

EFFECTIVENESS OF GRADUATE TEACHING ASSISTANTS

by

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ABSTRACT

The Effectiveness of Graduate Teaching Assistants

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The purpose of this study was to identify in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as knowledgeable, and in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as utilized. Specifically, the purpose of the study was to determine whether teaching assistants were utilized or perceived as knowledgeable in curriculum development, course maintenance, teaching responsibilities, and mentoring.

Teaching assistants, students, and instructors ($N = 233$) were administered a survey purposed to measure TAs' effectiveness based on their utility and knowledge in four areas of TA responsibilities: curriculum development, course maintenance, teaching responsibilities, and mentoring. All three participant groups perceived that TAs were utilized in course maintenance and mentoring, and they perceived the TAs were knowledgeable in course maintenance, teaching responsibilities, and mentoring. Overall, instructors viewed TAs as more knowledgeable than did the TA participant group, and

the TA participant group viewed themselves as more knowledgeable than did the student participant group.

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CHAPTER I

INTRODUCTION

New Faculty

Many new faculty experience stress and dissatisfaction during their beginning years as members of the professoriate (Magnuson, Shaw, Tubin, & Norme, 2004). Entering academia requires adjusting to a new perspective. The majority of new faculty are making the transition from one self-image as a student to the new image of professor (Magnuson, 2002). Not only are new faculty adjusting to new identity roles, but, due to economic constraints in higher education, they are also faced with increased teaching and advising responsibilities while dealing with rapid technological advances (Savage, Karp, & Logue, 2004). New faculty also must handle student diversity, changing societal expectations, an emphasis on the learner, and a new labor market for faculty (Austin, 2002). In addition, most faculty members are not educated to be teachers (Jones, 2008).

Nyquist, Abbott, Wulff, and Sprague (1991) noted there is an inherent belief that if scholars know their disciplines they can automatically teach within them. Boice (1991) asserts that there appears to be a social Darwinistic attitude towards new faculty at some universities. It is assumed that the best faculty will figure things out on their own and survive to improve their teaching and ultimately gain tenure. But as Nyquist and colleagues pointed out, there are consequences for not fully training and preparing faculty for their experiences. The consequences of inadequate preparation for academe have contributed to graduate students losing the desire to become a professor, a need for

remedial actions once they have entered the professoriate to improve teaching competence, or even a failure to achieve tenure.

Many new faculty expect to experience autonomy in their work. Instead of autonomy, their first semesters are often dominated by abundant lesson preparation but lack collegial support and intellectual stimulation (Boice, 1991). Magnuson (2002) examined the first year teaching experiences of 38 new assistant professors in counselor education. One participant of the study suggested the following would be the most helpful thing in becoming new faculty, “better preparation in the nuts and bolts of professors at the graduate student level would be the most helpful. It seems there are well-kept secrets which are only revealed after you start work” (p. 316). The graduate teaching assistantship is the central experience of preparation to become a scholar or a teacher (Nyquist et al., 1991). By providing proper training and mentoring to graduate teaching assistants, many of the problems experienced by first year teachers can be minimized.

Teaching Assistants

Teaching assistantships were originally based on an apprenticeship model where the assistant worked directly for the professor by grading or preparing class materials. After enrollment increased in the 1960s and the 1970s, teaching assistants took on more roles such as holding office hours, conducting laboratory sections or lectures, and even assuming complete responsibility for courses (Nyquist et al., 1991). Currently, graduate teaching assistants (TAs) fulfill diverse duties and responsibilities throughout their teaching assistant experience. Yet TAs are given little or no preparation for their varied

responsibilities (Golish, 1999), which in turn leads to a lack of preparation for new faculty. Nyquist and colleagues confirm, “virtually all professors have been TAs and report that, however limited it may have been, this experience remains the major preparation for their teaching responsibilities” (p. xi).

Incentive, rather than an opportunity for apprenticeship, may be an explanatory motive for a TA’s desire to obtain and fulfill an assistantship. A first year graduate student, one with only a semester’s experience requesting an assistantship may not be looking for an apprenticeship but for an opportunity to make money. As Boehrer and Chevrier (1991) suggested about the teaching assistant experience, “The basic transaction between professor and teaching assistant matches one’s need to delegate work with the other’s need to pay for graduate school” (p. 326).

Graduate teaching assistants provide much of the undergraduate instruction, particularly at large universities (Austin, 2002). Graduate teaching assistants are often the primary representatives of departments. TAs most often introduce undergraduates to a discipline, and, in some instances, TAs are the only impression undergraduates may receive about an area of study (Nyquist & Wulff, 1996). TAs are often responsible for a large part of lower division courses and so they have an influence on the quality of undergraduate education (Notarianni-Girard, 1999). TAs are most likely to be assigned to introductory courses and frequently have the least experience compared to other faculty members as teachers, and they are often some of the newer arrivals at the university (Romer, 1991). How well a graduate teaching assistant learns to teach is particularly imperative in a time when parents, employers, and legislators are interested in the quality of education provided at colleges and universities (Austin). TAs are

expected to teach and maintain the educational objectives of their university or college with very little training.

Although the majority of teaching assistants engage in a workshop or training session, Nyquist and colleagues (1991) found a consensus in their interviews with deans, department chairs, TA supervisors, professors, and TAs that professors need to be better prepared for their teaching roles. Not only do new faculty need to be prepared for their teaching and research responsibilities, but faculty will also have a social responsibility to contribute to the well-being of their institutions and subsequent communities (Lindholm, 2004).

In the 1980s, the emphasis on TA training increased due to a rising number of international teaching assistants (Wilkening, 1991). International teaching assistants (ITAs) differ significantly from domestic, or native English speaking, graduate teaching assistants. ITAs generally receive lower ratings of overall teaching performance than native teaching assistants; students have negative perceptions of ITAs which affects the students' willingness to learn from ITAs, and ITAs are more formal and less relaxed with their students than are domestic teaching assistants (Twale, Shannon, & Moore, 1997).

International teaching assistants have duties such as being instructors, quiz section leaders, laboratory instructors, graders, and/or tutors for undergraduate and graduate students. However, ITAs often come into these teaching experiences with limited English proficiency and little knowledge or experience with the culture of the United States educational system (Tanner, 1991). The use of international students in such responsible teaching roles has led to legislation requiring English language proficiency for university instructors (Thomas & Monoson, 1991). Using ITAs can be problematic in

such areas as teacher interaction with students, specifically concerning student question asking (Tanner). Using ITAs has also led to the development of separate and more intensive training programs for international and domestic teaching assistants (Nelson, 1991). Although ITAs are an important population, for the purposes of this study, ITAs will not be included in the graduate teaching assistant population due to constrictions such as a small sample size and potential confounding variables.

Statement of the Problem

Since graduate teaching assistant positions and training are the preparatory events for new faculty and since many new faculty may have difficulty adjusting to academia specifically as it relates to teaching responsibilities, it is important to gain an understanding of the TA experience. Much of the literature concerning graduate teaching assistants is focused on training programs and evaluations of pedagogy (LeBlanc, 1992; Lowman & Mathie, 1993; Notarianni-Girard, 1999; Shannon, Twale, & Moore, 1998; Twale et al., 1997; Williams, 1991). These areas are important in the development of TAs, but do not provide a complete picture of the TA experience.

Researchers have not focused extensively on the utility of teaching assistants or to which responsibilities TAs attend. Some studies have addressed the TA relationship with students (Golish, 1999), and some have addressed the relationship the TA has with professors or supervisors (Bomotti, 1994; Notarianni-Girard, 1999). Since the TA experience can be different from campus to campus, from department to department (Bomotti), and within departments based on the perceptions of faculty, it is important to know for which teaching assistant responsibilities TAs perceive themselves as effective,

as well as in which teaching responsibilities TAs are perceived by supervising professors and students as operating effectively based on their utility and their knowledge.

Purpose of the Study

“Letting TAs sink or swim makes it likely that some of them will have a poor experience that may have a lasting negative impact on their teaching skill, satisfaction, and motivation, perhaps causing them to avoid academic careers altogether” (Lowman & Mathie, 1993, p. 84). Not all universities provide formal training programs for new teachers or TAs in the area of teaching (Abaleta, 2007). Although rare, mentoring experiences and feedback available to TAs are the most useful tools to assist in teacher development (Boyle & Boice, 1998; Bukist, 2000). From this it can be concluded that the TA experience needs to be analyzed from multiple perspectives to determine in which areas of teaching responsibilities TAs are viewed as effective.

The purpose of this study was to identify in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as knowledgeable, and in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as utilized. Specifically, the purpose of the study was to determine whether teaching assistants were utilized or perceived as knowledgeable in curriculum development, course maintenance, teaching responsibilities, and mentoring.

The following research questions address the purpose of this study:

1. In which areas do TAs, faculty, and students view TAs as useful?
2. In which areas do TAs, faculty, and students view TAs as knowledgeable?

3. To what extent does the TA's prior experience contribute to the TA's perceptions of knowledge and utility?
4. How does the position of the faculty member, whether professor, assistant/associate professor, lecturer, adjunct faculty, or graduate student contribute to the instructor's view of the TA experience?
5. How does the student's year in school contribute to his/her perception of the TA?
6. How are the TAs' and the supervising faculty members' perceptions of the overall TA experience related?
7. How do TAs, students, and supervising faculty differ in their perceptions of TA knowledge and utility?
8. In which ethical areas do TAs feel most prepared to address student needs? To what degree are supervising faculty members aware of their TA's knowledge of ethical policy and procedures?

CHAPTER II

LITERATURE REVIEW

Each teaching assistantship is unique based on the type of university the TA attends, the department to which the TA belongs, and the supervising faculty member to whom the TA is assigned. The TA experience is comprised of training or workshops, common areas of responsibilities, and faculty supervision. The departments, to a small degree, and supervising faculty assigned to the TAs, to a greater degree, dictate the utility of the teaching assistant. The TA experience also provides a way for TAs to gain and demonstrate knowledge through workshop training and mentoring. The use of evaluations demonstrate the importance of including student opinions, professor opinions, and the self-rated opinions of TAs in order to build a complete picture of the TA experience. The strength of the TA experience is comprised of potential utility and knowledge. A more complete understanding of the TA experience can be gained from obtaining feedback from the TAs themselves, students whom they influence, and their faculty mentors.

Graduate Teaching Assistant Experience

The TA experience is preparatory for teaching regardless of the professional interests of the TA. Many TAs are required to complete some sort of training or workshop prior to working as a TA. Although TAs and new faculty share similar responsibilities, completing a training course does not mean a TA is prepared to teach or is prepared for the responsibilities associated with being a new faculty member. While

completing responsibilities common for many TAs, structured faculty mentoring is important for TAs to ask questions, gain knowledge, and prepare for their future careers. This is especially applicable if the TA's career goals include teaching in higher education. The graduate teaching assistant experience can be understood through common areas of teaching assistant responsibilities, training or workshops, and faculty supervision.

Areas of Responsibility

For some, the teaching assistantship provides training for future professional pursuits (Lowman & Mathie, 1993). For others, being a TA does not necessarily provide professional development since those students are not pursuing graduate degrees to teach but to work in the professional field (Bernard-Rodrigues & Bond-Robinson, 2006). However, both those pursuing careers in academia and those not pursuing graduate degrees to work in the professional field must teach others in some capacity at some point in time and, according to Nyquist and Wulff (1996), this is why TAs need to establish effective teaching relationships with others.

Graduate teaching assistants have many of the same responsibilities professors do: preparing and delivering lecture material, compiling examination questions, grading papers, and conducting laboratory sessions for courses. Mueller, Perlman, McCann, and McFadden (1997) studied 108 faculty members from psychology departments in the United States and Canada. The faculty members ranged from department heads and professors to other psychology faculty. In only 16% of the universities, both departmental and university level TA training was required. Seventy departments offered

TA training. Seventy-eight percent of the faculty believed that TAs learn the most from department-level training.

From this survey, Mueller and colleagues (1997) found that the 10 most frequently cited TA responsibilities were: (1) holding office hours, (2) grading exams, (3) conducting discussion groups or review sessions without the faculty member, (4) supervising labs, (5) preparing examinations, (6) leading class discussion, (7) preparing lectures, (8) presenting lectures, (9) advising or counseling of students, and (10) taking the sole responsibility for class discussion. These areas are common responsibilities of new faculty and are areas in which TAs should demonstrate knowledge. These are also areas in which TAs should be utilized by departments or supervising faculty members in order to gain experience.

However, some teaching assistants are not aware of their specific teaching responsibilities and duties. Luo, Bellows, and Grady (2000) used a sample of 304 international teaching assistants (ITAs) and domestic TAs who were instructing undergraduates during the spring semester of 1997. The subjects represented 45 different academic disciplines. These researchers found that only 39% of domestic TAs knew very little about their teaching duties and responsibilities whereas 76% of the ITAs knew very well what their teaching duties and responsibilities were before beginning a teaching assignment.

Training Workshops

When Mueller and colleagues (1997) compared the complexities of full-time teaching to the responsibilities of being a TA, they concluded that TA training can be

viewed as a beginning but not all inclusive. Sixty-five percent of the faculty participants agreed that new college professors had adjustment problems because graduate training did not prepare them for their job responsibilities. Fifty-seven percent either disagreed or strongly disagreed with the statements, “the typical graduate of a conventional doctoral program is well prepared to teach” (p. 169). Many universities use training courses or workshops to assist TAs with their preparation to teach and with the various responsibilities of teaching they may encounter.

Faculty Supervision

While training workshops provide a base knowledge, graduate teaching assistants who are pursuing careers in academia need effective training and useful feedback in order to successfully develop in their professional pursuits. Boyle and Boice (1998) conducted a study using volunteers to form 18 assigned mentorship pairs of graduate students and mentors as well as volunteers to form 25 assigned mentorship pairs of new faculty and mentors. Boyle and Boice analyzed structured mentoring relationships with new faculty and graduate teaching assistants in comparison to naturally occurring mentorships that are assumed to take place within departments. They found that less than 25% of new faculty had taught their own courses as graduate students; more had been employed in research assistantships that kept them away from teaching experiences. Less than 10% of new faculty had been in TA training programs and none had formal mentoring programs that involved assistance with pedagogy.

Boyle and Boice (1998) not only highlighted the inexperience of new faculty, but the desire TAs showed in their personal pedagogical development. The TA portion of the

study was conducted at a Research I institution with a sample of 18 graduate teaching assistants paired with mentoring professors. Boyle and Boice found that TAs were more interested in discussing teaching styles, teaching-related goals, grading issues, and course preparation in their weekly meetings than discussing research. The TAs felt they had personal control over their research, but they wanted more guidance and direction in issues relating to teaching.

Guidance, direction, and teaching were important components for a sample of 86 TAs' decision to continue teaching after graduation (Bomotti, 1994). Bomotti used teaching assistant respondents from eight disciplines at a research university to complete surveys rating the influence of their experiences on their anticipated career plans. The primary task of the study was to determine the positive or negative experience on the TAs' decisions to continue or halt college teaching following graduation. The average TA had been teaching about two years at the time of the survey. Most had taught an introductory course. The majority did not have experience teaching before becoming a TA. The majority of the respondents (73%) said they planned to teach at the college level for a career. The TAs who were considering teaching as a career said good supervision or a positive relationship with their supervisor was the most powerful influence on that decision. Other powerful influences on the decision to continue teaching following graduation included the TA's ability to teach well and positive relations with students (Bomotti).

Summary

The graduate teaching assistant experience is comprised of training workshops,

common areas of responsibilities, and faculty supervision. The research concerning the TA experience shows that training or workshops do not necessarily prepare TAs for the many responsibilities of higher education instruction. Although there are common responsibilities among TAs, many new faculty feel that graduate training is not preparatory for the job requirements of being faculty (Mueller et al., 1997). Structured faculty mentoring is important for TAs to ask questions, gain knowledge, and prepare for their future careers, especially in career goals that include joining the professoriate. Teaching assistant responsibilities, training workshops, and positive relationships with faculty members should serve as conduits for utility throughout the TA experience.

Utility

How a teaching assistant is utilized is multifaceted. Departments often control the potential utility of a TA by assigning specific responsibilities to TAs in their department which may differ from responsibilities of TAs in other departments. Not only does the department determine responsibilities, but the supervising professor or faculty member ultimately decides which tasks a TA will be required to complete. Since the supervising faculty member ultimately determines utility, there needs to be a shared understanding about course objectives for the TA to accurately fulfill responsibilities. Utility as a teaching assistant is imperative because utility can equate to the training and experience for the professoriate. The utility of a teaching assistant is comprised of fulfilling responsibilities which are designated by the department and supervising faculty member.

One responsibility a TA may fulfill is teaching. Teaching is an important responsibility for TAs to gain experience because it is one for which many new faculty

feel unprepared. Boice (1991) compared new and inexperienced faculty to seasoned and experienced faculty at both a comprehensive university and a doctoral focused university. Participants were asked about their experiences and plans as teachers, colleagues, and scholarly writers. Boice found that the initial teaching styles of the inexperienced faculty often stuck with them. Into their third and fourth semesters as faculty, many of the participants were still using an ineffective facts-and-principles form of lecturing and many had decreased the difficulty of the lecture content in an attempt to bolster student evaluations. From this it can be concluded that gaining experience as a TA in teaching coupled with effective feedback may help TAs in the transition to teaching as faculty.

Experience with Responsibilities

Nyquist and Wulff (1996) pointed out that large classes, specifically large lower-division courses, often equate presentational style to effective instruction. Teaching is a more complex process than just lecturing and requires competence in areas such as leading discussion, holding office hours, and evaluating students' work. Teaching assistants need to have experience with these responsibilities to prepare for their teaching responsibilities as new faculty. The more experience as a teaching assistant with teaching responsibilities like teaching, the more prepared an individual will be as a faculty member. However, utility is the jurisdiction of the department and ultimately of the assigned supervising faculty member.

Departmental Designation of Responsibilities

Although TAs need to experience multiple responsibilities to prepare for the professoriate, the experience a TA receives may be dependent on the TA's department.

Austin (2002) conducted a four-year longitudinal, qualitative study that followed 79 graduate students aspiring to the professoriate from three universities in multiple disciplines. The graduate students all worked as teaching assistants at the beginning of their graduate programs. Austin reported a difference in the utility of graduate students by department. Austin found that graduate students in the sciences were more likely to participate in research teams whereas students in the humanities and social sciences had more one-to-one relationships with faculty. Students in the sciences had more research assistantships, whereas graduate students in the humanities and social sciences were more likely to have teaching assistantships. Thus the utility of a TA was dependent on the specific department's designation of assigned responsibilities and not all TAs at the same university received the same opportunities.

Austin (2002) also found that using TAs was usually in response to a departmental need to cover courses or sections rather than a focus on the development needs of future teachers. In fact, few of the participants in this study experienced growth in their teaching assistant positions. Specifically, few moved from being graders for faculty to conducting lab sessions. So, for many graduate teaching assistants, the preparatory experience for future professional pursuits does not progress beyond the utility of clerical tasks. Yet, utility as a TA in various teaching responsibilities can be an important preparatory experience.

Supervising Faculty Members

Utility is also determined by the TA's supervising faculty member. Boehrer and Chevrier (1991) said, "The basic transaction between professor and teaching assistant

matches one's need to delegate work with the other's need to pay for graduate school" (p. 326). This is a common interpretation of graduate students and their usefulness. The professor's attitude about the course will affect his/her relationship with the TA and influence interactions with students. Boehrer and Chevrier provided interesting insight into the TA experience with the example that if a professor has an uncaring attitude towards students, views teaching as unimportant in comparison to research, and dislikes preparing for class, then the TA may devalue teaching or even spend little time with the students.

Professors are key players in the utilization of TAs. Boehrer and Chevrier (1991) suggested that, to make a course effective, there needs to be a shared understanding between the TA and the professor of the general intentions of the course as well as specific objectives. In order for TAs to provide the most help to students, as well as gain from the interactions of working with students, TAs must clearly know what the professor intends the students to know. Also, if the professor understands the TA's abilities and experience, they may assign more responsibilities to TAs. For example, rather than just completing clerical tasks for the professor, the TA may also recommend readings, generate discussion topics, or assist to build exam questions.

Not only should supervising faculty members and their associated TAs be in harmony concerning course objectives, but they should also be consistent in goals and criteria for specific TA responsibilities. Grading is one potential responsibility for a TA, and is usually completed in combination with other responsibilities. Nyquist and Wulff (1996) proposed that undergraduates often view grades in terms of fairness, and the way the TA grades can cause tension in the relationship between the TA and the student.

Without the aid of empirical data, Nyquist and Wulff provided insight for the TA concerning grading by suggesting that TAs need to be aware of the goals and criteria of grading, know about all relevant grading procedures and policies, and need practice and direction with consistency in grading.

Magnuson (2002) examined the first year teaching experiences of 38 new assistant professors in counselor education with a mid-year and an end-of-year survey administered through electronic and traditional mail. Participants ranged in age from 27 to 60 years old. Magnuson found that new faculty reported the following as challenging tasks: planning for classes, learning to prepare appropriate examinations, strengthening syllabi, determining fair grades, and giving feedback. One participant said, "While syllabus construction and course issues are important, classroom management should also be addressed, along with establishing expectations, grading, and tenure and promotion strategies" (p. 316). Thus it is important to view the TA experience from potential responsibilities, fulfilled responsibilities, and knowledge or experience gained from fulfilling TA duties.

Summary

Utility as a teaching assistant is an important preparatory experience for the future role as new faculty. Teaching assistants can have responsibilities similar to faculty such as holding office hours, preparing and grading examinations, leading class discussion, preparing and presenting lectures, advising or counseling students, and conducting class discussion (Mueller et al., 1997). Since not all TAs can have the same teaching assistant experience, even at the same university or within the same department, it is important to

study individual teaching assistant experiences to take note of the differences in potential utility. Through utility and gaining experience in TA responsibilities, TAs can improve teaching and lecturing styles and can gain consistency in grading. Teaching assistant utility is not only a reflection of the knowledge a TA has of subject matter or their responsibilities, but it can also be an opportunity to gain knowledge through experience.

Knowledge

Previous assessment of TA knowledge focused mainly on training workshop knowledge. Knowledge for a TA is comprised of the introductory or training course TAs are required to take, evaluative feedback they gain from mentoring relationships with supervising faculty members, as well as experience in exercising responsibilities as covered in the previous section.

Training Workshops

Many TAs are required to take an introductory training workshop at the onset of their program (Bukist, 2000). The most common form of training is a brief, pre-semester orientation workshop, a one-semester course or seminar in theory and pedagogy, or a combination of the two (Williams, 1991). Quality of training courses is important for a TA's professional development, especially for those who aspire to academic careers since training courses are meant to prepare TAs for responsibilities similar to those of new faculty (Lowman & Mathie, 1993).

Teaching assistant training is meant to be preparatory for potential careers. Notraiani-Girard (1999) used a sample of 462 doctoral teaching assistants at 12

universities throughout the United States in an effort to determine whether TA training programs included and utilized the transfer of training from the program to the work experience. There were eight Research I institutions, two Research II universities, and two Doctoral I institutions. Each of the teaching assistants had completed training programs. The majority of them (54%) had participated in a training program that took less than one week. Each of the participating TAs completed the Teaching Assistant Training Inventory (TATI; Notraiani-Girard). The TATI was used to gain data about teaching assistants' perceptions of the presence of facilitating and inhibiting factors in their work environment for TAs who had been through training, and the extent to which supervisor and peer support is given to teaching assistants before, during, and after training.

The TAs reported they felt like they had time to apply ideas they learned in their TA training programs. Notraiani-Girard (1999) found that there were many facilitating factors that encouraged the use of TA training in job application. For example, some TAs were able to apply the lessons they had learned in workshops. Others had time at work to actually use the skills they learned in training. Teaching assistants who felt they had time to apply what they had learned reported that they received the information from the training while having support from supervisors to complete the training.

Lowman and Mathie (1993) conducted a content analysis of 18 TA manuals and found that manuals were important references for orientation courses and workshops, but they were insufficient to train TAs in teaching. They found content in the manuals such as intellectual excitement (the ability to present content in an accurate, clear, and interesting manner) and interpersonal rapport (sensitivity to students' feelings and an

ability to communicate openly with students) were both important areas for teaching effectiveness and were included in only 50% of the manuals. Lowman and Mathie also suggested personal consultation, mentoring, supervisor visits, recording classroom presentations, and training sessions to foster discussion of teaching strategies and address teaching issues.

Although training courses give TAs a brief introduction to working as a TA, they are often ineffective. Bukist (2000) found that even after he addressed the top ten mistakes TAs made in teaching classes during his training course, TAs were still engaging in the common mistakes. Bukist found that the majority of TAs are required to participate in a “how to teach” workshop, however, Boice (1991) found that many new and inexperienced junior faculty felt they did not know how to teach. In fact, many of the participants had difficulty learning the appropriate level for lectures, and the new faculty were often passive in requesting assistance from experienced faculty. The new faculty assumed they would gain the experience and knowledge by being in the classroom. Boyle and Boice (1998) found mentoring, involvement, and modeling to be much more effective at developing new faculty and TAs in the area of teaching than training programs.

Supportive of the preceding research, Williams (1991) investigated the effects of a comprehensive TA training program on the teaching anxiety and effectiveness of TAs. A sample of 27 beginning TAs in the English department was divided into two groups. Each group participated in a one-week workshop and a 16-week theory and pedagogy course. The experimental group also participated in a consultant observation program and peer mentoring program.

A notable finding was that neither group of TAs improved in teaching effectiveness measured by general student evaluations. However, the results of the study indicated a decline from high levels of effectiveness before research treatment. Following the research treatment, there were slightly lower levels of effectiveness for the experimental group of TAs and dramatically lower levels for the control group of TAs who did not participate in the one-week workshop and 16-week theory and pedagogy course. Teaching effectiveness in the category of composition was higher for the TAs in the experimental group. Not only did effectiveness decrease for both groups, but the control group experienced an increase in teaching anxiety where the experimental group decreased in anxiety. This demonstrates the important combination of training coupled with peer mentoring and observation.

Shannon and others (1998) examined the impact that TA training had on undergraduate students' and corresponding TA self-perceptions of nine teaching effectiveness factors. Three types of TA training were examined: university TA training, departmental TA training, and an undergraduate degree in education. Teaching effectiveness was measured by nine items taken from the Student Evaluation of Educational Quality. The nine items were learning value, enthusiasm, organization, group interaction, individual rapport, breadth of coverage, examinations and grading, assignments, and workload/course difficulty.

Results from the study indicated that there is little substitute for actual teaching experience. TAs who had background in education, either K-12 teaching or college teaching experience, were consistently rated as more effective than those without teaching experience. Student ratings reflected a difference between those TAs who had

teaching experience and those who did not, but TAs' self-ratings did not result in lower ratings. In fact, TAs consistently rated themselves more positively than their students did. Prior TA experience did not have positive impact on teacher effectiveness ratings but experience in education did (Shannon et al., 1998).

Austin (2002) found that when a graduate student worked as a teaching assistant the person for whom he or she worked or the TA supervisor sometimes served as a model. In Austin's study, some graduate student participants mentioned undergraduate teachers they would like to emulate and others mentioned undergraduate teachers they would not like to model in conducting courses. Some of Austin's sample reported that faculty members assigned to graduate students usually devote little time to helping doctoral students learn to teach. Some teaching assistants were even advised to not spend "too much time" on their teaching. This demonstrates how TAs can gain knowledge from their supervisors when their supervisors serve as models for how to or how not to conduct courses. This also demonstrates how supervisors can negatively impact TA knowledge by depriving them of experience necessary to gain competence in teaching.

Evaluative Feedback

The most helpful item TAs can receive from training is feedback and evaluation (Bukist, 2000). Austin (2002) found that few graduate students reported receiving guidance about any of the other tasks they would be expected to perform as new faculty such as advising, committee work, curriculum development, managing ethical issues, or public service and outreach. So, the knowledge a TA receives through guidance and mentoring, in turn, affects the utility a TA can experience. If a task is not addressed or

experienced then a TA cannot gain knowledge, which means a TA will not receive the necessary training for future professional use.

Teaching assistants in Notraiani-Girard's (1999) study of the transfer of training of teaching assistant training workshops indicated that their supervisors did not discuss the quality of their teaching with them. They were not provided with any rewards or encouragement for their teaching efforts. This is significant because Notraiani-Girard also found that TAs in this study did not feel peer support in their institutions. The TAs were not encouraging one another to implement what they had learning in their training program and they were not working to mentor one another. This finding coincides with Magnuson's (2002) study of new faculty who experienced dissatisfaction due to isolation and loneliness as a result of perceived lack of support.

Summary

Teaching assistants participate in training workshops in an attempt to gain the knowledge necessary to perform their jobs. They also gain skills and knowledge from exercising responsibilities. So the knowledge TAs gain from experience can also help TAs demonstrate the knowledge necessary to establish credibility and authority. As Shannon et al. (1998) found, there is no replacement training for actually teaching. Therefore, utility, actually performing the task, translates into required knowledge to perform the task effectively in the future. For the most effective learning, TA responsibility performance should be coupled with feedback (Bukist, 2000).

Evaluations

Evaluations are important for TA career development. As Bukist (2000) noted, providing feedback to TAs about their teaching helps them become better teachers. Twale and colleagues (1997) reported that, when comparing TAs' evaluations to those of students', TAs may evaluate themselves higher because they have had minimal training and/or teaching experience and so may see their performance as acceptable. Nyquist and Wulff (1996) suggested that supervisors and professors should assess how well TAs fulfill their roles because it is one of the most important, and sometimes overlooked part of the supervising process. Nyquist and Wulff also suggested using student ratings and evaluations of teaching effectiveness, because they can identify areas in which TAs seemed to be successful and areas in which they need improvement or adjustment. For these reasons, feedback from professors and students are necessary to gain a complete understanding of the TA experience.

When student evaluations are returned with consultation and counsel, then they are an effective tool to provide guidance for future teacher development (Boice, 1991). Student evaluations are used for both summative and formative evaluative feedback (Abaleta, 2007). Student evaluations are meant to improve both student learning outcomes and teaching performance (Abaleta). There are many variables that contribute to a student's perception of the teacher and the subsequent course evaluation. Centra and Gaubatz (2000) used a sample of 741 classes, each with at least 10 female and 10 male students across 21 different institutions to evaluate gender bias in student evaluations of teaching. They defined bias as "a teacher or course characteristic that affects teacher

evaluations, either positively or negatively, but is unrelated to criteria of good teaching” (p. 17). They reported that bias presented itself in two forms: a teacher or course characteristic unrelated to criteria of good teaching, or characteristics of the students that affect the rating.

Feldman (1993) argued that favorable ratings of teachers may just be a reflection of better teaching rather than biases. However, Bernard-Rodrigues and Bond-Robinson (2006) found that the most effective TAs, those who were following teaching assistant requirements and were instructing how they were asked to, did not receive the highest evaluations. These TAs were conducting laboratory sessions that accompanied courses and they incorporated the conceptual components of course lecture as well as the laboratory procedural concepts. These TAs received lower evaluations because the students were more focused on learning the laboratory procedures to complete the laboratory, and they were not necessarily concerned with making connections to course concepts. This study demonstrated the importance of including professor as well as TA self-evaluations for evaluative purposes since student evaluations may not provide a complete representation of TA knowledge or performance.

Research about evaluations demonstrates why both student and supervising faculty perspectives are necessary in order to understand the TA experience. For example, the teaching assistants in Bernard-Rodrigues and Bond-Robinson’s (2006) study were teaching as the professor had requested and received lower evaluations from the students. If this is the case, then it is important to have the professor’s perception of the TA experience to provide greater understanding of the TA’s responsibilities and required performance. Also if TAs often rate themselves higher than students on

evaluations then student perceptions should be included. Student perspectives should be included since students are the stakeholders of TA responsibilities and TA performance should be focused on the needs of the student.

Summary

As the faculty respondents noted in Mueller and colleagues' (1997) study, TAs received varying approaches to learning about teaching because of differences in responsibilities, in supervision, and in the requirements in training structure. As Bomotti (1994) suggests, requirements of teaching assistants vary by department. Since not all TAs can have the same teaching assistant experience, even at the same university, it is important to study individual teaching assistant experiences to take note of the differences in potential utility.

Utility is a necessary component of the TA experience because it demonstrates the responsibilities TAs attend to, which ultimately demonstrates in which potential areas of faculty responsibility TAs are receiving training and experience. Teaching assistants can have responsibilities similar to faculty such as holding office hours, preparing and grading examinations, leading class discussion, preparing and presenting lectures, advising or counseling students, and conducting class discussion (Mueller et al., 1997). These specific tasks are not germane to all TAs, however. Utility is under the jurisdiction of the TA's university, department, and supervising faculty. Yet utility, or experience, is one of the most effective ways for a TA to gain knowledge.

Utility and knowledge are often intertwined. Knowledge is not just what a TA learned in a training course, but it is also the knowledge a TA gained from fulfilling TA

roles and participating with supervising faculty. A teaching assistant can gain knowledge from the experience of being utilized in a course. Yet a faculty member can decide that a certain responsibility of being a TA is not important and fail to foster skill development in that area.

Since not all TAs can have the same teaching assistant experience, even at the same university, it is important to analyze the individual teaching assistant experiences. To get a complete picture of the TA experience, student perceptions should also be included. Students should be included because they are a consumer of the TA's work. Student perceptions should also be included because TAs tend to rate themselves higher on performance evaluations than students do (Shannon et al., 1998). Supervising faculty should also be included in the assessment because they designate to which responsibilities a TA attends. Supervising faculty also have potential to model behaviors (Austin, 2002) or provide mentoring relationships to increase TA knowledge.

Based on this review of literature and the absence of a comprehensive view of the TA experience, the purpose of this study was to identify in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as knowledgeable, and in which areas of teaching assistant responsibilities graduate teaching assistants, professors, and students viewed TAs as utilized. Specifically, the purpose of the study was to determine whether teaching assistants were utilized or perceived as knowledgeable in curriculum development, course maintenance, teaching responsibilities, and mentoring.

The following research questions address the purpose of this study:

1. In which areas do TAs, faculty, and students view TAs as useful?

2. In which areas do TAs, faculty, and students view TAs as knowledgeable?
3. To what extent does the TA's prior experience contribute to the TA's perceptions of knowledge and utility?
4. How does the position of the faculty member, whether professor, assistant/associate professor, lecturer, adjunct faculty, or graduate student contribute to the instructor's view of the TA experience?
5. How does the student's year in school contribute to his/her perception of the TA?
6. How are the TAs' and the supervising faculty members' perceptions of the overall TA experience related?
7. How do TAs, students, and supervising faculty differ in their perceptions of TA knowledge and utility?
8. In which ethical areas do TAs feel most prepared to address student needs? To what degree are supervising faculty members aware of their TA's knowledge of ethical policy and procedures?

CHAPTER III

METHODS

Participants

For the purposes of this study, participants only included domestic graduate teaching assistants, their associated faculty member, and students from their assigned courses at Utah State University.

The purpose of the study was to determine whether teaching assistants were utilized or perceived as knowledgeable in curriculum development, course maintenance, teaching responsibilities, and mentoring. It was also to provide information about the relationship between teaching assistants', supervising faculty, and students' perceptions in these four areas related to knowledge and utility.

Utah State University, as of Fall 2008, had a graduate student enrollment of 1,705 students. Of those 1,705 students, 504 were graduate assistants, and 119 were teaching assistants or instructors (D. Leonard, personal communication, December 9, 2008). A sample of $N = 233$ participants was taken from the behavioral sciences graduate teaching assistants, instructors, and students in three social science departments. The social science departments were chosen for their similar nature of course materials and the compatibility of requirements among each department for teaching assistantships. The sample was comprised of 21 TAs, 20 instructors, and 192 students.

Of the TA participants, seven were first-year master's students, six were second-year master's students, one was a third-year master's student, four were first-year doctoral students, one was a second-year doctoral student, and two were third-year

Finally, the main body of the questionnaire consisted of questions that addressed areas of utility and knowledge a TA would be exposed to or experience as a result of employment in said position. The questions used a 5-point Likert scale for response options. The categories that were measured include curriculum development, course maintenance, teaching responsibilities, and mentoring.

On the survey, the four areas to measure TA utility were curriculum development, course maintenance, teaching responsibilities, and mentoring. These categories were further broken down into specific tasks.

Curriculum development contained seven questions addressing the following tasks TAs may have completed: located outside resources; developed course curriculum; developed examinations; created handouts; prepared PowerPoint presentations; reviewed drafts of course materials; and assisted with activities not specific to the course.

Course maintenance contained eleven questions addressing the following tasks TAs may have completed: graded exams; graded assignments; returned student work in a timely manner; recorded examination scores; remained up to date with grade information; took materials to e-Reserve; dropped off/picked up scantrons and/or promptly recorded grades; made copies; met with the instructor regularly; maintained confidentiality about student records; and maintained or updated Blackboard.

Teaching responsibilities contained nine questions addressing the following tasks TAs may have completed: attended lectures; set up teaching equipment; distributed handouts; taught classes; participated in class when appropriate; conducted exam reviews; gave exams or supervised exam periods; facilitated class discussions; and took notes on in-class information.