

DISRUPTING THE HIERARCHY: MENTORING GRADUATE STUDENTS AS CO-EDUCATORS

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In this paper, we describe our approach to mentoring Graduate Teaching Assistants (GTAs) as teaching and learning protégés within the context of a challenging undergraduate honours thesis course. An approach to mentoring GTAs in this multifaceted course is outlined, while providing practical strategies that expose GTAs to various aspects of the teaching process so that they become co-educators. Reflections from two GTAs that highlight the benefits and challenges of the co-educator model are also presented. Evidence from course evaluations provide support for the critical role that GTAs engaged as protégés play to enhance student success in this academically rigorous capstone course. We argue that mentoring GTAs for teaching development by treating them as co-educators can be rewarding, improve course outcomes, and enhance the student experience.

Within the context of teaching and learning, a mentoring relationship can be defined as any supportive relationship between an experienced instructor and a less-experienced novice that is focused on the teaching development of the novice (Rose et al., 2005). These relationships involve significant conversations that enable transitions in understanding and practice of learner-focused teaching (Huang et al., 2013). Within this framework, graduate teaching assistants (GTAs) can move beyond the traditional assistant role to teaching and learning protégés, with the guidance and support of course instructors (Finch & Fernández, 2014; Walters & Misra, 2013). Here, we describe a mentoring relationship within a challenging undergraduate honours thesis course, where GTA responsibilities extend beyond traditional tasks to a role as co-educators who enhance course delivery and the student experience.

Mentoring Graduate Students in Teaching

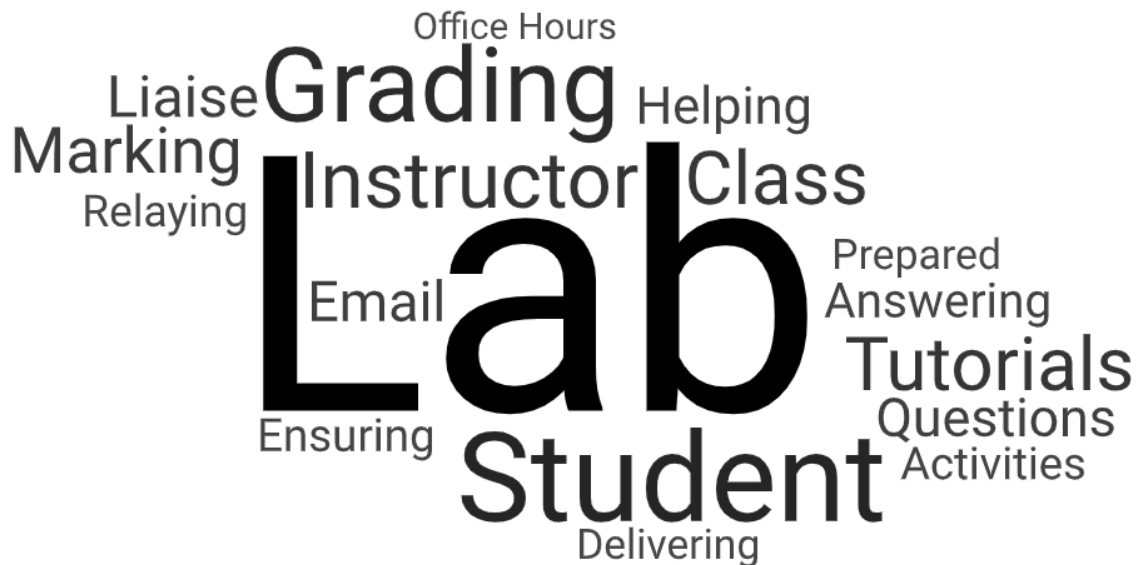
Research about teaching mentorship for graduate students has focused largely on formal programs organized at the faculty or institutional level, which typically concentrate on technical teaching skills, with little to no exposure to the complex process of teaching practice (Innocente & Baker, 2018; Park, 2004; Walters & Misra, 2013). Course instructors providing mentorship in teaching skills offer more; they model and engage graduate students with the implicit knowledge about the *art* of teaching, and its related ethics and values, as it applies in the real-world classroom (Rose et al., 2005). For true teaching mentorship to occur it is necessary to move beyond the traditional role of the GTA, which was originally conceptualized as a way to ease the teaching workload of instructors (Figure 1) (Finch & Fernández, 2014; Park, 2004). Even in courses where GTAs lead laboratory or tutorial components, teaching skills development could benefit from a more intentional approach (Gardner & Jones, 2011; Park, 2004).

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Figure 1

Perceptions of faculty and student attendees about the traditional role of GTAs, during a session exploring the mentorship of graduate students as co-educators



Finch and Fernández (2014) argue that the most effective training is to mentor graduate students through the entire teaching process. The ‘From Conception to Co-instructor to Completion,’ or FCCIC mentoring model features the instructor and graduate student as equal partners in the teaching process, which begins with the conceptualization of a course (Finch & Fernández, 2014). Collaboration is a key component of this model as the teaching duo works together to design course delivery, including teaching activities and assessment strategies, and to co-teach. Student course evaluations are collected for both co-instructors, providing a chance for the graduate student to obtain feedback about their teaching and to be mentored on how that feedback can be interpreted and used (Finch & Fernández, 2014). A benefit of the FCCIC model is that the graduate trainee is immersed in real-world learning with the support of an instructor experienced in navigating the challenges of teaching. Although it is not always practical or possible to co-create a new course, the emphasis on collaboration and equitable relationships makes some aspects of the FCCIC model applicable to thinking about GTAs as co-educators.

Walters and Misra (2013) apply a co-teaching model typically applied to collaborations between instructors to graduate student teaching training. Similar to the FCCIC model, graduate students are partner educators and immersed in multiple aspects of course design and delivery. However, their approach is not predicated on the conceptualization of a new course and can be applied in cases when graduate students are assigned as GTAs. The emphasis is on mutually beneficial collaborations, where the graduate student gains experience and mentorship, while the instructor benefits from fresh perspectives on teaching practice and a professionally gratifying experience (Walters & Misra, 2013). Both of these models are useful for reimagining the role of GTAs in the classroom (Figure 2) and instructors as mentors for teaching development.

Figure 2

Perceptions of faculty and student attendees about new potential roles of GTAs, during a session exploring the mentorship of graduate students as co-educators



Context

The Bachelor of Health Sciences (BHSc) in the Cumming School of Medicine (CSM) at the University of Calgary is a research-intensive, inquiry-based four-year honours undergraduate program. All BHSc students complete an undergraduate honours thesis. Students self-select a faculty research supervisor, define their own research question and engage in independent research to answer that question. The academic year culminates in the submission of a thesis and an opportunity to defend the work during a thesis oral exam.

All BHSc honours thesis students are enrolled in MDSC 508 -Honours Thesis and Research Communication, a course coordinated by two faculty members and two GTAs who work together to deliver various course components and to support students throughout the year. The course coordinators and GTAs offer targeted workshops aimed to develop and build student skills in academic writing and communication. GTAs also independently offer workshops that align with their expertise; past GTA designed workshop topics have included conference abstract writing, academic writing, and tips for navigating supervisor-student relationships. Additionally, students attend weekly sessions in small groups of 10 or fewer students, each supported by two CSM faculty or post-doctoral fellows as “preceptors”. These sessions enhance interdisciplinary communication skills by having students present their research, in both informal and academic formats, to their peers from the three different BHSc majors (Bioinformatics, Biomedical Sciences, and Health & Society). GTAs play a crucial role in coordinating small groups, scheduling and technical support, tracking attendance, and filling in for absent preceptors.

A main focus of the course is to support students for a successful thesis year. Course coordinators and GTAs make it a priority to be available for individual support on an as-needed basis to students who struggle with time management, motivation or face relationship difficulties

with their faculty supervisor. Overall, the MDSC 508 teaching team works to create a supportive environment that is responsive to student needs and circumstances.

MDSC 508 Approach to Mentoring GTAs

Our mentoring approach begins at the time of GTA selection. Our interview of applicants focuses on identifying graduate students who are interested in developing teaching skills and who can work well in a team environment. We make it clear that we are looking to develop a teaching *team* and that GTAs will be involved in all aspects of the course. We also aim to identify the applicant's interests and needs in teaching development. In essence, we seek graduate students who will be invested in the success of the course and student experience. Once suitable GTAs are identified, our mentoring approach centers on building equitable partnerships, collaboration and providing an immersive experience into the teaching process.

From the beginning, GTAs and course coordinators are introduced as the 'MDSC 508 teaching team' - to students, thesis research supervisors and small group preceptors. Course communications often include the entire teaching team, with the exception of emails that require a simple response. We keep each other 'in the loop' so that we can present a united front. This also sets the tone for the collaboration, such that most decisions throughout the course are made collaboratively. For example, before the course begins and as we are orienting GTAs to MDSC 508, everyone on the teaching team reviews and revises the Student and Supervisor Handbooks and the course outline. GTAs are also asked to provide feedback on all assessment rubrics.

Part of our collaborative model requires that GTAs take leadership of several course aspects, including certain course processes (e.g., how exams should be organized). GTAs also provide workshops that align with their interests and expertise that they design and deliver independently. Mentorship for these activities includes feedback on workshop content or slides, and if requested, the course coordinators may sit in as quiet observers in the back of the room to provide moral support and feedback about teaching. The GTAs also play an important role in supporting students through the challenges of completing their undergraduate honour thesis. Students often feel more comfortable approaching the GTAs than the course coordinators, but this could be undermined if the GTAs were not seen as an authoritative part of the teaching team. They are an incredible asset to the course in providing support, feedback on proposals, oral presentations, and thesis drafts, and guidance to students throughout the year. This collaborative approach also serves to immerse the GTAs in all aspects of MDSC 508 including course design, content delivery, student management, and assessment.

Part of creating equitable partnerships is allocating responsibility in a way that is fair to each person's needs and experience. While the GTAs are a main interface for students, the course coordinators take responsibility for handling complex and sensitive issues, either with students or faculty. This also presents a learning opportunity for GTAs, who participate in discussions, as appropriate, and are kept informed of decisions and how issues are resolved. We are also mindful of the number of weekly hours that GTAs devote to the course and aim to make the teaching load manageable with their other responsibilities (personal and academic).

Mentoring relationships need regular communication and maintenance (Rose et al., 2005). In addition to email communication, the teaching team meets weekly to discuss course activities and any substantive issues. These regular meetings are an opportunity for immediate and ongoing feedback that supports teaching development for all collaborators (Finch &

Fernández, 2014; Lachman et al., 2013; Walters & Misra, 2013). Additionally, these are important check-ins for mentorship to assess any changing GTA needs, struggles or concerns.

GTA Reflections on Role as Co-Educators

Motivations

It is often assumed that graduate students take on GTA positions for the purpose of financial compensation and gaining experience, as shown in Figure 3. However, the core of the mentoring relationship proposed herein inherently requires broader motivations that engender a level of commitment to expand the role of a conventional assistantship, which is often limited to grading and administrative duties. Both GTAs were motivated to apply for the MDSC 508 GTA role based on their sense of connectedness and a desire to reinvest in a program that they benefited from as undergraduate students, having both been MDSC 508 students in their undergraduate programs. Familiarity with the rhythm of course activities and the student response at each stage of the course allowed the GTAs to recognize opportunities to improve the course. The GTAs could then easily identify the areas of course delivery that best aligned with the goals of each GTA in their growth as teaching protégés.

Figure 3

Perceptions of faculty and student attendees about what motivates graduate students to apply for GTA positions, during a session exploring the mentorship of graduate students as co-educators



Celebrating Successes

The GTA's motivations provided the foundation for setting specific goals that were woven into the GTA experience. From the outset of the course, the course instructors encouraged the GTAs to bring forward goals, and together the co-mentors built a roadmap to achieving those goals. This early engagement with the GTAs facilitated a negotiation of realistic expectations for the course and the GTA role, and built cohesion among the team. The instructors, as much as the GTAs, shared their successes and barriers faced in their respective roles. This mechanism of sharing created a sense of co-ownership and support within the team that was important to

maintaining morale and enthusiasm. In the process, the GTAs interacted with students extensively and grew in their ability to support students in a manner that closely paralleled the mentorship received by GTAs from the instructors. Thus, the co-mentorship model benefitted the success of the teaching team and the students in the course. Continuous reflection, both as a team and individually, guided the experience longitudinally. At the end of each year the GTAs were encouraged to reflect on formal evaluations, and set intentions for the subsequent year.

Overcoming Challenges

Building relationships across the numerous, diverse, and dynamic individuals involved in the course was a consistent challenge for GTAs. The interdisciplinary nature of the teaching team and the many faculty involved in the course is regarded as a strength of MDSC 508, but it requires strategies to work effectively. For the co-mentorship model to work optimally and the course to run smoothly, buy-in is needed from the many stakeholders. Identifying values and goals early on was essential to foreseeing and overcoming potential challenges. The GTAs and the teaching team approached these relationships with flexibility on all sides, allowing newcomer GTAs to share ideas that perhaps challenged the status quo. It is important that the experienced members of the teaching team approach these new relationships with transparency on the approach to working, and to incorporate elements of mentoring new members of the team so that they are comfortable navigating their own experience in the course, irrespective of what their core teaching values may be. Within the complexities of the many relationships that the GTAs had to build in the course, having a supportive, united front within the teaching team was crucial.

Mentoring Graduate Students as Co-Educators: Recommendations

The co-educator model was key to the GTAs sense of fulfillment, the MDSC 508 students' success, and the functioning of the teaching team. Instructors who wish to mentor GTAs as co-educators should keep in mind the following recommendations:

1. Centre the teaching goals of your GTAs. Encourage professional development activities such as workshops and include these activities in their teaching duties. Offer continuous feedback to support your GTAs' growth. Allow GTAs to contribute to aspects of the course that would empower them to achieve their goals.
2. Frame your GTAs as part of the teaching team. Meet regularly with the teaching team and include the GTAs in the planning and debriefing process. Ask for their perspective on the course as a mechanism to build alignment between what they want to contribute and what you as an instructor want the course to be.

Impact on Students

Our experience in MDSC 508 supports that a co-educator model for the mentorship of GTAs in teaching development also benefits students. GTA performance is included as part of the course evaluation at the end of each academic year, which includes ratings of the course content, environment and GTA specific questions. Students consistently rate the GTA independently designed and delivered workshops as helpful to very helpful. These ratings reflect both the developing teaching skills of the GTAs and the relatability of the topics selected, which are relevant to the senior BHSc student experience.

Student comments on the course evaluations also support that our approach to working with GTAs works well for students:

“My general experience was positive. I felt like *I had multiple people to go to for help* [emphasis added] and support in various aspects of my project. The course was very well-organized.”

“The course coordinators and TA were very supportive and were available to answer questions. Thank you for setting up a *supportive learning environment* [emphasis added].”

“[GTA] is a wonderful TA who was *personally invested* [emphasis added] in my success during this course. [GTA] has provided me with incredibly useful oral and written *feedback* [emphasis added] throughout the course. I am very grateful to have had [GTA] *as part of the MDSC 508 teaching team* [emphasis added].”

These sample student comments indicate that students respect the GTAs as part of the teaching team and value their role in providing feedback. Importantly, students perceive a supportive learning environment as a result of our teaching collaboration. Overall, feedback from course evaluations has encouraged us to continue engaging GTAs as co-educators in MDSC 508, and has validated our focus on teaching mentorship in these relationships.

Impact on Instructors

In a challenging course, such as MDSC 508, the description ‘many hands make light work’ holds fast, however, our experience with the co-educator mentorship model provided additional benefits for instructors. The co-educator model gave opportunity for us as instructors to gain a fresh perspective and learn new ideas from our GTAs who come from different disciplinary backgrounds and provide a closer view of the undergraduate student experience. Self-reflection in teaching practice is always an important aspect for instructors but having to explain and defend ideas to someone else (fellow instructor and GTA) brings additional clarity and accountability. Together this avoids getting entrenched in specific ways of running the course and enhances our teaching practices to prevent our approaches from becoming stale.

The benefits of working in a teaching team and the mentoring GTAs as co-educators should not be overlooked. The continued learning of all team members brings an elevated level of personal gratification, collaboration and collegiality and teaching skills development. Our mentorship approach facilitated a work-life balance, beyond simply sharing the load.

Conclusion

In a role as co-educators, GTAs gain teaching experience that goes beyond technical skills that will enhance their preparedness for independent teaching (Finch & Fernández, 2014). As an added benefit, there is evidence that teaching experience also improves graduate students’ research skills (Feldon et al., 2011). Our experience in MDSC 508 suggests this approach also benefits student learning and experience.

Instructors working with GTAs should be intentional about mentoring them for teaching practice and work collaboratively on as many aspects of course design and delivery as possible. Instructors should be prepared to invest time and effort, and be willing to hand over the reins to

at least part of the course, which may not come naturally if they have ‘owned’ a course for some time. Where possible, the pairing of a ‘new’ GTA with a more experienced one can enhance teaching skills development through peer mentoring (Innocente & Baker, 2018; Lachman et al., 2013; Park, 2004). Lastly, the mentorship relationship should be driven by the teaching development needs of the GTA(s), although all parties will benefit from the collaboration.

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