University Senate Committee on Instruction, Curriculum and Advising
Review of Teaching Assistant Training
February 2001

Report on S-9913: "Review the training of graduate students by departments for teaching undergraduate-level courses at Rutgers. For example, compile data on the range of teaching assignments, teaching evaluations for graduate students who are responsible for teaching, and the amount and kind of training provided to graduate students, particularly in current instructional technologies. Consider the evaluation of skills (specifically fluency in the English language) and the training provided to students from foreign countries. This should include further study and consideration of recommendations made by the Rutgers College Governing Association report entitled "Teaching Assistants," which has been received by the Senate for review, and should be coordinated with the Graduate and Professional Educational Policy Committee of the New Brunswick Faculty Council, the Graduate School-New Brunswick deans' offices, and with units on Camden and Newark campuses, as appropriate. Make recommendations for improvements, as appropriate."

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RESOLUTION

I. Executive Summary

In evaluating the RCGA report and other suggestions to improve the training of teaching assistants, the Committee came to a number of conclusions within which it framed its recommendations.

- First, that the training of teaching assistants must be discipline specific, and "one-size-fits-all" training has limited applications.
Second, that training programs alone cannot be successful unless departments are held accountable for the performance of teaching assistants.

Third, that concerns related to international teaching assistants can best be addressed through enhancement of existing programs and generalized training, and through the addition of programs to increase international students understanding of the culture of the University and greater departmental collaboration and participation in those programs.

Fourth, that communication in the classroom is a two-way process, and programs to increase the cultural understanding of undergraduates also must be enhanced.

Fifth, that our present understanding of the role of teaching assistants in the diverse departments and schools of the University is limited, and that this must be studied in greater detail before recommendations concerning the numbers and uses of teaching assistants can be made.

Within this framework, the Committee developed the specific recommendations below.

**Recommendations Related to Teaching Assistant Training**

- Each department (or program) should have one or two department officials (for example, chair, vice chair, or designated faculty member) with the specific responsibility for assuring that the teaching assistants are trained and supervised in their teaching. That official should have or institute a training program run annually for new and continuing teaching assistants. Such a program might include orientation sessions, periodic workshops, a course on teaching in the discipline, in-class visitations, and presentations (when appropriate) by ESL staff. *(Parallel Recommendation Under Consideration by NBFC)*

- Each department should be required to submit to the responsible dean an annual report summarizing departmental teaching evaluations for teaching assistants. Where performance of any individual teaching assistant or overall scores are poor, the responsible Dean should meet with representatives of the Graduate School, the appropriate graduate program, and the campus Teaching Excellence Center to identify steps that must be taken by the department to improve teaching assistant performance through modification of training and supervision. Deans should consider what resources are necessary to improve training and teaching assistant effectiveness.

- An annual Teaching Performance Report should be compiled by the Teaching Excellence Center which will provide a breakdown of teaching evaluations by school, department, and rank, with data to be distributed to all department chairs.

- Each department should develop guidelines for faculty who supervise teaching assistants.
The units responsible for training teaching assistants on each campus (Teaching Excellence Centers, Graduate Schools, TAP) should schedule a series of workshops by Fall 2001 to share across disciplines ideas about the training and supervision of teaching assistants. It is clear that there are many models of how to train and monitor teaching assistants. Bringing together department officers, as well as faculty members who currently have responsibility for training teaching assistants, from different disciplines to share ideas about training seems an ideal way to stimulate new approaches at the department level. Graduate and undergraduate students should be involved in all such efforts. *(Parallel Recommendation Under Consideration by NBFC)*

In departments which utilize large numbers of teaching assistants to teach multiple labs or recitations, the appropriate dean should be asked to consider the appointment of a staff person (or the funding of an advanced "head" teaching assistant) who could serve as course coordinator and teaching assistant trainer. *(Parallel Recommendation Under Consideration by NBFC)*

Departments should institute a midsemester review for new teaching assistants; following the review the responsible departmental official should review the evaluations with each teaching assistant.

**Recommendations Related to International TAs**

Where appropriate ESL staff should meet with the department official in charge of supervising teaching assistants to expedite the testing of students and ESL staff should be invited to participate in department training sessions. ESL should receive additional funding/resources to allow fuller testing and in-class follow-up of international students, and be encouraged to request additional staff resources, based on need, for teaching ESL classes. When ESL tests graduate students for proficiency, an undergraduate student should always be part of the review committee. *(Parallel Recommendation Under Consideration by NBFC)*

Undergraduate colleges should develop programs through residence life programs throughout the year during which undergraduates can discuss possible problems with teaching assistants and strategies to further their own learning.

Programs should be developed to provide international teaching assistants with support throughout the year, for example through the Asian-American cultural center.

**Recommendations Related to Hiring Practices and Compensation**

Where possible, departments should arrange for some kind of interview process before graduate students are hired as teaching assistants. Departments may wish to conduct telephone interviews, or video interviews by computer, to assess a prospective student’s potential for assuming the role of teaching assistant.
• The University and the bargaining unit should investigate the possibility and desirability of restructuring the compensation levels for teaching assistants based on experience and assigned duties.

**Recommendations Related to Numbers of Teaching Assistants**

• The University should appoint a committee to review departmental use of teaching assistants as well as teaching assistant workloads, and to make recommendations as to how teaching assistant lines might be used more effectively. This committee should also identify areas where additional teaching assistant lines would enhance undergraduate education.

**Recommendations Related to Other Instructional Personnel**

• In disciplines where it is appropriate, departments should develop ways to utilize undergraduate peer mentors in supervised academic settings. Appropriate resources should be made available to departments for such instructional enhancements.

• Each department should be required to submit to the responsible dean an annual report summarizing departmental teaching evaluations for part-time teaching staff. Where performance of any individual staff member or overall scores are poor, the responsible Dean should meet with representatives of the department and the Teaching Excellence Center to identify steps that must be taken by the department to improve PTL performance through modification of hiring practices, training and supervision.

The background for this charge, our response to specific suggestions in the RCGA report and the rationale for each of the recommendations are discussed below.

**II. Background and Process**

**Overview:**

Many graduate students at major research universities will enter academic careers which include both research and teaching. Graduate student education has traditionally been focused on research and training within an academic area of concentration. However, the importance of providing training in teaching techniques for graduate students has been increasingly recognized over the last twenty years, and many universities now provide some form of training in teaching. There exists a sizable body of literature relating to teaching assistant training issues and programs. While the earlier emphasis was on more narrowly defined issues of improving the performance of teaching assistants in the classroom, in the last decade the focus has shifted to the broader issues of adequately preparing graduate students to become faculty members. Increasingly, teaching assistant training is viewed as not just an enhancement tool for job performance, but an important component of academic career preparation.
Many individual departments at Rutgers have had long-standing programs for their graduate students; programs are also provided by the Graduate Schools. In New Brunswick, departmental programs were strengthened and enhanced with the creation of the Graduate School’s Teaching Assistant Project (TAP) in the 1980s. This program provides one or two day training sessions for all new teaching assistants, a handbook, assists disciplines in planning and implementing departmental programs, and provides many other services. In Newark, new teaching assistants attend a day-long program developed by the Graduate School, and some departments provide additional discipline specific training. In Camden, the number of teaching assistants is relatively small, and most are employed in the English Department, which provides a training program.

Teaching assistants provide a significant part of the classroom instruction at Rutgers; university-wide, approximately 13.5% of the instructional units (IUs; where three IUs are approximately equal to one course) are taught by teaching assistants. Tenured and tenure-track faculty provide 51% of the classroom instruction, and PTLs provide approximately 25%. The percentage of instruction provided by teaching assistants varies across the campuses, with TAs providing approximately 17% of the instruction in New Brunswick, 4% in Camden and 7.5% in Newark. It is clear from these data that issues of training for teaching assistants are most critical for the New Brunswick Campus. However, teaching assistants provide instruction on all campuses, and regardless of where they are based, the University has a responsibility to provide graduate students with appropriate training before they enter our classrooms or begin careers in teaching.

The various training programs in place at the University were designed both to help graduate students cope with their new responsibilities as teachers and to enable them to better serve our undergraduate students. 

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population. Like all teaching faculty, graduate students who are teaching assistants are regularly evaluated through the standard University course evaluations form. However, there has never been a systematic university-wide review of these training programs, and a recent review of teaching assistants as classroom teachers by the Rutgers College Governing Association (RCGA) points to the need for such an examination. Although the RCGA report provides only the perspective of one college on the New Brunswick Campus, the quality of instruction is an important issue across the University, and across the nation. The issues raised by the RCGA report, and the system of teaching assistant training programs generally, are being simultaneously reviewed by this committee from a University-wide perspective and the Graduate and Professional Education Committee of the New Brunswick Faculty Council (NBFC) from a New Brunswick perspective.

**Process:**

The complex issues centered around teaching assistants and their training have been extensively discussed within this committee, and the committee has considered the materials and preliminary recommendations from the NBFC as well as the original RCGA report. Representatives of this committee have met with graduate student groups, the staff of ESL, representatives of the TA Liaison Committee and a focus group within the Faculty of Arts and Sciences, New Brunswick. Members of the committee have also discussed these issues, at least in part, with a number of individuals representing the three campuses, the Graduate Schools, the TA Training Project (NB) and the Teaching Excellence Centers. The issues raised by the RCGA and additional issues arising from discussions are discussed below.

**III. Undergraduate Concerns About Teaching Assistants**

**Nature of Undergraduate Concerns:**

The RCGA report voices general student concern about the level of training of teaching assistants in some disciplines and the lack of a comprehensive training program. Although the report does not explicitly state this, it is apparent that there is a general concern among undergraduates that not all teaching assistants are adequately trained. The report points out the importance and impact that teaching assistants have on the undergraduate experience, and the importance of having effective teaching assistants as part of the overall academic experience of our undergraduates.

The issues raised in the report or arising from it can be divided into five categories:

- Issues directly related to training of teaching assistants,
- Issues related to international teaching assistants,
- Issues related to hiring practices,
- Issues related to the overall number of teaching assistants, and
- Role of other instructional personnel.
General Committee discussion on undergraduate concerns:

There does not seem to be any quantitative information on the extent to which teaching assistants are poor classroom teachers. The RCGA report is based on verbal concerns expressed by a number of students to RCGA members; certainly there exists a widespread belief that teaching assistants in some disciplines are poorer than in others. Data on actual TA evaluations are difficult to obtain easily; although teaching assistants are regularly evaluated by the University-wide evaluations, the Teaching Excellence Centers do not have rank information on each instructor. While in courses where these data are available (e.g. in General Biology all lab sections are taught by teaching assistants) the ratings overall do not give cause for concern and averages are consistent with departmental averages; clearly there may still be individual problems. Moreover, if large numbers of undergraduates perceive teaching assistants to be poorly trained, the perception itself presents a problem which should be addressed. It is also not clear if students always know whether the person in front of their classroom is a teaching assistant, a PTL, an instructor or a faculty member. In many programs, PTLs are often graduate students who do not hold teaching assistantships. This makes it even more difficult to identify which group among instructional staff have given rise to the undergraduate concerns. While poor performance in teaching is not limited to any particular instructional group, teaching assistants, who frequently come to graduate school directly from undergraduate training, are least likely to have had training in teaching techniques. Providing and improving this training is a responsibility of the University even in the absence of clear evidence of problems.

IV. Training Issues

One of the central issues of this review is whether the training of teaching assistants can be improved, and whether additional training will improve classroom performance. The RCGA report makes a number of specific recommendations that the undergraduates feel would improve TA training. Most of their suggestions are based on elements which already exist within programs that the RCGA felt were successful (based on perceptions of TA performance in each discipline).

Recommendations of the RCGA Report

Rec. 1 Extend training for new TAs from one day to two weeks.
Rec. 2 Institute a policy of weekly meetings between the professor and the TAs of a course.
Rec. 3 Appoint a Head TA for large lecture courses to coordinate what takes place in the individual sections of a course.
Rec. 5 Departments should host monthly refresher training sessions for TAs.
Rec. 6 TAs should be routinely videotaped in the classroom.
Rec. 7 TAs should be required to create a teaching portfolio of their lesson plans, tests, videotapes, and student evaluations.
Rec. 8 There should be more opportunities for students to give feedback to their TA throughout a semester.
Rec. 14 Each department should be given a $3,000 grant to establish the position of a TA coordinator in
Existing training programs

Training programs for teaching assistants include both the one or two day programs developed by the teaching assistant project in New Brunswick and Graduate School, Newark and individual programs organized by departments. The departmental programs in New Brunswick have been reviewed by the New Brunswick Faculty Council, and programs within FAS-NB are currently being reviewed. The existing departmental programs are organized in a variety of ways and include diverse formats, from formal courses (History-NB) to intensive courses at the beginning of the semester (Physics-NB) to semester long training associated with large courses (General Biology, NB). There appears to be no clear correspondence between type of training and the undergraduate perception that teaching assistants in that discipline are well prepared. What the "successful" training programs may have in common are Faculty commitment to the importance of professional development of teaching assistants, some level of supervision, continuity, and accountability throughout the semester.

Graduate student perspectives

Graduate students from humanities, social sciences and sciences were emphatic in pointing out that disciplines were very different, and that training programs should be tailored for each discipline. Most were not in favor of a "one-size-fits-all" training program, nor an expansion of the current TAP training program in New Brunswick for the two weeks suggested by the RCGA report. However, one or two teaching assistants who had attended extended training programs at other universities did feel that an extended general program could be helpful. Many of the graduate students in the Life Sciences (NB) found the General Biology training program and support system useful, since it provided them with a structured context for their first teaching experience. Many of these graduate students felt that "just-in-time" training was most helpful, and that long training sessions before they had a context in which to apply the information would not be productive.

Some of the graduate students also felt that there were problems with the level of supervision and input they received from the faculty in charge of courses. Several graduate students remarked that it would be helpful to have written guidelines as to their responsibilities, and several remarked that regular meetings with the supervising faculty member would be useful.

Committee Discussion

It is the consensus of the Committee that training programs must be discipline specific, and that universal proscriptions for training programs would be counterproductive. It also seems clear that training is only one of a number of factors that may contribute to good TA performance. One critical factor is a department’s overall commitment to teaching as an important part of faculty and TA responsibility. Those departments which take this responsibility seriously have created appropriate training programs, each designed for the particular discipline or type of courses taught. While it may
indeed be useful to compile and disseminate details of these programs as a means of sharing ideas and best practices, we do not feel that there is anything to be gained by forcing departments to adopt particular strategies. We therefore can not endorse most of the above RCGA recommendations per se, and feel that none of these should be imposed on existing programs.

The Committee is also unable to endorse the recommendation that the Teaching Assistant Project’s program (or any other generalized program) be extended to two weeks. Although this program does include discipline specific "master classes" it must by its nature be close to a "one-size-fits-all" program and as such contrary to the discipline-specific model that we find most useful. If the program were subdivided so that there were more discipline-specific activities, there would seem to be little benefit over departmental programs. This program currently provides an excellent generalized base on which departmental programs could build; as such a base, it might be desirable to extend it into a three day session. Many of the graduate students interviewed felt that "just-in-time" training that they could apply immediately (e.g., exam writing skills as they were about to write a first quiz) was most useful; therefore having an extended period of training prior to teaching would not necessarily be useful.

An extended program before the semester begins would present enormous logistical problems; many graduate students do not have housing available until September 1, and many non-New Jersey TAs do not arrive until close to that date. If graduate students were required to be here two weeks earlier, some contractual adjustments would have to be made, and additional compensation paid. The program would be very expensive, and it seems to this committee that it would provide little benefit for the expense. If the program were extended to three days, the logistical problems would not be as severe.

The Committee did, however, feel that some of the RCGA training recommendations could potentially have a significant impact on the quality of departmental instruction, and would recommend that programs wishing to implement these recommendations be funded to do so. There is certainly merit, for example, in the recommendation that departments appoint a "Head TA" or staff member to assist with training and supervising TAs in large courses. In some departments (i.e. Life Sciences, NB) this has been very successful, and several graduate students commented that it was particularly helpful to them as they taught for the first time. However, if this is done it is critical that the Head TA be given adequate release from other teaching responsibilities so the position does not negatively affect progress toward degree; for example, the head TA in General Biology is released from teaching for one semester in return for serving as Head TA for one semester. We realize that this is an expensive recommendation as it requires the commitment of a full TA line to this position. Nevertheless, we feel that the University should make an effort to provide resources for these types of positions for departments/courses where they could be used most effectively.

We also feel that the recommendation for more frequent evaluations is one that should be implemented in most training programs. Some TA training programs already do a mid-semester designed to provide constructive feedback about improving teaching. The TEC-NB and the Teaching Assistant Training Project also make an on-line mid-semester evaluation available which can be used in any course; a mid-semester evaluation is also done for each on-line course (see Appendix A for examples).
Although the committee felt that it would be inappropriate to endorse suggestions that dictate how individual faculty supervise their TAs, it was clear from comments made by the graduate students that improvements could certainly be made in this relationship. There are two ways that this could most appropriately be addressed: first through the mentoring guidelines developed by the Graduate School, and second, through departmental guidelines and best practices. Development of such guidelines within departments should be part of the development or enhancement of training programs.

It is clear to the Committee that some departments/programs have less successful training programs than they should have. While the University must ensure that all graduate students receive adequate training and supervision, this can best be accomplished by ensuring that departments are held accountable for the performance of their teaching assistants. To that end, each Dean should meet annually with a designated departmental officer to review the teaching evaluation data for the departmental TAs.

**Recommendations**

- Each department (or program) should have one or two department officials (for example, chair, vice chair, or designated faculty member) with the specific responsibility for assuring that the teaching assistants are trained and supervised in their teaching. That official should have or institute a training program run annually for new and continuing teaching assistants. Such a program might include orientation sessions, period workshops, a course on teaching in the discipline, in-class visitations, and presentations (when appropriate) by ESL staff. *(Parallel Recommendation Under Consideration by NBFC)*

- Each department should be required to submit to the responsible dean an annual report summarizing departmental teaching evaluations for teaching assistants. Where performance of any individual teaching assistant or overall scores are poor, the responsible Dean should meet with representatives of the Graduate School, the appropriate graduate program, and the campus Teaching Excellence Center to identify steps that must be taken by the department to improve teaching assistant performance through modification of training and supervision. Deans should consider what resources are necessary to improve training and teaching assistant effectiveness.

- An annual Teaching Performance Report should be compiled by the Teaching Excellence Center which will provide a breakdown of teaching evaluations by school, department, and rank, with data to be distributed to all department chairs.

- Each department should develop guidelines for faculty who supervise teaching assistants (see sample in Appendix B).

- The units responsible for training teaching assistants on each campus (Teaching Excellence Centers, Graduate Schools, TAP) should schedule a series of workshops in spring 2001 to share across disciplines ideas about the training and supervision of teaching assistants. It is clear that there are many models of how to train and monitor teaching assistants. Bringing together
department officers, as well as faculty members who currently have responsibility for training teaching assistants, from different disciplines to share ideas about training seems an ideal way to stimulate new approaches at the department level. Graduate and undergraduate students should be involved in all such efforts. (*Parallel Recommendation Under Consideration by NBFC*)

- In departments which utilize large numbers of teaching assistants to teach multiple labs or recitations, the appropriate dean should be asked to consider the appointment of a staff person (or the funding of an advanced "head" teaching assistant) who could serve as course coordinator and teaching assistant trainer. (*Parallel Recommendation Under Consideration by NBFC*)

- Departments should institute a midsemester review for new teaching assistants; following the review the responsible departmental official should review the evaluations with each teaching assistant.

**V. International Teaching Assistants: Language Issues**

*Overview and Discussion:*

A number of concerns in the RCGA report center on language skills of international teaching assistants. Again, actual data on the frequency of language problems in the classroom are lacking, although anecdotal reports of problems are frequent. However, contrary to concerns expressed in the RCGA report, all international teaching assistants are tested before they may assume classroom teaching responsibilities. Each prospective teaching assistant is interviewed by a member of the ESL staff, and is then required to give a brief lecture on a topic in their field. This lecture is video-taped and reviewed by the ESL staff and forms the basis for the classification of the teaching assistant. Teaching assistants may be classified as "able to teach without further training," "able to teach but must take ESL courses," or "not cleared for classroom teaching."

The RCGA report makes one specific recommendation (#3) about international teaching assistants: "Require TAs who speak English as a second language to practice their first few lesson plans with their professor." The committee felt that as a policy this would be difficult to enforce and would not be appropriate in all contexts. It seems discriminatory to single out international graduate students to practice when in fact many new teaching assistants have difficulty with their first few lessons. The unique problems of international TAs could better be addressed by recommendations to strengthen the ESL programs and testing. The need for new TAs to practice could be a "best-practices" recommendation for individual department programs.

Despite the fact that international teaching assistants are tested, the widespread concern of students suggests that language skills are not always adequate. We also believe that some of the problems international teaching assistants may experience in the classroom result from a combination of factors. Many international teaching assistants face not only the challenge of teaching in a second language, but teaching for the first time, and in a culture that may be very different. Many are also new to graduate
school, a challenge in itself. Some faculty involved in training teaching assistants note that when international teaching assistants have problems in the classroom, cultural issues and lack of experience often compound the difficulties of teaching in an unfamiliar language. The Committee agreed that many of the problems faced by international teaching assistants are not directly related to language\(^3\), and that improved departmental training programs would be beneficial in helping international teaching assistants feel more comfortable in their new roles as instructors. We also felt that it would be beneficial to international teaching assistants if greater efforts were made to help them understand the culture of American classrooms and students.


It is problematical that international graduate students are most heavily concentrated in the sciences and mathematics, fields most often considered difficult by undergraduates. Some undergraduates may feel that their problems in these courses stem from the teaching assistant’s command of English, when in fact the inherent nature of the subject matter is at fault. Some of the graduate students also alluded to this, stating that undergraduates might blame them for being unclear, instead of asking for or seeking the additional help they need. The committee members felt that learning and communication in the classroom is a two-way street, and that undergraduates also need to be made more aware of their responsibilities in their own learning. This could best be accomplished through programs conducted during first-year orientation and through residence life programs.

However, some international teaching assistants undoubtedly do have less than adequate language skills.\(^4\) Although the ESL program does an outstanding job, their ability to test graduate students in the summer and provide liaison with departmental programs is limited by small staff size and limited resources. Increasing staff size would help to ensure that teaching assistants who will have problems in the classroom are identified more accurately. It would also be beneficial if the committee which reviews prospective teaching assistants always included an undergraduate student, preferably one from a discipline different from that of the student being tested. Not only do we think that the undergraduate can give an important perspective about a graduate student’s ability to present material, but it may help improve undergraduates’ perceptions of the process by which teaching assistants are screened.
This is a concern that has probably been voiced by students at every institution that has ever utilized international teaching assistants. A recent article in the New York Times (Ruderman, A. “Colleges Are Moving to Ensure English Fluency in Teaching Assistants,” December 27, 2000, p. 11. Col. 2) points out that at Princeton, which for the first time required new international graduate students to take an oral proficiency test prior to being allowed to teach, 67 percent of the students failed the test; 57 percent of those retaking the test after a three-week intensive language program failed again.

**Recommendations**

- Where appropriate ESL staff should meet with the department official in charge of supervising teaching assistants to expedite the testing of students and ESL staff should be invited to participate in department training sessions. ESL should receive additional funding/resources to allow fuller testing of international students and in-class follow-up, and be encouraged to request additional staff resources, based on need, for teaching ESL classes. When ESL tests graduate students for proficiency, an undergraduate student should always be part of the review committee. *(Parallel Recommendation Under Consideration by NBFC)*

- Undergraduate colleges should develop programs through residence life programs throughout the year during which undergraduates can discuss possible problems with teaching assistants and strategies to further their own learning.

- Programs should be developed to provide international teaching assistants with support throughout the year, for example through the Asian-American cultural center.

**VI. Hiring and Compensation Issues**

**Overview and Discussion:**

The RCGA report expresses a number of concerns about qualifications of graduate students appointed as TAs and makes several recommendations concerning the hiring of teaching assistants. These recommendations are:

Rec 11. The compensation of TAs needs to be examined to ensure that enough applicants apply for all available TA positions.
Rec 12. "Auditions" in mock classroom situations should be required for all applicants.
Rec 13. University-wide hiring standards need to be adopted.

Interestingly, a number of graduate students also mentioned the lack of any interview process or assessment of their ability to teach. Many felt that their departments should, in fact, have had some sort of interview process before they were hired as teaching assistants. However, this is a very complex issue. Graduate students are admitted primarily based on their qualifications for advanced training and research in their fields. The number of graduate students admitted has to be responsive to program/departmental capacity for training, and this places limits on the pool of prospective applicants. At least
in the sciences, the pool is further limited because GA positions or fellowships are much more highly sought after, often regardless of pay differences, because they allow the student more time for research. Several teaching assistants stated that they were actively encouraged to teach as little as possible and discouraged from participating in TA project programs that would take time away from their work in the lab. On the other hand, teaching assistant needs are defined by undergraduate enrollment, and many departments find it difficult to find enough qualified teaching assistants. Positions may be filled by the least qualified graduate students, or the newest. Most, if not all programs rank prospective graduate students for support using GRE scores, grades and recommendations. Where there is a wide pool of applicants available, departments should certainly consider the ability of a graduate student to teach before appointing that student as a TA. However, uniform standards would be difficult to apply across disciplines.

It is clear that for graduate students, whose main priority is to finish their education, fellowships or graduate assistantships are a preferred means of support. Although many graduate students recognize the importance of having some teaching experience, there is no incentive for graduate students to continue as teaching assistants if another means of support is available. Teaching requires a large time commitment, and teaching assistants are currently paid on the same scale as research assistants. Restructuring the pay scale for teaching assistants, so that those who remain on teaching assistantships rather than on fellowships or graduate assistantships receive some benefit, may make it easier to retain the most experienced graduate students as TAs. It is also clear that different teaching assistants have widely different responsibilities, ranging from grading to planning and teaching entire courses. All of these are currently paid on the same scale, making it clearly less attractive for a graduate student to accept the more demanding assignments. Since compensation falls under the collective bargaining agreement, we cannot make binding recommendations in this area; however we feel that it is an area that the University and the bargaining unit should examine.

**Recommendations**

- Where possible, departments should arrange for some kind of interview process before graduate students are hired as teaching assistants. Departments may wish to conduct telephone interviews, or video interviews by computer, to assess a prospective student’s potential for assuming the role of teaching assistant.

- The University and the bargaining unit should investigate the possibility and desirability of restructuring the compensation levels for teaching assistants based on experience and assigned duties.

**VII. Numbers of TAs**

*Overview and Discussion:*

The RCGA report also calls for increasing the number of teaching assistants; this recommendation is
based primarily on interviews with some graduate students who felt that they could do a better job teaching if they had fewer teaching assignments. Some of the graduate students the Committee spoke with also mentioned crowded classes and feeling overextended as a problem. The perception that Rutgers has too few teaching assistants is also supported by the recent report to the Senate by University Vice-President Seneca on part-time faculty; this report shows that Rutgers as a whole relies less on teaching assistants and more on PTLs compared to other AAU institutions.

Nevertheless, the Committee is not convinced that there is a clear causal relationship between the number of teaching assistants and the quality of classroom performance. Although there are clearly places where we feel that Rutgers could benefit academically from additional teaching assistants (for example, by adding recitations to large introductory courses) increasing the number of teaching assistants is a complex issue. Cost is one factor that we did not feel able to evaluate; a more critical issue educationally is whether individual graduate programs have the resources and faculty to add additional graduate students, and whether the employment opportunities in each field can support additional graduates. Finally, the Committee was reluctant to make any recommendations about numbers of teaching assistants when members felt that they had little understanding of how programs/departments currently use teaching assistants: It is clear from discussions among faculty and graduate students that there is a great diversity of teaching assignments that run the gamut from grading only to teaching whole courses. Since these issues clearly extend beyond graduate student training, the Committee is not prepared to endorse the recommendation of the RCGA that the number of teaching assistantships be increased beyond those mentioned in Section IV.

However the committee members did feel that a special committee should be appointed to examine how programs use teaching assistants, where teaching assistants might benefit undergraduate education, and how such an increase might be funded. This committee should also examine the issues of differential workloads mentioned above.

Recommendation

- The University should appoint a committee to review departmental use of teaching assistants as well as teaching assistant workloads, and to make recommendations as to how teaching assistant lines might be used more effectively. This committee should also identify areas where additional teaching assistant lines would enhance undergraduate education.

VIII. Other Instructional Personnel

Use of Undergraduate TAs:

The RCGA report recommends that where additional TA lines cannot be provided, undergraduates be used as teaching assistants (RCGA recommendation 10). The committee discussed this suggestion, but was not in favor of hiring undergraduates as teaching assistants per se. Committee members felt that teaching assistant positions carry responsibility for instruction and assignment of grades which should
not be given to undergraduates, who may feel pressured by their peers with respect to grading and instructional decisions. However, the committee discussed several circumstances where undergraduates have been successfully used as "peer mentors" in instructional positions that do not include regular teaching assistant responsibilities. For example, several New Brunswick mathematics courses use undergraduate peer mentors in workshops, and the Rutgers College EOF program uses peer mentors in several of its programs. Although the committee does not support appointment of undergraduates as teaching assistants, we would encourage their use in supervised instructional settings where we believe they can contribute significantly to enhancing undergraduate education.

Part Time Lecturers (PTLs):

As mentioned above, the Committee felt strongly that undergraduate concerns toward teaching assistants were at least partially addressed toward PTLs; or at least, that undergraduates were not reliably able to distinguish among the different levels of instructional staff. Few departments include PTLs in any departmental training programs; in fact, inclusion of PTLs is difficult since contractually, PTLs are hired only to teach a specific course. Inclusion of PTLs in training programs would presumably require some additional compensation and contractual adjustments. Nevertheless, the University relies heavily on PTLs and other non-tenure track instructional staff to meet instructional needs, and there should be some level of accountability regarding their performance.

Recommendations

- In disciplines where it is appropriate, departments should develop ways to utilize undergraduate peer mentors in supervised academic settings. Appropriate resources should be made available to departments for such instructional enhancements.

- Each department should be required to submit to the responsible dean an annual report summarizing departmental teaching evaluations for part-time teaching staff. Where performance of any individual staff member or overall scores are poor, the responsible Dean should meet with representatives of the department and the Teaching Excellence Center to identify steps that must be taken by the department to improve PTL performance through modification of hiring practices, training and supervision.

IX. Conclusions

Training of teaching assistants is a complex issue compounded by many factors, including the diversity of disciplines in which teaching assistants are utilized, the multicultural nature of our University, and the different categories of instructional staff whose status may not be clear to students. The recommendations presented here should be considered a first step toward improving overall performance of teaching assistants in our classrooms and ensuring that those choosing to enter academia are adequately trained to begin their own careers.
Appendix A. Sample mid-semester evaluations

Evaluation used in General Biology

The purpose of this evaluation is to help your TA improve his/her teaching. Separate evaluations will be conducted by the Faculty of Arts and Sciences at the end of the semester to evaluate the course as a whole. Please try to be as helpful and honest as possible in answering these questions. All responses will be anonymous.

To what extent do you agree or disagree with the following statements (a=strongly agree, b= agree, c=uncertain d=disagree, e=strongly disagree).

1. I feel comfortable asking my TA questions.
2. My TA answers questions clearly.
4. My TA speaks loudly enough.
5. My TA writes clearly on the board.
6. My TA has an adequate command of English.
7. My TA is enthusiastic about biology.
8. My lab section is well-organized.
9. I understand what is expected of me in lab.
10. I interact with my TA at least once each lab session.

What suggestions do you have to help your TA improve his/her teaching? (Please write your suggestions on the back of this page.)

On-line evaluation available from the Teaching Excellence Center

Please answer the following questions. When you are finished, click the "Submit" button. All responses are anonymous.

The instructor is prepared for class and presents material in an organized manner.
The Instructor responds effectively to student comments and questions.
What do you like about this course?
What do you think needs improvement?
How would you suggest the improvements be made?
Appendix B. Sample Guidelines for Faculty Supervising Teaching Assistants

Role of Laboratories and Recitations in Instruction: Laboratories are designed to enhance students’ understanding of course material by allowing them to see and experience materials themselves. They also provide an opportunity to teach students laboratory techniques and experimental design first-hand. Laboratories cannot serve this purpose unless laboratories are coordinated with lecture material in a way that is meaningful to students. Design of laboratories and laboratory manuals and materials is therefore ordinarily the responsibility of the faculty member, and not the teaching assistant. Recitations are also designed to enhance course material, to provide a review of important concepts and to provide students with assistance in working problems. Recitations must coordinate closely with lecture material in order to serve this role, and their design and supervision is therefore also the role of the faculty member in charge of the associated course.

Responsibilities of faculty supervising laboratory/recitation Teaching Assistants

The faculty member should plan the lab/recitation in coordination with lecture and develop written materials.

- Faculty should provide TAs with written guidelines clearly stating the TA’s responsibilities in the course. Faculty members should provide the TA with necessary training in techniques and course materials.

- Faculty members should have weekly meetings with TAs to go over laboratory exercises, discuss potential problems, and ensure that TAs are aware of material being covered in lecture and can make the appropriate connections for their students.

- Faculty members should establish a clear set of course policies for students with regard to attendance in lab/recitation, missed work, tardiness, make-ups and grade appeals and provide these to both the students and the TA in writing. Faculty should meet with TAs before the semester begins to be sure that all TAs understand course policy and will follow the same rules.

- When TAs correctly enforce course policy, faculty members should support their decisions. If a faculty member feels that a TA has dealt with a situation in the lab incorrectly, the faculty member should relay that decision to the TA first, not to the student. The TA should ordinarily be the one who tells the student of a changed decision.

- In large courses there may be a Head TA who oversees other TAs and provides weekly training meetings. In this case it is the responsibility of the faculty member to meet weekly with the Head
TA and to meet periodically with all TAs. Faculty members should recognize that even the most experienced Head TA is still a graduate student, and will need back-up and support from faculty in maintaining discipline in a large course.

RESOLUTION
In Support of Committee Report and Recommendations
Based on Review of Teaching Assistant Training

Whereas, the University Senate’s Instruction, Curricula and Advising Committee has examined and reported on Teaching Assistant Training at Rutgers; and

Whereas, the University Senate has reviewed the Committee’s Report and its Recommendations, finding those Recommendations to be sound and in the best interests of Rutgers University;

Therefore, Be It Resolved, that the Rutgers University Senate endorses the Report on Teaching Assistant Training at Rutgers, and urges the Administration to implement its Recommendations.