

The Transition from Discipline-Based Scholarship to Interdisciplinarity: Implications for Faculty

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Introduction

The Doctor of Social Sciences (DSocSci) program at Royal Roads University, Victoria, British Columbia (BC), Canada, is now in its fifth year of operation. In the spring and fall of 2014 we graduated our first six doctoral students. The program is based on a scholar-practitioner model with an interdisciplinary academic framework. Most of our students are highly placed, full-time working professionals who are also pursuing full-time doctoral work and find it necessary to blend their professional activities with their doctoral research. The students bring an amazing variety of experiences and research foci to the program as, in many ways, their professional careers demand interdisciplinary epistemologies.

The interdisciplinary framework of the DSocSci program presents an exciting context for students and for faculty. It also, however, presents challenges for faculty who participate in the delivery of the program, given that all of our faculty members come from rather strict disciplinary backgrounds. This chapter, and the experiences upon which it is built, focuses on the complexity of faculty transition from discipline-based scholarship to interdisciplinarity, a transition that has implications for their own research, their colleagues' evaluations of them, and their professional development. The transition exceeds professional implications and has profound implications for pedagogical approaches that normally shift

through the development of online pedagogy and in response to interdisciplinary teaching and learning.

This chapter is based on our own reflections and some informal interviews with faculty who have made the transition to our program and to the interdisciplinary mandate of the applied scholar model. We focus on career implications, which include the following: (1) research funding, (2) research development, (3) the role of critical friends in program dissemination, (4) colleague approval, (5) colleague collaboration, and (6) internal university acknowledgement. In addition, we explore pedagogical implications for faculty including teacher satisfaction, skill development, student-professor challenges, and transformative approaches to doctoral supervision.

The Doctor of Social Sciences Program: An Overview

DSocSci is a four-year structured program designed on a cohort model—with an average of 15 students per cohort. Each cohort of students journeys together through six core courses. Four of these courses are delivered through a blended learning model: the students start with a three-week initial online component, followed by three weeks of intense face-to-face learning through two residencies in the first year of study, and then six weeks of online learning post-residency. In between the two residencies, the students take a full online course to explore epistemological and methodological issues in applied interdisciplinary social sciences research. Subsequently, they develop directed studies with their chosen supervisors. Once all the course work is completed in the beginning of their second year, the students are required to pass their candidacy exam. After successful completion of the exam, they work with their committees to develop their research proposals, and seek approval for their doctoral research projects through the department that evaluates research ethics. By the beginning of their third year, students are engaged in the data collection phase of their research (see Figure 11.1).

As you can see from our program data in Table 11.1, more females than males are enrolled in the program but overall most students are in their mid-forties. As a result of this demographic, the students bring a variety of experiences and research projects to the program.

And interestingly, our data also show that the majority of our students are coming from education organizations: this typically includes teachers, instructors, and professors from secondary and postsecondary institutions who are seeking to upgrade their credentials from a master's to a doctoral level (Table 11.2). We also see a high concentration of students from the

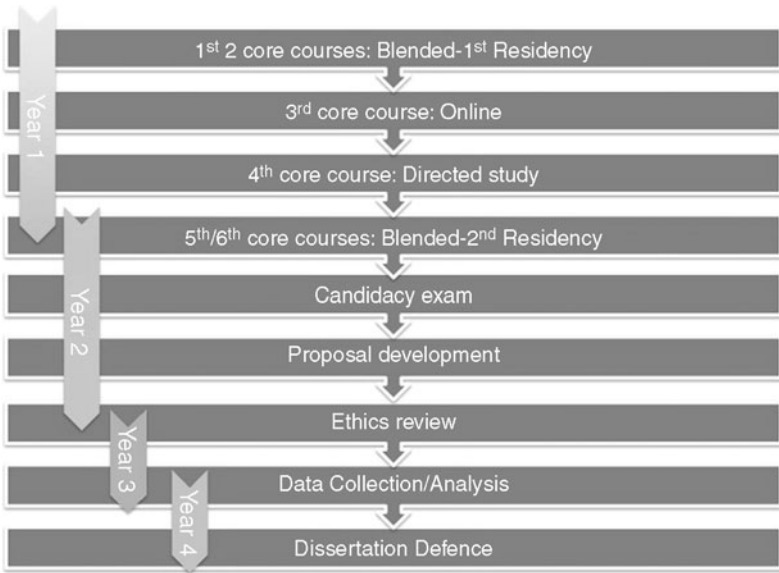


Figure 11.1 DSocSci Program Timeline

Table 11.1 DSocSci Gender and Age Statistics

	2010	2011	2012	2013	2014	2015a	2015b	Total
Male	2	1	5	7	6	5	4	30
Female	6	5	6	6	8	9	7	40
Age	35–63	38–54	44–60	31–63	28–58	26–70	28–60	

environmental sector, as well as from backgrounds such as government, consulting (unknown in Table 11.2), and social science research. What you can ultimately derive from the data is that we continue to attract well-placed professionals from a variety of sectors and backgrounds making the program truly applied and interdisciplinary.

The scholar-practitioner model we embody is based on an applied interdisciplinary academic framework that helps integrate the diverse backgrounds and experiences of our students. Typically, our students enter the program with a strong practitioner focus; one of our major challenges as faculty is to help our students engage in the rigors of scholarship and ultimately to draw links between their practitioner selves and the demands of rigorous scholarship. We do this by supporting the students in

Table 11.2 Represented Organizations

	2010	2011	2012	2013	2014	2015a	2015b	Total
Education industry	1	1	3	3	3	4	2	17
Environment	1	3	1	1	1	1		8
Government	2		2	1	1			6
Social sciences				2	2	1	1	6
Health/Social services	1	1		1			2	4
Human resources			1			2		3
Justice/Public safety			1		1		1	3
Arts and culture			1		1			2
Energy				1		1		2
Finance/Insurance	1						1	2
Manufacturing/Production						1	1	2
Business/Administration				1				1
Communication	1							1
Legal	1							1
Marketing					1			1
Services						1		1
Technology						1		1
Trades/Transportation				1				1
Unknown			2	1	2		1	6

the design of research helping them to focus on translating abstract scholarly theories and concepts into applied and action-oriented projects that focus on tangible deliverables, usually associated with their professional positions. This action-oriented, iterative process ensures that students not only consult with their committees as part of their research design, but that they involve their practitioner communities in the design, collection, and dissemination of their research. Their active research colleagues come from within academia and from outside.

Shifting to an Interdisciplinary Pedagogy: A Critical Friends Approach

The interdisciplinary framework of our doctorate program presents an exciting context for students and for faculty. As already noted, it also, however, presents challenges for faculty who participate in the delivery of the program, especially given that all our faculty members come from rather strict disciplinary backgrounds. Our traditional training, especially the idea of a discipline-based pedagogy, in many ways can seriously constrain our ability to address adequately the diversity of needs within an applied

interdisciplinary program. And the development and delivery of online interdisciplinary pedagogy introduces additional issues. While the form of asynchronous learning we employ in DSocSci addresses the fact that almost all of our students are full-time professionals, the online delivery format destabilizes traditional student-professor relationships, roles, and responsibilities, as well as require new virtual space roles and responsibilities of faculty to facilitate learning.

The epistemology or the pedagogical philosophy of the conventional educational world assumes that students know very little, and that we, as teachers know much more. Furthermore, the conventional assumption is that knowledge can ultimately be put into subject matter silos or disciplines—such as anthropology and sociology—with complete academic integrity and investigative credibility. Indeed, for centuries the whole educational universe has been organized around predetermined subject areas.

A truly effective interdisciplinary pedagogy, however, requires that we embrace the destabilizing spaces required to break free from disciplinaryity, especially when these new interdisciplinary-based approaches are more policy and action based than isolated disciplinary endeavors. Manathunga, Lant, and Mellick (2006, p. 371) argue that interdisciplinary pedagogy is threatening emotionally, socially, and cognitively for both teachers and students because it deliberately seeks to engage students in controversy and asks them to develop an appreciation for ambiguity. Manathunga et al. (2006) suggest that there are four key dimensions that support interdisciplinary doctoral pedagogy. These are (1) providing relational, mediated, transformative, and situated learning experiences; (2) focusing on development of the critical skills in students to help them move beyond disciplinary cultural relativism to interdisciplinary synthesis; (3) strengthening higher order thinking and metacognitive skills in students to help them critically unpack multiple disciplinary perspectives; and (4) enhancing students' epistemological understandings of their original discipline (p. 368).

Instead of the subject matter being the structure for learning, the interdisciplinary pedagogy underlying the DSocSci focuses on connecting the learning outcomes we are trying to achieve for our students with the social challenges they want to be working on, whether those challenges are related to indigenous community work, leadership, or environment and sustainability. Interestingly, most of the research endeavors of our students have a social and/or environmental justice focus. This means that our applied interdisciplinary pedagogy becomes highly practice-centered: our teaching is based on both practice and scholarship and we focus on learning as an interactive process. The general framework for our courses and the discussions that ensue revolve around the professional and research needs of our

students. The quality of our curriculum therefore is not based on what is *de rigueur* in a discipline but on emerging knowledge, and knowledge that is relevant to the unique professional challenges of each of our students.

Unfortunately, students may initially perceive gaps in our subject matter expertise as a limiting factor in their learning experiences that in turn may negatively influence teaching evaluations and their application to our professional development and promotion requirements. Furthermore, gaps in our subject matter expertise challenge our ability to evaluate the diversity of learning styles and backgrounds of our students. As professors in an applied interdisciplinary program we therefore need to be profoundly aware of the literature that is required to support the learning outcomes of our students. We need to be able to articulate and connect often disparate and sometimes contradictory ontologies, epistemologies, and methodologies, and we need to understand how other people are articulating these same ideas. We also need to be able to choreograph learning experiences for our students to bring the learning alive and add that extra layer of insight and understanding that comes from diversity in knowledge claims.

Employing a critical friends approach to interdisciplinary learning provides an opportunity to tap into the power of both our cohort and blended learning models. The critical friends model has more than 30 years of use in education (Costa & Kallick, 1993; Gibbs & Angelides, 2008; Kember et al., 1997; Storey & Richard, 2013; Swaffield, 2007; Wachob, 2011). Costa and Kallick's (1993) classic definition suggests that a critical friend is "a trusted person who asks provocative questions, provides data to be examined through another lens, and offers critiques of a person's work as a friend" (p. 50). After over two decades, this definition of the critical friend still resonates deeply. Researchers, too, have been building constructively upon Costa and Kallick's critical friend concept. Swaffield (2007), for example, suggests that the critical friend role is not just a supportive role, but also one that encourages and cultivates constructive critique. Such relationships rely heavily on trust, commitment, and knowledge of the professional context of the "friends." Storey and Richard (2013) in fact highlight how trust is really the key element in the critical friends approach; trust provides the framework to provide and receive constructive criticism more effectively than a top-down pedagogical style might.

In one of the core classes on applied qualitative research methodologies being taught during the second residency, students spend much of their three weeks together providing critical feedback to each other. Feedback is accomplished through a series of assignments designed on a snowball technique in which the students work together through tangible issues related to their research; that research cumulates in a polished 20-minute presentation outlining their doctoral research project. Throughout these

assignments, the students provide deeper and deeper critical feedback to each other. The power of this interdisciplinary critical friends approach is that each student receives a host of different critical perspectives on the gaps and successes of their project designs; the deep trust built between the students through the intense residency format of our program facilitates a much greater reception to the criticism than if we—their professors—provided it to them. Therefore, in the space of three weeks, the students are able to transform this critical feedback into tangible insights into their research projects—a process that would take months to achieve through a typical student–professor dialog. In short, our program fosters collegiality among all of us at a very profound level that fosters learning equity in opposition to authoritative teaching.

Embracing Interdisciplinary Research Methodologies

Being an applied interdisciplinary researcher necessitates a true willingness to engage in reading outside rigid disciplinary backgrounds. Such readings mean ongoing searches for, and sometimes frustrating confrontation with, bodies of literature that change regularly and rapidly. In many instances, as interdisciplinary novices, we often focus our research on substantive issues in lieu of larger interdisciplinary theoretical frameworks, and in some ways, this is a comforting approach for us. Many disciplinary-based scholars question the legitimacy of this research and characterize it as a-theoretical. Unfortunately, it is these same scholars who frequently make up the adjudication boards of granting bodies. As a result, much applied interdisciplinary scholarship is left underfunded, underrepresented at conferences, and underpublished by top peer reviewed journals. To address these challenges it would certainly help to have a new category of scholarly funding that recognizes the importance of practical research complemented by a new approach to adjudication that can address the incredibly complex, and often policy-driven nature of applied interdisciplinary research design.

We strongly feel the need to continue to push the envelope in terms of how we do research without relying on traditional scholarly grants to legitimize our knowledge production. We need to be proactive in how we disseminate our research to ensure that any knowledge created is accessible to multiple sectors and communities of practice. As applied interdisciplinary scholars we typically have a very strong practice-based research program. This means that much of our research is driven by policy needs, practical issues, and even activism, instead of merely an intellectual curiosity. It is this applied nature of our research, combined with the integration

of multiple scholarly epistemological and methodological approaches to scholarship that drives our applied interdisciplinary scholar-practitioner model. And where there is a willingness to work together in teams with colleagues who are very much not alike with respect to disciplinary thinking and modernist-postmodernist orientations, the possibility for innovation and systemic local and national change is incredible. And as we continue to build our international networks of applied interdisciplinary scholar-practitioners, the possibilities to tackle and even solve the increasingly complex and global social issues of the twenty-first century become not only doable but also necessary. We also have to acknowledge that building a truly engaged, applied interdisciplinary research community may take a generation or two and that the work we do today will benefit our students and their students in the years to come.

Interdisciplinary Doctoral Supervision

As doctoral supervisors in an applied interdisciplinary program, one of our biggest challenges is maintaining openness to our students' needs to incorporate complex ways of conceptualizing their research that involves both the social and natural sciences and in some cases the humanities, and often includes indigenous epistemologies. There is no denying that power relations play a significant role in many aspects of the student-supervisor relationship (Deuchar, 2008, p. 491), including being supportive (or not) of our student's unique perspectives on and approaches to their research projects. In many instances, as much as students look up to us as the subject matter experts who are supposed to be guiding them through their learning journey, we need to be able to admit to our students that they are in fact teaching us something new. Our teaching and/or learning and research development are certainly more reciprocal than anything we have experienced to date.

We also need to be transparent, making it clear that as much as we are engaged in supporting our student's learning journeys, we are also there to ensure that they are meeting the program requirements in terms of timing as well as rigor. Based on extensive research into supervisory styles (Delamont et al., 2000; Gurr, 2001; Kam, 1997; Pearson & Brew, 2002; Taylor & Beasley, 2005), Deuchar (2008) points out that two key variables of supervision are foundational: structure and support (p. 490). Based on these two variables, Deuchar suggests that within this foundation four key styles of doctoral supervision occur: (1) the "laissez-faire" style makes the assumption that students "are capable of managing both the research project and themselves"; (2) the "pastoral style," as distinct from

the former, assumes that the student is able to manage the academic aspect of the doctorate, but requires personal support; (3) the “directorial” style, is the opposite of the pastoral and assumes that the supervisor needs to support only the management of the project; finally, (4) the “contractual” style assumes that supervisors and students need to negotiate the extent of the support in both project and personal terms (p. 490). The alignment of supervision styles and student needs are further illustrated by Gurr (2001) in a two-dimensional graph (see Figure 11.2) outlining the importance of ensuring that students’ needs match the abilities and styles of supervisors. The importance of student and/or supervisor alignment highlights the reality that as much as we may feel we *should* be able, or need to be able to work with a potential student—or that a potential student *should* work with us—we need to be brutally honest with students about our availability, our interests, and our abilities.

The complexity of providing adequate structure and support through doctoral supervision also needs to be contextualized within the debates circulating about the veracity of the role of student autonomy and independence in doctoral studies. An increasing neoliberal “consumerist service ethic” within education is shifting the discourse on supervision toward a model of efficiency, adding pressure to provide students with “quick fix” solutions to their academic difficulties (Deuchar, 2008, p. 490; Holligan, 2005, p. 268; Lucas, 2006). As a result of this focus on efficiency, supervisors may now be compelled to overdirect their students’ research in

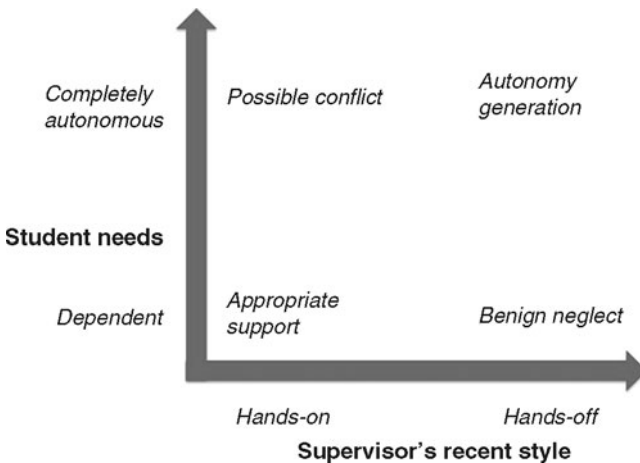


Figure 11.2 Alignment of Supervision Styles with Student Needs

Source: Adapted from Gurr (2001, p. 87)

order to meet program deadlines (Deuchar, 2008, p. 490). We have found that supervisory guidance on applied interdisciplinary doctoral research projects largely depend on the students being able to bring their theoretical and applied work together. It is the students who ultimately drive the research—and this kind of student entrepreneurship demands supervisors to be much less directive than in the past. We are somewhat like consultants, helping to guide the research and writing processes while allowing the students to be highly independent researchers. We do, however, need to continue to manage the expectations of our students in terms of program outcomes and processes. This does not mean overdirecting their research, but rather ensuring that their research projects are not overly ambitious and that we are able to help them to get back on track if it becomes too divergent from their original plans.

We have found that applying a critical friends approach to supervision allows us to build trust with our students, trust that helps to break down the often opaque power relations associated with supervisor-student relationships and helps open the student up to receiving critical feedback without taking it personally.

Conclusion

While the literature of our students' research projects typically lies outside of our expertise, as supervisors we need to cultivate a willingness to build teams of expertise. This means working together and helping to manage a diverse range of modernist and postmodernist orientations as well as disciplinary thinking processes, which will ultimately help our students connect the dots between perspectives to strengthen their research design and data analysis. In the end, the type of collegiality and cooperation that interdisciplinary work demands—as indeed does our program—is based on an academic humility that is framed around our rather new approach to teaching and research; we have become conscious lifetime learners as professors and supervisors and, in fact, we learn as much from our students as they learn from us. The foundational demand of interdisciplinarity is that we are committed to lifetime learning and, over the course of four years and beyond, we pass that commitment on to our students.

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