A MODEL FOR TRAINING AND EVALUATING GRADUATE TEACHING ASSISTANTS

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Although authorities frequently express concern about the training and support of graduate teaching assistants (GTAs), their involvement typically begins and ends with concern. This paper presents a proven model for the effective training of GTAs. We encourage readers to adapt these procedures to their own training programs.

The status and nature of training graduate teaching assistants (GTAs) is a topic of continuing interest (e.g., Lowman & Mathie, 1993; Meyers et al., 1997; Norcross, Hanych, & Terranova, 1997; Prentice-Dunn & Rickard, 1994). Two general themes permeate this literature: (a) concern about the availability and use of teaching opportunities (Meyers et al., 1997; Norcross et al., 1997) and (b) delineation of the extant procedures for training or supporting doctoral-level GTAs (Lowman & Mathie, 1993; Meyers et al., 1997; Prentice-Dunn & Rickard, 1994).

Clearly, suggestions for training and supporting doctoral-level GTAs exist. On the other hand, writers have given little, if any, attention to the training of master'slevel GTAs. Because many master's programs offer teacher training opportu-Psychological (American nities Association, 1998), this deficit reflects an important void. Hence, this paper presents an effective model for training, supporting, and evaluating GTAs. We believe these procedures are appropriate for use at all levels of GTA training; we encourage readers to adapt them to their own situations and needs.

The old saying that "necessity is the mother of invention" applies to the Empo-

ria State University (ESU) model. Until 1979, Introductory Psychology was taught by a full-time faculty member who presented a weekly, 1-hr lecture to all students enrolled in this course. GTAs assisted this faculty member by administering and grading tests and conducting two weekly, 1-hr small-group discussion sections. For a variety of reasons, faculty, students, and administrators believed this arrangement was unacceptable; hence we sought an alternate approach. The lack of regular faculty to teach this course resulted in the GTAs being given complete autoromy for sections of Introductory Psychology. These new responsibilities created the need for an expanded and organized training program for GTAs. We formally established this training program in 1981; it has evolved since that time. We describe the current version subsequently.

GTA Selection and Responsibilities

A faculty committee selects all GTAs from the pool of applicants for graduate assistantships in psychology. The committee screens potential GTAs on the following criteria: background coursework in psychology; grade point average; and desire to teach, as reflected in the applicant's personal statement. The committee

then invites highly rated candidates for interviews. In addition to ascertaining the applicant's interest in teaching, the committee informs all applicants that the typical semester assignment consists of full responsibility for two, 3-credit-hour sections of Introductory Psychology. It is important that each applicant understands fully the pending assignment before making a commitment.

Initial Activities and Orientation

During the summer prior to their arrival on campus, all GTAs read (reread in the case of second-year GTAs) selected chapters in *Teaching Tips* (McKeachie, 1999). At this time the GTA faculty supervisor also provides each GTA with a copy of the textbook and ancillary materials for his/her course and an exemplary course syllabus used by a former GTA. Summer requirements also include preparing a tentative syllabus and developing lectures and demonstrations. Second-year GTAs serve as mentors for new GTAs during the summer and following semester.

A minimum of 3, day-long (6 hr per day) orientation sessions are held immediately prior to the start of the fall semester. Both new and returning GTAs participate in the following activities during these sessions:

Presentation and discussion of university policies, as contained in the ESU Faculty Handbook. This discussion includes such topics as sexual harassment, academic dishonesty, appropriate university officials to contact in various situations, and GTA rights as faculty.

- Presentation and discussion of division policies. We discuss such topics as makeup tests, conditions for assigning grades of "Incomplete," posting and keeping office hours, and where to refer students who need remedial help.
- In-depth presentation and discussion of effective teaching opportunities, techniques, policies, and procedures. This discussion includes consideration of the chapters in McKeachie (1999).
- All GTAs view videotape excerpts of actual class sessions previously conducted by returning GTAs.
- 5. Each new GTA presents a lecture (30-45 min) to the other teaching assistants and GTA supervisor. Although the content of this lecture may vary, the assigned topic often is to "present the lecture that introduces the students to the field of psychology." This activity provides a trial run for new GTAs before they face their classes on the first day. GTAs in the ESU program report this practice helps alleviate first-day fears and nervousness.
- Each returning GTA presents an effective demonstration and describes when and how to use this demonstration in the classroom.

GTA Meetings and Activities

During the semester, all GTAs attend group meetings with the teaching assistant supervisor every other week. The following activities are included in each meeting:

- An open discussion of problems the GTAs encountered and how they dealt with these problems.
- 2. An open discussion of what went well

- in classes and how to implement such effective practices in other classes.
- The presentation of a discussion on a controversial issue in teaching (e.g., assignment of grades, discussion groups vs. lectures, the use of extra credit) by an assigned GTA.
- The presentation of an effective class demonstration by an assigned GTA.
- The presentation and discussion of selected chapters from *Teaching Tips* (McKeachie, 1999) by assigned GTAs.

The meetings also serve as a regular source of information, such as announcements of departmental policy changes and information concerning upcoming conventions and conferences. Moreover, the meetings provide a valuable source of support for the GTAs: a comfortable forum to seek help and ask for advice and ideas to facilitate better teaching.

Professional Development Activities

The supervisor routinely observes the GTAs at least once each semester in the classroom and provides extensive feedback to the GTA concerning the observation. In addition, each GTA completes either a self-evaluation form or a specific-focus report on an alternating basis every other week. The self-evaluation form requires ongoing reflection on teaching practices and abilities, as well as relevant professional and personal development. The specific-focus form requires each GTA to report on a specific aspect of teaching that he or she has attempted to modify or improve. Moreover, both the supervisor and each GTA complete a semester evaluation form at the end of each academic term. This form evaluates teaching development and performance, as well as personal growth and development that is relevant to teaching.

To encourage professional growth and collegiality, each GTA must attend and critique classes taught by two other GTAs during the course of each semester. Each observer prepares a thorough critique of each class that is observed and submits this critique to the GTA supervisor and the GTA who was observed. In addition, each GTA attends a regional teaching conference (e.g., Mid-America Conference for Teachers of Psychology, Southwest Regional Conference for Teachers of Psychology) during the academic year. ESU provides funding for registration and transportation. The supervisor encourages second-year GTAs to be active participants at such conferences via paper and poster presentations and symposium participation.

Each GTA prepares (or revises, in the case of second-year GTAs) a statement of his/her philosophy of teaching. This exercise is assigned at the close of the fall semester; the completed statement is due at the first GTA meeting of the spring semester. Thus, first-year assistants complete a full semester of teaching before starting to draft their initial philosophy. Second-year assistants have a year's experience to assist them in revising the philosophy they prepared the previous year.

As a final requirement, each GTA prepares (first-year GTAs) or revises (second-year GTAs) a teaching portfolio annually. The portfolio consists of a narrative section (7-9 pages long) plus appendices. Personal information, the philosophy of teaching, teaching experiences, teaching development activities, and other relevant information are presented as separate sections in the narrative portion of the portfolio. The appendices are used to support the narrative presentation. The completed portfolio is due just prior to the completion of the spring semester.

Program Evaluation

Portfolio Development and Evaluation

The GTA supervisor maintains an active evaluation portfolio for each GTA and meets individually with each GTA at the end of each semester to review performance, improvement, and development as reflected by the documents contained in this portfolio. The GTA or GTA supervisor are expected to add the following items to the evaluation portfolio on a regular basis:

- 1. A course syllabus for each course taught.
- All personal evaluation and specificfocus forms prepared by the GTA.
- Comments made by the GTA supervisor during the observation(s) of the GTA's classes
- 4. The peer evaluation forms submitted by the GTA.
- 5. All testing instruments.
- Separate semester evaluation forms completed by the GTA and the GTA supervisor.
- Any additional materials (e.g., items reflecting professional or personal growth and development) deemed relevant by the GTA or supervisor.

A comparison of the semester evaluation form completed by the GTA with the one completed by the supervisor offers an excellent starting point for discussion at the semester evaluation conference. This meeting provides the ideal opportunity to identify strengths and weaknesses and to discuss ways to improve teaching methods for the next semester. Further, the portfolio of materials represents a source of inspiration for many GTAs as they realize how much they have accomplished during the semester that has just ended.

Subjective Comments from Former GTAs

The success of any program rests on its ability to achieve its stated goal. In this instance the goal is to prepare GTAs who are effective in the classroom. Has this goal been met? Based on GTA self-reports, the answer is yes. The following commentaries from former GTAs reflect the impact this training program can exert.

The GTA training program at ESU has proven invaluable in my current position as a doctoral-level teaching assistant. The comprehensive approach helped to boost confidence in my own abilities and form a focused philosophy toward teaching that I continually draw on in each and every class. The program's emphasis on support and evaluation allowed me to learn from mistakes and make positive changes in my teaching style. For example, the biweekly meetings provided a comfortable and constructive environment in which to seek advice about class-related problems. This not only instilled a sense of camaraderie with the other GTAs, but also

made it clear that others shared my own initial fears and insecurities in having to face a room full of students. Furthermore, the teaching portfolio remains a valuable resource in my current assignments.

The training offered for psychology graduate teaching assistants at ESU offers valuable and unique insights into academic life. It provides GTAs the opportunity to develop who they are as instructors (i.e., both the philosophy and practicality) through direct experience. Having gone through this training, I was able to develop my own techniques as an instructor with the help of a knowledgeable advisor and supportive peers.

Objective Measures

Because students evaluate the GTAs each semester, student evaluations provide an objective measure of the effectiveness of the GTA program. The ESU evaluation instrument consists of 14 Likert-type questions that deal with various aspects of instructor effectiveness and student involvement with the class. The mean of these responses gives a single, global measure of teacher effectiveness. We used these mean scores in the following analyses.

We obtained student evaluation scores for the previous 10 years and randomly selected evaluations from three spring semesters to make comparisons between GTAs and full-time faculty. We restricted our selection to the spring semester to insure that all GTAs had taught for at least one semester. Independent samples t tests

comparing mean student evaluations for 1993, 1994, and 1999 indicated that GTAs and full-time faculty did not differ reliably, t(27) = 1.61, t(27) = 1.47, t(25) = 1.55, respectively, all ps > .05. Clearly, student evaluations placed GTAs on par with full-time faculty.

A second comparison between GTAs and full-time faculty involved the variance in student evaluations of each group for the three selected semesters. Fmax tests indicated that the full-time faculty had significantly greater variability for these three evaluation periods, Fmax(2, 14) = 5.11, <math>p<.01, Fmax(2, 14) = 6.03, p < .01, P <(13) = 5.38, p < .01, respectively. Although the mean student evaluation ratings did not differ between the GTAs and full-time faculty, the faculty ratings were more variable. One interpretation of this result is that the GTA training program is successful in producing a uniform, high level of teaching performance.

A comparison of the variance in student evaluation ratings of first- and second-year GTAs yielded significance for the fall semester evaluations of the 1992-93, 1993-94, and 1998-99 academic year, $F\max(2, 7) = 5.82, 6.54, \text{ and } 7.30, \text{ all } ps$ < .05, respectively. In all instances the mean evaluations of the first-year GTAs were more variable than those of the secondyear GTAs. However, by the end of the spring semester of these academic years, the variability of these two groups did not differ reliably, $F\max(2, 7) = 1.24, 1.61,$ and 1.39, all ps > .05. Similarly, independent groups t tests comparing first- and second-year GTAs during these three fall semesters yielded significance, t(12) =2.76, 3.18, and 2.97, all ps < .02, respectively; in all instances the second-year GTAs had higher mean evaluations. However, when we made similar comparisons for the spring semester of these academic years, we found no significant differences between first- and second-year GTAs, t(12) = 1.35, 1.73, 1.49, all ps > .05. In concert with the finding that full-time faculty had significantly more variable mean evaluation scores, a likely explanation for these results is that the GTA training and direct classroom experience were effective in creating a group of teachers who were uniformly attuned to the needs of their students and the responsibilities of their position.

Conclusions

The GTA training model we have described offers an effective and reliable method to prepare students to teach in both doctoral- and master's-level programs. Objective and subjective measures attest to the model's success in developing GTAs who perform uniformly and at the same level as full-time faculty. Furthermore, there are additional benefits of the model not inherent in many GTA training programs in use today.

First, the summer orientation session, which ensures that all students are adequately prepared for the first class, also provides an opportunity for GTAs to meet other GTAs in a relatively relaxed atmosphere. The early formation of relationships with fellow GTAs serves as a valuable source of support throughout the academic year. These relationships also aid the peer teaching evaluations in that GTAs are likely more inclined to offer candid and constructive feedback to peers they know

well.

Second, the frequent group meetings and evaluations throughout the semester help reduce the sense of isolation that students often feel in other GTA programs. It is not uncommon for students in doctoral and master's programs to be left "on their own" after receiving initial training. We have been in student teaching positions in which supervisors offered little or no supervision or support once the semester started. In contrast, the present model keeps GTAs connected to the faculty supervisor, the administration, and each other.

Third, the ESU model strongly emphasizes the professional development of GTAs. The teaching conference requirement is just one way GTAs can become more deeply involved in the teaching of psychology. The ESU model also encourages GTAs to conduct and present teaching-related research at regional and national conferences. Further, the teaching portfolio is an excellent resource to aid in securing future teaching positions or admission to doctoral programs. Past GTAs have utilized this material in their search for an academic position as a record of knowledge, skills, and abilities they obtained as a GTA.

We encourage readers to adapt these GTA training procedures to their specific needs and situations. The sound development of competent student teachers is a necessary first step toward the long-term goal of a better prepared professorate.

References

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