adrian.Delcaro@colorado.edu, (303) 492-2889.

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Acknowledgments

We acknowledge *in memoriam* the contributions of our GTEMS Chair Tony Barker, former Associate Vice Chancellor for Research, and Associate Dean of Sciences in the College of Arts and Sciences at the time of his death. Tony brought passion and insight to GTEMS, and his leadership is evident in our findings.

Introduction

GTEMS was launched in fall semester 2003 under the leadership of Tony Barker, who presided over all but the last few meetings in spring semester 2004. Tony was responsible for building the high degree of consensus that shapes our recommendations. Our campus lost a tireless, dedicated, and talented leader with Tony's passing; we are fortunate to have benefited from his focus on GTEMS issues, and we urge that the University regard Tony's work on GTEMS in a manner commensurate with the spirited dedication he brought to the task.

A comprehensive survey garnered responses from 33 of 51 degree programs (65%). What follows is a summary of key issues, details of which can be found in the appendix. The survey contains 12 separate questions, some of which are grouped into larger categories below.

Program Growth

Most programs expressed a desire for growth and indicated potential in this area, especially at the Master's level but also for the Doctoral degree.

Barriers to Growth

For both the Master's and the Doctorate, stipends are considered not competitive with those of peer institutions. Compounding the problem are insufficient number of stipends, lack of fellowships, and lack of tuition remission. Many programs report severe curtailment and some outright discontinuation of foreign student admission, due to high non-resident tuition and lack of remission funding. Heavy teaching loads in some disciplines aggravate the problem of stipends. Applicant pools are shrinking due to the squeeze on admitting international students and domestic non-residents. Some programs lack funding to engage effectively in recruiting.

Barriers to Quality

Responses to this issue were expressed in very similar terms to growth barriers. The lack of fellowships figures prominently in this category, followed by high non-resident tuition and non-competitive stipends. The current practice toward limiting admission to resident students has a decisively negative effect on quality. When commenting on the desired ratio of foreign to domestic students, programs clearly desire to admit more internationals. The effects of current remission policy are regarded as severely negative: limiting or eliminating admission of foreign students, smaller entering classes, reduced percentage of students on appointment, reduced quality based on the practice of admitting the cheapest versus the best students. When asked if current remission policy was a barrier to enrollment or quality, overwhelmingly programs answered affirmatively, remarking that losses occur in overall number of students and in not recruiting first choices.

Tuition Differential

Less uniformity was observed in response to the notion of phasing in a steep increase in resident tuition while simultaneously reducing non-resident over five years. Some programs used expressions such as "disastrous" or "extremely detrimental" to characterize such a change, while others more reliant on foreign students strongly support change in this direction. The complexity of the issue and the stridency of responses warrant a measured, cautious response from GTEMS.

When the issue of “convergence” was tied to students supported by grants, responses were fewer and less urgent-sounding, as they were when “convergence” was tied to students on fellowships.

GTEMS presents four assumptions and nine recommendations to be read in the context of the survey. The task force itself represents considerable expertise and experience in matters of graduate education, such that its formulation of problems and preferences contributed to the shaping of the survey. When the survey results became available, incrementally, there were no surprises to the task force; on the contrary, a high degree of corroboration exists between the information garnered from programs and the proposed strategies for change.

GTEMS Task Force Assumptions and Recommendations

Our recommendations are guided by four assumptions.

1. There are two major barriers to increasing the number and quality of graduate students at the University of Colorado:
 - a. financial support offers are not competitive;
 - b. the cost of non-resident tuition is too high.

Solving the first problem would require an infusion of significant funds that, in our view, simply are not available (but see Recommendations 5, 7, 8, and 9 below). We can, however, ameliorate some of the damage caused by high non-resident tuition rates.

2. The approximately \$2.5 million dollar deficit in the continuing budget attributed to a tuition shortfall is not a product of a loss of tuition. It is a product of a budgetary process that treats tuition remission as real money and then spends it in other ways. This deficit should be recognized as part of an overall campus budget process. It should not be viewed as a problem created by graduate education and its remediation should not be placed on the back of individual Principal Investigators (PIs) or assigned to Schools, Colleges, and departments through tuition remission allocations to cover TAs and GPTI's who, by definition, pay no tuition.
3. No recommendation should jeopardize the existing real income (approximately \$10,000,000) derived from graduate tuition via students who pay their own tuition out of pocket or via outside grants and fellowships.
4. Any and all recommendations are inevitably subject to financial, political, and institutional factors that the members of the Task Force are unable to control or predict. Decisions that may eventually be taken by, e.g., the state legislature, the Board of Regents, the President, or the Chancellor, or unforeseen developments in the wider state and national economy, may thus change the current situation in ways that make one or another of our recommendations moot. We do nonetheless offer our recommendations as forming an interdependent system in which each recommendation works in concert with all of the others.

Recommendations

1. The administration must re-conceptualize how tuition remission is calculated in the budget. Tuition remission should not be regarded downstream as real money. A remission is revenue neutral. It costs the University no money to grant a remission unless it then treats that remission as income. Similarly, it costs no more money to provide a student a remission than it does to let that student go elsewhere for lack of funding.
2. Allow graduate programs to grant resident and non-resident tuition remissions to all graduate students on TA/GPTI appointments, subject only to the limits imposed by the size of the TA/GPTI stipend allocations the programs receive and to the size of each student's appointment. This is a natural consequence of Recommendation 1. It will have two important consequences:
 - It will eliminate uncertainty in graduate admissions at the department level and allow departments to admit the best students regardless of residency status.
 - It will eliminate the current practice of treating tuition remission given to Colleges and Schools as part of their operating budgets, thus making them go into debt and hamstringing their activities at every level.

All students on halftime (25%) appointment should be granted remissions for up to 6 credit hours per semester. Graduate programs should also ensure that students on fulltime appointment register for a minimum of 5 credit hours per semester.

3. Tuition charges to grants supporting first-year RAs should be set at the resident tuition rate* for several reasons:
 - This is what PIs budget.
 - It will lower tuition costs and thus allow some departments to admit more first-year students.
 - Money not spent on tuition will be spent in other ways that generate ICR.
 - Research grants already pay ICR (45%) on the RA stipend. Holding down tuition costs will allow PIs to pay larger salaries to RAs. This will in turn help to recruit students. Note that the University still benefits because ICR is paid on salary (but not on tuition). So a \$5000 increase in RA salary generates roughly \$2250 in ICR, which goes into the General Fund. PIs should ensure that permanent non-resident RAs who are not subsequently put on a TA or GPTI appointment register for the minimum number of credit hours required to maintain their appointment status and adequate progress toward their degrees. Since tuition is paid on the basis of credit hours, this will help control costs.

* The net financial impact of this recommendation needs to be evaluated to make sure it does not significantly violate Assumption 3. Moreover, the problem addressed in this recommendation may be solved by Recommendation 8 below.

4. If there are structural barriers that limit the amount of RA support from research or training grants, they should be removed.

5. Attach tuition remission to all internal fellowships (e.g., Chancellor's and Devaney Fellowships). This would greatly help departments in the Arts and Humanities (including the College of Music) and the Social Sciences recruit more and better students. However, this may not be revenue neutral because it could result in the loss of the tuition that bodies granting internal fellowships currently pay. The cost of this proposal needs to be analyzed carefully by the Budget Office.
6. Any attempt to revise resident and non-resident tuition rates must be discipline specific and must aim for as much flexibility as possible. Thus, in setting new rates and in determining the relationship between resident and non-resident tuition, campus financial officers should avoid trying to cut tuition rates from a single cloth as though circumstances were the same from one School or College to the next or even from one department or program to the next. Instead, though seeking uniformity where possible, they should allow for factors peculiar to each case. Such factors include: the specific markets in which different Schools, Colleges, departments, and programs must compete for students and specific features of the student populations to which a given discipline appeals—e.g., the financial expectations students in that discipline will have, their motives and career goals in pursuing graduate studies, the relative mix of international students appropriate to the discipline, and whether the tuition for the students in question is paid out of pocket by the students themselves, through extramural grants (as in the case of RAs), or through extramural fellowships (Javits Fellowships, Mellon Fellowships, etc.). The following recommendations should all be viewed against this background.
7. Significantly increase resident and, to the extent possible, non-resident tuition for selected professional schools' graduate degrees, such as the MBA degree in the Business School and the Law degree. Resident tuition in some professional schools is far below national norms and could be raised without compromising enrollments. This recommendation has the obvious virtue of generating more income. However, in setting graduate tuition rates, the University should take a differential approach designed to reflect market realities in various disciplines. Many MA/MFA students in, e.g., Education, Journalism, Creative Writing, Music, or Art pay in-state tuition out of pocket and cannot expect the same salary benefits as students in Business or Law. It follows that steep increases in resident tuition in these cases would result in a proportional decline in graduate enrollments and in a loss of tuition revenue to the campus. In addition, care should be taken to ensure that large increases in tuition in disciplines that can sustain them should nonetheless be indexed to rates at comparable state institutions in order to avoid pricing the University out of the relevant markets. Care should also be taken to consider our ability to offer fellowships, teaching assistantships and other student support, relative to our peer competition, and to ensure a proper, discipline-specific balance between resident and international students.
8. Beginning in Fall 2004, and on the flexible, discipline-specific basis outlined in Recommendation 6 above, non-resident tuition for graduate students should be frozen at AY $\frac{3}{4}$ levels for 5 years. During this time, and unless relevant market forces permit otherwise, resident tuition for graduate students should increase at the same percentage rate as resident tuition for undergraduates. After this 5-year period, all future increases in both resident and non-resident graduate tuition will be made by the same dollar amount. This recommendation aims to ease the burden on both PIs and non-resident students who pay tuition out of pocket or through external fellowships by stabilizing non-resident tuition and by gradually reducing the differential between resident and non-resident tuition.

9. Additional mechanisms must be found to support graduate students in disciplines where faculty have limited access to external funding and where resources derived from associations with campus Institutes or nearby national laboratories are not available. These disciplines include the Arts and Humanities, the Social Sciences, and Schools and Colleges like Education, Journalism, and Music. To this end, the administration should consider dramatically increasing the amount of fellowship funding available through the Graduate School as a high priority. One potential source of funding for new fellowships is revenue generated by Quality for Colorado. The Graduate School should be directed to distribute these new funds in a manner that takes into account the relative availability of resources in each discipline as well as the quality of the programs and students involved.

Appendix A. Task Force Members

The GTEMS advisory panel members include the following individuals:

Anthony Barker, Associate Vice Chancellor for Research[†]

Lawrence Bell, Interim Director, Office of International Education

George Born, Director, Colorado Center for Astrodynamics Research, Department of Aerospace Engineering

Christopher Bowman, Professor, Department of Chemical Engineering

Chris Braider, Professor, Department of French and Italian

Cheryl Brazeau, Assistant to the Provost / Executive Vice Chancellor for Academic Affairs

Jeff Cox, Director, Center for Humanities and The Arts, Professor, Department of English and Comparative Literature & Humanities

Adrian Del Caro, Associate Vice Chancellor for Graduate Education, GTEMS Chair

Sam Fitch, Chair of the Department of Political Science

Stewart Hoover, Director of Graduate Studies, Department of Journalism/Mass Communication

Ken Howe, Director of Graduate Studies, Department of Education

David Humphrey, Accountant, Department of the Bursar

Bill Kaempfer, Associate Vice Chancellor, Office of Budget and Planning

Carl Koval, Professor, Department of Chemistry and Biochemistry

Peter Knox, Chair of the Department of Classics

Leslie Leinwand, Chair of the Department of Molecular and Cellular & Developmental Biology

Clayton Lewis, Chair of the Department of Computer Science

Stephanie Martin, Doctoral Candidate, Economics, Vice-President, United Government of Graduate Students and Graduate Senator, University of Colorado Student Union

Erik Monsen, President, United Government of Graduate Students Representative, Doctoral Candidate, Business Administration

Linda Morris, Task Force Administrative Support, Office of the Associate Vice Chancellor for Research and Graduate Education

Margaret Murnane, Associate Chair for Graduate Studies, Department of Physics; Fellow of JILA

Lou McClelland, Director, Institutional Analysis, Department of Planning, Budget & Analysis

Joyce Nielsen, Associate Dean, College of Arts and Sciences for Social Sciences

David Pinkow, Associate Dean for Graduate Studies, College of Music

W. Fred Ramirez, Chair of the Department of Chemical Engineering

Jerry Rudy, Chair of the Department of Psychology

Philip Shane, Doctoral Curriculum and Policy Committee Chairman, Leeds School of Business

Stein Sture, Associate Dean of Engineering for Research, College of Engineering and Applied Science

Appendix B. Charge to the Task Force on Graduate Tuition and Enrollment Management Strategy

The University of Colorado at Boulder has a significantly smaller proportion of graduate students than that found at many leading comprehensive research universities. Also, our resident tuition rates for graduate students are among the lowest in the AAU, while our non-resident rates are close to the highest among public universities. A peculiarity of graduate tuition is that all graduate students who are U.S. citizens or permanent resident aliens are eligible to apply for resident status after their first year at UC Boulder.

During Spring 2003, a proposal for radically changing the manner in which tuition remission is charged to sponsored research projects and to units employing TA's and GPTI's sparked a discussion about whether our graduate tuition is too low. A closely related question is why previous attempts to increase graduate enrollment and to increase the quality of the graduate student pool by partially subsidizing high non-resident tuition charges had generally not succeeded.

A twenty-two member Task Force on Graduate Tuition and Enrollment Management Strategy has been formed to develop a coherent campus-wide strategy to address these concerns. The Task Force is charged to:

- (1) Evaluate current graduate tuition levels in terms of how they compare to actual costs for graduate education, and to tuition rates at peer institutions.
- (2) Evaluate graduate enrollment levels in the various academic units in terms of their size relative to the size of the faculty, the demand for TA's and GPTI's in the unit, and the strategic goals of UC Boulder.
- (3) Evaluate the mix of domestic and international students in terms of its impact on the quality of the graduate student pool in the various academic units, and on its appropriateness to meeting the goals of the university as a public institution.
- (4) Determine the overall level of graduate student enrollment needed to achieve the goals of Vision 2010 for UC Boulder.
- (5) Identify academic areas that should be targeted for efforts to increase graduate enrollment, or for efforts to change the proportion of international students.
- (6) Formulate a proposal for a long-term strategy to gradually modify resident and non-resident graduate tuition rates so that they accurately reflect the actual costs of graduate education at UC Boulder, taking into account such state subsidies as are provided, as well as issues of market competitiveness, accessibility, and affordability.
- (7) Formulate a proposal for a long-term strategy to increase graduate enrollment to the desired level.
- (8) Formulate a proposal for a long-term strategy for handling tuition remission, for graduate students on teaching as well as research appointments, which is consistent with the strategies for tuition rate modifications and enrollment enhancement.

Timeline

It is anticipated the Task Force will meet monthly beginning in June 2003. I would appreciate receiving the report of the Task Force by May 31, 2004.

Appendix C. Graduate Tuition and Enrollment Management Strategy Task Force Departmental Qualitative Survey Questions

This survey consists of seven questions. For each question, separate responses are requested for Master's programs and for Doctoral programs. In addition, if your unit has both professional and academic Master's Programs, you may wish to give separate answers for each. Please exclude MBA Programs in the Leeds School of Business. If you are an Institute Director, please answer only those questions that are relevant to your situation.

1. Assuming that direct student support for teaching and/or research stipends and for tuition remission can be increased, but that other available resources (number of faculty, lab and office space, operating support, etc.) remain roughly the same as current levels, what would the ideal total enrollment in your graduate programs be, and how does this compare to the current enrollment?
2. For each program where current enrollment is less than the ideal number, what are the barriers to increasing enrollment?
3. For each program, regardless of enrollment, what are the barriers to increasing the quality of students? (Typical barriers might be lack of fellowship money or uncompetitive RA stipends.)
4. Is the current ratio of foreign to domestic students in each program too low, too high, or just right, relative to the ratio you would like to have if cost were not an issue, but acknowledging the characteristics of the available applicant pool in your discipline?
5. About how much general fund money did your unit have for tuition remission in AY '02-03?
6. How does the amount of tuition remission funding available affect your policies or standards regarding admission of or appointments for graduate students?
7. How have your admissions and appointment policies for graduate students been affected by the recent termination of campus subsidies for non-resident tuition differentials?
8. Are current tuition remission policies a barrier to increasing either the enrollment or quality of graduate students in any of your programs? Please explain.
9. The task force may propose a significant increase in resident tuition rates for graduate students. For example, one proposal is to phase in a doubling of resident graduate tuition rates over five years. This would possibly be combined with a significant reduction in non-resident graduate tuition rates. Please comment on the possible impact of such a scheme on current students and on potential future enrollments for:
 - b. students who are supported by sponsored research grants.
 - c. students who are supported by intramural or extramural fellowships.
10. Do you have any additional comments or recommendations for the Task Force?

Appendix D. Responses to the Graduate Tuition and Enrollment Management Strategy Task Force Departmental Qualitative Survey – See Separate Excel Spreadsheet attachment

Appendix E. Tables for campus, colleges, and Arts & Sciences discipline clusters. –

D.1 Profiles - New students and total enrollment by residency-citizenship group (international, U.S. non-residents, Colorado residents), by appointment type (none, TA, RA), by doctoral vs. master's level, with counts, graduation rates, degree recipients, and time to degree.

<http://www.colorado.edu/pba/records/gprofile.doc>

D.2 Summaries - Number of faculty, research expenditures, enrollment, and graduation rate, with enrollment by appointment type.

<http://www.colorado.edu/pba/records/gsum.doc>