

### Graduate Professional Skills Development Recommendations Report

Recommendations drafted by the Professional Skills Working Group (PSWG)



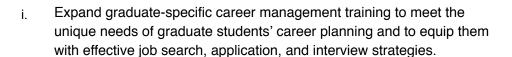
### **Executive Summary**

In Fall 2017, the Assistant Vice-President and the Associate Dean of Graduate Studies invited key stakeholders from across campus to participate in a Graduate Professional Skills Working Group (PSWG). The group was motivated by a shared interest in ensuring the professional skills development needs of the University of Guelph's graduate students are met. Over the past year, the group has reviewed and researched best practices in professional skills development and the needs of graduate students. The accompanying report and appendices describe the yearlong research process, and provide a detailed explanation of the recommendations outlined below.

- 1. Rebrand the professional skills development program and centralize all opportunities on a new website, organized by five core competencies: i. Communication; ii. Career Management; iii. Research and Teaching; iv. Leadership, Management, and Ethical Behaviour in the Workplace; and v. Wellness and Personal Effectiveness.
- Establish a position to manage and coordinate Graduate and Postdoctoral Professional Development. It is recommended that this position be housed in the Office of Graduate and Postdoctoral Studies (OGPS) and be responsible for implementing the PSWG recommendations.



- 3. Implement Individual Development Plans for all doctoral students.
- 4. Wherever possible, offer generic, non-discipline-specific professional skills training (e.g. GTA workshops, turning a CV into a resume, time management skills), typically delivered by University service providers like the Library, through University-wide co-curricular professional skills development programming. While discipline specific programming can remain within curricula, generic programming should be removed.
- Implement a Professional Development Certificate to be administered by the Office of Graduate and Postdoctoral Studies.
- 6. Scale-up certain professional development opportunities offered at the University of Guelph that have shown to be effective.



- ii. Create a soft-skills co-curricular course that teaches students how to effectively sell themselves and their research to academic and non-academic audiences.
- iii. Grow and widely promote on- and off- campus experiential learning opportunities (e.g., Mitacs Accelerate Internships).
- iv. Scale up the undergraduate CBaSE course on business, management, and leadership skill development to provide an advanced level course to graduate students.
- v. Improve digital and technological literacy skills on campus.



# CONTENTS CONTENTS



EXECUTIVE SUMMARY

COLLABORATORS

Members of the Professional Skills
Working Group (PSWG)

BACKGROUND
Training graduate students for multiple ends

OVERVIEW PSWG's Objectives

RESEARCH
Environmental Scans and Needs
Assessment

RECOMMENDATIONS
Detailed description and explanation of recommendations

13 REFERENCES



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### Training graduate students for multiple ends

The time to debate the benefits of professional skills development for graduate students has passed; universities have a responsibility to prepare graduate students for life post-degree completion (Rose 2012). Today's doctoral students, in particular, face an increasingly competitive post-PhD job market that places additional pressures on them to cultivate transferable skills while fulfilling coursework, research, and teaching obligations.

The University of Guelph recognized the need to support this type of transferable skills development ahead of many of its peers. In 2006, the Library Learning Commons, Graduate Student Association (GSA), and the former Associate Dean of Graduate Studies collaboratively created the Graduate Student Learning Initiative (GSLI) with the intent of sharing "information among service providers," promoting "existing services jointly," and collaborating "in the development of new services to meet the needs of graduate students as learners" (Massecar 2014:3). Eight years later, the GSLI Committee commissioned a review of this professional development program and generated a number of recommendations (see Appendix III, 2014 GSLI Review); few updates have been made since that time. The GSLI now requires an organizational restructure and additional human resources to remain in-step with other Canadian institutions and to ensure that we continue to attract and retain strong graduate students that succeed within and beyond the academy.

In Fall 2017 the Office of Graduate and Postdoctoral Studies (OGPS) recognized it was time to revisit the Graduate Student Learning Initiative (GSLI), to take stock of existing, largely uncoordinated efforts across campus to promote professional skills development among our graduate students, and to hear from students themselves about their needs and experiences. The Assistant Vice-President and the Associate Dean of Graduate Studies invited key stakeholders from across the seven colleges and service units to participate in a Professional Skills Working Group (PSWG). The group was motivated by a shared interest in improving communication among professional skills development service providers across campus and ensuring the skills development needs of our graduate students are met. Over the past year, the PSWG, supported by a doctoral Graduate Research Assistant (GRA), has reviewed and researched national graduate professional skills development practices and developed recommendations intended to improve and modernize professional skills development programming at Guelph. This report and accompanying appendices outline the PSWG's yearlong process and present those recommendations.

## The Professional Skills Working Group: Objectives

The PSWG was comprised of: one faculty representative from each college; two graduate students (including the GRA); and one representative from each of the professional development service providers (Library, Career Services, OpenEd, Office of Research, CBaSE). The 17-member PSWG was divided into four subcommittees. Supported by the GRA, each of the subcommittees and the entire PSWG met regularly to determine the most suitable professional development practices for the University of Guelph. The subcommittees were responsible for researching and cultivating recommendations to address the following questions.

### Subcommittee #1

Should graduate professional skills development be offered within or outside of the graduate program curricula? For professional development (PD) programming outside of the curricula, how will graduate students be recognized for the completion of PD activities?

### Subcommittee #2

What graduate professional skills development opportunities at the University of Guelph should be scaled up?

### Subcommittee #3

What graduate professional skills development initiatives from other universities should be incorporated at the University of Guelph?

### Subcommittee #4

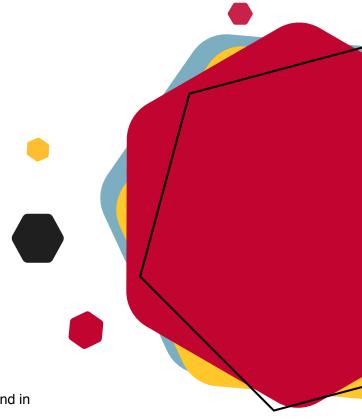
How should graduate professional skills development be organized at the University of Guelph?

### **Research Objectives**

To assist the subcommittees in developing empirically grounded recommendations, the GRA was tasked with the following:

- 1. identifying the current state of professional skills development for graduate students on campus (an environmental scan in and outside of curricula);
- highlighting best practices at other Canadian universities;
- 3 reviewing academic and grey literature on graduate professional development; and
- 4. assessing graduate student needs with respect to professional development at the University of Guelph

The results of each of these investigations are presented here and in the accompanying appendices.



### Research

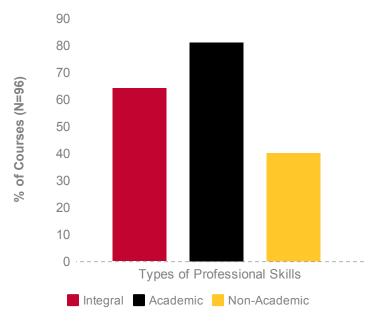
### **Environmental Scans and Needs Assessment**

1.

Scan of Curricular and Co-Curricular Professional Development Offerings at Guelph

For some time now, the University of Guelph has provided its graduate students with professional skills development both within and outside of graduate program curricula. To develop an accurate picture of this situation, a content analysis was conducted of 96 graduate course syllabi that, according to the academic calendar descriptions, focused on "skills" development. Learning outcomes and course descriptions were coded into three types of professional skills: integral skills (i.e., skills that are essential to students both within and outside of graduate school); academic skills (i.e., skills that help prepare a student for an academic or research-based career); and nonacademic skills (i.e., practical skills that are directly transferable to non-academic careers). Eighty-one percent of the 96 course syllabi identified that academic skills (e.g., research proposal and methods skills) were developed within the course, compared to 64% integral skills (e.g., oral and written communication), and 40% non-academic skills (e.g., policy briefing skills during an experiential learning opportunity with a community partner). The scan showed that only a few departments were organizing practical, experiential learning opportunities to encourage non-academic skills development.

Figure 1. Types of Professional Skills Developed within the Curriculum



Next, a detailed scan of co-curricular professional skills development opportunities on campus revealed that the University of Guelph has significant professional development supports spread across campus for graduate students. Specifically, professional development opportunities for graduate students have been developed and are delivered by the Library (Writing, Learning, Information Literacy, and Research & Scholarship), Open Learning and Educational Support (OpenEd), Co-Operative Education and Career Services/Experiential Learning Hub, the Centre for Business and Social Enterprise (CBaSE), the Office of Research, the Research Innovation Office, the Community Engaged Scholarship Institute (CESI), and Wellness Services. Three main challenges were mentioned by some service providers: (i) the need for centralized marketing support; (ii) the need to expand programming to support the diversity of student needs; and (iii) a lack of human resources to support the heavy demand on their services. For example, demand is especially high for writing services. The Library conducted 4,639 writing consultations in 2017-18, an increase of more than 13% from the previous year, and had 1,623 students on a waiting list. This demand is due to a combination of factors including the greater numbers of international students on campus and the 03 expansion of graduate programs.

2.

Scan of Best
Canadian
Professional
Development
Practices

In 2017, the Canadian Association of Graduate Studies (CAGS) reviewed and ranked all professional skills development programs in Canada into four categories (Lypka and Mota 2017). Guelph's once-innovative program was ranked in Category 2, below Category 1 programs at other institutions such as Brock University, Concordia University, McGill University, Queen's University, University of Alberta, University of British Columbia, University of Calgary, University of Manitoba, and University of Toronto. According to the 2017 CAGS rubric, the best professional development programs (Category 1 Institutions) included: (1) a clearly defined brand endorsed and organized by Graduate Studies; (2) professional development as a required component for graduation and students receiving recognition for completion (certificate or co-curricular record); (3) a centralized website and many avenues of communication (e.g., newsletters, social media, department presentations); and (4) a wealth of professional development opportunities (with a range from beginner to advanced workshops). A centralized communication hub and student recognition for the completion of professional skills development programming are needed in order for Guelph to join the other Category 1 institutions.

Another evident, though unofficial, differentiator, which has become a professional development best practice, is the implementation of Individual Development Plans (IDPs) for graduate students. IDPs provide an opportunity for students to assess their skills, learn about academic and non-academic careers, identify goals, devise action plans, and track achievements (Kaslow et al. 2018). The tool requires that graduate students intentionally plan their path at graduate school in consideration of the skills that they anticipate will make them successful in the workforce (Kaslow et al. 2018). It encourages students to discuss post-graduation goals with their advisors openly and early in their programs of study. Researchers studying the benefits of IDPs have found that their use can improve student-advisor relationships and enhance students' and postdoctoral scholars' abilities to identify and translate skills to employers (Bell 2017; Hobin et al. 2014; Kaslow et al. 2018). The IDP has also been found to support timely completion of research-based writing (Davis 2006). IDPs are a requirement for graduation at the University of Alberta and McGill University. Similarly, Queen's University uses a graduate pathways document to guide student goal setting, and the University of British Columbia outlines a "graduate game plan."

Review of Professional Development Literature

In 2008, CAGS stated that it was the "responsibility" of universities to prepare graduate students for a diversity of career paths. The call mirrors a growing body of scholarship that identifies graduate professional skills development programming as a necessity for universities and outlines the ideal means by which it will be designed and delivered (Edge and Munro 2015; Gould 2015; MLA 2014, Rose 2012). The emergence of this literature corresponds with the increase in doctoral graduates and decline of full-time tenure-track faculty positions (Jonker 2016). The Association of Universities and Colleges in Canada (AUCC, 2011) reports that, compared to the 1980s, full-time masters enrollment in 2011 had tripled and full-time doctoral enrollment had increased four-and-a-half-fold. Between 1981 and 2007, as the number of graduates increased, the percentage of doctoral graduates under the age of 35 entering full-time tenure-track positions decreased by over 20% (Desjardins 2012). Now, less than 30% of all Ontario PhD graduates are hired as full-time tenured professors (Jonker 2016).

Despite the decrease in doctoral graduates entering academia, universities have largely continued to prepare graduate students to become university professors and researchers (Charbonne 2011; Jonker 2016; Sekuler et al. 2013). The glorification, be it explicit or implicit, of tenure-track faculty positions during doctoral training has created a surplus of PhDs competing for a decreasing number of full-time tenured faculty jobs (Sekuler 2014). Some would suggest the solution to the surplus problem is admitting fewer students into doctoral programs (Gould 2015); however, there is a global need to train highly-skilled researchers to help create solutions for social and scientific problems (Sekuler 2014). Furthermore, Canada already produces fewer PhDs compared to other developed countries (Charbonne 2011; Jonker 2009). Given the need for skilled researchers, it is imperative that universities continue to find ways to attract graduate students and provide them with the skills to be successful in other meaningful, non-academic career paths.

In addition, research on employability suggests that there is a gap between the skills employers require and the skills students have upon graduation (McGarry 2016; World Economic Forum 2015).[1] Universities are facing increasing pressure to decrease the "skills gap" (Craig and Markowitz 2017; Polziehn 2011; Rose 2012). Guelph researchers examined the employability skills of graduate students and found that employers want graduate students to possess: professional maturity (quality of work, interest, initiative, organization/planning, dependability, and response to supervision); soft skills (interpersonal, written and verbal communication, adaptability, leadership, and judgment); and problemsolving skills (Chhinzer and Russo 2018). While development of these skills can and often does occur within the curriculum, it is important to provide students with opportunities to practice and complete formal training on professional maturity and soft skills to ensure their graduate degrees provide a "competitive advantage" when entering the workforce (Chhinzer and Russo 2018). Graduate students must learn how to translate their academic accomplishments into marketable skills for employers. In order to support student success and maintain competitive graduate programs, it is incumbent upon the University of Guelph to improve graduate professional skills development training.

[1] It has also been argued that the "skills gap" is more of an "awareness gap" whereby graduates are unable to effectively translate the skills they have acquired and learned while at university (Craig and Markowitz 2017; Lewarne and Gurrisi 2017).

### 4.

### Graduate Student Needs Assessment

In the Spring of 2018, graduate students at the University of Guelph were asked to complete a survey and attend a series of focus groups to identify and understand their professional skills development needs and experiences. A detailed account of the research findings is provided in Appendix I.

### **Career Goals**

Figure 2. Doctorate Students (N=221)

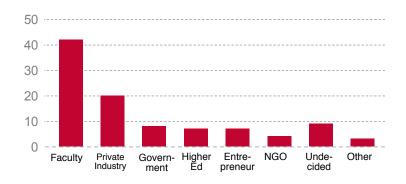


Figure 3. Master's Students (Research Based) (N=333)

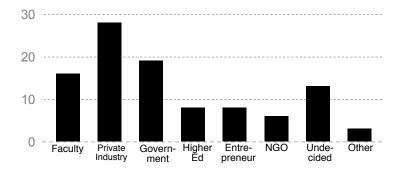
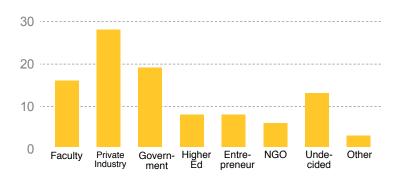


Figure 4. Master's Students (Course Based) (N=101)



### **Summary of Survey Findings**

Twenty-eight hundred graduate students at the University of Guelph received the professional development survey, and 764 students participated (28% response rate). The survey generated a representative picture of the following needs and experiences of graduate students around professional development: (1) University of Guelph graduate students' career goals; (2) the skills graduate students need to be successful in graduate school and beyond; (3) incentives and motivations for, and barriers to, participation in professional skills development; (4) marketing and communication of professional skills development; (5) mandatory professional development; and (6) preferences around the delivery of professional skills development.

Guelph graduate students reported that they enrolled in their graduate studies to pursue a variety of career paths, which is consistent with the literature on graduate professional development. Almost 60% of doctoral students are interested in work beyond tenure-track faculty positions, and the majority of master's students are looking for work in the private sector or government. About 10% of students are undecided about their career goals. These results highlight the need to prepare students for diverse careers and provide more structure to help them explore potential careers.

The survey found that over 50% of graduate students have never participated in co-curricular professional skills development. When asked what would motivate them to participate, over 70% identified 'a certificate' and over 75% identified 'encouragement from their supervisor'.

With regards to communicating professional development opportunities, students said they wanted to hear from a variety of sources, including email listserv, a centralized website, posters, and social media.

### **Focus Group Insights**

Four focus groups were used to elicit a deeper understanding of graduate students' professional skill development needs and to generate initial feedback on the potential implementation of an Individual Development Plan (IDP) at Guelph. Twenty-eight masters and doctoral students, representing six of the seven colleges, participated in these groups.

The focus groups provided additional context around graduate professional skills development needs and barriers. Some participants discussed the issue of lab culture as a barrier to participate, noting that advancing research was typically privileged over professional skills development. Others identified the need for service units to more effectively communicate the goals and aims of professional skills development workshops so they could identify if the time away from their research would be worthwhile. Barriers to participate across all four focus groups included: (1) students' perceived lack of time; (2) lack of awareness about opportunities; and (3) the lack of specificity of sessions relative to perceived needs. Participants said they were most likely to attend when a friend, faculty, or mentor encouraged them to do so.

"Find a way to help students whose advisers make them feel these [professional development] services are a waste of time Maybe by making them mandatory for graduation, so advisers no longer have a say."

Focus Group Participant, Pro-Mandatory Professional Development



"You have the power to cause a significant amount of harm in attempting to administer a mandatory blanket solution. You will dilute the value of any required courses by filling them with reluctant participants."

Focus Group Participant, Against Mandatory Professional Development

Conversations around the issue of whether to make professional skills development mandatory generated both views in support and against (see quotes).

Lastly, the focus group participants saw benefit in Individual Development Plans (IDPs). They felt that an IDP would allow them to track their progress, encourage advisors to be more involved, and increase goal setting and accountability. Some students expressed a desire to work with someone other than their supervisor to realize their career aspirations. They feel that their supervisor does not have the knowledge to support their non-academic career path, while others worried about their supervisor's receptivity to their career goals.

### Recommendations

Drawing on the evidence generated by the above research, the sub-committees of the PSWG developed recommendations that were then subjected to collective reflection and refinement. The following six consensus recommendations emerged.

1. Rebrand the professional skills development program and centralize all opportunities on a new website organized by five core competencies.

The PSWG recommends that professional skills development opportunities be listed on a new, rebranded centralized website and organized with an online calendar-alert system. This recommendation emerged, in part, from the recognition that 40% of graduate student respondents noted a lack of knowledge of opportunities as a key barrier to participation. Further, a scan of best practices at other institutions in Canada identified that graduate professional development opportunities are commonly organized by core competencies. Based on extensive research on the knowledge, skills, and character traits most required for graduate student success in the workplace, the following list of core competencies is proposed for Guelph students (CAGS 2008; Polziehn 2011; Rose 2012; World Economic Forum 2015):

i. Communication

Oral and written communication skills are essential to completing a graduate degree and effectively communicating a student's story to non-academic audiences.

ii. Career Management

Career management workshops equip students with the skills, such as networking, to find a successful and fulfilling post-graduate career. The workshops and experiential learning opportunities provide students with real workplace experiences and teach them how to communicate their transferable skills.

iii. Research and Teaching

Research and teaching workshops provide students with the knowledge and skills to enhance their academic and professional opportunities. Of particular value are skills around project management, technological & digital literacy, and knowledge mobilization.

iv. Leadership, Management, and Ethical Behaviour Workshops that help to develop students' leadership and management capabilities are very popular, as they typically focus on practical matters such as developing one's interpersonal communications, recognizing and enhancing emotional intelligence, and collaborating to accomplish tasks efficiently and innovatively. Ethical reasoning and behavior is commonly intertwined to produce principled leadership and management.

**V.** Wellness and Personal Effectiveness

Wellness is increasingly recognized as a professional competency that can be developed through a variety of means. Its mainstreaming is helping students cope with stress and uncertainty, and achieve their academic and professional goals. Personal effectiveness workshops encourage greater self-awareness and teach students effective personal and professional goal setting techniques.



2. Establish a position to manage and coordinate Graduate and Postdoctoral Professional Development. It is recommended that this position be housed in the Office of Graduate and Postdoctoral Studies and be responsible for implementing the PSWG recommendations.

To this point in time, no individual at the University has been assigned responsibility for enabling the development of professional skills among the University's 3000+ graduate students and postdoctoral fellows. This is not the case with our competitors, all of whom have at least one staff member overseeing campus-wide graduate and postdoctoral professional skills development, typically based out of a central graduate studies office. A position to manage and coordinate all professional development opportunities is vital for implementing the recommendations of this report. Specifically, the manager would be responsible for: (1) working with service units to maintain an upto-date inventory of professional skills development opportunities; (2) communicating/promoting professional development activities to graduate students on behalf of internal and external service providers; (3) identifying co-curricular, experiential learning outcomes and opportunities; (4) tracking graduate student progress in the professional development certificate program; (5) collaborating with external stakeholders to learn about best practices, (6) providing support to faculty around the IDP; and (7) mentoring graduate students and postdoctoral scholars on their IDPs and connecting them to resources on campus.

Of the many tasks identified above, the members of the PSWG were especially keen to ensure better university-wide communications of professional skills development programming. Having a main point of contact for all graduate professional development will help students get the support they need and will assist service units to market and promote professional development events.



3 Implement Individual Development Plans for all doctoral students.

The PSWG recommends that all doctoral students at the University of Guelph develop an Individual Development Plan (IDP). An IDP provides a platform for students to assess their skills, learn about academic and non-academic careers, identify goals and develop action plans, and track achievements (Kaslow et al. 2018). Support for IDPs emerged from the student focus groups and surveys, which showed that graduate students: (1) value their supervisor's support to attend professional skill development; (2) want more guided help around career planning for diverse careers; and (3) want personalized professional development plans that are relevant to their needs.

"Within each program, support students to develop their professional development plans. From this offer a roster of program-specific professional development courses/workshops and direct students to professional development opportunities that are personally relevant."

Graduate
Survey Respondent

All doctoral graduate students would be provided with the opportunity to complete an IDP with support from a central manager and their supervisor. During these meetings, supervisors and students would agree upon goals and a professional skills development action plan. These customized action plans would help to ensure graduate students receive the skill training required for them to be successful. The IDP will help to emphasize the importance of professional skills development and establish expectations around their development. Hence, rather than mandating that all students participate in co-curricular professional skills development, a student's faculty advisor or career mentor will keep them accountable to their selfdefined skills development goals. The School of Environmental Sciences (SES) is piloting the IDP during the 2018-2019 school year (see the SES IDP example Appendix II).

4. Wherever possible, offer generic, non-discipline-specific professional skills training (e.g. GTA workshops, turning a CV into a resume, time management skills), typically delivered by University service providers like the Library, through University-wide co-curricular professional skills development programming. While discipline specific programming can remain within curricula, generic programming should be removed.

During the past year, some service providers offered the same generic professional skills development workshop to 20+ departments on campus. To create a more efficient and robust co-curricular professional skills development program, service providers will increasingly decline requests from faculty for within-curriculum generic professional development training, and instead encourage faculty to invite students to a pre-existing scheduled programs. In turn, discipline-specific skills (manifest in program-specific learning outcomes) should be delivered within the degree program, and ideally with courses for credit. Examples include the technical skills necessary for a specific degree program, disciplinary ethics, and disciplinary writing practice. Co-curricular professional skills programming should focus on supporting students in non-discipline-specific professional and soft skills development, and help students identify and communicate their transferable skills.

### 5. Implement a Professional Development Certificate to be administered by the OGPS.

The OGPS should offer a professional development certificate to all graduate students once they have completed a certain number of hours/units in co-curricular skills development. Over 70% of the graduate students surveyed stated that a certificate would motivate them to attend co-curricular professional development training.

### 6. Scale-up certain professional development opportunities offered at the University of Guelph that have shown to be effective.

Five opportunities are especially recommended.

i. Expand graduate-specific career management training to meet the unique needs of graduate students' career planning and to equip them with effective job search, application, and interview strategies.

The career advising teams in the Experiential Learning Hub and Student Experience department should continue graduate-focused career advising and seek ways to expand career management training opportunities. Given the unique needs of graduate students, there is a high demand for graduate specific workshops (e.g. non-academic/academic career planning, parallel career planning, and resume to CV workshops), career events/fairs (e.g. Biological Sciences Graduate Career Day), 1-on-1 graduate career advising, and networking events with industry professionals and successful alumni.

ii. Create a soft-skills co-curricular course that teaches students how to effectively sell themselves and their research to academic and non-academic audiences.

There is evident desire among graduate students to build skills that are well recognized in professional workplaces. It is therefore recommended that the University develop a co-curricular course collaboratively with service units to teach graduate students soft skills (e.g. conflict management, teamwork, personal effectiveness) and how to effectively communicate their skills and their research using everyday language that will resonate with employers, hiring committees, funding/grant reviewers, and businesses. This course could be modelled upon the successful co-curricular Graduate Research Project Management course offered by the Research Office and will be created in collaboration with a variety of service units across campus: the Community Engaged Scholarship Institute (CESI); Centre for Business and Social Enterprise (CBaSE); the Experiential Learning Hub (formerly Cooperative Education and Career Services); the Library; the Research Innovation Office (formerly the Catalyst Centre); Learning and Development in Human Resources; and the Office of Research.



### iii. Grow and widely promote on- and off- campus experiential learning opportunities.

The peer helper program is an experiential learning opportunity for undergraduate and graduate students on campus. At the moment there are over 20 units on campus that require volunteer support from undergraduate and graduate students. While the majority of the positions are tailored to undergraduate students, a select number of "graduate student only" positions exist. The PSWG recommends that more graduate peer helper positions be created for students to gain practical experience using desired employability skills.

In addition to building experiential opportunities on campus, the PSWG recommends that Mitacs Internships be more widely promoted across campus. In particular, the Mitacs Accelerate Internship provides graduate students with a four-month paid internship during which they apply their research skills in a workplace setting. Compared to other institutions, Guelph has low participation rates in Mitacs internships and training programs. Over 50% of graduate survey respondents at Guelph said they prefer to learn professional skills through experiential learning and internship opportunities. Experiential learning and internships offered on campus provide an accessible way for students to get hands-on practical work experience.

iv. Scale up the undergraduate CBaSE course on business, management, and leadership skills development to provide an advanced level course to graduate students.

CBaSE currently offers a Business Consulting course for undergraduate students at the University of Guelph. They are willing to scale this course up for graduate students on campus. The course covers topics relevant to many graduate students who need and want experience in strategic planning, business planning, market research, competitive analysis, social media expertise, and communications. The credit course teaches students about business consulting, after which they utilize their skills in partnership with outside businesses and organizations.



### V. Improve digital and technological literacy skills on campus.

89%

of graduate students said they needed digital literacy to be successful in the workforce Students identified a significant need for improved digital and technical literacy training at Guelph. Digital and technical literacy includes the ability to effectively communicate with and through a variety of digital platforms including, but not limited to, social media, infographics, data visualization, video, and audio. When asked what skills they needed to be successful in the workforce, 89% of students said they needed such skills. However, only about 25% of students felt that digital literacy skills were being developed in the curriculum and through co-curricular opportunities. A scan of on-campus resources revealed that many service providers feel they lack the expertise to provide workshops on most digital literacy skills. The Library currently provides individual consultations and instruction in support of methods and technologies for digital literacy.

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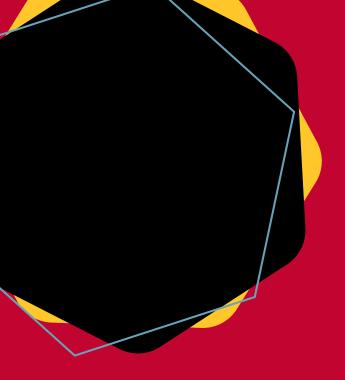
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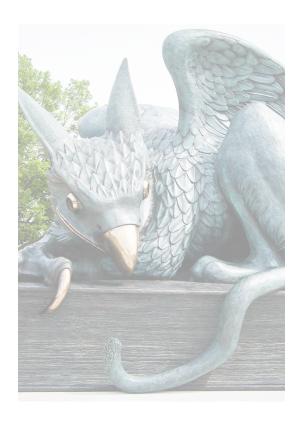






### **Appendix**

# CONTENTS



Appendix I
Environmental Scans and Needs
Assessment

66 Appendix II
Individual Development Plan

Appendix III

GSLI Review 2014



What skills are focused on within graduate curriculum?

### Curriculum Scan

96 Master's and Doctorate level courses were analyzed and the 133 course syllabi were coded based on the tasks and skills mastered in the course

Syllabi tasks and skills were coded into three categories:



### Professional Integral Skills

These are skills, like communication and teamwork, that are essential to students success both within and outside of their graduate degrees.



### Professional Academic Skills

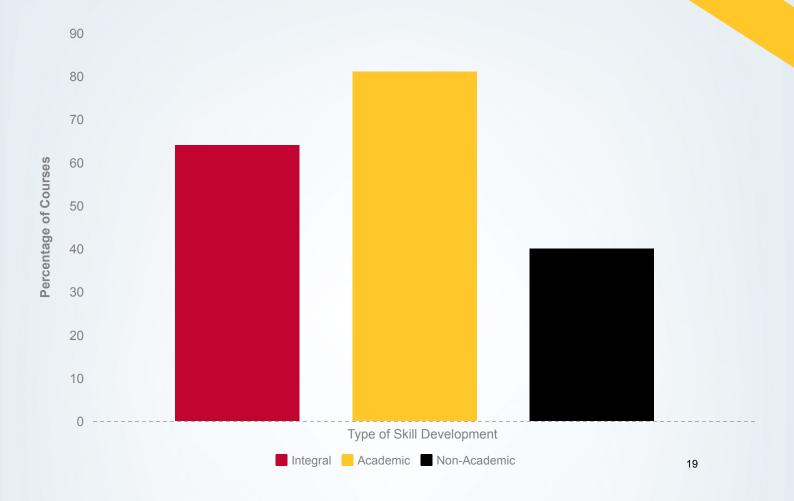
These are skills, like research skills (qualitative and quantitative), that help students prepare for an academic or research-based career.



### Professional Non-Academic Skills

These are practical skills, like project and human management skills, that "bridge the gap"between graduate training and non-academic employment.

### Coded syllabi content analysis: percentage of graduate courses focusing on the three types of skills (N=96)



What skills are focused on outside of the curriculum (co-curricular)?

### Communication Skills

### Writing and Learning Services at the Library

### Written communication

- 1-on-1 writing appointments
- Dissertation Boot CampWriting Tune-up

### Oral communication and presentation skills

- 1-on-1 presentation appointments
- Presentation Boot Camp
- Mitacs Training Practice your presentation skills I

### English as an additional language (EAL)

- Talk like an Academic
- Write like an Academic
- Pronunciation Group
- Graduate Writing Camp

### Career Management Skills

### **Co-op Education and Career Services**

- 1-on-1 career advising appointments
- Drop-in 9-12pm and 1-4pm
- Career workshops on request
- Non-academic career planning
- Job search strategies
- How to create CVs, resumes, and cover letters
- Networking, informational interviews, and elevator pitches

### **Mitacs Training**

Networking Skills Workshop (in-person and online)

### Research Skills

### Graduate Research Project Management Course (GRPM), Office of Research

- The course introduces graduate students to the management of scholarly and research projects, including administrative and ethical concerns.
- Always has a waiting list
- Runs for 11 sessions (Monday 12-1pm) and graduate students get a certificate at the end

### Writing and Learning (Library) - Brain Food Series

- Getting Started on Your Thesis
- Writing the Literature Review
- Time Management Essentials
- Outlining Your Thesis + Writing Results and Discussion
- Publishing and Presenting Your Research

### Research Skills Continued...

### **Knowledge Mobilization (KMb)**

- Scholarship and Research in the Library
- Community Engaged Scholarship Institute (CESI)
- The Research Innovation Office

### **Data Resource Centre**

- Data basics
- Research data management
- Getting data
- Open data
- Creating Data APIs
- Creating Data Surveys
- Cleaning and preparing data OpenRefine
- Nvivo
- SPSS I &II
- SAS I&II
- Data Visualization GIS
- Excel
- Tableau I&II

### Teaching Skills

### **Open Learning and Educational Support (OpenEd)**

- UNIV 6800: University Teaching: Theory and Practice
- Inquire: Certificate in the Scholarship of Teaching and Learning
- Instructional Skills Workshop (3 days)
- Graduate Teaching Community
- Teaching and Learning Workshops

### Leadership, Management & Innovation

### **Entrepreneurial and Innovation**

- CBaSE Consulting course & the Hub (a. Developing a big impactful Idea, b. Developing a value proposition, c. Conducting customer discovery d. Developing a business model)
- The Research Innovation Office (Agri-food and bio-tech researchers can participate in Accelerator Guelph)
- Mitacs Training Discover the entrepreneur within

### Interpersonal skills

- Mitacs Training
- Skills of communication
- Essentials of productive teams
- Career professionalism

### **Project Management**

- Mitacs Training
- Foundations of project management I
- Foundations of project management II

### Thriving: Wellness Skills

### **Counselling Services**

• 1-on-1 counselling appointments

### Mitacs Training

Time management workshops (online)

### Learning Services Library

- 1-on-1 time management/goal setting
- appointmentsBrain Food Series: Time Management **Essentials**

### SURVEY & FOCUS GROUPS

### Focus Groups

Winter 2018

Facilitated four focus

28 graduate students

All colleges except for CBE were represented

### Survey

Spring 2018

28% response rate (N=764)

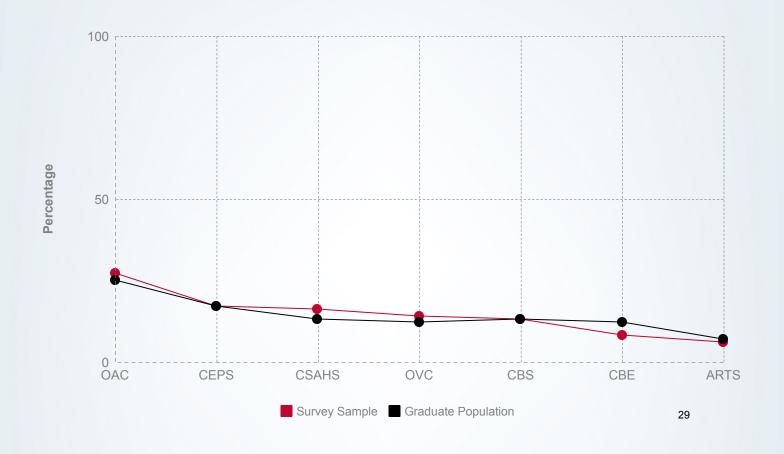
63% were female

65% were Master's students, 33% were doctoral students

94% were full-time students

18% were international students

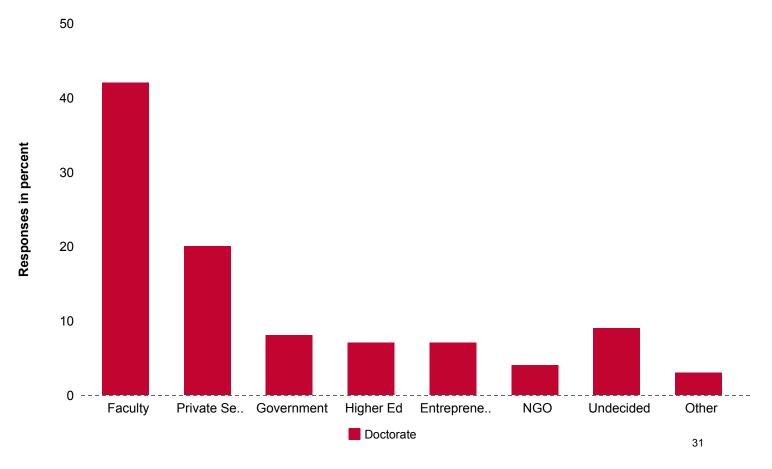
### Percentage of survey respondents by College compared to percentage of graduate population by College (N=764)



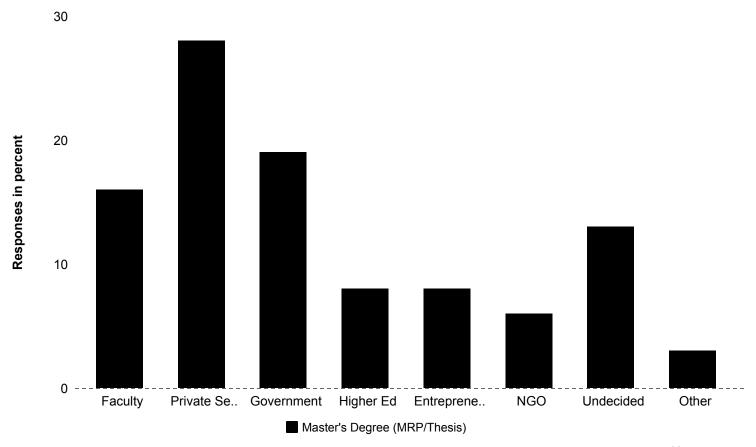
#### Survey results

What are UoG graduate students' career goals?

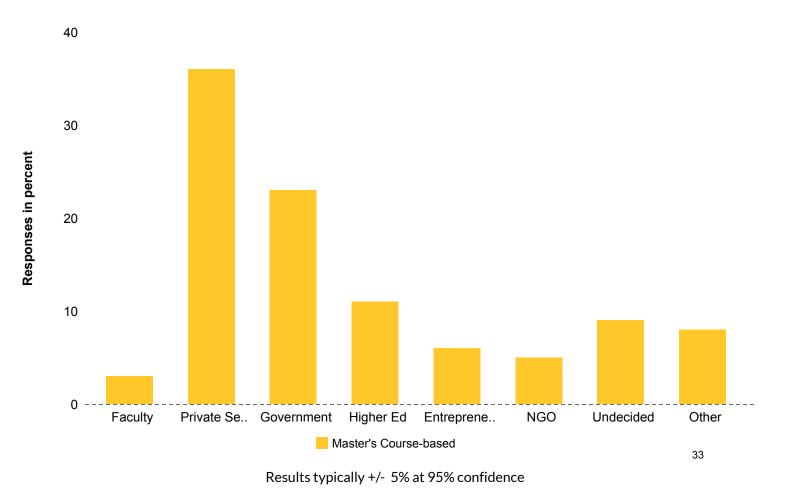
### Doctoral Career Goals (N=221)



#### Master's Degree (MRP/Thesis) Career Goals (N=333)



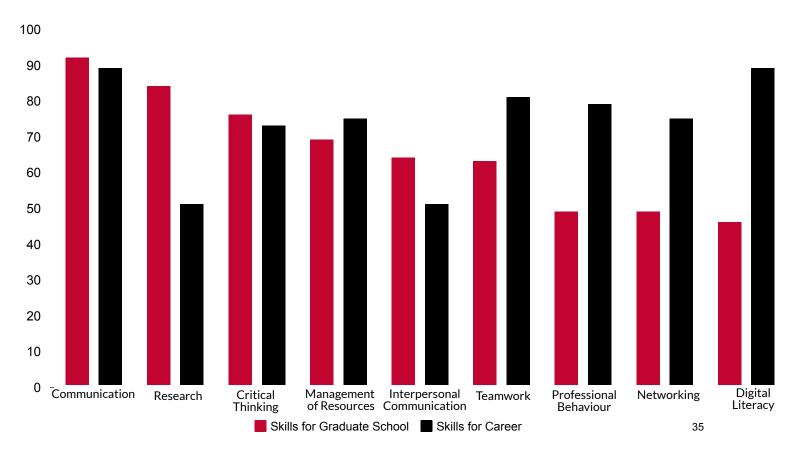
#### Master's Degree (course-based) Career Goals (N=101)



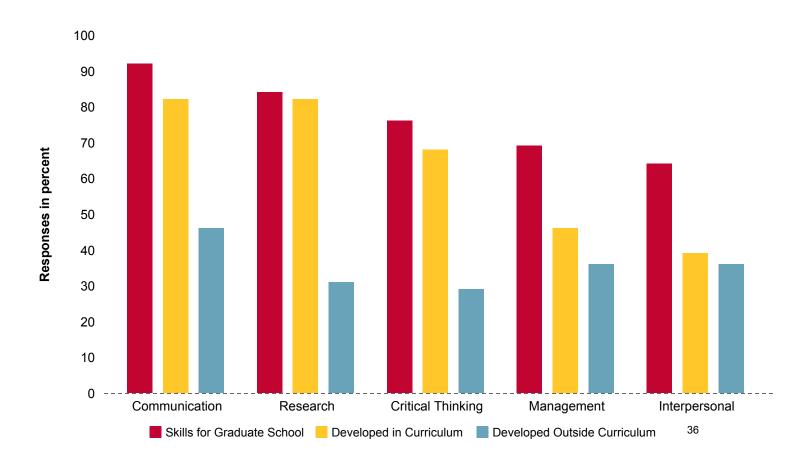
#### Survey results

What skills do graduate students believe they need to be successful in graduate school and their careers?

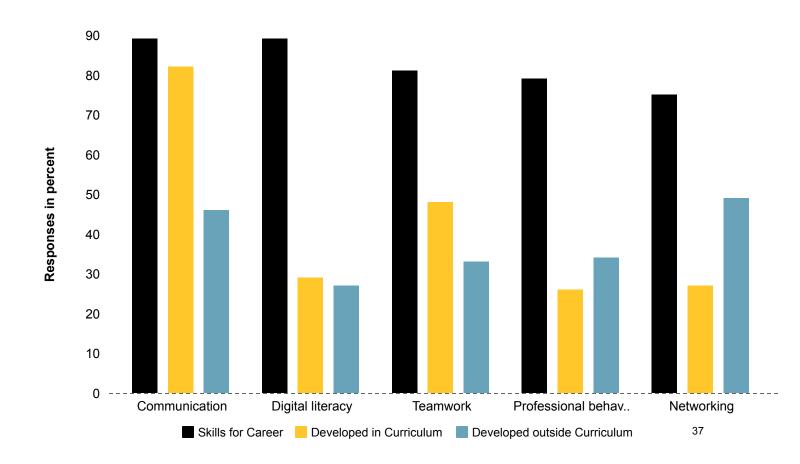
## Students perceptions about the top 5 skills needed to be successful in graduate school vs. their career (N=689)



## Students perceptions about the top five skills needed to be successful in graduate school vs. their perception of skills actually developed



### Student perceptions about the top 5 skills needed to be successful in their <u>career</u> vs. their perception of skills actually developed



### What do you need to be successful?

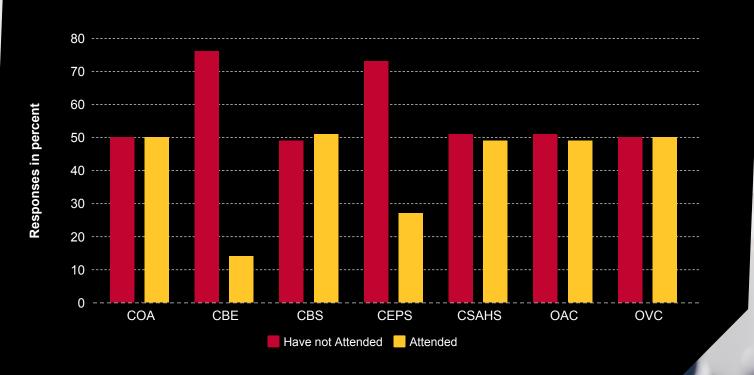
Focus Group & Qualitative Survey Responses

- Networking opportunities with non-academic industry
- Skills and knowledge translation
- Career Management skills: How to write a CV vs. a resume, job search strategies
- Statistical, digital, and technology skills
- Communication skills: writing workshops that are more discipline specific and non-academic presentation support (e.g. TED talks)
- Wellness & stress management

"How to convince employees of the worth of my education as opposed to technical programs, such as those offered at the college level which the big tech companies (e.g Google) snap up with no hesitation."

What is the co-curricular participation rate and usage of professional skill development at Guelph?

#### Participation in co-curricular (N=720)



55% of graduate students have <u>NEVER</u> participated in co-curricular skill development

40

# Of the students who attend co-curricular PD activities, they reported visiting:

#### 1-on-1 Appointments

```
#1 Writing Services (31.3%)
```

#2 Counselling Services (23%)

#3 Co-op and Career Services (17.5%)

#4 Data Resource Centre (16.5%)

#5 Learning Services (9.3%)

# Of the students who attend co-curricular PD activities, they reported visiting:

### Workshops or Seminars

```
#1 Writing Services (41%)
```

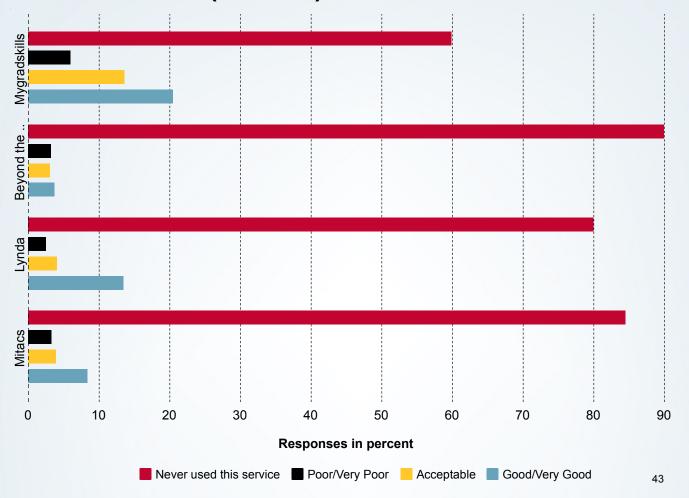
#2 Learning Services (19.5%)

#3 OpenEd (15%)

#4 Co-op and Career Services (15%)

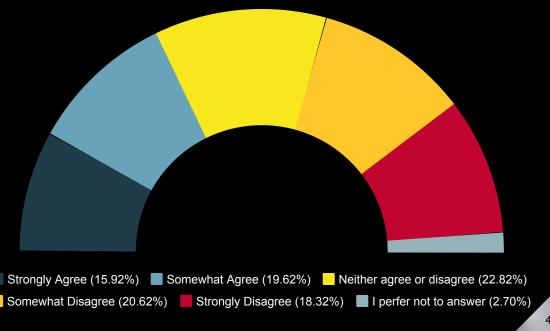
#5 Data Resource Centre (14%)

### Students' ratings of off-campus and online PD resources (N=639)



How can we motivate students to attend professional skill development opportunities?

Rate: Professional development should be mandatory for all University of Guelph graduate students (N=693)

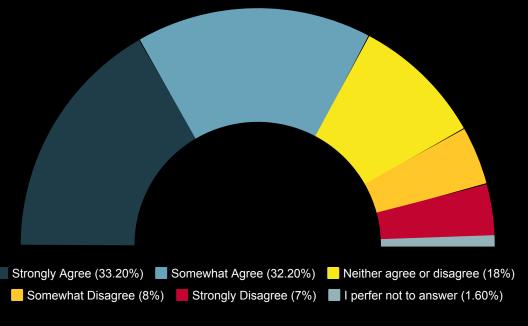


#### Thoughts on Mandatory PD

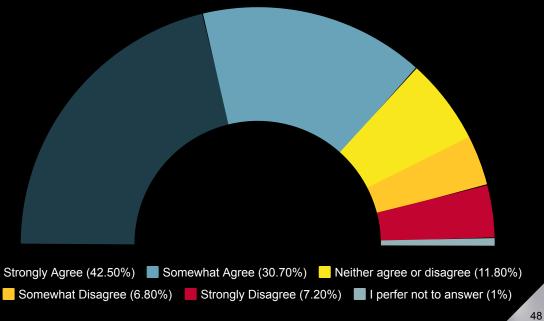
"You have the power to cause a significant amount of harm in attempting to administer a mandatory blanket solution. You will dilute the value of any required courses by filling them with reluctant participants while diverting student time away from activities critical to their degree."

"Find a way to help students whose advisers make them feel these services are a waste of time (taking away time from research) maybe by making them mandatory for graduation so adviser no longer have a say."

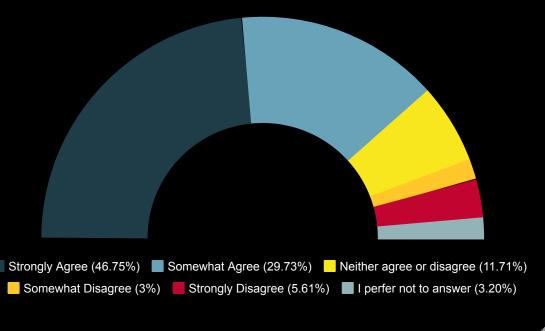
A notation on my co-curricular record would encourage me to attend skill development opportunities (N=689)



A certificate would encourage me to attend cocurricular professional skill development opportunities (N=694)



The support from my supervisor would encourage me to attend co-curricular professional skill development (N=691)



### Support from my supervisor

"There needs to be an emphasis placed on the importance of professional skills at Guelph. This should start at either the department or advisor level, if they don't have awareness or buy-in then the grad students typically aren't aware or able to participate in the services offered."

# What were the top <u>motivations</u> for attending co-curricular professional development? (N=313)

```
#1 To learn something new (72%)

#2 Add to my resume/CV (46%)

#3 To network with individuals in my field (39%)

#4 I needed the knowledge to complete a task (34%)

#5 The session fit into my schedule (34%)

#6 A professor encouraged me to attend (27%)
```

What are the barriers preventing graduate students from attending professional skill development?

# What are the top <u>barriers</u> for not attending co-curricular professional skill development? (N=708)

```
#1 Too busy (52%)

#2 I don't know what opportunities exist (40%)

#3 The sessions conflicted with my program (27%)

#4 I don't feel the sessions are relevant to me (19%)

#5 The sessions are too long (17%)

#6 The sessions are too generic (16%)
```

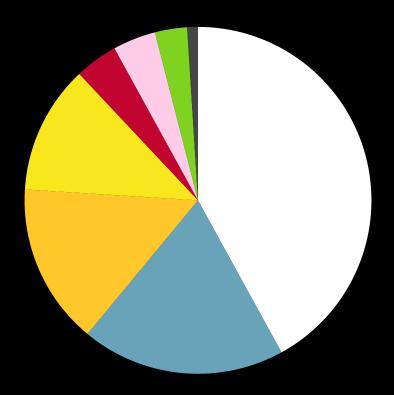
4%

of students still reported that their department & advisor were not supportive <sup>53</sup>

#### **Barriers**

"If you really want to improve the professional skills of the graduate students at this institution, you need to connect with them and understand their specific needs. Blanket events are not inviting to many students, because they don't expect these opportunities to be relevant to their development."

### Communication of PD Opportunities (N=696)





#### Challenges with Emails:

Make professional development opportunities more widely known on campus. Often with email forwards, the opportunities get lost in an inbox of irrelevant announcements.

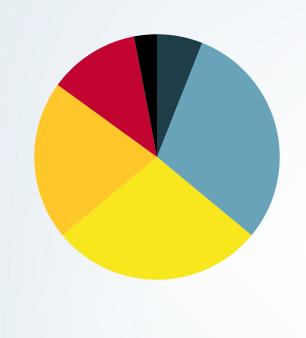
Not from my department as they rarely forward this information. Perhaps a listserv that we can sign up for the things we WANT to get notified about.

Anything that comes through my department is annoying because it gets sent at least three times and often at the last minute. Also, it is often not applicable and thus I end up ignoring things that may be applicable.

What are graduate students' professional development preferences?

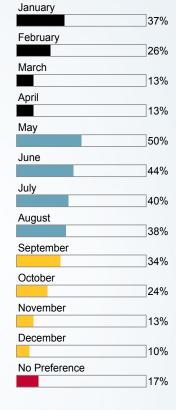
# Number of hours graduate students are willing to spend on PD per semester (N=658)

# Best month for graduate students to attend PD opportunities (N=703)

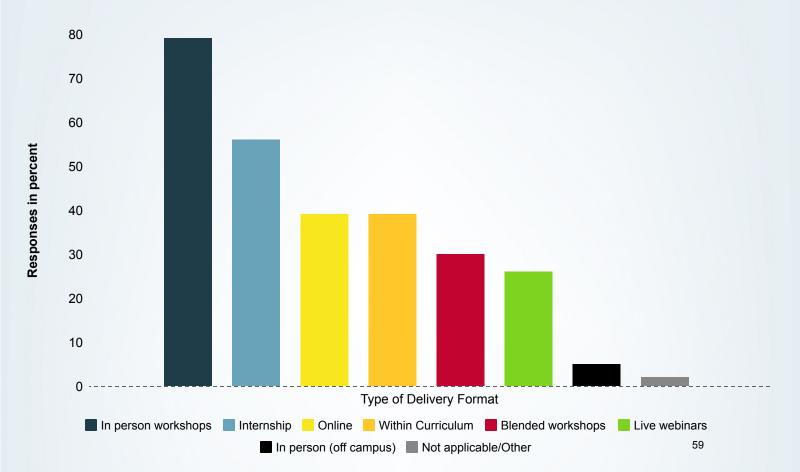


0 hours (6%) 1-5 hour(s) (30%) 6-10 hours (28%)

11-20 hours (21%) 21-50 hours (12%) 51+ hours (3%)



### Preferred Delivery Method (N=691)



Ideas that emerged from the survey and focus groups



#### Create a certificate

"It is great that Guelph offers to many professional skill development programs and other helpful services, it is just a shame that it is difficult to juggle doing all of these things that would be absolutely beneficial to me and other graduate students. Time management and thinking ahead get the best of many graduate students...providing certificates upon completion then graduate students would be more likely to utilize these services."



### Improve networking & alumni connections

"Something really helpful and encouraging would be hearing from people who have RECENTLY gone through the job hunting process - with a grad degree from Guelph - and been successful. Most government and industry speakers that we speak to and network with haven't been on the other side of the interview table in decades."



## Support skill translation & non-academic career planning

"There should be a much stronger emphasis on translating a PhD degree to careers outside of academia. It seems like my program is set up solely to produce more professors and that is not realistic. There are many other career avenues that require a slightly different set of skills (networking, business mindset) that are completely overlooked."



### Expand experiential learning opportunities

"Offer more work place integration, providing opportunities for students to gain REAL applicable experience outside of the university, not just from workshops and seminars."



## Individually crafted professional development plans

"Within each program, support students to develop their own professional development plans. From this, offer a roster of program-specific professional development courses/workshops and direct students to professional development opportunities that are personally relevant."



### Increase training on digital literacy

"Improving digital learning and promoting interdisciplinary development of research through such workshops would be a welcome effort."



#### **New website**

"I think one website that has all of the professional development opportunities on campus will be great. You can make it so a student can customize their semester's calendar or you can generate a suggestion of workshop based on themes or disciplines."





### Improved marketing and communications

"More emphasis on importance. There are so many to choose. Maybe have us do a survey and forward me what seminars would be best for me to attend."

"Need to find a way to attract students to read the emails about these courses and what we will get from them."

#### **Engage faculty**

"To develop professional skills during doctoral studies, students must frequently go against their advisor's wishes to focus exclusively on research. This is unduly stressful for the student-advisor relationship. By providing an incentive for faculty to allow students to pursue cocurricular activities that will lead to better post graduate career outcomes, the University of Guelph will stand out among other universities as the defacto institution for developing the whole person during graduate studies and producing professional graduates ready for the modern workplace."





### Appendix II: Individual Development Plan



### **Individual Development Plan**

Full Name:
Graduate Program:
Degree Type:
Email@uoguelph.ca:
Mentor:
Academic Advisor:



#### Why create an Individual Development Plan?

An individual development plan (IDP) helps you to align your personal and professional goals with your academic expectations and responsibilities. The IDP is a tool to help you identify, document, and communicate the transferable skills you will develop throughout your degree. The tool will give you critical information about skills, knowledge, and resources to help you succeed at your personal and professional goals after graduation.

#### How will an IDP guide my progress?

Your IDP will serve as a guide during meetings with your mentor/advisor each semester, to ensure progress is made towards your personal academic and professional/career goals. Each semester, you can revise your IDP and, based on an updated assessment of your goals and skills, you will identify attainable steps for fulfilling long-term goals. It is *ok* if you are unable to provide clear answers to all the questions, the document is meant to guide you in formulating a plan for your future. Any questions that arise can be addressed in your first meeting with your mentor/advisor.

#### What is the role of my graduate advisor?

Your advisor's primary responsibility is to provide guidance for your goal plan. In addition to the IDP, you and your advisor are responsible for completing your academic plan of study, which outlines the courses you will take to ensure academic success in your program. You should meet with your advisor once per year to discuss your plan.

If you feel uncomfortable speaking with your advisor about your career plan and future goals, you can also meet with a Career Advisor in Co-op Education and Career Services. Career Advisors are available for drop in appointments Monday to Friday.





Assess your skills, values, and interests using the rating questions in your IDP (Pages 3-5).



Set and prioritize your goals. Identify goals for each year and reflect on them at the start of each semester.



Explore your career options using informational interviews.



Discuss your IDP with your advisor once per year.



Implement your plan and revise your IDP throughout the years as needed.

Remember Goals Change. Revise and review your IDP often. Assess Your Skills



When completing your self assessment, remember to consider all your experiences to date, whether academic, professional or extra-curricular, that may have contributed to your development of knowledge and skills. This is a pretty exhaustive list and is meant to capture the diverse background and experiences of our students so don't feel like you have to have experience with all the things listed here! Having said that, all of the skills listed are valued by employers so do consider which ones fit your career plans the best when evaluating what you will work on while completing your degree at Guelph.

Rank each skill between 1 - 5 (1 = Skill needs improvement to 5 = Skill has been mastered)

	<b>September</b> Semester 1	<b>January</b> Semester 2	<b>May</b> Semester 3
Communication			
Write for academic audiences			
Write for non-academic audiences			
Present to academic audiences			
Present to a general audience			
Teach in a classroom setting			
Email and social media communication/etiquette			
Knowledge mobilization (accessible knowledge exchange between university researchers and the wider community)			
Leadership, Management, and Entrepren	eurial Skills		
Ability to give constructive feedback			
Ability to receive and implement constructive feedback			
Conflict management in the workplace			
Plan and organize projects (project management)			
Lead, train, and mentor others			
Work with diverse groups of individuals			
Business acumen (e.g. budgets, business proposals)			
Ability to think of innovative ideas and solutions			
Entrepreneurial skills			
Respect diverse opinions and approaches			

# Assess Your Skills



	<b>September</b> Semester 1	<b>January</b> Semester 2	<b>May</b> Semester 3
Career Management Skills			
Sell your skills with an "elevator pitch"			
Networking skills (including informational interviews)			
Job application materials (e.g. resume, cover letter, CV)			
Interview skills			
Identification of career options and awareness of job opportunities			
How to negotiate job offers			
Personal Effectiveness			
Manage time effectively to successfully meet goals			
Personal stress and wellness management			
Identify personal strengths and weaknesses			
Demonstrate perseverance and resilience			
Take initiative and act decisively			
Research Skills			
Understand responsible ethical conduct in research			
Project design (e.g., identify questions, methods)			
Locate, evaluate, and use information effectively			
Manage, analyze, and interpret data			
Quantitative analysis			
Grant writing			
Understand and explain how the scientific method is used			
Identify and understand limitations and assumptions			
Understand the relationship between science and policy			

# Assess Your Skills



	<b>September</b> Semester 1	January Semester 2	<b>May</b> Semester 3
Critical Thinking			
Consider alternate views, approaches, and explanations			
Understand complex interactions			
Appreciate historical context of your work			
Critique arguments, and interpretations			
Have global awareness of your discipline/profession			
Identify and challenge assumptions and bias			
Ask meaningful questions to advance knowledge			
Digital Literacy Proficiency in Microsoft Products (e.g. Excel, Word, and Powerpoint	:)		
Drafting programs (e.g. Adobe Illustrator, CorelDraw)			
Data visualization and analysis (e.g. Nvivo, Tableau, ArcGIS, MatLab			
Statistical programs (e.g. Stata, R, SPSS, and SAS)			
Collaborative work platforms (e.g. Google Docs, Slack)			
Discipline-specific Skills and Knowledge Examples: data collection and data analysis skills specific to you biological, microbiological, atmospheric, water, soil, geological of field and/or lab safety protocols, quantitative analysis (e.g. varidand disciplinary knowledge (e.g. soil science, environmental rem	, ir area of expertise latasets), specific fi ous types of modelli	(measuring and ar eld skills, specific l ing, time-series an	ab skills, alysis),
1.			
2.3.			
4.			
5.			
6.			
7.			
			72





List the skills you believe you've already mastered and a brief description of how you've mastered the skill.

Example: Statistical programming (Stata & R) - attended ICPSR for statistical program training and used Stata while working on faculty research project.

Semester 1: September



List the skills you want to improve. Order your list and identify the skills you are going to prioritize first.

Example: Improve project management skills (1st priority), Refine presenting to general audiences (2nd priority).



For your top three prioritized skills, identify how you will improve the skill and provide a timeline to help you achieve your goals.

Example: Research project management skills - Sign up to attend the Office of Research's Graduate Project Research Management Course.

		_		
		Į		
Se	emester 2: January			
ĺ		Г	ı	
		- 1		





List the skills you believe you've already mastered and a brief description of how you've mastered the skill.

Example: Statistical programming (Stata & R) - attended ICPSR for statistical program training and used Stata while working on faculty research project.

Semester 3: May



List the skills you want to improve. Order your list and identify the skills you are going to prioritize first.

Example: Improve project management skills (1st priority), Refine presenting to general audiences (2nd priority).



For your top three prioritized skills, identify how you will improve the skill and provide a timeline to help you achieve your goals.

Example: Research project management skills - Sign up to attend the Office of Research's Graduate Project Research Management Course.

Are there any factors that you are concerned may negatively affect your progress/goals? (Please add to this section each semester)



Take time to research possible career paths and education that are of interest to you. Look at different possibilities in business, industry, government, and nonprofit sectors. Consider careers that you may otherwise not have thought to pursue. Careers can be relatively similar or quite different from each other depending on the breadth of your interests and the stage in your career that you find yourself in at this time.

Identify at least **three** possible positions that fit in with your career path and then complete these steps:

- Watch a video on informational interviews and conduct an informational interview (For the video to work make sure to sign in on Lynda.com with your central uoguelph.ca user name and password).
- Contact three different professionals who are currently working in the three positions that fit with your career path. Complete an informational interview with at least one of the professionals.
- Attempt to find a current or old job advertisement for the role. Document all the skills that are required/preferred.
- Journal your key findings from your research in the boxes below.

Position One:		



Position Two:		
Position Three:		



List your recent involvement/achievements and label each entry with the semester/year which it was completed.

Example: Graduate Research Project Management Course (W19)

Coursework	Work/Employment	Research (MRP Students Only)
Professional Development Training	Awards/Scholarships	Volunteering
Non-academic achievements	Personal Wellness	Other
		77

#### **Appendix III:**

## Graduate Student Learning Initiative Review Final Report

Prepared by Aaron Massecar, PhD

July 25, 2014

#### **Contents**

Executive Summary	2
Main recommendations	2
Background Rationale for the GSLI Review	3
Project Goals	
Approach and Methodology	
Main Data Collection Methods	5
Environmental Scan	6
Summary of Data Collected: GSLI Committee	
Summary of Data Collected: Graduate Students	8
Focus Group Results	8
Grad Student Survey Results	10
Workshop Growth Since 2006	33
Recommendations	34
References	39
Appendix	See long version

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#### **Executive Summary**

This report was commissioned by the Library at the University of Guelph to provide recommendations to guide the future development, governance, and resourcing of the Graduate Student Learning Initiative (GSLI) by responding to the specific issues, questions, and concerns detailed in the Review Framework.

An environmental scan of Graduate Student Professional Development (GSPD) at other universities in Ontario was performed in order to assess the extent to which other universities are participating in GSPD. The main questions that guided the study were determined in advance by the GSLI committee in the form of the Review Framework. These questions were put to the committee and are summarized below. The questions also became the main framework for discussions with graduate students. Consultations also took place with former graduate students.

#### **Main recommendations**

- 1. Shift responsibility for the GSLI to Graduate Studies.
- 2. Pursue a sustainable funding model at a minimum of .10 .20 FTE for a chair or co-ordinator to maintain co-ordination of existing programs and services.
- Consider restructuring the GSLI (instead of partners across campus, for example, consider funding an individual to oversee coordination of efforts). This might include having one person oversee the coordination of GSPD activities across the university instead of the current collaboration model that is being used.
- 4. Develop a new branding and marketing strategy. This will include exploring new ways of communicating with graduate students, re-naming the GSLI, updating the website to make it easier to navigate, and demonstrating how the GSLI's programs are relevant to graduate students.
- 5. Engage with other partners across campus to determine areas of greatest need, such as, graduate program coordinators, young alumni, and other units that work with graduate students. This could involve simply contacting those units to see if they would like to attend a meeting or to see if there are other areas of overlap.
- 6. Engage with other institutions. Stronger communication ties with other institutions could result in a set of best practices that would benefit graduate students at all of the participating institutions. This could take place through an email discussion group that includes people responsible for GSPD programming at the different institutions.
- 7. Develop online programs and services through the GSLI. 72% of survey respondents stated that they would participate in online workshops if they were available. This cannot take the place of face to face communication, but it can facilitate independent learning while simultaneously expanding programming and freeing up resources over the long term.

#### **Background Rationale for the GSLI Review**

In what was an innovative move at the time, the Graduate Student Learning Initiative (GSLI) was created at the University of Guelph in December of 2006 through the collaborative efforts of the Learning Commons, the GSA, and the Dean of Graduate Studies. The main focus of the GSLI was to "share information among service providers," "promote existing services jointly," and "collaborate in the development of new services to meet the needs of graduate students as learners." (For more on the background and development of the GSLI see "GSLI History" in the Appendix of the long version of this report.) As the GSLI evolved, the need to develop graduate students as researchers, teachers, and professionals, as well as learners, was recognized, in part because of a needs assessment survey conducted by the GSLI in 2007. This survey helped to confirm graduate students' skill development needs and set the direction for the GSLI for the following few years.

In 2007, the Society for Teaching and Learning in Higher Education (STLHE), the Canadian Association of Graduate Studies (CAGS), and the Tri-Council (Natural Sciences and Engineering Research Council (NSERC), Social Sciences and Humanities Research Council (SSHRC), and the Canadian Institutes of Health Research (CIHR)) met for a joint workshop on professional development for graduate students. A series of reports came out of this meeting, as well as the identification of a series of defined skill areas for graduate student development. These skills focused on developing graduate student potential, both as an academic and for positions outside of academia. As a result of this workshop and these reports, the area of Graduate Student Professional Development (GSPD) became a major area of focus for most universities with graduate programs. This can be seen in the types of programming that are offered at these institutions. Many of their programs highlight the skills mentioned in these reports. (Of course, it could be the case that GSPD programming and the skills that it highlights are merely coincidentally present, but it would seem to be more likely the case that GSPD programming at each of the institutions is emerging in accordance with the skills identified by the above-mentioned agencies.)

At that time, the GSLI was well ahead of the GSPD curve, and garnered national recognition for its collaborative approach to GSPD when it received the 2007 Innovation Award from the Canadian Association for College and University Student Services. The depth and breadth of programming the GSLI was offering would be later replicated by other institutions.

By 2010, Career Services, Open Learning and Educational Support (OpenEd), and the Office of Research had joined the GSLI. With this continued growth and expansion of services, it appeared that the GSLI was still at the forefront of GSPD. In 2011, a review was commissioned by SSHRC in collaboration with CAGS to review GSPD. The report was published in 2012 under the title of "Graduate Student Professional Development: A Survey with Recommendations" (See References for a link to the full report). This report became known as the *Rose Report* after its author Marilyn Rose, PhD, a former Dean of Graduate Studies from Brock University.

The main goal of the Rose Report was to examine GSPD at universities in Canada and to make recommendations for best practices based on graduate student programming found at those universities. The report outlined some of the history and background of GSPD at these other institutions

and at the University of Guelph. In addition, it created a ranking system based on the GSPD activities found at the different universities. Criteria for the highest ranking, Category 1, included a high level of GSPD, a recognized brand, and oversight or management within Graduate Studies. Category 2 included a high level of GSPD without the programming oversight of Graduate Studies but by a committee not overseen by Grad Studies, and a general rubric under which the programming operates without that rubric coming together as a recognized brand. Category 3 included universities that offer GSPD programming without centralization, but still with endorsement from Grad Studies. Category 4 included universities that are not yet active in GSPD as a recognized sub-unit of student development, though they still tended to offer programming that graduate students attended.

One of the main justifications for this categorization has to do with ease of access for students to GSPD programming. The Rose report claimed that the more centralized that programming is, and the more that the programming is overseen and developed by Graduate Studies, the more likely students are to take advantage of that programming. The perceived legitimacy of housing GSPD within Graduate Studies is thus assumed to be a major contributing factor to the success of the GSPD programming. More will be written about this below when it comes to incorporating some of the Rose Report suggestions into the GSLI's own practices. For now, it is sufficient to note that the categorization system that the Rose Report used was based on the relationship between GSPD and Grad Studies.

When it came to determining how the University of Guelph's GSLI program stacked up against the other universities, the results came as a surprise. The GSLI, which had been recognized as an innovative program that was setting the trend for other universities, was now considered a Category 2 program.

While the GSLI was developing, more and more print and online news media attention was being focused on the outcomes of university education in general and graduate student education in particular. The Ontario Ministry of Training, Colleges, and Universities invested heavily in Guelph in 2009, providing \$3.62M to create 231 new graduate student spaces. Since then, the discussion has largely been focused on how universities are or are not contributing to the knowledge economy by helping to produce graduates with the necessary skills to be successful in the workforce in addition to preparing graduate students for careers in academia.

At the same time, the growth of GSLI programming and initiatives such as the e-portfolio project and redesign of the website began to strain the GSLI's in-kind staffing model. Over the past three years alone, GSLI workshops have grown at a steady rate of 150%. Increasing responsibilities outside of the GSLI meant less time for the Chair to devote to the GSLI, with the priority shifting to maintaining existing programs and services rather than pursuing opportunities for expansion.

The Category 2 ranking from the Rose Report, the limitations of the staffing model, and the continued discussion throughout the media about the skills gap that is emerging, have introduced some concerns about whether the current programming at the University of Guelph is meeting the breadth of student needs, and whether the GSLI is keeping pace with new and emerging student needs, current trends in GSPD, and the services provided at other universities.

#### **Project Goals**

The main goal of the GSLI review is "To provide recommendations to guide the future development, governance, and resourcing of the GSLI by responding to the specific issues, questions, and concerns detailed in the Review Framework."

#### **Approach and Methodology**

In the GSLI Review – Terms of Reference (see Appendix), the committee asked that the following groups be consulted:

- Senior management of the three founding departments the Learning Commons, Office of Graduate Studies, and the GSA
- GSLI Chair
- Current members of the GSLI working group
- Past members of the GSLI working group
- Staff providing GSLI programming and services
- Graduate students
- Graduate program coordinators

All of the above groups were consulted with the exception of the Graduate Program Coordinators. Due to time constraints, it was deemed more essential to consult with recent graduate alumni and with other universities who run GSPD programming.

#### **Main Data Collection Methods**

- 1. Recording discussion feedback during a GSLI Committee Session
- 2. Asking current and former members of the GSLI Committee to answer the review framework questions on their own time (12 respondents)
- 3. Discussing the focus groups idea with the GSA at one of their meetings
- 4. Focus Groups with Graduate Students (3 focus groups, 5 participants in total, avg 1hr/person talk time)
- 5. Electronic survey sent to
  - a. all graduate students (320 respondents of ~2530 students (according to 2013 AUCC estimates))
  - b. former Graduate Students (one respondent)
  - c. other Universities with GSPD programming (6 respondents)
- Research of other Ontario universities through their websites (21 in total with 15 that have GSPD programming)
- 7. Research of recent media articles related to GSPD through the Internet

#### **Environmental Scan**

In general, the majority of universities in Ontario have GSPD programming (see Appendix "Universities with GSPD Websites"). It is clear that many of the institutions have adopted the general "skill development" approach that was advocated by SSHRC, CAGS, and STLHE. This approach is also evident in the programming offered by MITACS, an NGO that offers GSPD programming to member institutions who pay fees to MITACS.

Some institutions have supplemented their skills workshops and taken a slightly different tack by focusing on engaging the local community with projects wherein those skills will be developed. Despite outreach efforts, there was not much feedback provided from the other institutions about the effectiveness of these programs (see Appendix "Survey Results from Other Universities' GSPD").

Although almost every institution was focusing on the core skills areas for their GSPD, it is not clear how exactly these skills will be employed. One of the questions that needs to be asked is, "What are the skills going to be used for?" This might help to address some of the problems of attracting and retaining graduate student interest in GSPD programming that have been identified by groups at the University of Guelph and other institutions.

There has been a growing trend to talk about the "Skills Gap" that exists in Ontario. (See, for example, The Conference Board of Canada's "The Cost of Ontario's Skills Gap".) As a result, there has been an increased emphasis to fund programs that provide both university-level training with college-level skill development. This increased pressure to generate graduates that are "employment ready" necessitates a shift in focus from simply developing the person to developing someone with employment potential, both inside and outside of academia. Given the current government's focus on the economy and the creation of jobs, it does not appear as though this trend is going to slow down. In fact, it is likely the case that more pressure will be placed on universities to justify their programming based on employment outcomes after graduation. This means that there will likely be increased pressure on graduate programs to ensure that their students are ready for the job market.

#### **Summary of Data Collected: GSLI Committee**

In accordance with the terms of reference and review framework that was provided, a series of questions were put to the GSLI Committee in the form of a group discussion and then later, individual reflection. What is presented below is a summary of the individual responses that can be found in the Appendix. There are some themes that are present amongst the answers below. One of those themes is the general consensus that graduate student needs must be front and centre for GSLI programming. There were many suggestions offered as to how this could happen, but there was a general concern about the degree to which the GSLI is receiving student feedback about its programs.

According to the committee, in order to meet the needs of graduate students, four things need to happen:

- 1. The GSLI should consider a process of rebranding so that the name becomes not only synonymous with workshops, but with Graduate Student development in general.
- 2. The GSLI should consider developing a stronger relationship with faculty members, especially graduate program coordinators, but also, perhaps, more graduate students.
- 3. Because the current funding model is unsustainable, there needs to be a new funding model put in place.
- 4. There was a general consensus that the GSLI should have a stronger relationship with Graduate Studies. There were some suggestions that the GSLI should be funded and overseen by Graduate Studies. Because of the proposed stepping-down of the current GSLI chair at the end of the summer, this would be an appropriate conversation to have soon.

These were the themes that tended to emerge throughout the individual responses. A more detailed account of each of these groups of responses can be found below.

#### **Summary of Data Collected: Graduate Students**

There were two main ways that graduate students were consulted as a group: focus groups and a survey. The focus group participants identified many areas of need: more specific workshops, workshops pertaining to teaching, publishing, and money management; lack of understanding of etiquette; not understanding how to translate academic skills into a non-academic environment; and better communication strategies.

From the survey, there were some general themes that emerged. Graduate students would like more workshops offered more often (evenings, weekends, summer semester) on specific topics that related to their programs. It is important to note that over 72% of respondents stated that they would participate in workshops if they were available online. The content of the most in-demand workshops were: academic writing, thesis writing, writing a cv or cover letter, interview skills, job search strategies, identifying career goals and options, and academic presentations and poster presentations.

It is also important to note that some of the requests were for programming that is already offered by different units operating under the GSLI banner. This points to a lack of communication of the resources that are available to graduate students. Although most respondents stated that they would prefer to be communicated with through their department, many said that the current emails were difficult to navigate.

#### **Focus Group Results**

Three focus groups were held for 1.5hrs each. Two people attended the first two focus groups and one person attended the third. This equates to just under one hour of discussion per person. The groups were evenly distributed with different departments and backgrounds represented (Chemistry, Psychology, Population Medicine, Philosophy, and Math and Stats). Four people were familiar with the GSLI while the fifth person was not familiar with the GSLI's services. Though this does not give a broad base for determining the future direction of the GSLI, it does provide some information for consideration about the kinds of programming that the GSLI should think about implementing.

The discussion ranged over a broad set of issues, from comments about the kinds of programming that would be beneficial to graduate fees to the best means of marketing the GSLI's programming. In general, the main focus was on issues/problems that are currently relevant to graduate students. There was not much of a discussion in any of the sessions about the importance of professional development for long-term career prospects.

Here are some of the main topics that were discussed:

**Embedded Programming in Departments** 

- In general very good
- Could use more of them that dealt with more specific issues

#### Workshops

- SSHRC/NSERC and OGS workshops don't offer much beyond what is available on their websites
- More advanced stats training would be really helpful in addition to the basic workshops
- Many of the workshop topics are quite broad and don't narrow down sufficiently to make them worthwhile
- More workshops on project management would be helpful—these could be specifically tailored to individual programs, but they could also be more broad (budgeting, time management, etc.)
- TSS tells you the specific skills that are being developed and so it is easier to translate them into language that makes sense to potential employers
- Journal submission: How do you prepare your work for submission to a journal? How do you know which journals are good?
- There seems to be very little in the way of preparing students to use Courselink (adding students, navigating the website, etc.)
- Webinars would be really helpful because of time constraints and because of a lack of space
- The more specific the session, the more likely that the graduate student is to perceive value
- How to prepare for and deliver a lecture?
- It is unclear how to manage money during grad school because it is unclear where the funding is coming from and when.

#### Etiquette

- Is it possible to set up a list of best practices across the disciplines for issues of etiquette?
- How do you manage your online presence?
- Graduate students were unclear about some basic issues of etiquette, such as
  - o responding to student emails,
  - o how to switch supervisors/committees,
  - o developing a strong relationship with your supervisor,
  - evaluating your advisor in a confidential way
  - o conflict management

#### Non-Academic Career

- A panel discussion on how to develop your non-academic career prospects would be really helpful
- It would be really interesting to learn about the different career options available outside of academia
- Would it be possible to have a career fair?
- Some companies have key words that they search for and it is possible to embed them in an invisible font. This can bump your application to the top. How do we do this sort of thing?

#### Academic Career

- Faculty seem to be adverse [sic] to sharing how to write grants. Can we offer more programming in this area?
- Many advisors are well known for having students run over time because the project is too large
  or because the advisor is not attentive to the student. How can we help to avoid this problem in
  the future?
  - Just occurred to me that the navigation of the thesis process (timelines, requirements for advisory committee, etc.) is not transparent enough, and I have found Grad Studies, departments and other writing services (DBC) are struggling to provide clarity and this is something GSLI could work on.

#### Instructors

• How do you develop a teaching portfolio?

#### Branding/Marketing

- "'GSLI' doesn't mean anything to graduate students" (note that 75% of respondents to our survey associated workshops for graduate students with the GSLI)
- There are too many emails and they are difficult to navigate—students are unlikely to scroll
  through an email in order to get the content out of that email (note that one email is sent every
  two weeks and the message was changed to a shorter format in Winter 2014)
- Would Facebook be less annoying?
- Is it possible to send an individualized email to each student based on preferences?
- Orientation day would be the best time to advertise

#### Writing

Thesis writing is an important area that it would be nice to have more help with

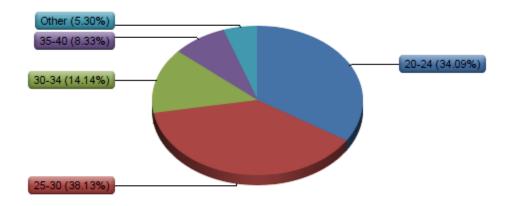
#### Badges/Certificates

• It is unclear that graduate students would perceive value in these without knowing the longterm benefits of them

#### **Grad Student Survey Results**

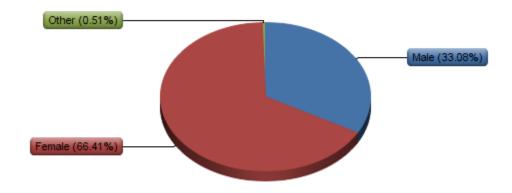
In total, there were 418 respondents. Based on an estimated enrollment of 2500 students, that would equal 17% of the population.

1. What is your Age?

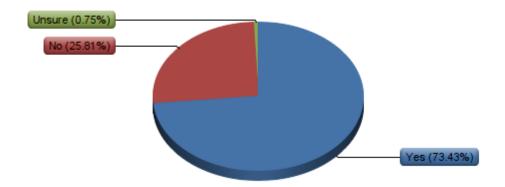


The ages in the "other" category ranged from 40 to 61 years old.

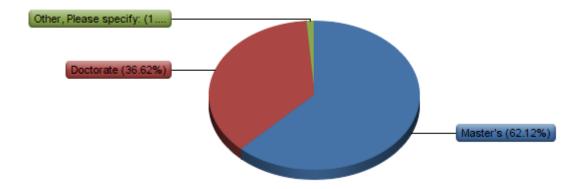
#### 2. What is your gender?



#### **3.** Are you a native English speaker?

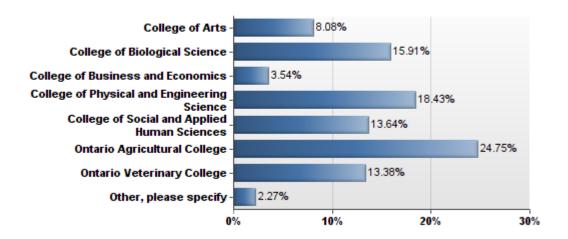


#### 4. Degree level



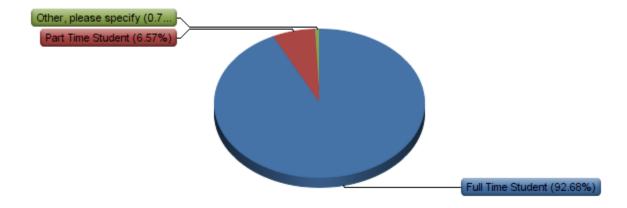
The "other" category (1%) included three DVSc, one "Grad Dip", and one "Just defended my PhD"

#### **5.** What College are you currently registered in?



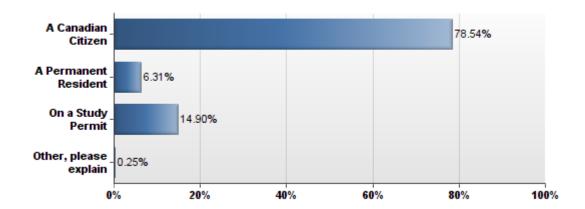
The "other category included: Sociology, Math Stat, Food Science, Engineering, School of Engineering, School of Environmental Science (2x), and one respondent stated "non"

#### 6. Full/Part Time



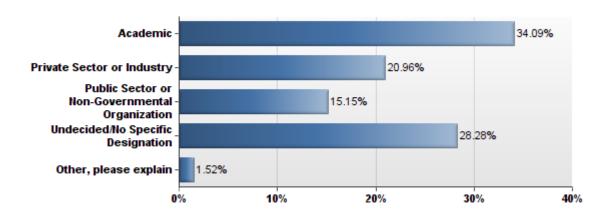
The "other" category included "leave of absence" and "on leave S14"

#### 7. Canadian Citizen/Permanent Resident/On a Study Permit/Other



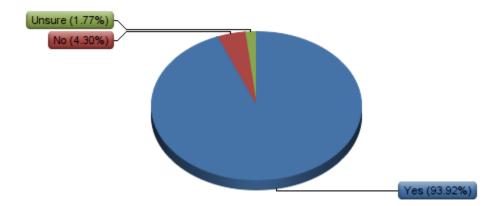
The "other" category included no explanations

#### 8. What is your primary intended career?

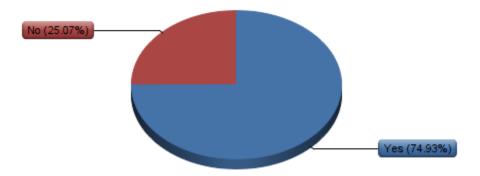


The "other" category included "Dev. Org", "Not-for profit", "author, private practice", "Combination of Academic and Consulting", "It was academic coming into my master's program, now I am unsure," and "Government". It is telling to note that more than a third of respondents intend to have a career in academia. This is not far off of the numbers of graduate students who will have a career in academia (with some estimates around 30%, though none could be substantiated with adequate research), but it is sufficiently far enough off that these people need to prepare for the possibility of a career outside of academia.

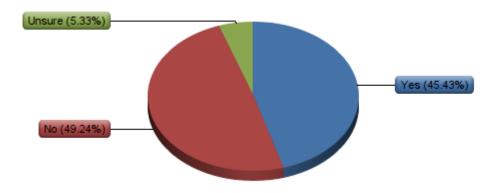
**9.** Did you know that there are workshops offered for graduate students the cover learning, instructing, research, and professional development?



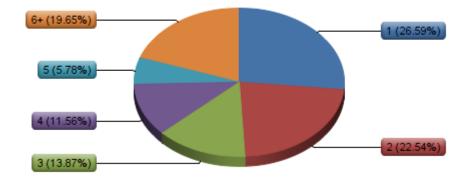
**10.** Would you associate the term GSLI with those workshops?



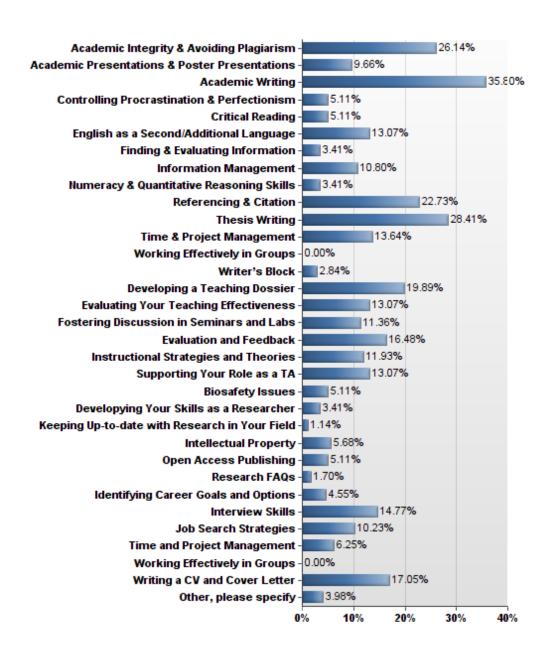
11. Have you attended any GSLI workshops during your graduate career?



**12.** How many workshops did you attend?

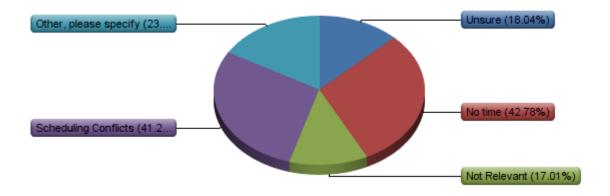


#### **13.** What kinds of workshops did you attend?



The "other" category included "SAS & SPSS", "writing a resume", "Research and Project Management and SAS BootCamp", "Graduate Student Teaching Conference", "research and project management", "MITACS – Presentation skills and networking", and "Performing Literature search".

#### 14. If no, why have you not attended any of the workshops?



The "other" category included a mixture of different responses. Thirteen respondents stated that the workshops were not accessible from a satellite location (out of town, Ridgetown, not living close to campus, etc.). Eight respondents said that they had just recently started their program or were planning on attending soon. Eight other respondents stated that they didn't feel the need to, were uninterested, felt that self-learning would be better, or that they seemed like a waste of time. Five respondents said that the workshops were always full. Five others said that the workshops were either not advertised enough, forgotten about, or that they were unaware of the offerings. There was a mixture of other responses that ranged from not being workshops for therapists, rescheduling, finding out about them too late, or having workshops in class.

#### **15.** How would you improve the GSLI workshops?

There were over 100 comments as responses to this question. These comments were grouped in descending order from most comments to fewest comments under the title of General, Content, Marketing, Scheduling, Frequency, Space, Location, Online, EAL/International, Certification, Embedding, Teaching, and Registration System. The number next to the heading corresponds with the number of comments in this category.

#### General (26)

These included a range of responses, from NA and "no comment" to thorough explanations about how to improve. I have not included the short comments such as "Have not attended", but it should be noted that quite a few students said that they were happy with the offerings. I have included three below that contain interesting recommendations:

1. Better timing for seminars; more sessions for students who are further along in their programs; more professional development for later stage students and students about to graduate

- 2. Create list of workshops, send to graduate students and ask what they'd be interested in attending, offer workshops based on demand. The few that I was interested in attending either were all full by the time I gained knowledge about them or had scheduling conflicts. If a workshop is high demand, then you would know to offer more sessions.
- 3. Some of these should be mandatory for graduate students (thesis writing etc. etc.)

#### Content (17)

The majority of students who made comments about the content stated that the content was not specific enough. Some said that this was because it was meant for a general audience, some said that it was because it was geared towards people early in their program. I have included a particularly helpful comment below. The other comments about content were varied. Two people would like more focus on teaching and professionalization. Two asked for more advanced workshops. One asked for more career-related workshops. One student asked for follow-up sessions to review materials that were generated as a result of introductory workshops. One student said that there should be a course for credit similar to UNIV\*6800 that all potential TAs have to take. Here is one particularly helpful comment about the content:

1. Offer some of the specific ones (e.g. scientific writing) more than once a semester so that it is more accessible for graduate students to fit into their schedules. Offer workshops with special guests on topics specific to academics, like how to mobilize/transfer knowledge, or how to communicate your research to the public. The topics of the workshops are excellent. However, I feel that the content is too general. Maybe too much is trying to be accomplished in too little time. Or the audience that is trying to be reached is too broad. Or the initial level of knowledge of the participants is gauged too low, so a lot of the seminars is spent on review rather than the meat of the material. I'm not exactly sure what the underlying issue is. Initially I had registered for all the Brain Food Workshops in the fall, and then I stopped going after a few because I did not find they provided any additional information than the basics that were already known. I very much value the effort that the instructors put into designing the workshops and the fact that these resources are even offered, as I know other graduate students at other universities are not so fortunate. I do not mean to be extremely critical with my initial comments, but I know how much potential the program has and I hope that that help it grow and strengthen.

#### Marketing (15)

Fifteen respondents stated that better and more marketing would help. One person asked for more advanced notice. One asked for social media and Courselink to be used. One student asked for more emails and another pointed out the ineffectiveness of emails. One student said that more detail on the information that will be covered during the session might attract more people because it will be easier to decide if it will be relevant to them.

#### Scheduling (13)

Seven respondents asked for evening/weekend workshops because it is difficult to get to the daytime workshops. Three respondents asked for summer workshops because there is more time to attend them. One student stated that it was very frustrating to have so many of the workshops scheduled at the same time because he/she had a class at that time.

#### Frequency (11)

Four respondents simply stated that they would like to see the workshops offered more frequently throughout the semester. Three people stated that they would like to see more offerings of the high-demand workshops. One suggested having walk-in sessions because it is hard for graduate students to know in advance if they will be able to attend.

#### Space (3)

One student asked for more space in popular workshops. Another asked for more space so that students can attend when they want to and not just in their final year. A third stated that another workshop should be opened up when one becomes full.

#### Location (3)

One asked for workshops at satellite campuses, another at Ridgetown, and a final at OVC.

#### Online (3)

Three students asked for online courses for those at satellite campuses. One student stated that following along online would be helpful as well.

#### EAL/International (2)

More advice for EAL students as a TA and more workshops for international students to get involved with Canadian culture through activities or volunteering

#### Certification (2)

One student asked for a certificate and another asked for a co-curricular transcript.

#### Embedding (1)

One student said that workshops should be embedded in more courses.

#### Teaching (1)

One student said that the passport to learning was helpful but that it could have been more structured. Here is the full comment:

1. I have enjoyed the teaching seminars and workshops. I took part in the passport of learning and found it helpful. But I think that this program could be much more structured. I would like to see more development in teaching. For instance perhaps there could be more specific programs necessary to gain a certificate. Something along the lines of core content for the certificate in addition to the more "elective" workshops. Also, I know that there are now opportunities for peer evaluation for participants, but I think that this would be nice to have more of a concrete description and requirements for this program. Finally, is there any way to help graduate student gain experience in university teaching?

#### Registration System (1)

One student stated that the registration system was difficult to navigate.

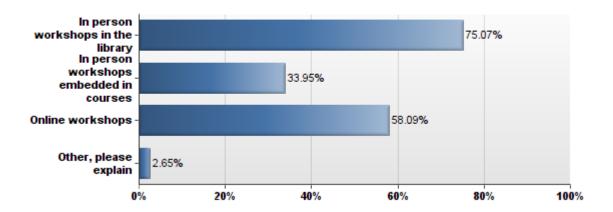
16. What are the best ways to get information to you about support services for graduate students?

The rankings were as follows:

- 1. Email message forwarded from your department
- 2. Email message from the international student listserv
- 3. University Website (e.g. Library, Learning Commons, GSLI Website)
- 4. Through your advisor
- 5. Poster or brochure in the library
- 6. Poster or brochure in the Grad Lounge
- 7. Poster or brochure in your department office or lounge
- 8. Poster or brochure in the Graduate Program Services Office
- 9. Campus Mail
- 10. The Ontarion
- 11. Other

In the "other" category, four students said a direct email from the GSLI. Three people said social media (e.g., Facebook). One person said that a graduate student listserv that people could sign up for would be best. Three people stated word of mouth or in person.

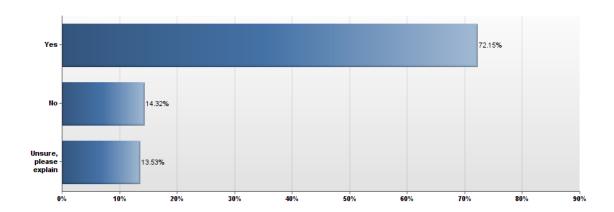
#### 17. What mediums or methods of workshop delivery are best for you?



In the "other" category, there was a range of responses:

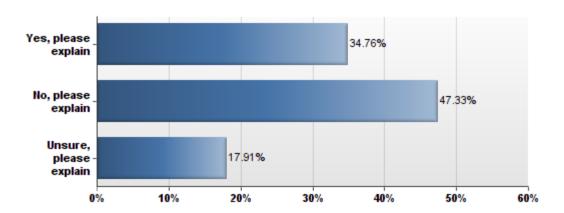
- Teleconference
- Combination of online along with interaction
- Chat with someone when I'm having a problem, online, as a chat function
- Videos
- In person but not in the library.
- in person at regional campus
- In department
- None
- You need to sell them better to students.

#### **18.** Would you participate in workshops if they were available online?



In the "Unsure, please explain" category, twenty-two out of the 40 respondents used the word "depends" in their response. It depends on: how much it is needed, time, content, workshop, relevance, structure, value, quality, topic, and schedule. There were quite a few "ifs" as well. If it is: relevant, interesting, useful, and saves time. It is clear from the responses in this category that there is not a straightforward "yes" in the 13.53% "Unsure" group, but if the value was there, then it is likely the case that this group could be swayed.

**19.** Do you have needs as a learner, instructor, researcher, and professional that are not currently being met by your program?



There were 99 responses to the "Yes, please explain" category. These were divided up based on the following headings: General, International, Learner, Instructor, Researcher, and Professional.

#### General (16)

The comments in this category varied quite a bit. There were a couple of comments about the lack of resources in home departments and some frustration about a lack of clarity when it comes to expectations about the program. There was a comment about the lack of resources in Ridgetown and another about a lack of French-centred resources. There was also a comment about a need for more outreach and understanding for disorders/conditions.

#### International/EAL (3)

One comment was about being able to perfect/review English grammar and another was about an inability to get all materials understood in class.

#### Learner (13)

There were six comments about writing (different types of essays, thesis writing, writing a paper, technical writing) and one comment about regular discussion groups. The other responses were difficult to understand completely.

### Instructor (22)

Nineteen of the 22 responses in this category were based on a lack of preparation for teaching. Some were more frustrated than others, but the general consensus in this category is that more teaching training would be helpful before students are given seminars or lectures to conduct. The other three responses had to do with communication skills (project oneself in public and pronunciation).

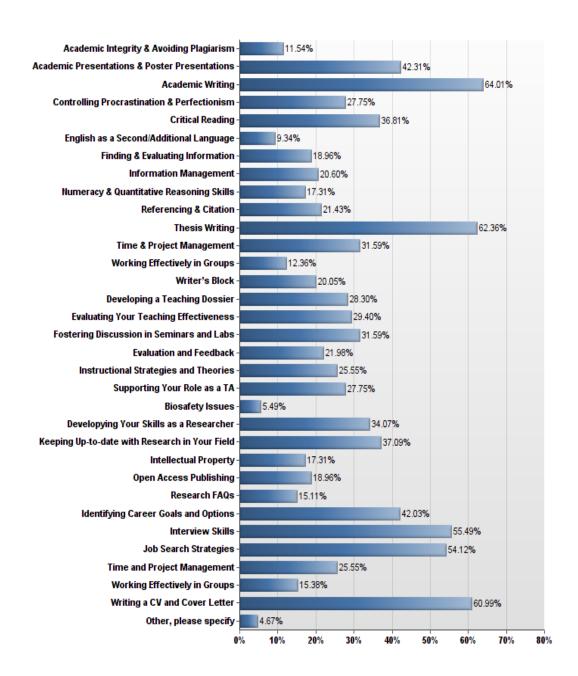
# Researcher (27)

The majority (18 out of 27) responses focused on Stats training (collection and presentation of data through software programs). There were quite a few different software programs mentioned, and so it is difficult to pull them all into one possible grouping. Additional needs that were expressed were accessing SciFinder off-campus, research and time management, funding travel to conferences, and knowing if there was a research librarian at Guelph.

# Professional (18)

Two respondents specifically asked for professional development workshops. Three asked for career guidance. Two asked for grant-writing workshops. Two asked about employment opportunities through job shadowing and learning about others in the field. The remainder asked about how to turn graduate training into professional skills.

### 20. What kinds of workshops would you attend?

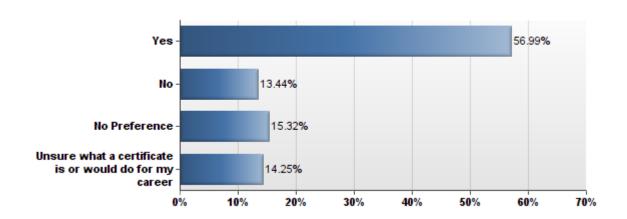


In the "Other" category, there were a variety of responses. They are exactly represented below:

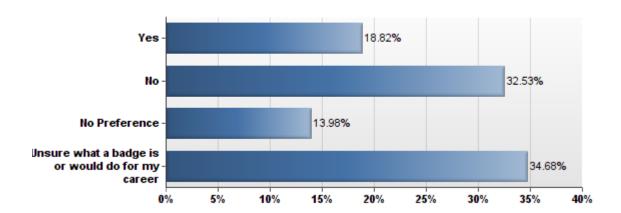
- SAS & SPSS
- Networking
- Stata program help

- Keeping up-to-date with design, data analysis as technology advances
- Prepare a defense
- Application of research in practical settings
- Transferrable skills; Customizing academic CVs for non-academic job search; how to highlight and market "soft skills"
- Defence presentation practice
- MITACS
- Designing a Course/Assignments
- Networking series for specific industry of interest
- Job Shadowing Opportunities
- jobs outside academia
- Co-op work, volunteering, consulting. Crowdfunding? Developing a professional social media presence.
- Culture of universities and challenges to existing models of higher learning
- Statistics

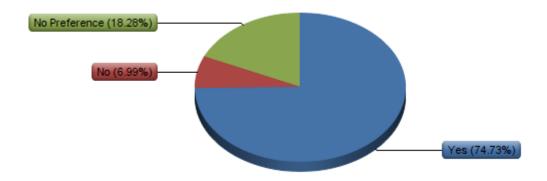
### 21. Would the opportunity to obtain a certificate motivate you to attend workshops?



### **22.** Would the opportunity to obtain a badge motivate you to attend workshops?



# 23. Would you be interested in networking with alumni in your profession?



### 24. What kinds of professionals would you like to network with?

There were quite a few different kinds of professionals mentioned. Of particular note are Academic (19), Research (9), Industry (9), Public Health Professionals (7), and Government (6).

- A wide range
- Academia and in industries related to my research (animal nutrition industry -specifically focusing on pets)
- Academic (19)
- Advocacy workers
- Agricultural Economists
- Agricultural scientists and
- Agriculture
- Allied academia professionals;

- Any (3)
- Anything agriculture related
- Anything to do with animal research within genetics
- Applied science researchers
- Bacteriologists,
- Biologists and agricultural scientists working at the academic and industry level
- Chemists
- Chemists in industry
- Community workers /family
- Condensed Matter Physicists
- Conservation networks, NGOs, industry
- Consultant enterpreneurs,
- Consultants (2)
- Consulting
- Engineering
- Environmental consultants,
- Environmental remediation professionals.
- Environmental management and public policy
- Epidemiologists
- Executives from Development organizations
- Exposure to all the career options that are possible with my degree.
- Food Safety and Quality Assurance professionals, preferably in the meat industry
- Food scientists (2)
- Geneticists and
- Government (6)
- Graduates,
- Health and food industry
- Health and R&D/research consultants
- Health professionals
- Humanities Professors.
- Individuals in the medical field
- Individuals that aren't in an academic career
- Industrial employee
- Industry
- Individuals in industry
- Industry leaders,
- Industry personnel in my field
- Industry Professionals
- Industry professionals in animal agriculture or companion animals
- Industry

- Industry, and any other professions.
- International development
- Knowledge mobilization,
- Laboratory technicians
- Landscape architecture,
- Market Analysts, , market researchers
- Medical doctors, biologists and neuroscientists
- Medical Laboratory technicians, etc...
- Microbiologists,
- NA
- NGOs, (3)
- No idea
- Not for profit organizations,
- Not sure (2)
- Ones that make lots of money
- People in "science" careers
- People in consulting firms relative to my field,
- People in psychology with jobs outside academia
- People who do research from different companies/organizations
- People who were relatively recently in a degree program and who are now on their way to becoming professor (2)
- Pharma
- PhD holders who are working in the industry
- Physicians, scientific researchers, instructors at medical schools, etc.
- Physicists who have found jobs outside of academia
- Physiologists,
- Policy makers
- Political Consultants,
- Poultry industry
- Previous students
- Primarily accomplished researchers
- Private and public sector researchers,
- Private companies in the sciences
- Private company economists
- Private sector workers with phd's
- Professionals in criminal justice
- Professionals in the public sector
- Professionals who have studied at the University of Guelph and who now have an academic job
- Professors, and
- Program evaluation,

- Psychologists,
- Public and private sector individuals who graduate from my program
- Public health professionals (7)
- Public Opinion poll consultants,
- Public Policy experts in NGO and Corporate sector,
- Public-sector/population research
- Research (9)
- Risk Assessment
- Social researchers,
- Social workers
- Statisticians working in both public and private sector
- Teachers from various levels
- Those already working in industry or
- Those working in plant agriculture and
- Those working with mental health (campus, community, or workplace). CMHA, CAMH, United Way. Program development and evaluation.
- University faculty and staff, and industrial researchers
- Unsure. But it would be interesting to see what some alumni have done/achieved. There may
  be some possibilities for post graduate opportunities I am not aware of aside only having the
  mention of post doc positions
- Urban design,
- Veterinary professionals in pharmaceutical industry
- Wildlife Conservation/Researchers
- Working experience
- Working in migration modelling or disease models
- Writing & publishing
- **25.** How would you improve the services of the GSLI (i.e., are there services other than workshops that you think would be effective, do you think that the GSLI should expand its services to recent graduates, etc.)?

There were also a variety of responses to this question. The main response, most likely due to the priming that took place in the question, was to expand services to recent graduates (23), followed by online community/resources/workshops (7), more specific programming for departments (3), and more applied workshops (2).

 A brief orientation of the GSLI activities and workshops during the new students orientation sessions

- A workshop to me sounds like it would cover general issues at a basic level instead of attending to my needs specifically. However, I may just be uninformed of the structure. It would be nice to offer some one-on-one services, particularly in the area of career development.
- Allow and support more flexibility for the department level to offer assistance.
- Analyse the workshops that are getting full very quickly and offer more (offer vs. demand)
- By providing information on latest techniques in vogue
- Conferences, yes
- Developing the program to make attraction of the students. Basically, if the workshop is focused more on the career development, the number of participants will increase
- Difficult to answer as I have not yet used any of the GSLI services
- Disband the GSLI
- Evening workshops
- Expand services to recent graduates (23)
- If possible hold workshops in a variety of places sometimes it's hard to find time to make it to the library when we are in Clinical Studies (OVC) ..workshops in pathobio would be easier to attend
- Having more GSLI opportunities in the summer when we are not TAing or doing coursework
- I like interactive workshops that make you think or understand things in a new way, instead of regurgitating strategies/tools I know about but am not using. I think services for recent graduates, especially for professional development, would be great.
- I think GSLI should expand its services and advocate the service to make more people know
- I think the GSLI needs to rebrand and think about what niche/gaps it's actually trying to fill. Why can't departments do this? If it's the case that it's here to fill in the gaps, isn't the larger problem that it exists at all? Why shouldn't departments and colleges be accountable and just provide good support? Could the GSLI act to advocate for this instead of acting to condone the lack of good specific departmental support?
- I think the workshops are enough (2)
- I would suggest to complete one workshop as an obligation for our graduation
- If there were short articles with advice about various topics (thesis writing, job search, etc.) that were available at all times (i.e. on a GSLI website) rather than one having to attend a session that is time consuming and inconvenient, I would find the GSLI much more useful. I would gladly read this sort of information over my lunch breaks, when I have a spare half hour during the day, etc.
- I'm not sure what other services are offered, so my only suggestion would be to more clearly communicate what else it is you do.
- Increase amount of people allowed to participate per section and increase time slots per section
- It might be nice to have information about workshops sent at relevant times during a graduate program. For example, near graduation it would be good to hear about workshops that deal with getting a job/doing an interview.
- It seems to me that course design should be part of the SETS graduate curriculum.
- Less emails

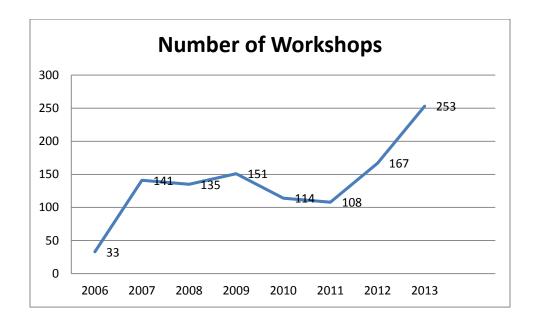
- Let us know what careers recent grads have gotten and how they obtained them.
- Making the sections more focused on a particular field
- Matching alumni with current graduates to act as mentors
- Maybe trying to get some feedback from students about the workshops and make changes to improve them
- Mock job talks, conference presentation style and delivery
- More applied workshops (2)
- More awareness of what is available would be better. Also, while I haven't signed up for a workshop, I'm positive simpler registration would be beneficial.
- More focused, see comments
- More help
- More interactive sessions where graduate students can meet and learn about the research of other graduate students
- More services for graduate students later in their programs
- More specifically directed at department (3)
- More statistics workshops during the semesters
- My program provides sufficient supports (i.e., more specialized supports) for my specific area. Because I am in a specialized program, GSLI's services are too general to meet my needs.
- Need to be mindful of schedules for courses. The online option. Recognition of attendance
- Networking
- No comment (14)
- Not sure, expanding would not be a negative necessarily. But I think that whatever programs
  the GSLI expands it should be well thought out and structured to contribute to a specific aspect
  of graduate students future opportunities.
- Offer food at the Brain Food sessions!
- Online community/resources/workshops (7)
- Open up more workshops if they are getting a lot of participants in the current workshop
- Other campuses. Stats help
- Other services would be creating a social media presence (how to effectively use LinkedIn etc.),
   collated information on job search websites/setting up searches that send you job positions
- Perhaps groups that meet more than once (e.g., a writing group) (2)
- Relevant workshops on analysis, research skills, presentation design
- Students should be encouraged to take part in other programs (ToastMasters, Mitacs, etc.); GSLI cannot do everything
- Timing is a big issue, so embedding workshops into existing courses, or creating a new for-credit
  course that consists of key workshops (possibly a year-long course, "key" workshops could be
  chosen by each cohort) would be the best way to make sure grad students get access to these
  services. Involving recent grads would help link alumni with current students, and recent grads
  may need GSLI services as much (or more) than current students, if they're actively seeking
  employment
- Unsure (6)

- Work with the counselling office to offer graduate specific one on one or small group counselling. Offer a workshop on student advisor interactions (i.e. covering your butt as a student, effectively communicating and managing expectations...)
- You could try different types of learning structures- such as a learning circle, group learning opportunities etc.

# **Workshop Growth Since 2006**

Note that as of August, 2014, there were 136 workshops in 2014. This number is in line with the general trend of the increase in the number of workshops.

Year	Number of	Percentage
	Workshops	Growth
2006	33	
2007	141	427%
2008	135	96%
2009	151	112%
2010	114	75%
2011	108	95%
2012	167	155%
2013	253	151%



# Recommendations

This section outlines the main recommendations based on the environmental scan of other universities, the recommendations of the GSLI Committee, graduate student responses, and my own experiences as the reviewer.

#### **Based on Environmental Scan**

It is difficult to provide concrete recommendations based on the environmental scan because there was no evidence offered at any other institution for one type of GSPD programming over another. Without longitudinal studies that measure the effectiveness of GSPD programming, it appears that the only justification for the expansion of GSPD programming is student demand and participation rates. That said, there are some specific recommendations with regards to GSPD programming that are worth noting.

- 1. Ensure that the GSLI's programming aligns with the recognized skill areas. Many institutions have adopted some form of programming that aligns with the skills outlined by the Tri-Agency Statement of Principles on Key Professional Skills for Researchers, CAGS' Report on Professional Skills Development for Graduate Students, and the OCGS Taskforce on Professional Skills Report. It would be worthwhile to ensure that the University of Guelph's programming is reaching these key skills areas.
- 2. **Centralize advertising of community engagement and outreach programs**. This can be seen at Carleton, Brock, McMaster, and Queen's, to name just a few of the programs. Though there are programs like this at the University of Guelph, it would be helpful to have a centralized location where all of these kinds of programs are advertised. A central list of all of these programs could be the start of a "best practices across the colleges" document that highlights what each of the departments and colleges are doing in order to prepare their graduate students for a life outside academia and also to make academic pursuits relevant to the broader public.
- 3. **Engage with Alumni**. Quite a few institutions are working hard to engage their current graduate students with alumni from their programming. "Mac10" at McMaster, for example, brings in mentors and recruiters to help bridge the gap between university and post-graduate life. A stronger relationship between the GSLI and Alumni Affairs would help to bring more prospective donors back on campus and simultaneously help graduate students learn more about what they can do with their graduate training after graduation.
- 4. **Update the Website**. In comparison with other universities, the GSLI website is very text-heavy and slow to navigate through. Focus on the "workshops" component of the website since this is accessed most frequently.
- 5. **Develop a new branding strategy**. It would be helpful to reconsider the name of the GSLI. Many of the GSPD programs at other institutions have a specific name that defines their program: "GradNavigate: Skills You Need to Succeed", "Altitude", "Expanding Horizons", "Future Smart", "GradPath", and "Aspire" are all either catchy or informative names that help to identify the kind of

programming that is available. Something as simple as "Pathways: Helping You Succeed at Graduate School and Beyond" might work well enough to engage graduate students while simultaneously informing them about our programming.

6. **Engage with other institutions**. Despite the repeated unsuccessful attempts to contact other institutions, it would be beneficial to develop stronger communication links with other universities with GSPD programming. This could result in the kinds of longitudinal studies that are essential for justifying further expenditures on GSPD programming. In the meantime, opening up the lines of communication through something as simple as an email listserv based on the contact information provided in the Appendix would be a good start.

#### **Based on GSLI Committee**

The recommendations that are highlighted here are based on the strength and consensus of the committee regarding those recommendations.

- 1. Shift responsibility for the GSLI to Graduate Studies.
- 2. **Develop a marketing strategy in order to reach as many students as possible**. It is clear that members of the committee recognize the need for better marketing of its programming. A lack of resources has been the barrier to responding to this long-standing need. This is a difficult area to deal with, but with some research in this area, it might be possible to develop novel ways of communicating with graduate students in a more effective manner.
- 3. Create a succession plan for the position of chair including the following:
  - a graduate student co-chair
  - 2-4 year term for the staff member chair
  - selection by nomination and voting by the GSLI committee.
- 4. **Re-brand the GSLI**. Many committee members stated that the GSLI needs a new name, one that is more readily recognized by graduate students as relevant to them.
- 5. **Develop criteria for including undergraduate professional programs** not already being serviced by their own program.
- 6. **Conduct another needs assessment survey**, in recognition of the changing needs of students and environment of GSPD over the past seven years. The survey should:
  - Determine areas of greatest need
  - Gauge interest in a credit course or certificate for GSLI programming.
  - Identify and prioritize the needs of ESL/EAL, post docs, part-time students, first generation students, students with families, and students who have returned after taking a leave from academia.
- 7. Develop a long-term plan to expand services to meet the needs identified in the survey.
- 8. **Recruit more faculty as committee members** with the goal of one member per college to better represent college needs.

- 9. Invite new members from the Office of International Affairs or Centre for International Programs.
- 10. When possible, **request that a student member of BGS also sit on the GSLI committee** to enhance communication between the two groups.
- 11. Create a communication strategy to share information with the colleges and non-member units providing services to graduate students, such as Campus Health.
- 12. Create a formal Terms of Reference for the GSLI committee.
- 13. **Pursue funding for a full- or part-time position** to chair the GSLI committee and provide administrative/marketing support.
- 14. **Secure a sustainable source of permanent funding**. Some suggestions for funding sources were: centrally funded from the University, funded from Graduate Studies budget, contributions from member units, grants, and student fees.

### **Based on Graduate Student Responses**

There was a lot of continuity between the focus group responses and the online survey. This section will highlight some of the strongest recommendations from the graduate students.

- 1. Develop a grant writing workshop.
- Devise a new email strategy. This could be a matter of reformatting the emails or it could be a
  matter of providing an opportunity to subscribe to emails about particular types of
  programming.
- 3. Provide "beginner", "intermediate", and "advanced" labels for the workshops
- 4. **Provide more explanation about the workshop** and how the student will benefit from the workshop.
- 5. Offer workshops online. 72% of the respondents stated that they would participate in workshops if they were available online. These workshops could be online modules or they could be workshops broadcasted live on the Web. This would address some of the issues of time, location, and space. This need may be addressed, in part, by the online modules "MyGradSkills" created by the Ontario Consortium for Graduate Professional Skills, which includes the University of Guelph.
- 6. **Develop a strategy for offering workshops** that are in demand. This might involve polling the graduate students at the beginning of the semester or simply offering more iterations of indemand workshops throughout the semester.
- 7. Pursue the possibility of making a writing course mandatory for graduate students.
- 8. **Consider offering more workshops during the summer, evenings, and weekends** to cater to students with full daytime schedules.
- 9. Offer more workshops for stats, SAS, SPSS, SATA, and other statistical software programs
- 10. **Expand programming to incorporate more interaction from relevant fields** (Academic, Research, Industry, Public Health Professionals, and Government).
- 11. Expand programming to recent graduates

### **Based on Strategic Priorities of the University**

#### **Graduate Studies Priorities**

- 1. Focus on programming that facilitates early time to completion. By focusing on programming that emphasized healthy student-advisor relationships and project management, students would be more likely to complete their programs on time.
- 2. Operationalize the learning outcomes. If Graduate Studies is serious about their learning outcomes, then make them a mandatory part of every graduate program. If these outcomes are not being met in the programs, then provide a mandatory course for all graduate students wherein the learning outcomes will be realized. This is already in process in many programs, but it should become a specific area of focus for all graduate programs. This kind of programming would not necessarily be part of the current GSLI's mandate, but would be part of the GSPD mandate if the GSLI was incorporated within Grad Studies.

### **Library Priorities**

1. Provide support for turning in-person services into online services. Under the rubric of improving accessibility, the Library has identified the creation of a Virtual Learning Commons as a priority. This should include the development of online resources for graduate students based on the workshops are already available. These learning objects could then be imported into graduate courses. These objects would then save time by covering the basics and permit a more advanced classroom presentation if that is requested by the faculty member.

# **University Priorities**

- 1. The University should support its strategic priorities by providing funding for the GSLI. The main priorities of the GSLI are mirrored in the main vision statement of the Integrated Plan: learner-centredness, research-intensiveness, internationalism, collaboration, and open-learning. The GSLI is the central conduit through which graduate students experience the breadth of these services. In particular, there are few areas on campus who help International students to the degree that the GSLI does. ESL/EAL support needs to be supported by the University. If the University is going to continue to grow its graduate students in new strategic areas (e.g., food security, alternative energy, bio-product innovation, and the bio-economy), then it must provide more support for International graduate students.
- 2. The GSLI should **engage more with the School of Civil Society (SCS) and the Institute for Community Engaged Scholarship**. These two units both focus on the kind of outreach that other universities are implementing. The SCS should become a core partner for the GSLI.
- 3. **Establish and maintain long-term relationships with Alumni**. The Integrated Plan has identified a "Guelph Forever" program that will "promote life-long reciprocal engagement with alumni in active and participatory networking, learning, mentoring, and advisory roles." This would present an ideal opportunity for former graduate students to connect with current graduate students and provide current students with direction and mentorship and former graduate students with enriching volunteer opportunities and access to potential new recruits.

#### Based on the Experience of the Reviewer

- 1. **Establish a stronger relationship with the GSA**. The regular turn over in the GSA executive and limited access to current members make establishing and maintaining a strong relationship with this important group challenging. Developing a stronger relationship with the executive and board members by encouraging the current graduate student members of the GSLI to work more closely with the GSA executive would provide an important perspective and better clarity on areas of student need and how they should be addressed.
- 2. Work with Ryan Brejak in Alumni Affairs and Development to develop a stronger relationship with Young Alumni. It is in Ryan's portfolio to manage Young Alumni, and so it would be fitting to work closely with him to develop a stronger relationship with recent graduates of our graduate program. I do not believe that, traditionally, graduate students have been a group that have been identified for relationship building, so this might be a partnership that benefits both the GSLI and AA&D. Elizabeth Thomson, a former Guelph graduate student and a member of AA&D, would also be helpful in this regard.
- 3. Have a frank discussion with members of the GSLI about their role in the GSLI. It would be a good idea to have a discussion with each member about his or her role on the committee and whether there is perceived value of the contribution made to the committee. In general this is a good approach that helps to ensure that committees are getting the most out of their members and that members feel as though their contribution matters. In addition, there was a sense that some members of the committee were not entirely pleased with their role and their contribution to the GSLI.

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