Graduate Student Professional Development: A Survey with Recommendations

Prepared for

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Marilyn Rose, PhD
Brock University

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I.   PROFESSIONAL SKILLS FOR GRADUATE STUDENTS: A DEFINITION

For the purposes of this report, the term "professional skills" is used to refer to both academic skills and transferable skills and competencies of other kinds that graduate students will need to acquire as 'carry-forward' or work-ready skill sets applicable in workplace settings of all kinds.

"Professional Skills" includes a*cademic skills* developed while undertaking the courses and research that characterize disciplinary areas of study. Such skills include both those related to the conduct of research and related scholarly work and those connected to teaching through work as teaching assistants or, in the case of some doctoral students, as course instructors.

The second kind of professional skills with which this study is concerned has to do with the acquisition of *transferable competencies of a broader nature*, ranging from interpersonal and leadership skills to career search and career advancement strategies. These have to do, in general, with a student's ability to present himself or herself professionally and to integrate quickly into complex workplace environments after graduation.

Professional skills training of both kinds is designed to help students to mobilize themselves and their capabilities effectively. The assumption is, as the Canadian Association for Graduate Studies, has put it, that skills are "behaviours that can be learned, that can be improved with practice, that require reflection, and that benefit from ongoing improvement" (3). The goal of professional skills training is to ensure that – equipped with all that their graduate degrees have prepared them to do – graduate students will be well-prepared to move forward within the typically fast-paced, interconnected, multidisciplinary, multi-cultural and team-based workplace environments that characterize today's worlds of work – whether academic, for-profit, or not-for-profit in nature.

II.   PROJECT GOALS

The goal of this investigation into Graduate Student Professional Development (GSPD) in Canada was to determine what is currently in place on individual university campuses in terms of both academic and more broadly transferable skills acquisition, to analyze the data gathered, and to make recommendations regarding good practices and the potential role that granting councils might play in supporting professionalization opportunities for both graduate students and, where appropriate, postdoctoral fellows in our institutions.

The study was to begin by establishing a framework for the project, which would look at the nature of graduate education today, what is thought to be needed in terms of carry-forward skills development for graduate students at the Master's and Doctoral levels, and a sense of why such training is believed to crucial at this time.

A survey of the programming and related opportunities currently available to graduate students in Canadian universities would be undertaken, on the understanding that this preliminary work would be limited to some extent by the complexity of the project and the rather short time available for its completion. The assumption was that the information amassed in the undertaking of this project would be substantial, but that it would undoubtedly be useful to survey more institutions and generate more data subsequently, should time and resources be available in the future.

In surveying the various universities, special attention would be paid to professionalization activities that are currently available to Social Sciences and Humanities students in Canada.

Following an analysis of the data collected, there would be an attempt to identify particularly strong approaches to graduate student professional development and good practices in the area of GSPD, as a way of indicating what might be done by institutions wishing to enhance transitional skills programming and related opportunities for their graduate students and, where applicable, postdoctoral fellows working on their campuses.

The report would culminate with the development of specific recommendations for consideration by those developing and delivering GSPD programming in Canadian universities, and by the Granting Councils in terms of programming initiatives that they might consider mounting in order to move this agenda forward.

III.   THE CASE FOR PROFESSIONAL DEVELOPMENT FOR GRADUATE STUDENTS

As AUCC's recent publication, *Trends in Higher Education* (2011) indicates, graduate student enrolments have increased substantially over the past several decades. The number of graduate students in Canada has grown significantly faster than the number of undergraduate students over the past 30 years, from about 77,000 in 1980 to almost 190,000 in 2010. Master's enrolments have more than tripled, and PhD enrolment has increased four and a half-fold. There are more full-time students, proportionately, than part-time graduate students in our universities, and they are on average older than they were 30 years ago. On average 31% of Master's students and 56% of PhD students are now 30 years of age or older (AUCC 10-11).

Factors influencing the increase in graduate student populations include the rapid development of new graduate programs and specializations designed to respond to the generation of new (often interdisciplinary) knowledge clusters in our time and to 'societal need' with respect to the social and economic drivers characteristic of emerging post-industrial environments. The attendant intensification of research agendas in the universities, and increases in research support by both provincial and federal governments have led to support for larger numbers of graduate students. AUCC notes, for example, that "sponsored research investments" more than doubled between 2000 and 2010, and that the additional funding available to graduate students undoubtedly spurred graduate growth (10).

The disciplinary distribution of these increased graduate enrolments is worth noting. According to AUCC, the most popular fields of study for Master's students continued to be "the combined disciplines of business, management and public administration," along with law and "architecture, engineering and related technologies," and "the social and behavioural sciences." Enrolment numbers also increased in the fields of Education and Humanities, although their share of graduate students decreased by 2-3% in comparison with the period from 1992-2008 (12). On the PhD side, the three most popular fields of study continued to be physical and life sciences and technologies, as well as the social and behavioural sciences and law, followed by architecture, and engineering and related technologies. The number of humanities doctoral students also increased by almost 40% since 1992, even though its share of students fell by about 5%.

A point to be made is that graduate enrolments have burgeoned, with the most dramatic growth involving students in what might generally be considered to be the more 'applied' areas, including behavioural sciences programs in the Social Sciences. At the same time, though, there are increased numbers of students in other kinds of programs – from the remaining Social Sciences though Humanities and

Education – who are also preparing for entry to the workforce. In none of these cases, moreover, whatever the discipline, is it expected that a wealth of opportunities for academic careers will available to these students upon completion of their degrees. Rather, the vast majority will need to enter the broader workplace more directly and will need to be prepared to do so.

Yet, as surveys of existing research indicate, there is widespread belief that the development of skills and competencies related to effective transitioning to non-academic workplaces has been less attended to than is wise. Indeed, professional skills training is thought to represent a kind of lacuna in graduate training that needs to be better addressed.

Graduate students are, to be blunt, the 'faces of the future.' Clearly their intellectual formation and development – the acquisition of academic skills, the capacity for independent and critical thinking, the ability to generate new knowledge, and the ability to use it in creative ways – continues to be paramount when we think of the purpose of graduate education. However, much discussion about university education today, at a philosophical level, is grounded in a belief in the notion of "citizenry" – the responsibility of graduate educators to model and encourage integrity, compassion, commitment, ethical behaviour, and the desire and will to make a positive difference in the world. And there is a concomitant assumption that the capacity to bring both specialized knowledge and related research competences <u>and</u> highly developed and relevant interpersonal skills to the world of work is essential if the academic and societal potential of graduating students is to be realized.

To think of graduate education as including responsibility for workplace readiness, however, represents something of a culture shift. A number of points made by Douglas Peers, then Dean of Graduate Studies and Associate Vice President, Graduate at York University (in his keynote address at a conference entitled Navigating Your Path: Exploring and Supporting Teaching Assistant and Graduate Student Development, held at the Ontario Institute for Studies in Education in Toronto in May 2011), seem particularly apt. Dr. Peers argued that we reconsider graduate education in its 21st century context and attend closely to the pressing need to render our graduate students more employable within and outside universities, thereby ensuring that their knowledge and skills are appropriately recognized and therefore can be better mobilized:

- We must recognize the fluidity of knowledge generation and knowledge mobility in our time. The practice of research itself has changed: it is more global and collaborative in nature, crosses boundaries between universities, and crosses boundaries between other universities and other kinds of civil and economic institutions. Only a small fraction of today's graduate students (as few as 30% in some programs and disciplines) will find traditional tenure-track positions in the academy. Most will apply their research knowledge and skills to workplace environments of other kinds – where their research knowledge and skills will be equally vital but interpersonal, leadership and presentation skills will be essential as well.

- We need to acknowledge that, although there is continued emphasis on the fact that research and technical skills remain the most important aspects of any graduate training component, increasingly funding agencies, universities and employers of highly qualified personnel are recognizing the importance of professional skills that go beyond disciplinary expertise. Hence it is essential that our institutions prepare and graduate students who are flexible, adaptable, and (to put it bluntly) more immediately employable than may have been the case in the past.

- It is especially important that graduate students be trained in communications skills that include writing for different audiences, and 'writing short' as well as 'writing long.' Students will also need to be able to multitask and to work in team environments. They will need to be prepared for a world that involves more collaboration and is more interdisciplinary. Entrepreneurial thinking is

essential – and must be based on thinking about, knowing, and acting upon one's strengths. Training in applied ethics is also needed, as are project management skills and skills related to the internationalization and globalization that characterize our time.

- The need for a broadened perspective is especially acute given the costs of educating graduate students, the shortfall in government funding to meet these costs, and the general environment of accountability on the part of the government and the public with respect to the need to educate a workforce that meets many more potential needs than the staffing of post-secondary institutions.

- Indeed there is a compelling need to counter 'bad press,' a negative perception (which may be rooted in some truth) that graduate students are emerging unprepared for fruitful intersections with the wider world – that they are too often overspecialized, lacking in commercial awareness, unable to relate well to non-specialists with whom they must work, unable to write in clear, penetrable prose, and in possession of unrealistic expectations with respect to workplace demands and protocols.

- We must recognize that this cultural shift will not be easy. Change is very difficult for institutions like universities where researchers were themselves trained for academic positions and have traditionally seen themselves as preparing their students almost exclusively for entry into similar academic positions in expanding universities. Though the notion of apprenticeship to highly trained researchers remains valid, particularly in the acquisition of discipline-specific academic skills, faculty advisors can become trapped in the "self-replication" model when so many of their students will need to locate and find their way into other kinds of careers. In this environment, broader professional skills training is essential. Whether formal or informal, mandatory or optional, such training needs to be built in some way into each university's training of its graduate students.

- Students must come first and graduate students need to be able to profit from a culture shift on our part. To a greater extent than in the past, we as faculty need to think broadly about a range of potential careers for our students and how best to prepare them for diverse kinds of opportunities. In short, our students need to profit from our willingness to put our time and resources into supplementing their core education with skills training that will help them to forge pathways into the world of work such that they will have the opportunity to realize their potential for contribution to the wider world in varied ways.

IV.   KEY DOCUMENTS: PREVIOUS STUDIES AND SKILLS INVENTORIES

A number of earlier documents and studies have highlighted the need for a greater emphasis on the acquisition of professional skills by Canadian graduate students and have attempted to define the core competencies that such programming should address.

1.   *Tri-Agency Statement of Principles on Key Professional Skills for Researchers*, 2007

Following a Tri-Council, STLHE (Society for Teaching and Learning in Higher Education), and CAGS (Canadian Association for Graduate Studies) workshop held in the summer 2007, and subsequent broad consultation with stakeholders, the Tri-Council issued a *Statement of Principles* with respect to key professional skills, in recognition of the clear need on the part of universities and employers together for professional skills training that goes "beyond disciplinary expertise" (1). While emphasizing the retention of the "premise that research and technical skills remain the most important aspects of any research

training, the document argues that training in "professional skills" to complement these core skills is necessary, and that "non-academic sectors (private industry, government and not-for-profit)" should be encouraged to "work closely with academia to better prepare researchers for their entry into the labour force" (1). In this statement, "researchers" is a term used broadly to include graduate students, postdoctoral fellows and new faculty.

Nine skills areas were identified:

- Communication and Interpersonal Skills
- Critical and Creative Thinking
- Personal Effectiveness
- Integrity and Ethical Conduct
- Teaching Competence
- Leadership
- Research Management
- Knowledge Mobilization and Knowledge Transfer
- Societal/Civic Responsibilities

2. **Canadian Association for Graduate Studies *Report on Professional Skills Development for Graduate Students* (2008)**

The CAGS report builds upon the Tri-Council *Statement of Principles*, strongly endorsing the need for professional skills development for graduate students. Given the demand for the "skilled people needed to thrive in a knowledge-based economy and to make meaningful contributions to society, both nationally and internationally," it argues that graduate students *need* to "engage in ongoing development of their skills in areas that complement their academic programs and enhance their employability" (2). Indeed, universities are *obliged* to support the professional development of graduate students: simply put, they "are responsible for providing graduate students with the best possible preparation for their future roles whether within academia or in other sectors" and must be willing to provide resources for the development of the necessary …skills" (4).

In its report, CAGS collapses the nine areas identified by the Tri-Council into fewer areas of focus, a distillation that has the effect of creating a greater emphasis on those skills related to workplace readiness and workplace efficacy:

- Communication Skills
- Management Skills
- Teaching and Knowledge Transfer Skills
- Ethics

In order to operationalize its principles, CAGS recommends creating an up-to-date inventory of current resources, practices and methods, identifying gaps and barriers to success, developing a comprehensive description of each of the four skills areas it has defined (including identifying comprehensive and detailed description of core skills and competencies in these domains and focusing on existing literature and best practices), and developing a national strategy for ensuring delivery of professionalization programming for graduate students.

3.   OCGS *Taskforce on Professional Skills Report* (May 2011)

The Ontario Council for Graduate Studies (OCGS), a body comprising all Ontario's Graduate Deans, undertook a comprehensive survey of Ontario Universities in 2010/11, in an attempt to learn what was being done in the professional skills area in that province. Based on responses from nine of the 20 institutions surveyed, 21 professional skills areas were identified as being addressed across the system:

- Research Ethics
- Academic Integrity
- Academic Writing
- Public Presentations
- Grant Writing
- Writing/Communication with Lay Audiences
- Public Speaking
- Teaching
- Developing Resumes/CVs
- Research Management
- Intellectual Property
- Knowledge Transfer/Translation
- Career Planning
- ESL [English as a Second Language]
- Intercultural Communication
- Time Management
- Teamwork
- Leadership/Management
- Media Relations
- Work/Life Balance
- Networking

The survey attempted to identify who provides these workshops within the various universities, the degree to which universities would be willing to share their expertise on the various topics with one another, and whether a mechanism for importing/exporting professional skills programming could be found (e.g. through online sharing).

The survey revealed that among the institutions responding:
- Most skills training was provided by the students' home academic Faculties (and not, for example, by Faculties or Schools of Graduate Studies).
- By far the most prevalent mode of delivery was the face-to-face workshop, followed by integration into courses, and – as a distant third – individual consultations.
- In terms of modes of delivery, there seemed to be an equal balance between face-to-face and on-line resource materials.
- There was great interest among respondents in the possibility of sharing training opportunities and modules from other universities, especially through the development of online skills-training components of various kinds.
- However, owing to concerns about resource implications, there was not a clear sense of commitment re: producing components that might be shared (such as online resources on particular topics). Indeed there was a clear "mismatch" between the potential supply of such components and the potential demand for them.

OCGS recommended more sharing with one another with respect to what individual institutions already do. In the short term, the exporting of what is already available needs to begin (i.e. sharing whatever is transportable, from print and online resources to workshops offered on different campuses). In the long term, however, online program development is necessary and should be prioritized in the province.

4. **Renee Polziehn,** *Skills Expected from Graduate Students in Search of Employment in Academic and Non-Academic Settings* **(January 2011).**

Renee Polziehn, Outreach Director for Graduate Student Professional Development in the Faculty of Graduate Studies at the University of Alberta, has prepared a guide based upon the Tri-Council *Statement of Principles on Key Professional Skills for Researchers*, which address each of the nine skills areas identified in that report.

What is particularly useful is the way in which – for each of these nine areas – she identifies several "Related Skills Sought in Non-Academic Sectors" and the "ways in which graduate students can demonstrate these skills." The document offers practical advice for students (and faculty) with respect to ways of identifying the student's existing professional competencies, while becoming aware at the same time of other competencies that they can continue to develop as graduate students – through opportunities available to them in their own graduate work or by engaging in public dissemination activities regarding their research activities or engaging in co-curricular activities inside or outside of their university environment.

5. **Richard Ivey School of Business,** *Leadership at the Graduate Studies and Postdoctoral Levels* **(March 2011)**

This study, prepared for the Vanier Scholarship Program by the Ian O. Ihnatowycz Institute for Leadership at the Richard Ivey School of Business at Western University, addresses (among other objectives) "trends affecting academic life in North America today," with a focus on the ways in which leadership is "currently fostered and can be better nurtured at the graduate and postdoctoral levels in the future" (2). Recognizing that recent surveys at Canadian and American institutions reveal the interest of graduate students in "gaining transferable skills, engaging in collaborative research, and teaching in new and innovative ways," the paper states that "the demand for universities to provide transferable (or generic) skills for its graduate population is higher than ever" – and that there should be a special emphasis on skills related to "the development of interpersonal and team working skills" and "managerial competencies" (16-17).

The study is particularly useful in its examination of the shift from transactional to transformational leadership models and the ways in which graduate students can acquire and demonstrate leadership skills through such strategies as

- engaging in self-directed learning, critical reflection and transformative learning
- developing an awareness of the global environment
- recognizing and responding to increased diversity
- taking an active role in interdisciplinary research workshops and teaching
- participating in intellectual communities across disciplines and specializations
- demonstrating knowledge beyond their own disciplines
- honing the ability to communicate to interdisciplinary audiences
- developing collaborative interpersonal skills
- seizing upon leadership opportunities within and beyond their programs (16-17)

V.   APPROACH AND METHODOLOGY

This research project is intended to pick up where previous discussions, notably the Tri-Council *Statement of Principles* (2007) and the CAGS *Report on the Professionalization of Graduate Students* (2008) left off, and to begin to address in particular the call of the CAGS report for

- the creation of an up-to-date inventory of current resources, practices and methods
- the identification of core skills and competencies in these domains and focusing on existing literature and best practices
- the identification of gaps and barriers to success
- the development of a national strategy for ensuring delivery of professionalization programming for graduate students

In undertaking this task, the following approach was employed.

1.   The Survey

For each institution to be included in the survey, the university's Graduate Studies website was examined for the information to be found there regarding Graduate Student Professional Development. The investigator was thus placed in the position of graduate students seeking to know what is available in their institutions and how to go about registering for, or otherwise accessing, those activities or experiences.

As needed and where appropriate, Graduate Deans were contacted regarding either clarification of or expansion on what appeared on the university's website. Graduate Deans were also asked a few larger questions, having to do with their ideas for encouraging faculty buy-in regarding professional development for their students and what they thought the Granting Councils might be doing, or might be able to do, in terms of support for universities in the area of professional development for their graduate students.

2.   Survey Sample

It was clear from the start that not every university in Canada could be included in the survey: time and human resources were limited. However, the assumption was that a reasonably large sampling could be undertaken and would provide a good initial window into programming available across the country.

- The research began with a determination of the size of the graduate sector at Canadian universities, using AUCC's enrolment data per university as of November 2011 (Enrolment by University: 2011 Preliminary Full-time and Part-time enrolment at AUCC member institutions, rounded rounded to the nearest 10 (http://www.aucc.ca/canadian-universities/facts-and-stats/enrolment-by-university/). Universities without graduate programs were then eliminated from the sample, as were universities at which graduate programming was linked directly to their professional mandates, including some theological institutions and Royal Military College. In these cases the professional development of graduate students tended to be built into curricula fairly directly and/or connected to specific professional opportunities aligned directly with the external organizations for which the student was being specifically prepared.

- Sorting the universities in the survey by full-time headcount was determined to be the most useful approach in looking at the density of GSPD programming at various sites. The most developed GSPD programming typically corresponds to the size of the FT student contingent (although this

is not always the case). Universities without an on-campus FT graduate student population cannot arrange for the kinds of campus-based activities that typically characterize GSPD activities and thus these were eliminated from the initial sample group.

- As well, a major decision was taken to exclude, at this stage of the project, Francophone institutions whose websites would need to be navigated with linguistic expertise by a qualified co-researcher not yet in place, and whose governance was typically quite different from the remaining Anglophone institutions. A brief examination of Francophone university websites suggests that there is interesting and highly developed professional skills training for graduate students available in a number of these institutions, so this is definitely a gap that will need to be addressed during the second phase of the research project.

- At this point there were 53 Anglophone institutions left in the sample (of the 93 listed by AUCC – which includes its separate listings for all campuses of the Université de Québec). The institutions ranged in size from the smallest, whose FT student numbers were as few as 10, to the largest, at 13,600 (the University of Toronto).

3. Spreadsheet

As the information was gathered from university websites and through contact with Graduate Deans, their designates, and, in some cases, student services personnel, it was inserted into a spreadsheet designed to capture the various kinds of GSPD activities to be found on various university campuses using categories that would lend themselves to comparison and analysis. The categories developed and used were as follows:

- the size of graduate operation at each university
- its general approach to GSPD programming
- an overview reflecting the location of website information about GSPD activity and a description of the general parameters and/or approach of each school to GSPD programming
- evidence of Academic Skills Training for graduate students in the areas of Research and Teaching
- evidence of Transferable Skills Training for graduate students
- evidence of SSHRC-discipline specific programming
- notes on resourcing for GSPD activities where this information was available
- modes of delivery employed
- a listing of university and external partners involved with the Faculty, School or College of Graduate Studies in the delivery of GSPD

The information on the interim spreadsheet, which is attached, is not as complete as might be wished. Websites were sometimes difficult to navigate and it is possible that information was missed in reading them if it was not to be found via standard pathways of investigation. Some universities did not respond to further inquiries. And a degree of interpretation was involved in the encapsulations that appear on the spreadsheet. Hence each spreadsheet entry will need to be verified for accuracy by its home institutions before this report is finalized.

However, a great deal of information was amassed, certainly more than has ever been collected to date. And the information unearthed does reveal patterns – and ideas and suggestions – that, although

somewhat incomplete, should nonetheless prove a rich resource for those wishing to encourage GSPD activities on their own campuses.

VI. OBSERVATIONS and GOOD PRACTICES

1. Overview of GSPD Programming Across the System

There is a substantial amount of GSPD activity underway in Canadian universities and this area is being taken up and developed on most Canadian campuses with a sizeable graduate student sector. The activity level is highest at larger universities with substantial numbers of students, but is significant, or reported as being substantially under development, at almost all mid-size institutions as well. It is less prominent in universities with the smallest numbers of graduate students, as is to be expected. However, there are outriders in each category and the levels of activity and of development in the area of GSPD would appear to be dependent upon a particular university's institutional emphasis on the importance of professionalizing graduate students through skills training – in combination with each particular Graduate Dean's ability to prioritize the development and delivery of this kind of activity given the degree of decentralization marking graduate activity on his or her campus and the constraints of his or her operating budget.

Ideas and Good Practices
- Universities with thriving GSPD programs, or those whose programming is undergoing significant development, tend to identify clear leadership for the initiative and invest responsibility into that dedicated position.
- Frequently an Associate Dean for Graduate Studies is given this responsibility.
- At times the individual so designated is a faculty member who takes on this special responsibility under the direction of the Graduate School.
- At times the leadership is invested in the rotating chair or other representative of the university's central GSPD planning committee.
- Large, well-integrated operations may appoint a Director for the GSPD program.
- One university has a Professional Skills Specialist within its Centre for Teaching and Learning.
- Another has created the position of Professional Development and Outreach Director.
- One of the largest GSPD programs employs a full-time manager and several part-time assistants in order to deliver its multifaceted offering.
- To support the individual leading the initiative, some administrative assistance – which sometimes takes the form of a half-time position or a graduate assistantship dedicated to this portfolio – would appear to be necessary.

2. Coordination/Leadership in GSPD Programming

Where there is coordination regarding GSPD activity on particular campuses, it is most commonly the Faculty or School of Graduate Studies that serves as coordinator for information about GSPD activities on each campus.

Coordination most often takes the form of the development and maintenance of a specific webpage that lists current and future offerings and is updated often. Alternately, or in conjunction with this webpage, a common tool is the use of an Events Calendar posted on the Graduate Studies website. In some cases the principal mechanism used is an events bulletin sent electronically to all graduate students on a weekly or bi-weekly basis.

The events listing, however promulgated, generally attempts to represent all GSPD activities available on campus during a particular period, so that all graduate students, whatever their program of study, can use this tool as their principal guide to current activity. However, it was noted again and again that many Graduate Deans simply do not know all that is going on in the Faculties – they know only what they are told about or asked to advertise, and that may be very little. Indeed the first step that is usually assigned to administrative specialists who have been given responsibility for both developing and tracking GSPD activity on their campuses is to mine for and collect information about Faculty-specific activities that can then be folded into information packages for students through the university's coordinating mechanisms. The challenge is to create a culture in which all Faculties share all information with the centralized repository that has been developed.

<u>Ideas and Good Practices</u>
- A key to the culture change that may be required on a particular campus is a genuine commitment to the need for GSPD training for students on the part of faculty and Faculties – as addressed in #12, below.

3.   Partners in the Delivery of GSPD Programming

Some Faculties of Graduate Studies offer programming themselves – a suite of workshops available to all graduate students, for example. However, for the most part, the central Graduate Studies Office or central coordinating committee is dependent upon the contributions of a wide network of <u>internal partners</u> – Student Services, Career Services, the Library, Centres for Teaching and Learning, Offices of Research, and so on – for the actual mounting and delivery of program components.

- In terms of internal partnerships, on-campus partners typically include
  - o Career Services
  - o Centres for Teaching and Learning
  - o Libraries
  - o Academic Success Centres
  - o Writing Centres
  - o Research Offices
  - o Graduate Students' Associations
  - o Libraries, Writing Centres, Diversity and Equity Offices, Alumni Relations,

- Less frequently cited internal partners include:
  - o Diversity and Equity Offices
  - o Alumni Relations
  - o Human Resources
  - o Health Services
  - o Faculty of Business
  - o Faculty of Education
  - o Leadership Development Institutes
  - o International Services
  - o Institutes for Community Development
  - o Disabilities Services
  - o Academic Integrity/Ethics Offices

At the same time, it is clear that <u>external partnerships</u> have not been extensively developed, although this was strongly recommended by the TriCouncil Statement of 2007.

There may be more activity of this kind occurring in the Academic Faculties, where GSPD activities can be difficult to trace and document. And there is some indication of partnerships on some campuses. MITACS is most frequently mentioned. Some universities bring external employers to campus to speak with students about potential employment and career strategies. In some institutions there is an attempt to involve alumni from diverse work settings to share their expertise.

In any case, it does seem advisable for universities to actively seek out and attempt to involve non-academic partners from private industry, government and not-for profit sectors to participate in professionalization programs for their graduate students.

Ideas and Good Practices

- While dependent for most programming on the generous contributions of internal partners, a number of universities feature some 'banner' programming organized by the Faculty or School of Graduate Studies. Brock and Trent, for example, offer a suite of GSPD workshops open to all students in all disciplines.
- The University of Ottawa has created a Graduate Mentoring Centre that focuses in part on the needs of graduate students for professionalization. The GMC produces the university's calendar of events relevant to graduate student support and GSPD activities.
- In terms of external partnerships, one graduate school reports working with an industrial psychologist on time management issues.
- Another routinely brings representatives of government and industry to campus to talk with graduate students about career options and how to prepare through professional skills development for the pursuit of work in their areas.
- Others report that alumni make excellent external partners especially when they return to campus to speak about unconventional career pathways that have paid off for them.
- The University of Alberta has developed an "Outreach Program" as a way of connecting students to the community.
- Dalhousie connects its Medical Device Training Program to a group of potential employers of great relevance to those who will be seeking work in this particular technical area.

4. Modes of Delivery for GSPD Programming

GSPD programming tends to take the form of workshops or short courses, or, alternatively, may take the form of electronic resources, some of which are interactive, while others appear as "tip sheets" or the like. Of these options, face-to-face workshops dominate and are considered by GSPD providers to be the most effective way of delivering GSPD programming.

It is true that the OCGS Task Force on professional programming argued strongly for the development of electronic resources that could be shared within a consortium of contributors, resulting in cost- and expertise-sharing. However, there is little evidence of this kind of activity having taken root, probably owing to the barriers identified by the Task Force itself: developing online resources is costly and most universities are reluctant to enter into agreements that would oblige this kind of expenditure. Another consideration revolves around copyright and intellectual property, since different institutions have different ownership arrangements with respect to the electronic resources they have developed. Sharing electronic resources would be more complicated than it might seem at first glance.

Most significant, though, is the belief of GSPD providers, generally speaking, that working in small groups is most effective in the development of professional skills for graduate students. While different

students will learn different ways, and some will prefer electronic resources or personal one-on-one coaching (an option that is simply not affordable for large numbers of students), workshops or short courses have the advantage of being comparatively inexpensive to mount, flexible in terms of scheduling over a given year, and appealing to students.

It is often suggested that since the university's general Student Services offerings (notably Career Services and Learning Support units) cater to graduate as well as undergraduate students, programming specific to graduate students is not necessary – but again, Graduate Deans tend to lack data with respect to the numbers or proportions of graduate students who access generic programming that is open to all students, and tend to lack information as well about the specific utility or customization of such programming when it comes to the special needs of the graduate population.

Ideas and Good Practices
- In general, GSPD providers endorse the workshop or seminar format as most useful.
- One correspondent summarized this approach as "Real People with Real Knowledge in a Real Room" and argued that this is the gold standard for GSPD program delivery.
- On the other hand, one or two universities are convinced of the value of on-line activity, notably UOIT, which offers a substantial number of links on its Graduate Studies website to external resources in the area of professional development. UOIT also offers a "Postgraduate Toolbox" on its "Grad Junction" site and has created "GradShare," an interactive site through which students can confer with one another or anyone else from the university community who wishes to offer insights in response to their questions or thoughts.
- A good number of universities offer online resources as a supplement to workshop and seminar activity. Sometimes these amount to a posting of the materials covered in the workshops as a way of reaching those who could not attend in person.

5.   GSPD: Core Competencies

Taken as a whole, it is the traditional *academic skills* areas (i.e. in the areas of Research and Teaching development) that are typically most highly developed on most campuses. A much smaller proportion of GSPD activities, generally speaking, is concerned with the *transferable skills and competencies* that represent the other half of the GSPD equation – though many institutions indicate that they are moving in the direction of redressing the imbalance.

- Frequently occurring *Academic Skills* Activities (Research and Teaching Skills) include

    Research Skills
    - Critical Thinking
    - Academic Presentation Skills
    - Grant Writing Skills
    - Working with Supervisors
    - Citation Skills
    - Research Dissemination
    - Getting Published
    - Scholarly Writing at Grad Level
    - Research Ethics
    - Dissertation Management
    - Copyright
    - Intellectual Property

- o   RefWorks
- o   Academic Integrity

Teaching Skills
- o   Instructional Design
- o   Learning Objectives
- o   Learning Styles
- o   Leading Discussions
- o   Reflective Practice
- o   Preparing a Teaching Dossier
- o   Marking Rubrics
- o   Grading and Providing Feedback
- o   Practicing Inclusivity

- Frequently occurring *Transferable or Workplace Readiness* Skills (Person/Interpersonal Skills and Career-related Skills include such topics as

  Personal and Interpersonal Skills
  - o   Leadership and Team Building
  - o   Managing Group Dynamics
  - o   Entrepreneurial Thinking
  - o   Emotional Intelligence
  - o   Conflict Management
  - o   Communicating with Different Audiences
  - o   Communicating Across Cultures
  - o   Communicating with Media
  - o   Time Management
  - o   Project Management
  - o   Stress/Anxiety Management
  - o   Human Rights and Equity
  - o   Workplace Ethics

  Career-related Skills
  - o   Self-assessment
  - o   Career Planning
  - o   Career Paths Outside Academia
  - o   Job Search Strategies
  - o   Preparing CVs and Resumes
  - o   Cover Letters
  - o   Information Interviews
  - o   Interview Skills
  - o   Networking
  - o   Life/Work Balance

When these topics and themes are examined in the context of the nine "key professional skills" identified by the Tri-Council Report in 2007 and the four key competencies identified by CAGS in 2008 (see page 8, above) the kinds of activity that are evident on many campuses appear to relate very directly to the core competencies that have been identified in these reports.

There is, however, one area that is somewhat less well served by most universities – what might be called "Teaching and Knowledge *Transfer* Skills." Although it is often argued (and is surely true) that the

academic skills in Research and Teaching that are acquired while the student is in program are applicable and transferable to other settings upon graduation, there is relatively little programming that seems to be designed to demonstrate how students can learn to identify the 'portable' skill sets derived from this work and present these as attributes to potential employers.

Hence there appears to be a need for more opportunities for students to learn how to identify and 'translate' for non-specialists audiences (such as the public and potential employers) the nature of the transferable skills they have acquired through their academic training while completing their degrees.

Ideas and Good Practices
- Some universities do offer workshops that focus on converting one's academic CV to a resume suitable for applying for positions in non-academic workplaces, or on preparing for interviews in non-academic settings.
- The University of Alberta offers a workshop called "Translating Graduate Student Skills to Job Skills," as well as a document, which is available electronically, called *Skills Expected from Graduate Students in Search of Employment in Academic and Non-Academic Settings.*
- Memorial University advertises programming with a focus on "knowledge translation" and on "entrepreneurship" – thinking unconventionally about and/or creating job opportunities.
- McGill's **SkillSets** program was developed around the nine themes set out by the Tri-Council report and addresses its sense of key competencies directly.

6.　　Student Awareness of GSPD Programming

The most direct way for students, potential students or other interested parties to access GSPD information is through the Faculty, School or College of Graduate Studies homepage. Where the GSPD programming that is available is accessible at the click of that single button, both current and prospective students are able to find relevant information quickly and the chance of students abandoning the search because it is too complicated is reduced.

In addition, identification of GSPD activity on the Graduate Studies homepage is good advertising: for those investigating graduate schools and their offerings, this information serves as evidence that professionalization for graduate students is valued at this institution. Moreover, the presence of "professional development" as a category on the main graduate studies webpage contributes to a sense of the strength of the graduate sector by suggesting that this kind of value-added programming is a priority at this particular university.

GSPD activity may be difficult to locate, however, if there is <u>not</u> a 'button' dedicated to it on the main Graduate Studies page of the university. Without that top-page link, it must be searched for in ways that involve numerous links, some of which must be found intuitively. In some cases the information is found under "Current Students" or under "Prospective Students," and in others under "Student Services." "Student Services" may require moving to a number of sub-sites, within which information relating specifically to graduate students may be challenging to locate or sort out. In other cases the information is listed by Faculty. In these cases, information about the actual programming may be quite dispersed and difficult to find unless there is a top-page link that leads students to these opportunities more directly and in an organized way.

Ideas and Good Practices
- Searches that do not require 'web scavenging' on the part of students, as one correspondent put it, begin with a single button for professional development on the Graduate Studies homepage.

- Especially useful is a link from this top page to a comprehensive monthly calendar featuring all GSPD activities across campus, which is refreshed constantly, and includes current and future events as well as an archive of past events.
- Sometimes the calendar is actually featured as a part of the Graduate Studies homepage.
- The best models for such calendars are built so as to permit partner units to post their events directly, though the calendar needs to be maintained and overseen generally by a single administrator in Graduate Studies or alternative "home unit" for GSPD at a particular school.
- Sometimes the students are reached through e-mails that include weekly or biweekly e-newsletters or bulletins, which are also posted on the GSPD website.
- One university has established a listserv for GSPD activities, with graduate students invited to subscribe.
- Especially innovative is Concordia's "Build Your Own Toolkit" option, an interactive web tool that allows students to enter specific information such as the name of their program and their professional development interests. The program then produces a list of appropriate workshops and related activities tailored to the student's specific situation and needs.

7. Structural Approaches to Graduate Student Professional Development – Four Types

While Canadian universities are very different from one another, in professionalization for graduate students as in other ways, and many interesting idiosyncrasies are evident, there are patterns that can be observed. For example, based upon the data collected to date, approaches to GSPD programming at Canadian universities can be observed as falling roughly into four categories.

- o Category 1 includes universities whose GSPD activity level is high, and whose GSPD activities are collected under one aegis or 'brand,' the management of which resides in the Faculty, School or College of Graduate Studies. They can be thought of as having a strongly centralized GSPD operation. Their branded 'bundle' of offerings includes activities homed in or hosted by internal partners within the institution as well as, in some cases, activities homed in and run by Graduate Studies. Every effort is made to include Faculty-specific offerings for graduate students as well. There is a button that links to the branded programming on the top page of the Graduate Studies website, as well as (often) on Faculty Graduate Studies webpages.   The coordinating mechanism, generally managed by Graduate Studies through a page on their website, often includes a 'living calendar' on their website, and publicity for the branded activity is managed through the normal Graduate Studies channels, so that there is a constant flow of information to all graduate students and other stakeholders regarding ongoing programming, In some cases students have the opportunity to earn a certificate or to receive credit for their activity through co-curricular transcript notations. The branded GSPD activities become a selling point for the university's graduate studies programs and are used as recruitment and retention tools.

  This category includes
  - o University of British Columbia (**Graduate Pathways to Success**)
  - o Concordia University (**GradProSkills**)
  - o McGill University (**SkillSets**)
  - o Memorial University (**EDGE**)
  - o Queen's University (**Expanding Horizons**)
  - o University of Toronto (**Graduate Professional Skills**)
  - o Victoria University (**Pathways to Success**)
  - o Western University (**360◦**)

- Category 2 includes universities whose GSPD activity level is also quite high, and whose activity is also quite coordinated but may not be managed or formally overseen by the Faculty, School or College of Graduate Studies. At times the initiative will be named (or given an appropriate acronym), but the coordination level will not yet have reached the level of 'branding' and advertising via that brand the full range of activities and opportunities available. Most often, universities coordinating their activities at this level will be working through a committee representative of the partners in GSPD programming, and it may be chaired, typically, by a member of one of the service units providing the services, rather than by Graduate Studies itself.

  Such institutions tend to be in the process of coordinating activities across campus. Part of their work is to ensure that each partner knows what the others are doing, and that duplication is avoided – a benefit to all when resources are tight. The committee also works hard to collect information from the Faculties about Faculty-specific activity, which they can include in their GSPD calendars or biweekly newsletters to graduate students or other mechanisms for reaching students frequently with up-to-date information.

  Category 2 universities sometimes provide a link to their common site on the top page of the Graduate Studies website, although the GSPD page itself may reside elsewhere.

  Included in this category are universities (marked with an asterisk) that have just begun to collect information and undertake planning centrally, generally through the creation of a dedicated position in the Faculty of Graduate Studies to initiate and oversee this work. It may be useful to think of universities employing this approach as representing a centralized/decentralized approach to GSPD.

  This category includes

    - University of Alberta
    - Brock University
    - Carleton University*
    - University of Calgary
    - University of Guelph
    - Ryerson University
    - Trent University
    - University of Manitoba*
    - University of Ottawa*
    - Wilfrid Laurier University*

- Category 3 consists of a sub-set of universities that offer considerable GSPD programming, but of a dispersed nature. There may be considerable GSPD activity occurring across the university, but it tends to reside in the partner areas of the university and/or in the Academic Faculties. Graduate Studies will promote GSPD activities in ways commensurate with the information it receives, but tends not to offer GSPD programming itself. The graduate studies website most often directs students to partner operations, "Student Services," "Career Services" and the like. The Graduate Studies website tends not to attempt to collect and promote activities centrally. Institutions in this category may be thought of as embodying a decentralized approach, but a number of them indicate the creation of recent positions or dedicated assignment of Graduate Studies personnel whose task it will be to begin to move towards the development and coordination of GSPD activity on their campuses.

This category includes

- o Dalhousie University
- o McMaster University
- o University of Ontario Institute of Technology
- o University of Regina
- o University of Saskatchewan
- o Simon Fraser University
- o University of Waterloo
- o York University

- o Category 4 includes universities that are not (yet) active in Graduate Student Professional Development on their own campuses. They tend to have few graduate programs and students, and they tend to rely on generic workshop and activities offered by partners within the institution that offer general programming in areas such as Learning Skills, Research and Writing Skills and Career Development to all students, though perhaps with moderate customization as needed when graduate students participate in their offerings. Graduate Studies tends not to be involved in GSPD programming, does not prioritize it on its own website, but directs students to student services areas for general assistance and support (generally through the "current students" link on the Graduate Studies website).

  This category includes:
  - o Acadia University
  - o Bishop's University
  - o Brandon University
  - o Brescia University College (students are referred to Western University's 360∘ site)
  - o Cape Breton University
  - o Huron University College at Western
  - o King's University College at Western
  - o Lakehead University
  - o Laurentian University
  - o Lethbridge University
  - o Mt. Allison University
  - o Mount St. Vincent
  - o University of New Brunswick
  - o Nipissing University
  - o University of Ontario College of Art and Design
  - o University of Prince Edward Island
  - o Royal Roads
  - o St. Francis Xavier
  - o St. Mary's
  - o University of King's College
  - o University of St. Michael's College
  - o University of Northern British Columbia
  - o Thompson Rivers University
  - o University of Trinity College
  - o Trinity Western University
  - o Vancouver Island University
  - o University of Windsor
  - o University of Winnipeg

Categories 1-4 represent the most to least sophisticated of approaches to GSPD delivery, and the attached spreadsheet has been sorted by category in order to highlight the different patterns that characterize the approaches taken by kinds of universities within the system as a whole. This taxonomy, however, should not be taken as a judgment of the validity of any particular approach vis-à-vis any particular institution.

Many factors will influence what will be right for each institution at a given time: the size of the graduate operation; the level of prioritization of GSPD activity by the senior administration of each institution; the availability of resources for GSPD activity; the degree of centralization of the institution (which affects the ease with which Graduate Studies is able to manage GSPD activities centrally); the ability of the Graduate Dean to prioritize GSPD given his or her own resources and staffing levels; and the time it takes to develop a centrally-directed initiative given the complexity of this area and the many partners that it involves. All of these enter into the question of how best to manage GSPD in particular institutions at particular times.

At the same time, it is evident that coordinating GSPD activity centrally does increase the awareness of students about what is available to them and create an energy, a degree of magnetism, perhaps, around the area of GSPD – which students need to be attracted to, since availing themselves of these opportunities is not mandated but voluntary. Something has to be built such that they will come, and branding is undoubtedly a significant marketing tool and magnet for students.

Branded and coordinated 'packaging' of what is already on offer is also a way of creating whole-university awareness of what is available to graduate students – the effect of which is likely to be more encouragement for students to attend GSPD programming on the part of graduate programs, graduate faculty and individual supervisors.

Additionally, although the coordination of programming and the coordination of advertising to students about its availability need not be entirely managed by Graduate Studies, it can be argued that the strength and vitality of each university's Graduate Studies sector will be enhanced by its taking a leadership role in the management of GSPD. Some argue that there is a degree of *gravitas* about GSPD programming if it is seen that the Faculty or School of Graduate Studies sponsors and manages it – a kind of serious institutional weight that is more difficult to attain if the program is seen as being primarily linked to student services rather than an academic entity. However, institutional cultures will differ in this regard as well.

Ideas and Good Practices
- The branded programs, namely **Graduate Pathways to Success** (UBC), **GradProSkills** (Concordia), **SkillSets** (McGill), (**EDGE**) (Memorial), **Expanding Horizons** (Queen's), **Graduate Professional Skills** (U of T), **Pathways to Success** (Victoria), and **360◦** (Western) have well-developed websites that serve as examples of centralized and easily navigable GSPD offerings.
- Brock and Guelph serve as examples of the second category, where coordination is underway through a GSPD committee and efforts are being made to ensure website navigability in centralized/decentralized environments.
- Laurier has put together its coordinating committee using broad disciplinary representatives rather than program-specific representatives, so that different "disciplinary cultures" can contribute to their professionalization planning without requiring a committee membership too large to be manageable.

8.   Getting Started in University-wide GSPD Planning

There would seem to be a fairly typical process by which structural changes tend to be brought about when an institution wishes to coordinate and centralize information about its GSPD activities, as is the case with universities that fall into Categories 1 and 2, above.

Few institutions report beginning with a top-down initiative, even if Graduate Studies has been designated to take the lead on the project through an administrator charged with this responsibility. Rather, universities typically begin by bringing together representatives of potential internal partners, along with representation from the Graduate Students' Association and interested faculty, for a discussion of what each provides for graduate students in terms of *transferable or workplace-ready skills,* as well as an identification of gaps that may need to be addressed.

A formal committee is struck and a chair selected for a period of time, so that someone will have the responsibility for organizing meetings and ensuring that the work assigned to individual representatives in collecting data and investigating major questions is moving forward.

At the same time, under the auspices of this committee, an audit is usually undertaken of *academic programming* that is already in place. The university's Centre for Teaching and Learning may be asked to provide information about its range of programming for graduate teaching assistants, for example, and Graduate Studies may be asked to canvas the Academic Faculties with respect to research-specific training opportunities that are in place for their students.

The committee may also begin to look at the kinds of credit that students are able to earn on their campuses for co-curricular activities, and how these might be adapted so as to accommodate a record of graduate students' GSPD activities. If there is no such program in place, the committee may wish to create some such initiative for graduate students who participate in skills training in preparation for their work lives after completion of their degrees. The question of naming or branding the GSPD initiative is likely to emerge and the question of resourcing will need to be examined closely. The question of how and where to house and manage GSPD information for students will need to be addressed, and especially the capacity that will be needed for maintaining a centralized 'living calendar' or the equivalent, to push information out to students in a timely and continually freshened way.

From this kind of activity, decisions will be made as to the degree of centralization that is manageable and the group will develop the best strategies for managing the portfolio given the size of their graduate student contingent and the specific opportunities or constraints that characterize their university at this stage in its development.

What should be noted is the degree to which this kind of activity typically depends upon volunteer activity on the part of dedicated advocates for graduate students within institutions setting out along this path. As with all projects so deeply rooted in volunteerism, continuity and sustainability are issues that may arise.

9.   Resources for Graduate Student Professional Development

This study has not yet accessed a great deal of data regarding the resourcing of the GSPD programs currently in place. It appears to be the norm for universities to provide seed money for the creation of large, coherent and branded initiatives, such as those found in Category 1 (although it is not always the case that substantial founding resources are in place when a university undertakes one of these large-scale

initiatives). In Quebec, the process has been assisted by professional development funding available from the provincial government, which universities from that province in this survey have been able to access.

But for the most part universities report that GSPD programming must be supported through current resources that exist within Graduate Studies and the partner institutions that mount so many of the programs and initiatives that comprise the GSPD offering. The work of founding and establishing a university-wide coordinated GSPD program is generally supported by volunteer labour on the part of the units involved, while the cost of administering the program centrally will be borne by Graduate Studies, from its normal operating budget, or, as in the case of some Category II institutions, that of some other unit that homes and coordinates the program.

While the administrative costs for running a centralized GSPD program in centralized or decentralized settings will be relatively small compared to other kinds of costs at universities, it is evident that some resources need to be directed to GSPD and that universities should recognize this and assist with the resourcing required. On the one hand there are indirect costs related to the time spent on this project by salaried employees who have been seconded to it – whether that of Associate Deans of Graduate Studies or that of other kinds of coordinators in the participating units who may be assigned this work. As well, there will need to be administrative assistance in Graduate Studies or elsewhere, with specific responsibility, for example, for gathering information about upcoming events, tracking registrations and attendance, updating websites, undertaking publicity for GSPD events, and so on.

> Ideas and Good Practices
> - Quebec universities report the immense value of the province's "insertion professionelle" grants, which are competitive and funded on soft money from year to year – but which have been accessed by universities to serve as seed money for the development of large, whole-university, integrated GSPD programs.
> - One institution mentioned the ability to tap into the Provost's Priority Pool Funding for the kind of seed money required to launch a new integrated initiative.
> - Concordia and Alberta were able to employ graduate students through graduate assistantships focused on the development and/or the ongoing management of the GSPD operation.
> - One university mentioned charging graduated students a fee to attend sessions if they wished to, and found some interest on the part of recent alumni in this prospect.

10. Assessment of GSPD Activities

Assessment is an area that still requires work. Few universities report successful attempts to evaluate the success of their programs. Most invite student feedback on events held, generally at the end of particular sessions. But none reports having tracked student success in finding suitable work after graduation or the placement of those some years after graduation in relation to their having completed GSPD programming.

As accountability continues to increase in importance in the public sector, it is clear that it is advisable that thought be given to effective assessment of GSPD activities. It is not surprising that, as a rather new direction for universities to have taken, evaluation of GSPD programming is in its infancy; however, it is an area that will require attention in the future.

> Ideas and Good Practices
> - U of T "vets" the curriculum for each workshop or related offering before it can be offered as a part of their GSPD brand. A level of interactivity is expected of each such program so that the program as a whole can be advertised as being 'hands-on' and experiential in nature.

- A number of universities report using feedback forms after each GSPD workshop or event.
- A number of institutions indicate plans to collect post-graduation data that will permit them to track the relationship between participation in GSPD training activities and workplace success in the first year after graduation and at the five-year mark.

11.   Recognition of Student Participation in GSPD Activities

While the actual training of students in transferable skills is of primary importance, it is also essential to ensure that their participation in such training components is recognized by the institution in ways that will authorize the value of the work undertaken.

To some extent the validation of the programming occurs 'at source,' i.e. when it is evident that the GSPD program is coordinated and overseen at a high level, by the Faculty of Graduate Studies or equivalent, as is implicit in the case of with Category 1 and Category 2 programs.

However, it is generally felt that the opportunity to obtain some sort of institutional documentation regarding the completion of GSPD components – whether in the form of an earned certificate or co-curricular transcript – is highly beneficial for students as a way of recognizing the work they have undertaken.

Ideas and Good Practices
- A good number of universities offer certificates recognizing completion of a substantial number of workshops or a particular cluster of activities within the GSPD offering as a whole.
- Guelph offers a letter of recognition from the Dean of Graduate Studies and/or the Director of the GSPD program when a student completes GSPD components.
- A number of institutions (for example, Brock and Trent) make a co-curricular transcript available to students that will record workshops attended and the skills focused upon for each itemized entry.
- Ryerson offers students a hard copy document upon request, the "Professional Skills Recognition of Completion," once they have completed seven GSPD units distributed across a specified number of skills areas.
- Queen's offers a not-for-credit PD certificate upon completion of 12 workshops in six skills areas.
- Especially innovative is the University of Alberta's "Professional Development Record Book," which students may complete for themselves and which is meant to serve as a portfolio of skills development activities that have been undertaken.

12.   Encouraging Faculty Buy-in

Most institutions acknowledge that it is challenging to engage faculty members in the idea that GSPD programming is crucial if holders of graduate degrees are going to succeed in tough hiring markets on both academic and non-academic sides. Faculty tend to see themselves as primarily engaged in the training of researchers. They may believe that this training in disciplinary methods, protocols and ways of communicating are sufficient. Most faculty members were not trained themselves with an eye to developing transitional skills and making themselves marketable in competitive and often non-academic markets, and so it is difficult for them to see that their current students' needs may be different. They are also justifiably conscious of the need for students to focus on academics and on times-to-completion, and hence may be somewhat reluctant to encourage students to spend time on activities not directly related to the completion of academic requirements. It is difficult for students to justify finding time for GSPD

activities, even if they believe in them, if their academic instructors and supervisors discourage participation in such activities while they are in program.

Yet, as Dr. Peers has suggested, times change and we live in a cultural moment that requires that we manage a shift away from the assumption that there will be academic jobs for most of our promising students. Faculty need to be brought on side if our institutional responsibility for helping graduate students to prepare themselves for entry into different kinds of workplace environments is to be realized.

<u>Ideas and Good Practices</u>

Graduate Deans report some success in increasing faculty awareness and 'buy-in' regarding the importance of GSPD. Their suggestions for encouraging faculty affiliation with GSPD initiatives follow.

- Faculty need to be better educated about the prospects for their graduating graduate students. Few students (30%-40% is the current estimate) will find academic jobs no matter how talented and productive they may be. We have a moral and pedagogical obligation to ensure that our students are being prepared for alternative careers. Faculty Deans must cooperate with Graduate Deans in getting this message out.

- Graduate Students' Associations need to create awareness of the importance of the university's GSPD programming. They need to lobby faculty, encouraging them to encourage their students to avail themselves of GSPD opportunities.

- It is important to advertise to faculty (as well as to graduate students themselves) the highly-applicable skills programming available to their students. What faculty member would not want his or her students to become stronger in time management or project management skills? Faculty would enjoy the benefits of students having been trained in team leadership, time management, and inclusivity. What benefits graduate students also benefits those who supervise them.

- It helps to make it clear to faculty that solid and coordinated GSPD activity is an advertisable strength and can be used to recruit strong students to their programs.

- It is helpful to involve faculty in the planning for or management of the university's GSPD programming – i.e., find a place for them on design or management committees.

- Faculty need to be recognized for their participation in GSPD activities. At the very least there should be a letter developed for their files that recognizes their GSPD contributions, preferably at the time of year when Annual Reports are being developed. More significantly, this kind of activity, like other service work that is undertaken in support of graduate students needs to be considered in merit and promotion applications. University service needs a higher profile, and this includes ensuring that there is positive recognition through the university's public relations activities for faculty who contribute to graduate students' professionalization in a variety of ways.

- Some advise going to the Academic Faculties first in order to determine their needs when initiating cross-university planning re: common GSPD programming.

- It may be helpful to target new, young faculty – especially through New Faculty Orientation activities. New faculty may be generally more amenable to the idea of GSPD, as recent graduates

themselves, and may be willing to begin to weave academic and other kinds of transferable skills into their management plans for their own students.

- It helps to make sure that there is widespread knowledge of existing professionalization activities that have been embraced by specific programs. Sharing such information across a Faculty, or with the university as a whole, has a contagious effect. New initiatives are exciting, and work that is undertaken by some programs will spark initiatives elsewhere - if such information is routinely shared.

- Proven success works well: if there is follow-up and if records are kept, it can quickly be demonstrated that students who have been well-prepared for employment through professional skills training do well in finding suitable employment and launching careers.

- It is always wise to work with the converted: identifying faculty who are committed to GSPD and will serve as advocates who will assist in the culture shift that may be necessary in certain environments.

13.   Serving International Students

A number of schools indicate that the needs of international students in terms of professional development skills are substantial but that they have only 'scratched the surface' in programming for this constituency. Most would like to do more – but are hampered by resource limitations.

Ideas and Good Practices

- Memorial has appointed a Career Advisor for International Students, and offers programming under that aegis.
- Memorial also offers Writing Support for International Students and programming in etiquette and job search protocols for international students applying for work in other cultural settings.
- Among the electronic resources made available to its graduate students, UOIT offers access to one of Western's resources, "Communication Strategies for International Students" by mutual agreement.

14.   GSPD Programming for Students in SSHRC-related Disciplines

Current research did not locate a substantial amount of GSPD programming tailored to students in the Humanities and Social Sciences. It is likely that some such programming exists in the Academic Faculties at most institutions, most of it occurring within individual programs. And there is some indication that programs occasionally mount special sessions for their students on professionalization topics. Some Student Services areas (such as Academic Skills Centres, Career Centres and Library partners) report preparing targeted workshops for Arts and Social Sciences graduate students at the request of specific graduate departments and programs. And some graduate degree programs include the development of academic skills, particularly with reference to the conduct and dissemination of research, within the curricula of their programs' foundation courses.

However, with a few exceptions, there would appear to be little in the way of Faculty-wide programming for students in SSHRC disciplines and little awareness of it as part of the overall GSPD programming at a given institution.

<u>Ideas and Good Practices</u>
- McGill offers "Conducting Human Research in Humanities and Social Sciences."
- Concordia offers "Statistics and Microdata for Social Science Students."
- Memorial offers "Artworks" – programming designed to serve as a bridge between classroom experience and the practical application of acquired skills.

15.   Addressing the Needs of Postdoctoral Fellows

Most schools indicated that they would be pleased to welcome postdoctoral fellows to GSPD programming wherever it might be relevant to them. However, two major impediments were identified.

- Postdoctoral fellows are often administratively located in units separate from Graduate Studies, e.g. under the university's Research Offices or, in effect, in Faculty laboratories well away from Graduate Studies and its outreach network. When this is the case, Graduate Studies tends not to have access to lists of PDFs and therefore has difficulty reaching them. This may change as the organization of postdoctoral fellows is developing and flourishing on various campuses across the country. They are likely to become more networked in the near future and easier to reach as a body than in the past.

- GSPD programs and activities will not always be appropriate for the PDF constituency, and at the very least a survey in which they could identify their particular needs and interests may be necessary. At that point there could be a sharing of GSPD offerings matching the interests of PDFs, and/or some GSPD opportunities could be customized to recognize the presence of PDFs as well as Graduate Students as participants.

16.   Potential Role of Granting Councils

Most frequently mentioned were the following:

- NSERC's ~~Create~~ CREATE grants, in which graduate student training is a requirement, were thought to be a good idea in that they encourage faculty to think about and arrange for professional development for their students. However, on the whole the CREATE program did not seem to correspondents to be the best approach to graduate student professional training.

  It was noted that these grants are rather few in number, and that some institutions have received none of this funding. In consequence the 'broadening effect' of increasing commitment to GSPD is limited to relatively few researchers in few institutions.

  In addition, questions were raised about whether reporting on the use of these grants has been employed to generate useful information about the kinds of training offered to the students who were trained under these grants. Are the students being encouraged to participate in GSPD activities beyond the sphere of these supervisors and their labs? Has programming been created in their home Faculties for these students, and, if so, what can be learned and adapted from such efforts? Has there been any follow-up to see whether students trained under CREATE grants are particularly successful in finding academic or employment opportunities after graduation, presumably because of this training?

On the whole correspondents were not convinced that attaching training grants to faculty research grants, along the lines of the CREATE initiative, would be effective, though there was a suggestion that such grants might be put in place with the proviso that the researcher, in reporting on the graduate student training component of the grant, could be required to demonstrate that the student or students attached to the grant had participated in a specific number of relevant GSPD programs or activities (which would be listed on the report – and then could be analyzed by the granting council in assessing the usefulness of this programming).

- MITACS programming was mentioned positively. The fact that there is a national program in place, which draws upon a high levels of expertise as well as excellent industry connections, and which brings national experts to participating universities to work with their graduate students, was thought to be very positive in nature. Universities must contribute to the costs under this program, but those who accessed the program generally felt that the costs were considered to be justified given the level of the programming. On the other hand, a number of institutions indicated that they simply could not afford to participate.

- Similarly, the CIHR STIHR(Strategic Training Initiative in Health Research) program is also thought to have worked well.

- In more general terms, the notion of a 'travelling road show' was embraced quite enthusiastically. Arranging for those with particular expertise to move from campus to campus and engage equally with students across the country was thought to be a model that might be emulated or developed. Would the granting councils be willing to designate funding that would support the mobilizing of GSPD expertise so that many institutions, and other disciplines than the sciences, could profit from such knowledgeability?

- In the case of SSHRC, it was thought that programming that would support the development of *transferable skills* (interpersonal, management and career-readiness skills), as well as focusing on the ways in which *academic skills* can be seen and shown to translate to workplace readiness and effectiveness, would be helpful. Could SSHRC assemble a group of experts to codify core competencies and – with the help of institutions willing to share some of their materials with the nation – produce guidelines, outlines, lists of resources, and the like, to assist local institutions, particularly those that are small and have limited resources, to mount useful programs for their student?

Ideas
- Where this is not yet the case, could the Granting Councils require a report on the GSPD activities undertaken by student researchers who have been supported by Tri-Council grants?
- Could more programming of the "traveling road show" type be sponsored and coordinated through Granting Council programming?
- Might SSHRC make available some pilot funding to develop GSPD programming in discrete areas of the Social Sciences and Humanities?
- Could SSHRC arrange for the creation of a national pool of experts who could serve as advisors to the university community in significant ways?
- Could the Granting Councils fund initiatives that would create common materials of some kind – e.g. guides, templates, online resources that could be shared by all universities – to avoid every university having to find the resources to develop so many workshops with limited staffing in both Student Services and Graduate Studies?

17.   Next Steps

It was felt by many of those who participated in this survey that the report was a good idea and that valuable information and ideas would emanate from the project. However, it was also clear that Graduate Student Professional Development is very complex and that the information amassed so far would be likely to be incomplete. Hence there was a sense that:

- This report should be seen as a first and interim step. It needs further development, a second stage, or simply a continuation, in order to address the gaps in findings that characterize this first step in the process.

- It would be helpful to put together a small 'think tank' from those who can be identified as particularly knowledgeable and resourceful in this area. That group could mine the data that will have been collected through the completion of this report, could develop materials, approaches and ideas for the enhancement of GSPD activities, and could also serve as mentors for institutions seeking to initiate or augment their own GSPD approach and offerings.

VII.   RECOMMENDATIONS

1.   Prioritize Professional Skills Training for Graduate Students

Professional skills training for graduate students is essential, indeed an ethical imperative, if universities are to ensure that graduate students are fully trained in ways that will ensure the mobilization of their knowledge and skills and the realization of their potential in a variety of workplace settings – whether academic, for-profit or not-for-profit. GSPD programming should be prioritized by universities – through vision statements, strategic plans, public relations materials, and other mechanisms linked to institutional identity.

2.   Dedicate Institutional Resources for Professional Skills Training for Graduate Students

Currently GSPD programs are heavily dependent upon 'volunteer labour' – the willingness of internal partner units to use their resources to mount workshops and offer other kinds of professional development experience through existing budgets. Graduate Deans, too, typically must redirect existing operating funds in order to support the administration or delivery of GSPD activity. Universities need to properly resource graduate student professionalization activity. It is central to the training and development of students completing their degree programs and requires adequate support.

3   Address Both Kinds of Core Competencies through Transferable Skills Programming

GSPD training opportunities must include transferable skills in *both the academic side* (those related to Research and Teaching) and *other kinds of skills broader in nature* (these tend to be personal/interpersonal and career-related in nature, and are sometimes referred to as "soft skills). Both kinds of skills training are necessary, and skills training on the academic side needs to include helping students to identify and promote the transferability of teaching and research skills to workplace settings beyond the academic sphere.

Core competencies have been identified by earlier studies, notably the Tri-Council report on *Key Professional Skills* (2007) and the CAGS *Report on Professional Skills Development for Graduate Students* (2008). The wide range of programming now evident in many institutions corresponds to those set out in these documents, and while programs and offerings may take different forms in different institutional settings, those lists of identified core competences comprise a suitable guide to the development of an integrated Graduate Student Professional Development program in all Canadian universities.

3.   Coordinate Graduate Studies Professional Development Activities

While different administrative models may characterize different institutions (depending upon the degree of centralization or decentralization that prevails), the adoption of a structural approach in each institution that emphasizes the centralization of information and the dissemination of information about GSPD activity across campus is advisable.

It is clear that the programs with the greatest efficiency in pulling together and delivering complementary programming across campus are those that are fully developed and branded/promoted by the university, as in Category 1. These are branded GSPD operations whose bundling of a variety of GSPD programming and opportunities is enhanced by a catchy title, a strong web presence, and an attendant dynamism or "buzz" that appears to be working well in attracting students on each of the campuses that has gone that route. The ability to promote GSPD programming as a value-added component of undertaking graduate degrees in such institutions is considerable in more general terms as well. The message that is sent is that this is an institution that cares deeply for its graduate students – including their readiness to enter a variety of workplaces with highly developed skills as well as their subject-specific knowledge.

For other institutions, however, other mechanisms than a full-fledged, branded program may suffice, provided that there is centralized coordinating through a committee of some kind and the administrative responsibility is vested in a particular administrative position that oversees the collection and advertisement of the coordinated activity that is available to students – and provided that this constantly updated information is posted on the Graduate Studies website (as in Category 2).

However if the information is to be collected and distributed, even in the case of Category 3 institutions which are much more decentralized in operations, there needs to be a designated GSPD coordinator, in some unit on campus, who is provided on an ongoing basis with information about all relevant activities available on campus, including Faculty-specific workshops or events for their students. The goal is to offer coordinated "one-stop shopping" for students – one route to all available information, including that related to registration. Without this, the university's graduate students will not be well-informed and well-served.

In the case of Category 4 institutions, while their graduate student population may be small in numbers, those students too need to have access to professionalization activities, whether through workshops or seminars organized by the graduate sector working in concert with on-campus partners, or through the use of online resources that may be available through external links.

4.   Locate GSPD Leadership in Graduate Studies

It seems evident, in viewing the level of activity across the universities surveyed in the preparation of this report, that the development of an integrated GSPD program is best positioned under the leadership of the Faculty, School or College of Graduate Studies, or "Graduate Studies" as it is otherwise located in each institution – though its design and ongoing operations will be best served by working through a committee representative of partner units within the university, along with interested faculty.

There are two reasons for 'homing' GSPD in this way. The first is that Graduate Studies has the responsibility for oversight of all graduate students and all graduate programs through its designation as the centralized hub for graduate students and their access to the programming they need for the completion of their degrees. Because of its administrative reach and relationship with graduate programs,, they are most often best positioned to collect and distribute information about GSPD across campus.

The second reason is more ephemeral, but equally real. GSPD activities need to have cachet. Students complete all but course-based professionalization activities voluntarily, and there is a consistent sense amongst stakeholders that non course-related GSPD programming should continued to be voluntary. Yet students who attend GSPD activities consistently rate them highly and there is a substantial record of students returning to take more workshops or participate in more GSPD activities once they have sample one or two such offerings. When the GSPD activities are authorized and promoted by Graduate Studies, particularly through a strong top-page webpage presence, there would appear to be an implicit legitimization of this kind of programming attached to the Graduate Studies 'seal of approval.' If it is agreed that students need to be encouraged to take advantage of such activities, the location of the portfolio in or through Graduate Studies would appear to be a valuable enhancement.

5.   **Provide Direct Access from Graduate Studies Homepage**

Priority should be given to making information about all GSPD activities on campus accessible to all graduate students through a single button on the Graduate Studies home page. All too often students are left to navigate a maze in looking for relevant GSPD activities, and without simple navigation and a user-friendly interface, there is a great temptation to abandon the search.

So far as what appears when that link from the homepage is accessed, institutions with a high degree of coordination (Categories 1 and 2) have an advantage: they are already coordinating the information centrally and will have devised schema for listing what is offered and making navigation to specific sites straightforward. In some cases the link from the Gradate Studies homepage is to a GSPD webpage that displays all available and relevant graduate student services along with current and upcoming GSPD events (with linkages to the pages of those providing the workshop or activity). In other cases the use of 'living' calendars that display current and future GSPD events and opportunities, usually on a monthly basis, works. In yet others the link is to an e-newsletter or bulletin of some kind that is updated weekly or biweekly – and is usually sent out separately to all graduate students as well.

6.   **Include International Graduate Students**

A good number of correspondents mentioned the need of international students for GSPD programming, starting with workshops or other resources that will offer opportunities for improving their English and/or French skills. As well, a number of other 'soft skills' were

mentioned, such as the need for assistance with career search and job application skills. While some institutions have focused on the needs of international students, others indicate that scarce resources make it very difficult to mount programming of this kind for international graduate students who need this kind of assistance.

7.   **Include Postdoctoral Fellows**

While postdoctoral fellows are different from graduate students in fundamental ways, and while they may be located outside of "Graduate Studies" as it is constituted on their campuses, it is clear that this is a group that also would profit from professionalization activities. Even postdoctoral fellows are unable to count on finding permanent academic positions after completion of their fellowships. They too need to know about other opportunities for employment and ways of approaching such potential employers with evidence of the transferable skills they have developed as graduate students and postdocs. At the very least, they should be invited to participate in GSPD activities as appropriate – and polled to determine what specific kinds of programming they may need apart from what is offered. Whether they fall under the purview of Research or Graduate Studies within specific institutions, they are – it is widely thought – a group that needs to be pulled together and attended to in terms of professionalization opportunities that meet their particular needs.

8.   **Recognize Students' GSPD Development Activities**

It is useful to set up a process by which students can establish a record of their participation in GSPD activities, whether through the establishment of a program leading to a certificate of some kind or, preferably, the creation of a co-curricular record on which student participation is recorded in the form of a parallel transcript for use in job searches of all kinds.

9.   **Assess Ongoing Activities**

GSPD initiatives will be strengthened when institutions develop strong means of assessing their outcomes and their success. Many institutions indicate that students are asked to fill in a feedback form after individual sessions, and that the comments are used for both refinement and the development of new offerings based on what the students have said. However, other kinds of assessment are needed, especially in terms of success rates in finding suitable employment after graduation. Do students who received GSPD training while completing graduate programs do better in terms of finding jobs and succeeding in moving forward from these initial positions. Some suggest that this information could be derived from survey activities connected to a province's program review system. If cyclical reviews require information about student pathways after graduation, would it be possible to correlate that data with data indicating the GSPD activities undertaken by students while in program? It is a complicated question but one that might be looked at more thoroughly in the next phase of this research project.

10.   **Ensure Faculty Engagement and Buy-in**

There appears to be a need for greater support for GSPD goals, and the training that such programs provide, on the part of faculty members. Strategies need to be found for increasing faculty engagement, since students are likely to avail themselves of GSPD opportunities at levels

commensurate with supervisory or program support for taking the time to do so. Strategies for increasing faculty engagement with GSPD goals and programming need to be developed on an institutional basis commensurate with university cultures.

11.   Employ Graduate Students in GSPD Design and Administration

The engagement of Graduate Students' Associations in GSPD activity and programming is to be encouraged, as is the use of graduate students (perhaps as graduate assistants) in the running of workshops and other kinds of programming support activities. It might be possible for a number of graduate assistantships to be designed that could be designated "Graduate Assistantship in Professional Development" using part-time or TA/RA budgets. For the GSPD programs, where resources are few, the bright minds and extra hands would be of great use, and the designation would be helpful for CV/Resume purposes for the graduate students holding such assistantships.

12.   Encourage the Formation of External as well as Internal Partnerships

External partners should also be sought – for the special knowledge and expertise they could offer GSPD participants, but also for the human and even fiscal resources they might bring to the program.

13.   Encourage Granting Council Support

The support of Granting Councils would be very helpful and they are urged to think of ways in which their funding might, even in a small way, support GSPD development on University campuses. In the case of SSHRC, given the dearth of GSPD programming that focuses on graduate students in SSHRC-related disciplines, the need for targeted support is particularly compelling as it is in the Arts and Social Sciences, the universities indicated, that there is immediate and pressing need for programming that will help students to bridge the perceived gap between academic skills and workplace applicability.

14.   Set Out Next Steps

This report is a start, but there is a need to act upon its key recommendations, and to set out concrete next steps to be undertaken immediately. A second stage or continuation of this research project seems essential if we do not want to experience a second 3-4 year gap in pressing forward with the GSPD agenda. As well, the creation of a national Think Tank or Task Force consisting of a number of experienced and knowledgeable GSPD champions who could pool ideas, develop materials, promote the positive outcomes of this kind of training, and serve as mentors to institutions seeking to enhance GSPD activity on their campuses, would be another positive step forward.

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