

EDUCATIONAL DEVELOPMENT FOR QUALITY GRADUATE SUPERVISION

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Graduate supervisors can benefit from ongoing educational development to enhance and develop their supervisory skills. From new supervisors to more experienced ones, faculty members can all benefit from gathering to discuss and exchange their experiences and supervision practices. Increasingly, graduate education research (Egan, Stockley, Brouwer, Tripp, & Stechyson, 2009; Erichsen, Bolliger & Halupa, 2014) is focusing on the study of best practices for graduate supervision given the need to enhance the student/supervisor relationship, increase students' satisfaction with the quality of supervision, and generate better outcomes for graduate students. Offering educational development opportunities for graduate supervisors is complicated and needs more attention from universities. This paper aims to shed some light on the role of graduate supervisors, the factors that may contribute to developing successful graduate supervision experiences, the factors that contribute to the complexity of graduate supervision with a discussion of different types of support for a successful graduate supervision and lastly, the design of a Massive Open Online Course (MOOC) that focuses on Quality Graduate Supervision to be offered at the University of Calgary.

INTRODUCTION

In addition to sponsoring excellence in research, there is pressure on educational institutions and faculty members to respond to social, organizational, and student demands for excellence in course-based teaching and high quality graduate supervision to support the development of creativity and student success in research (Brancato, 2003). These competing demands require institutions to provide quality professional development and learning opportunities for faculty members (Brancato, 2003). In particular, the study of best practices for graduate supervision has increased recently, due in part to “the political pressure to increase the number of doctoral degrees awarded” and also due to high attrition rates reported for doctoral students in Canada (Skarakis-Doyle & McIntyre, 2008, p. 1). The attrition rate of doctoral students is reported to range from 30-50 % of students in Canada, depending on the discipline (Minister of Education, Recreation and Sports (MERS), 2013); further, the number of years a doctoral student takes to finish a doctoral degree has increased (Skarakis-Doyle & McIntyre, 2008). Insufficient supervision is considered one of the factors that contributes to the dropout of doctoral students in Canada (Erichsen, Bolliger & Halupa, 2014; Skarakis-Doyle & McIntyre, 2008). Another important issue that urges educators to focus on the study of best practices for graduate supervision is the limited literature available on how to best support graduate supervisors in ongoing development to improve their graduate supervision skills.

THE ROLE OF A GRADUATE SUPERVISOR

Graduate supervision is “a complex pedagogical practice. It is a partnership between an experienced and an aspiring scholar, which shifts over the number of years it takes for the Alharbi, H., & Jacobsen, M. (2016). Educational development for quality graduate supervision. *Papers on Postsecondary Learning and Teaching: Proceedings of the University of Calgary Conference on Learning and Teaching*, 1, 41-46.

research to be done and the thesis to be written” (Kamler & Thomson, 2014, p. 1). A graduate supervisor plays the role of an academic mentor who provides professional guidance, encourages scholarship and research, assesses student performance, teaches the student the necessary skills to plan and conduct original research, and participates in the students’ thesis preparation (University of Calgary, 2009). Furthermore, Skarakis-Doyle and McIntyre (2008) identified the effective supervisor as “one who can identify students’ learning styles, their strengths and weaknesses, while employing a repertoire of skills for working effectively within this range of differences” (p. 12).

FACTORS THAT CAN CONTRIBUTE TO A SUCCESSFUL GRADUATE SUPERVISION EXPERIENCE

Effective communication and the development of shared expectations are the most important factors that contribute to a successful graduate supervision experience (Dimitrov, 2009; Skarakis-Doyle & McIntyre, 2008). Understanding any cultural differences between supervisors and students is also an important factor (Dimitrov, 2009). Dimitrov (2009) divided the common challenges of supervising graduate students across cultures into five themes: “(1) assumptions about the nature of research and knowledge production; (2) cultural differences in power and status; (3) differing needs for saving face; (4) cultural differences in communication styles; and (5) expectations about following rules” (p. 1). Graduate supervisors can be more successful in mentoring graduate students when they are aware of potential challenges and they intentionally focus mentoring conversations on each area. Furthermore, balancing the responsibilities and personalities of both the graduate student and the supervisor in setting and achieving goals is fundamental for a successful supervisory relationship (Skarakis-Doyle & McIntyre, 2008). Litalien and Guay (2015) have found that perceived support and a strong relationship with the graduate supervisor has some effect on lowering dropout intentions among PhD students. Finally, supervisors who adopt a caring supervision approach usually have successful graduate supervision experiences with their graduate students (Määttä, 2015). Määttä (2015) summarized the elements of caring supervision as follows:

Caring supervision is sensitive interaction, the emphasis of caring supervision changes during the process, a caring supervisor does not hold back compliments and appreciation, a caring supervisor motivates to write, caring supervision clarifies the requirement of PhD research, a caring supervisor teaches time management, a caring supervisor helps tolerate uncertainty and criticism, a caring supervisor monitors the fulfillment of the quality criteria of a doctoral thesis, a caring supervisor provides many kinds of feedback and caring supervision provides suggestions and options, in addition to questions (p. 186-189).

THE COMPLEXITY OF GRADUATE SUPERVISION

There are many factors that can contribute to the complexity of graduate supervision. The diversity of students and their needs is the first of these factors, as students’ status can vary from part-time to full-time, and from domestic to international students. Supervising part-time students, who are usually mid-career professionals and well established in their fields, can pose some challenges for supervisors because they may need more or different kinds of support than a full-time student. Part-time graduate students may face challenges in forming a new identity as a scholar and novice learner, balancing work, study and personal commitments, so the length of their studies might become longer (Walker & Thomson, 2010). Supervising full-time students

can pose some challenges as they tend to demand more time from a supervisor. Full-time students may have plans to finish early or right on time and then transition to a new career path, which can place demands on supervisors' time. Full-time students usually seek professional development opportunities and different funding and scholarship opportunities, so supervisors need to know how to help them identify and apply for these opportunities (Walker & Thomson, 2010).

Supervising international students can present unique challenges because of the many factors cited above, such as differences in communication norms, power and status, and also the time it may take to adapt to the post-secondary culture and the university's context, which may be longer than domestic students. For graduate students born and raised in Canada, the adaptation to the context of a new university takes at least six months (Dimitrov, 2009). However, this transition might take up to two years for an international graduate student given the cultural adaptation and transition challenges that they may face (Dimitrov, 2009).

The second factor that can contribute to the complexity of graduate supervision is the diversity of students' programs. Supervisors may be responsible for students in different types of programs, such as thesis-based programs, course-based programs, and blended and online programs. Graduate supervisors need to become aware of the procedures and policies and expectations of each program and develop the ability to manage and respond to students with different needs (Walker & Thomson, 2010). The different models and blends of supervision across disciplines are also considered one of the factors that makes graduate supervision so complex. In the Natural Sciences and Engineering Research Council of Canada (NSERC) and Canadian Institutes of Health Research (CIHR) disciplines, for example, a group-based apprenticeship supervision model is more common and supervisors often carry out bench science alongside graduate students in laboratories, and supervise several 'generations' of students in a lab, from post-doctoral scholars to doctoral and master's students (Chiappetta & Watt, 2011). A student's research is usually tied to the supervisor's research and the student may be in contact on a daily basis with their supervisor (Chiappetta & Watt, 2011). In contrast, in the Social Sciences and Humanities Research Council (SSHRC) disciplines, an individual apprenticeship model is more common and the supervision approach may be a form of mentorship and coaching that is carried out in one-on-one, project-based studies, and/or in applied field settings (Chiappetta & Watt, 2011). This supervision approach can also involve multiple generations of post-doctoral scholar, doctoral and master's students in a research lab.

Managing the multiple responsibilities of an academic career is a third factor that can make graduate supervision a complex undertaking for faculty members. Graduate supervisors do not just supervise students; they also have many other roles and responsibilities, such as managing and growing their research program, research and award grant writing, knowledge mobilization, course-based teaching, curriculum development, and service commitments in the department, faculty, university and community, to name a few. Graduate supervisors need to constantly advance their own knowledge and research in the discipline while also mentoring graduate students as emerging scholars, as well as manage and keep up with all their course-based teaching and service responsibilities. Academic faculty members may agree that educational development is desirable but may still find it challenging to allocate time to workshops and seminars focused on graduate supervision given their many responsibilities.

TYPES OF SUPPORT FOR A SUCCESSFUL GRADUATE SUPERVISION

The purpose of ongoing, continuous educational development is to help graduate supervisors when they need help, and support them in enhancing their supervisory knowledge,

skills and practices, which in turn can help “to create a space where supervisors are able to break open this intensely private pedagogical relationship... for discussion, debate and critique” (Manathunga, 2010, p. 76). The theoretical approach underpinning the design of educational development opportunities for graduate supervisors needs to recognize that educational development is a critical, transcultural exchange (Manathunga, 2010). Faculty members are not complete novices when it comes to graduate supervision; they bring ideas, knowledge, attitudes, beliefs and a range of experiences based on their own experience as graduate students and observations of colleagues’ practices. It is recommended that the instructor in educational development programs focused on graduate supervision adopt the role of a facilitator/participant in order to sponsor transcultural exchange among graduate supervisors (Manathunga, 2010). In brief, graduate supervisors need opportunities to talk about graduate supervision with other graduate supervisors across campus. Manathunga (2010) describes her experience and role as a facilitator participant in educational development programs for graduate supervision:

A bit like a musical conductor, I orchestrate an ensemble of activities, speakers, reflective moments, discussion and debate. I provide a structure, a space and stimulus, but I do not provide the music. This is provided by the participants (and by my contributions to debates as a fellow participant) (p. 79).

The following is a summary of key topics that emerged from the literature that need to be included in educational development programs designed to support graduate supervisors. The main topics are:

- Developing knowledge of policy and procedures
- Maximizing the effectiveness of the supervisor/student relationship
- Increasing the quality of communication
- Access to group expertise; e.g., supervisors’ best practices, students’ best practices
- Experience with mentoring students through proposal, research and writing processes
- How to deal with difficult situations
- Where supervisors can find help (Skarakis-Doyle & McIntyre, 2008; Kaslow et al., 2007; Kamler & Thomson, 2014; Walker & Thompson, 2010).

SUPPORT FOR GRADUATE SUPERVISION AT THE UNIVERSITY OF CALGARY

The University of Calgary recognizes the importance of developing and preparing graduate supervisors for their roles and responsibilities as graduate supervisors. The Faculty of Graduate Studies at the University of Calgary offers workshops and seminars throughout the year in the “My Supervisor Skills” program to enhance supervisors’ skills in supervision. Furthermore, the Faculty of Graduate Studies works closely with Graduate Program Directors in every program, and the Assistant Dean Supervision provides all new supervisors with an orientation as well as providing individual mentorship and online resources in order to support graduate supervisors.

QUALITY GRADUATE SUPERVISION MINIMOOC

To support both new and experienced graduate supervisors in continual professional learning to enhance their graduate supervision skills and knowledge at the University of Calgary, our plan is to design, develop and evaluate a blended, six module mini-Massive Open Online Course (miniMOOC) on Quality Graduate Supervision. This blended educational development opportunity will be flexible and accessible to faculty members considering their busy schedules and limited time. The design of our Quality Graduate Supervision miniMOOC is guided by three

learning theories: connectivism, learning community, and constructivism. According to Siemens (2005), “Connectivism is the integration of principles explored by chaos, network, complexity and self-organization theories” (p. 4). A learning community is defined as “a general sense of connection, belonging, and comfort that develops over time among members of a group who share purpose or commitment to a common goal” (Conrad, 2005, p. 2). The constructivists believe that there are four important characteristics that influence all learning: “1) learners construct their own learning; 2) the dependence of new learning on students’ existing understanding; 3) the critical role of social interaction; 4) the necessity of authentic learning tasks for meaningful learning” (Applefield, Huber & Moallem, 2001, p. 8). Developing a connectivist faculty learning community informed by constructivism can enable the critical, transcultural exchange among faculty members that is described by Manathunga (2010).

Design-based research, a mixed methods approach to studying innovation in naturalistic contexts (Jacobsen, 2014), is the research approach we have adopted to analyze, design, implement and evaluate the miniMOOC. There are four phases in this design-based research initiative: (1) analysis of practical problems by researchers and practitioners; (2) development of solutions; (3) evaluation and testing of solutions in practice; and (4) reflection to produce ‘design principles’ (Reeves, 2006; McKenney & Reeves, 2012).

The Quality Graduate Supervision miniMOOC will be developed and offered as a pilot in the 2016–2017 academic year for faculty members at the University of Calgary, with the intention of expanding the Quality Graduate Supervision miniMOOC as a massive open online learning experience for the entire University of Calgary faculty population in a subsequent implementation cycle.

CONCLUSION

In conclusion, graduate student supervision is an important component of every faculty member’s teaching responsibilities and an area that needs more educational development focus, study and support. Faculty development programs offer an important approach to developing and advancing faculty members’ expertise in teaching and graduate supervision. Investments in faculty development are expected to yield stronger supervisory relationships and result in better outcomes for graduate students. However, given the many demands on faculty members’ time, it is a challenge to get professors assembled in one place at one time to take part in faculty development. There is a need to design accessible and flexible faculty development opportunities for large numbers of faculty members, to provide for interdisciplinary interactions among graduate supervisors and for meaningful learning opportunities that address individual faculty members’ needs. This design-based research study is focused on exploring the design, implementation and evaluation of a Quality Graduate Supervision MOOC for faculty development at the University of Calgary.

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