Lessons from Graduate Student Instructors on the Peer Review of Teaching

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In this qualitative study, we examined a pilot program for graduate student instructors (GSIs) in a peer review of teaching program at Duke University, a medium-sized research university. We noted key elements that participants identified from their experience that may be distinct from models of peer teaching review developed for faculty. These elements include factors that contribute to critical self reflection, such as interdisciplinarity and opportunities to both observe and be observed; modification of specific teaching behaviors; recognition of different teaching models within the discipline; and practical logistical suggestions for developing peer observation and feedback programs for GSIs.

Graduate student instructors (GSIs) are critical to university teaching (Story, Denning & Bustamante, 2005; Nyquist et al., 1991) and many will go on to faculty careers. Given that research universities produce the largest number of doctoral recipients (Hoffer et al., 2005, p. 6), it is vital that we provide opportunities for professional development for them for the benefit of both the university and the students' careers.

In 1990, the Association of Graduate Schools (AGS) released a policy statement that argues "since virtually all doctoral students […] will be engaged in not only the creation but the dissemination of knowledge, the skills acquired in learning how to teach will be fundamental to their future work" (p. 1). The AGS continues, "yet in far too many programs, effective teachers are produced by happenstance rather than design. Graduate students often teach too much but are not sufficiently assisted in becoming effective teachers; we find this both ironic and unacceptable" (p. 1). This policy statement illustrates the importance of better-developed GSI training programs at universities.

Moreover, many hiring institutions now seek new faculty who already have experience in classroom and lab management, proficiency with instructional uses of technology and experience designing their own courses (Adams, 2002). In sum, hiring committees expect new faculty to have specific skills and experiences that were not required when they themselves were hired. Fortunately, Duke University, like many universities, has expanded the training opportunities for GSIs to prepare them for the breadth of faculty roles and responsibilities, for the realities of pre and post tenure review, and to contribute to the scholarship of teaching throughout their careers. One component of this process is the peer review of teaching.

In developing the program described here, we identified successful models for peer review of teaching that were grounded in research-based principles and that had developed creative resources available in the public domain. We reviewed a number of research reports, web resources, and other models of peer review of teaching in order to identify procedures that were scalable, inexpensive, and effective in the use of time for both staff and students (Chism, 2007; Siddiqui, Jonas-Dwyer & Carr, 2007; Kohut, Burhap & Yon, 2007; Griffee, 2005; Wessely, 2002; Bernstein, Jonson and Smith, 2000; Cosh, 1998; Martin & Double, 1998; and Schön 1983.)

Nearly all of the participants in our Teaching Triangles program had taken advantage of other courses and workshops on teaching and already had a working knowledge of adult development and learning theory. Nonetheless, we agree with Schön's (1983) call for a "new epistemology of practice" and realize that GSIs can only become "critically reflective teachers" (Brookfield, 1995) when given the opportunity to serve as primary instructors of their own courses.

Teaching Triangles Program

During Summer 2007, we piloted the Teaching Triangles Program for GSIs at Duke University to engage in a peer review of teaching process in groups of three instructors. The objectives of the program included the following: 1) to engage in critical self-reflection on their own teaching practice, 2) to identify specific areas in which they

could improve their teaching, and 3) to implement strategies to address these areas. The members of each triad of GSIs were from different disciplines and participated in each stage of the program, as described below.

At the beginning of summer term, nine GSIs attended an orientation meeting to participate in training on techniques in classroom observation and constructive feedback. At this meeting, the GSIs then formed interdisciplinary groups of three and scheduled dates to engage in classroom observation and to meet to share their feedback with one another during the term. They also agreed on ground rules to conduct their observations, and developed their own observation checklists based on models we provided and their own thoughts about what was important in this process. During the term, they visited and observed each others' classes as scheduled. Each triad member observed at least one class taught by each triad partner for a total of two observations. After each observation, the observing GSIs had time to reflect on the class meeting they had attended and complete the checklist they had created earlier with their partners.

After all observations had been completed, GSIs within each triad met in pairs to exchange feedback and to discuss the experiences of both observing and being observed by each other. Notably, the actual classroom observation and individual feedback in this program were entirely GSI facilitated and executed. Finally, the GSIs attended a final meeting at which they shared their reflections on the experience with all participants in the program and offered key insights toward teaching improvement.

Research Questions

To determine if and how the new program added value to the GSIs pedagogical training, as well as what value it would have for other institutions, we conducted a focus group with the initial participants to answer the following questions:

1. How did participation in the Teaching Triangles Program facilitate GSI ability to engage in critical reflection on their own teaching practice?

2. What, if any, actions did participants take to improve their teaching?

Methodology

Nine GSIs in the Teaching Triangles program and teaching summer classes participated in a single, two-hour focus group meeting near the end of the term. We collected qualitative data in a semi-structured interview that consisted of a series of questions (below) as prompts for each participant to describe their experience. The initial questions were:

1. How useful was being observed and getting feedback from another instructor? What did you learn from this process?

2. How useful was being an observer of another instructor? What did you learn from this process?

3. What aspects of your teaching has Teaching Triangles led you to think about?

4. Have you changed (or plan to change) any specific teaching behaviors or strategies based on your Teaching Triangles experience?

We asked participants to address each question, and where relevant, to respond to each others' experience. The focus group meeting was audio recorded; we (the authors) also took notes.

After the focus group interview was transcribed, the transcripts were coded with both preordinate and emergent categories. The initial, preordinate categories corresponded to the interview questions. Other specific categories also emerged related to other topics that surfaced in our interviews. Categories are presented in the results below.

Findings

We have identified several benefits and challenges to engaging GSIs in a peer review of teaching project that fall into four areas: 1) facilitation of critical self-reflection; 2) modified teaching behaviors and tangible outcomes; 3) GSI recognition of differences from modeled teaching; and 4) logistical suggestions for peer observation and feedback in this type of peer review of teaching.

1. Facilitation of Critical Self-Reflection

A. Interdisciplinarity works. All participants identified working in interdisciplinary peer groups as superior to working solely within one's own department in order to facilitate critical self-reflection. Different disciplines, it seems, bring different pedagogies (Schulman, 2004.) One GSI from Religion explained that "having people from different disciplines was ideal. You know that it gave us a perspective that we wouldn't otherwise have had, both as observer and as observed. Concomitant with that are different pedagogies that go with different disciplines that's valuable."

This interdisciplinary arrangement was also much less threatening to the participants than would be working with observers from their home department. A GSI in English explained that working with someone from outside her department made her

> maybe less nervous because there was nothing really at stake, in terms of like you know, having to see you, and telling all my friends I'm a horrible teacher, and I just fell apart at this moment or something, and you

> know, sort of like, [someone] outside of my circle that I didn't feel quite as vulnerable or that that would impact my life social circle in some way...not that it would, because in fact I felt really validated with [her feedback] and that some of the things I do I think.

B. Focus on process, not content. This interdisciplinary arrangement allowed GSIs to focus more on classroom dynamics than the content of the class, which was perceived as a great advantage. Another GSI spoke about working with others from their home department, "we […] end up degrading into the material rather than pedagogical conversations…" A student from Business described how observing other GSIs was more useful than the observations she'd done in her own department, stating:

> what happens when I go and observe faculty in my department is that I'm so focused on the material that they're teaching, and the approach that they're taking, that I'm not so focused on what I'm calling the 'soft skills' of teaching, which is how you interact with the students, how you foster the discussion between them, or the things that are maybe not specific to the subject matter, but more just general. I was able to focus on that more when I'm observing something that was unrelated to my field.

C. Take advantage of being an observer. Both observing and being observed facilitated GSI self reflection, but the experience of observing a class being taught in another discipline was particularly more useful for facilitating self-reflection than participants had expected. A GSI from Business explained, "[I] went into this thinking that this was all about giving the other person feedback, and I really learned...actually I learned more being the observer than I did being observed."

2. Modified Teaching Behaviors & Tangible Outcomes

Several participants also identified concrete teaching behaviors and classroom conditions in which they made tangible (sometimes immediate) changes. These changes ranged from relatively simple classroom management practices to strategies meant to address gender differences in discussion participation. Typically, these behaviors or classroom conditions had been more or less "invisible" to the instructor but were readily apparent to the observer.

One GSI who taught a large introductory accounting class had a number of students who typically arrived five to ten minutes late to class. An observing triad partner noticed this, pointed it out and provided a few suggestions about ways to address this (i.e., an attendance sheet.) The instructor took this advice, implemented a sign-in policy, and the attendance problems stopped.

In another triad, an observer noted that female students did not contribute as much to discussion as male students, who the instructor described as "guys on various sports teams [and] very domineering." Based on feedback from the observing GSI, the instructor said she then

> tried to give the girls in the classroom more positive feedback when they did say something one or two times, so that they wouldn't feel like...I felt like I had to do that a little bit more just to get that to draw out. But then in the last few classes they were participating a lot. So I guess something, the dynamic changed enough.

3. GSI Recognition Of Differences From Modeled Teaching ("I Don't Teach Like My Professors At All…")

A number of the participants expressed concern about how they would be perceived by their own professors, by search committees and by senior faculty for putting into practice approaches to teaching and learning that we have promoted in other courses and programming on campus (i.e., student centered and active learning.) In the process of reflecting on their own development as teachers, they questioned how this might not be to their advantage.

A GSI in religion, who will graduate soon, has been hired to teach at his undergraduate alma mater. He compared his current teaching approach, in which he encourages student discussion without a great deal of instructor "interference" to that of his former undergraduate professors who

> believe that they need to give them the interpretation or set these things up, whereas I tend to like to sit back and say, "Oh, you guys are disagreeing. You need to talk to each other." I don't like them talking to me. Right? Because I want them to feel and critically engage with the material and talk about it among themselves and not just be repeating to me what they think that I want to hear. This is especially pressing because I'm going back to my undergraduate institution to teach for two semesters next year. So this very teacher who lectured to me for many courses, is going to come and watch me sort of sit and listen to discussions, and not teach the way he taught at all. So I wonder if I have good reasoning behind the way that I'm doing it […]

Another GSI expressed a need for more theoretical or research support in exploring teaching that might not be conventional for his field, asking rhetorically if he should tell his future colleagues, " 'Yeah, you guys are great teachers, but I'm going to do something totally different. And I'm only 26, right, and I know.' I don't know. I feel like I need more evidence or support to encourage these sorts of techniques."

In another course, a philosophy GSI asked his students to work in groups and role-play how famous thinkers might have dealt with various philosophical and ethical problems. The students were actively engaged, and the activity led to lively discussion and a great deal of participation. In reflecting on the outcomes of this activity, the GSI said:

> [I don't] know how I would improve on that, but those worked well, insofar as trying to encourage more active learning. But when I tell my professors about doing things like that, they're like, "Well, it's the summer. I guess you can experiment." They don't believe that that's actually instruction. That's something that summer counselors do at camp […] A lot of professors, I think, take the mindset that you only learn through suffering so the students are only going to give good evaluations when you're just sort of coddling them, and not instructing them.

4. Logistical Suggestions For Peer Observation And Feedback

Finally, the participants offered a number of specific suggestions concerning the logistics of conducting a peer observation program with GSIs. First, they all preferred to meet one-on-one to receive initial feedback from their triad partners. Although there was not a great deal of risk perceived in receiving feedback, getting this input from one observer at a time was perceived as less threatening.

Second, participants perceived value in being observed at least twice: to identify issues to address, and then to evaluate if any changes they made were effective. Ideally, these observations would be several weeks apart to allow the instructor to receive feedback and implement any changes to their teaching. Third, participants perceived a peer group of three instructors as ideal. Since the summer term is relatively short, it would be difficult to schedule more observations and feedback sessions.

Limitations

There were two key limitations to this study. First, we interviewed only nine GSIs in a single focus group. Though it would have been preferable to use several groups, logistical constraints prevented this. And, since this was a pilot program, we did not work aggressively to increase the number of participants beyond those who originally expressed an interest. Second, we did not require participants to incorporate any specific goals related to student learning outcomes in their courses. The recent literature on peer review of teaching is clear that there are many benefits when faculty attempt to monitor and document specific issues related to student learning. This is one area that we, or other institutions that implement a peer review process with GSIs, might address in the future.

Conclusion and Recommendations

Having already developed other training and coursework opportunities, a peer review program was the next logical step in our overall training for GSIs. We conducted this as a research project in order to learn about the benefits or barriers of promoting peer teaching review among GSIs, as well as to evaluate the overall strengths or weaknesses of such an approach. In the end, we were surprised at the number of lessons that we learned from our graduate students that help to identify key issues for engaging GSIs in the peer review of teaching.

This project not only provided constructive answers to our original research questions, but also transformed the parameters of our design by forcing us to recognize how the peer review of teaching for GSIs must take into account the meaning-perspective of their experience as graduate students. We discovered that GSIs benefit highly from interdisciplinary perspectives that offer different pedagogical approaches, learn as much (or more) from the process of observing other instructors as they do from being observed, appreciate real 'peer' review from other graduate students (rather than faculty or teaching center 'experts,') and have distinct concerns about how both current faculty advisers and future potential hiring committees will view their deliberate attempts for professional growth as college teachers.

GSI concern about whether pedagogical training might become a barrier to employment seems to be grounded in current fears about how current research faculty might view their proactive approach to become effective teachers. From our experience with faculty at nearby, non-research-extensive institutions, it is clear that many institutions expect new faculty to have such skills. Given that very few GSIs begin tenure-track careers at research institutions, we will continue to offer and expand our many training programs in order to prepare as many graduate students as possible for the realities they will face. Fortunately, many have already overcome their fears and have participated in our ongoing courses and workshops on teaching and technology.

The approach to peer teaching review for GSIs that we developed would be easily transferable to other institutions. By nature, it is highly interdisciplinary, flexible, and student-centered. Other universities that use graduate students as instructors would find this program useful. In particular, the program was highly effective in terms of both time and cost. In terms of time, the program coordinators developed a workshop on giving and receiving critical peer feedback and organized the initial and final program meetings. However, the majority of time and effort

was participant controlled. The individual triads scheduled their own observation times, meetings, and follow-ups without having to contact program coordinators. Similarly, the costs for this program are very low and limited to photocopying and lunches for the meetings. Given the very positive results of our pilot and the effective use of cost and time, we expect that similar programs could be developed in other institutions.

In the end, we learned about faculty development activities in more ways than one. First, we were able to implement a modest program that required minimal staff time and expense, but which led to important discoveries about how peer review of teaching activities might be developed effectively for graduate student instructors. Second, our GSIs taught us not only about how to design an effective program, but also about how important their unique perspectives are as graduate students. It is clear from these findings that we must listen carefully to our GSI insights to further improve our training models. We hope that other institutions will also recognize that there are many lessons to be learned by allowing graduate students to voice their unique viewpoints – not only on the peer review of teaching, but more widely on their overall professional development.

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