

Report of the Instructional Advisory Group: 2/24/09

Charge:

Convened by the Dean of the Graduate School, the Instructional Advisory Group met seven times from November 2008 to February 2009. The Group's charge was to examine current course enrollments and to identify the areas of stress in instructional staffing as this relates to Teaching Assistants/Fellows, graders, adjuncts, and other supports for classroom instruction. The aim was to develop flexible strategies for addressing staffing challenges, and to propose recommendations to the Dean, Provost and Faculty.

Demographics of Instruction:

The Group considered in some detail the "demography" of instructional need, looking at enrollment and appointment data, as well as program size for graduate programs in E&G as well as the Division of Biology and Medicine. We considered the 2008 recommendations of the *Working Group on Graduate Education* as well as the 2008 *Draft Report of the TA Working Group of the Division of Biology and Medicine*. We also looked at comparative information from our peer institutions, where we found many common problems, but few new strategies or solutions, apart from the widespread use of Master's students as graders.

The Group's assessment primarily relied upon course enrollment and TA appointment data for the 2007-08 academic year (see figure 1). The course enrollment data was supplied by the Office of the Registrar and was based on final enrollment numbers in each course as of the end of the semester. We looked only at undergraduate level courses (course numbers under 2000 in Banner).

For the purpose of quantifying the **demand** for TAs we identified two types of courses: (1) introductory level courses in the physical and life sciences, basic foreign language, intensive writing, and studio courses that have limited enrollment sections of fewer than 20 students; and (2) all other courses. We defined TA demand for the limited enrollment lab, language, and studio classes by allocating one TA for every increment of 20 students beyond the first 19 students. For instance, a basic language course with a total of 30 students would be allocated one TA and a course with a total of 50 students would be allocated two TAs. All other courses were allocated one TA for every increment of 40 students beyond the first 39 students. For example, a course with 45 students would be allocated one TA and a course with 80 students would be allocated two TAs. The allocation rule of 40 that we used is more generous than the long-standing 50-student rule of thumb that was used in the past for allocating TAs. To estimate the total TA demand in a program for the semester, the number of TAs allocated to each course was totaled for all undergraduate courses offered by the program. Thus, a program that had only one course that reached the 20- or 40-student threshold would have a total TA demand of one, irrespective of the total number of students enrolled in all courses offered by the program.

Our measure of TA **supply** used the actual number of TA appointments made to Ph.D. students in the home program during the semester. In our analysis we examine the

relative impact of three alternative TA management approaches on addressing the difference in TA supply and demand: (1) expanding the supply of TAs to include unfunded active seventh-year students, (2) evening out the demand and supply of TAs across the fall and spring semesters, and (3) using groupings of aligned programs to match TA supply to TA demand rather than working only within departments.

It should be noted that our analysis provides a static picture of the areas of instructional supply and demand. Any capping of course enrollments or faculty staffing changes would have an obvious impact upon TA demand.

Our analysis of these data confirmed what had been expressed anecdotally by faculty: that pressures exist in several areas:

1. in the physical and life sciences (especially in Math, Chemistry, Biology, Neuroscience and Psychology)
2. in language instruction (especially in French, Slavic and, increasingly, in Chinese)
3. in the popular undergraduate concentrations that do not have allied doctoral programs to provide TAs (such as International Relations, Urban Studies, Visual Arts, Education and Environmental Science), and
4. in very large, single lecture courses (e.g. in Economics, Political Science, and History of Art) where a very small percentage of courses overall makes a significant impact upon TA resources.

TA Supply:

Despite a perception that there has been a new shortage of Teaching Assistants in recent years, the data demonstrate that this is not the case (See figure 2). In fact, over the past five years, a remarkably constant number of TAs (averaging 369) has been funded. Certain programs (such as American Civilization, International Relations and Urban Studies), however, have experienced a lack of qualified students available to serve as TAs either because of the lack of an allied doctoral program or the success of allied doctoral students in winning external funding and thus removing themselves from the pool of available TAs. Additionally, with growth in the number of faculty through the Plan for Academic Enrichment, there are now more courses being offered (see figure 3), although the largest areas of growth has been among courses with enrollments under 20 that typically are not assigned a TA.

Since the institution of the five-year guarantee, departments have a predictable supply of funded students. Departments must, however, manage these resources. Many departments have an imbalance of TA need from fall to spring. In addition, “over-assignment” of dissertation fellowships in some departments compromised the ability to staff courses. In order to avoid this source of pressure, the Graduate School now reviews all appointments in batch. In most cases, making use of graduate students beyond the funding guarantee (in years 7 and beyond) has a relatively limited impact.

Demand:

Despite a constant and predictable supply of funded students, however, areas of unmet demand still occur. These can be characterized in the following categories:

1. **expertise:** TAs are not always available in the area of expertise that is needed by a particular course. We cannot transfer a “surplus” student from Classics to serve as a TA in Chemistry, for example, although we have had some limited success in “matching” students across disciplines. This problem is also apparent within BioMed where differing expertise is necessary in advanced-level classes with laboratory or field components. The graduate program in Comparative Literature sees real value in their students gaining experience in teaching outside the department, and they actively search for these opportunities.
2. **small cohort size:** Very small graduate programs like French or History of Art are challenged when they attract large undergraduate enrollments. A year of low yield in admitting graduate students, or unforeseen student leave patterns will also affect the availability of TAs in later years. Similarly, exceptional performance by a program’s students in attracting external funding adversely affects TA availability.
3. **absence of allied doctoral program:** The instructional needs of the concentrations without associated doctoral programs remain particularly challenging.

Moreover, in programs where students are normally supported by Research Assistantships, the “downstream” challenge of assuring that adequate grant funding will be available further complicates the planning. Any proposal for increased size of a graduate program to accommodate instructional need must assure that such RAs will be present.

Recommendations:

The Group acknowledges that there is no single solution to instructional challenges for all programs. In the new economic environment, growth of graduate programs to accommodate instructional need is now not an option. Any solutions should be mindful both of the impact of instructional needs on Brown’s undergraduates, and on the training needs of our graduate students. Furthermore, the challenges that we face are *instructional* challenges (not TA challenges) that may be met by a range of resources. In that spirit, the Group advances a number of recommendations:

1. The Group recommends that departments **forecast enrollment** based on previous year’s numbers, and attempt to more closely balance TA supply and demand across semesters, linking their assignments to available numbers of TAs listed in the Graduate School census, GSIM. **Capping** of course enrollment and planning is a further solution. The planning advantages that are gained by capping must be weighed very carefully against the restrictions

placed upon student choice, and this system must continue to be monitored by the Dean of the College and the Graduate School.

2. The Group recommends **closer monitoring** of the links between enrollments and TA assignments. TA assignments can now be entered into Banner. The Graduate School is revising its procedures for appointment forms for TAs. In the future, each TA assignment will be required to list the assigned course and course enrollments from previous years, as well as projected enrollment for the coming year. The specific TA assignment will be entered into GSIM, and the assignment verified at mid-year.
3. In many departments at Brown (and in our peer institutions), **faculty** take responsibility for a portion of the students enrolled in large courses, teaching a section in large lecture courses and/or doing a portion of the grading. Many faculty members offer a special section for concentrators, or for freshmen as part of their CAP advising. This practice is not standardized at Brown or at our peers, but it provides further support for instructional needs, and is thus endorsed by the Group.
4. Other constituencies such as **postdoctoral Fellows** or **adjuncts** can be brought profitably into instruction.
 - a. For example, many **postdoctoral Fellows and Research Associates** are deeply interested in gaining teaching experience. While there are restrictions on the allocation of their research time, a teaching component may be written into many postdoctoral appointments.
 - b. In cases where no graduate student with expertise is available, a recent PhD graduate can sometimes be hired as an **adjunct** instructor. The Graduate School has over the past two years arranged for transfer of funds to the Dean of the Faculty for “replacement TAs.” In “emergency situations” the DOF and the Graduate School will continue to partner to provide adjuncts in cases where TAs are not available, and will seek to put aside contingency funding.
 - c. In some cases, **Master’s students** may have the requisite expertise to serve teaching needs, but many programs depend upon the tuition revenue these students provide. We cannot hire Master’s students as TAs and pay them a differential sum (i.e. stipend only). We can, however, institute a *different* position with a *more limited set of duties*. The Group proposes the institution of an MTA (Master’s Teaching Associate) to handle grading or other very specific duties as approved (or, in exceptional instances, classroom assistance) *only*, and recommends that a fixed amount be set aside in the Graduate School budget in order to support MTAs, and that a system be created to monitor and regulate these assignments. In truly exceptional cases where no qualified doctoral students are available, and where the Graduate School and the department chooses to forego the tuition revenue, we may consider a Master’s student appointed to a regular TAship. This occurs in selected terminal Masters programs.

5. We also recommend a **rethinking of TA** assignments. The weekly section meeting is not the only alternative, nor is it always the most effective. In some cases, teaching assistance can be partial or divided, providing review or alternative exercises punctually rather than every week. The Division of Engineering, for example, makes good use of “split” appointments, with its STA program. Such students are appointed as 90% RAs and 10% TAs.
6. The instructional needs of **concentrations with no affiliated doctoral programs** (such as IR and Urban Studies) are particularly challenging. In the past, such concentrations held TA “slots” and hired from among the ranks of the unfunded graduate students. With the guarantee, unfunded students only exist in years 6 and beyond. The alternatives are: “pre-dedicated” students from allied programs, sixth-year students, and adjuncts. With the measures in recommendations #1 and 2 above, graduate programs without sufficient enrollment will also yield “surplus” students who can, given the right expertise, serve these concentrations. The Group recommends that those concentrations be guaranteed a number of TA allocations, linked to enrollment. In some cases, the adjunct solution described in # 4b may be necessary.
7. Meeting the instructional needs of the **life sciences** is similarly challenging. As the report of the BioMed Working Group has underscored, the three-semester limit of institutional funding places constraints upon the availability of BioMed students to serve as TAs. The analysis of the Instructional Advisory Group also finds areas of keen need in undergraduate courses in a number of Biology courses. The BioMed Working Group pointed to the need for additional graduate **training grants** to increase the ranks of supported students in the Division. It also pointed to the challenges of matching students to courses and recommended “floating” TA slots for advanced students .
 - a) The Instructional Advisory Group recommends that a budget sufficient to support introductory-level Biology courses be maintained in the Graduate School for allocation to a set number of advanced BioMed students to serve as TAs.
8. The Instructional Advisory Group discussed the use of **undergraduate “TAs”** which is a common resource used especially in Computer Science, Biology, Economics and other courses. The College Curriculum Council (CCC) has reviewed the role that undergraduate TAs play at Brown and acknowledges the values of these TAs to Brown’s teaching mission. As part of that review, the committee has set down guidelines for the proper use of undergraduate TAs and has outlined the duties for which these students can be responsible.

Conclusion:

The balance between instructional supply and demand is a necessarily dynamic proposition. Banner and the funding guarantee both provide new measures of predictability, but these resources must be managed and monitored carefully, especially in the new climate of economic downturn. Enrollment numbers, however, should not drive the size of graduate programs; rather their size should be linked to the excellence of the program, to the availability of external funding (where relevant) and to the ultimate placement of graduate students as they complete their training at Brown. The benefits of the recommendations listed above must be shared, providing greater support for the teaching needs of our faculty, enhanced professional training for our graduate students and post docs, and continued excellence in instruction for our undergraduates.

Members of the Instructional Advisory Group:

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Figure 1

Undergraduate Courses by Enrollment and Area, Academic Year 2007-08

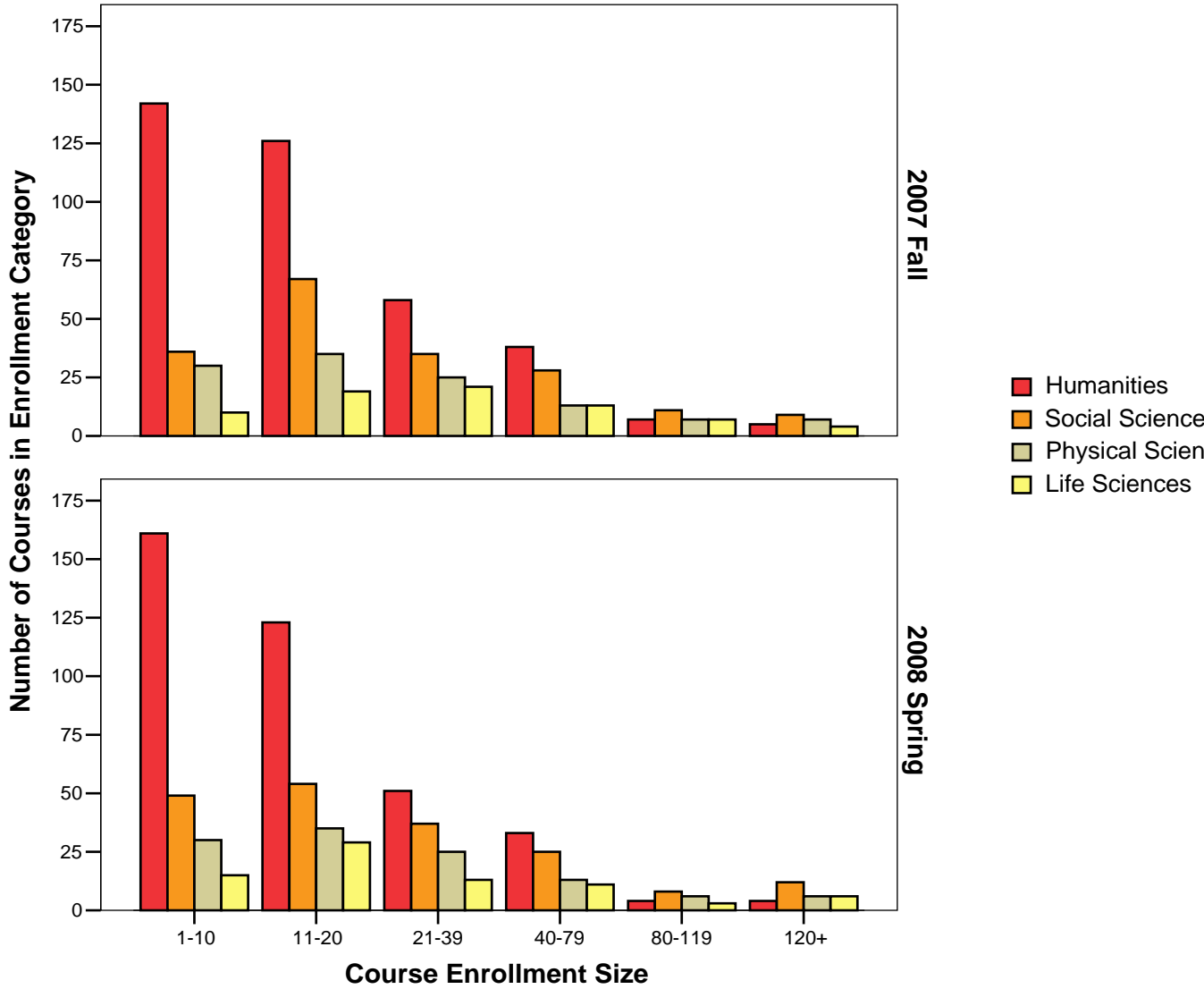


Figure 2

**Brown University
Graduate School
Teaching Assistantship Stipend History
FY 2004 - present**

<u>Fiscal Year:</u>	<u>Total # of Appointed Teaching Assistants</u>
FY 2004	376
FY 2005	356
FY 2006	378
FY 2007	372
FY 2008	360
FY 2009	369
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Average # of TAs	<u><u>369</u></u>

