

# KEY FINDINGS & RECOMMENDATIONS

## PART 1: INCORPORATING REASONABLE ACCOMMODATIONS

### STUDENT-SUPERVISOR RELATIONSHIP

*“He treats me differently, but not in a negative way. I think that he is more in tune with what is going on with me medically and mentally than others and acts accordingly. He goes out of his way to help with anything that he can and is an advocate. I’m not sure he does this for other students – although I think he would if they required it.”*

*“I have not reported my disability – PTSD – to the university or my supervisor because I was afraid there could be negative implications... people may not want to work with me.”*

*“My vision loss affects me in particular ways so that I don’t always need accommodation; yet I am always singled out and asked if I need help. I feel like my supervisor doesn’t ask me to do certain things because he thinks it might be hard for me. I like to make my own judgments.”*

*“My supervisor doubted my competence because I had severe anxiety issues for most of my graduate program.”*

*“Although he’s been supportive, expectations have changed since I’ve been ill and he no longer discusses my future, i.e., academic jobs, although I know he continues to have these discussions with his other students.”*

### RATIONALE

Experiences of the student-supervisor relationship vary along a continuum from very poor to very effective, with most relationships realized between two extremes: good in some ways, fair or poor in others. High-quality relationships between students and their thesis advisors (supervisors) are associated with benefits for the university, the supervisor and the student. These benefits include timely rates to degree completion (Girves & Wemmerus, 1988; Lovitts, 2001), lower rates of attrition (Jacks et al., 1983; Lovitts, 2001; Golde, 2005) and successful socialization into the department and discipline (Weiss, 1981; Gerholm, 1990). Since supervisors often provide career advice, letters of reference to potential employers and/or further mentoring after graduation, the

student-supervisor relationship is one of the most defining relationships of the student's careers.

We evaluated the quality of the student-supervisor relationship for students in master's and doctoral thesis-based programs across five metrics: whether the supervisor treated the student differently on a personal level because of their disability; whether the supervisor treated the student differently in the research setting because of their disability; the supervisor's helpfulness in providing accommodations; the supervisor's understanding of disability; and the overall quality of the student-supervisor relationship. Our data (Figure 6) suggest that the majority of graduate students with disabilities had positive and functional relationships with their thesis supervisors. There were no significant differences between master's and doctoral students in this regard (Figure 7). Furthermore, consistent with data from the general graduate and postdoctoral populations, graduate students with disabilities reported that they met most frequently with their supervisors around research issues, and much less frequently around career development issues. Meetings around disability or accommodation issues took place much less frequently, on an "as needed" basis (Figure 8).

In positive student-supervisory relationships, the qualities of an effective advisor include high levels of interaction (accessibility, frequent informal interactions, and connections with many faculty members) (Weiss, 1981; Girves & Wemmerus, 1988; Gerholm, 1990) and purposefully helping the student progress in a timely manner (Lovitts, 2001). Students also note flexibility, respect and strong communication skills to be important characteristics of effective supervisors (Skarakis-Doyle & McIntyre, 2008).

Students and their supervisors who have realized high-quality relationships also have achieved a mutual understanding of expectations around the roles and responsibilities of both the student and the supervisor in the student's graduate program. It is necessary to clarify such expectations since considerable variation exists in to the roles of both supervisor and student. The roles of both supervisor and student are negotiated around topics such as: funding; graduate student employment; the frequency of meetings; timelines; the type, nature and frequency of feedback provided on written work; authorship and intellectual property; responsibility for thesis topic development and methodology; and the role of other committee members and co-supervisors (Skarakis-Doyle & McIntyre, 2008). Supervisors may also differ in how ideological or opinion differences are handled and communicated to graduate students (Skarakis-Doyle & McIntyre, 2008), which may be a reflection of their own experience of being supervised.

The variation around roles and responsibilities is likely related to differences in disciplinary cultures and the position of the supervisor. For example, the culture of the discipline or department may determine the format of a dissertation, how the thesis topic(s) are chosen, how the research is conducted, how funds are allocated, and how students and faculty interact (Zhao et al., 2007). In addition, variation among institutions in the requirements of different graduate programs, different roles of graduate officers,

and policies around the role of the supervisory committee also dictate expectations that must be considered in the student-supervisor relationship.

The quality of the student-supervisor relationship declines when expectations are not clear to both supervisor and student, or when they are not mutually agreed upon. When the student has a disability, there is a higher risk of mismatched expectations in the student-supervisor relationship as a result of additional factors that must be negotiated by both student and supervisor.

Our qualitative and quantitative findings indicate that, while most graduate students with disabilities have solid and functional – even strong – personal and professional relationships with their supervisors, and that their supervisors were for the most part understanding of disability and accommodation issues, there were some broad categories of scenarios where the student-supervisor relationship had the potential to break down (Figure 9). Situations where disability impacted the student-supervisor relationship significantly included: the definition and clarification of expectations around productivity and accommodation; student non-disclosure, fear of stigma and the evolution of potential crisis situations; and attitudinal barriers on the part of the supervisor. The discussion paper included in Appendix E describes in detail several factors influencing the success of the student-supervisor relationship for students with disabilities in graduate school.

*“Casual discussions about any worries I have surrounding anything, not just school related topics. I am lucky as my advisor also has a disability and we therefore have many similar experiences.”*

*“I have an amazing supervisor and am very fortunate. He makes up for what the University's student disability services program/office lacks and goes above and beyond to do so. I would not be at the level of graduate studies that I am at without him.”*

*“My supervisor/advisor is very flexible when dealing with my needs. I have not ever been given the impression or suggestion that I present any complications that are seen as an inconvenience to him. Discussion with my supervisor regarding any questions or concerns is strongly encouraged with an open-door policy throughout the department.”*

*“My supervisor doesn't really have enough time to properly supervise, not to mention mentor, despite being tenured for a while already. I feel like a supervisor with more time/effort would have been able to support me better around my disability. Also, I have a strong belief that my previous supervisor dropped me because he found out about my disability when I was forced to reveal it to get accommodations (because the disability office couldn't do anything besides making recommendations).”*

## RECOMMENDATION 1: STRENGTHEN THE STUDENT-SUPERVISOR RELATIONSHIP FOR STUDENTS WITH DISABILITIES IN GRADUATE EDUCATION

Recognizing the central and critical importance of the relationship dynamic between the graduate student and their thesis supervisor (or curriculum and practicum advisors) to the success of any graduate student, and also recognizing the confusion and myths often surrounding disability, we recommend that efforts be undertaken to educate both students and supervisors about their rights, obligations and responsibilities, in particular those that pertain to disability in the context of graduate education, in order to foster strong relationships and student success. Specifically, we recommend that:

- a. New faculty member orientations, as well as ongoing offerings through relevant university offices (e.g., centres for teaching and learning, faculty conferences, etc.), include training and resource materials around graduate studies, disability, and the student-supervisor relationship;
- b. Guidelines be provided to supervisors to help them identify the essential requirements for trainees (i.e., students and postdoctoral fellows) successfully conducting research in their research environment;
- c. Guidelines for students and supervisors, patterned after best practices in other contexts, be developed for framing ongoing conversations around the interaction of disability and the graduate education environment;
- d. Awareness of students, faculty and DSOs of the requirements of graduate study, both at the program and curriculum levels, and the interfaces between disability and graduate education, be increased through appropriate educational and professional development programming;
- e. Faculty liaisons be established within an institution, with resources and supports for students with disabilities at the graduate level. Liaisons should act as advisors to faculty members seeking resources, information and advice on accommodating graduate students with disabilities;
- f. Where appropriate, existing graduate faculty leads/officers of academic units within an institution should be provided with resources and supports for students with disabilities at the graduate level. These individuals should act as advisors to faculty members seeking resources, information and advice on accommodating graduate students with disabilities;
- g. Institutions, administrators and graduate faculty should be provided with resources around the impact of disability and accommodation issues on the student-supervisor relationship in graduate education.

*“Though my one supervisor respects me, I sometimes feel he does not fully understand my needs or the reasons for those needs. That's fair but can make for some discomfort. There is the assumption that just because I present as such as a strong writer, I do not have language gaps in other areas (i.e., spontaneous oral expressive language is difficult for me, but with the additional time writing allows, I am a very good writer).”*

*“I have an excellent relationship with my supervisor. We have a clear understanding of each other's expectations and discuss things on a regular basis. My supervisor is there when I require support and will always advise me if he will not be available for any extended period of time.”*

*“People like me are easily stressed out and confused about choosing an appropriate topic and research questions. We need to be mentored and guided more than the others.”*

## ESSENTIAL REQUIREMENTS OF GRADUATE EDUCATION

*“I did not really recognize my disability until grad school. I met with disability office and they didn't even read my assessment, but just sent a generic letter to my supervisor recommending additional time. I was looking for some help from them in understanding how I might overcome/compensate for my disability; but the meeting lasted only about 7 minutes. My supervisor and I invented some sort of accommodation, I'm not at all sure it is the best or fairest, but I don't have any better ideas.”*

## RATIONALE

Essential requirements and academic rigor are strongly linked in higher education. Rose (2009) identified the conflation of these two issues as a significant barrier to graduate education for students with disabilities, in need of policy and practice development. For example, authorship and intellectual property challenges with respect to students requiring accommodation to publish their work was identified as a significant challenge. However, our data (Figure 10) do not support this assertion, as only a small fraction (less than 7%) of students with disabilities in graduate education identify authorship or intellectual property challenges with disability accommodations required to publish their work. Furthermore, it was clear that students were being well-educated on academic integrity, intellectual property and responsible conduct of research guidelines and policies (Figure 11), but were not being educated on concerns that faculty may have around disability, accommodation and academic rigor.

Consultations with the DSO, institutional human rights office, and graduate deans' communities as part of the project identified the concept of essential requirements in graduate programs as a particular and emergent challenge in the field. As described in our discussion paper on the subject (see Appendix D), the definition of essential requirements in the context of graduate education, by analogy to the application of *bona fide* occupational requirements and the associated legal precedents, requires identification of the specific competencies and skills a student must gain during their time in graduate school, and whether any of these skills must be demonstrated in a prescribed way.

Essential requirements or competencies are discipline- and field-specific. In today's multi-disciplinary culture, it is entirely conceivable that two research-stream students in the same department, working for the same dissertation supervisor, could have significantly different competency requirements. In the context of students with disabilities, as outlined in Appendix D, accommodation plans must take into account what the student needs to demonstrate unaided in their field. This in turn requires an appropriate understanding of both what the student's accommodation needs are as well as what the requirements of the discipline are. However, as we note in our discussion paper on the subject (Appendix D), no one party may be knowledgeable in all areas. Indeed, the importance of informed faculty in collaboration with the student and the disability service provider cannot be understated in this context.

Additional to the discipline- and field-specific competencies are program-specific competencies established by the department and more general – non-technical – competencies that could be set out by the faculty of graduate studies or other relevant body (see schematic in Figure 12). As graduate co-curricular programming focused on professional skills development (e.g., institution-specific programming; mygradskills.ca) continues to expand in scope and availability, the establishment of competency requirements – as well as their translation into “soft skills” for employment transition – needs also to be taken into consideration. Taken together, the clarification of the essential requirements for all components of graduate education needs to be folded into the ongoing discussion in the higher education space about the purpose and intended outcomes of graduate education.

The length and breadth of academe, encompassing the multitudes of disciplines, sub-fields and specialties, has long been a barrier to the establishment of unifying standards and competencies in research-stream graduate education. Professional-stream programs, through their interface with professional accreditation bodies, are farther ahead in this area, having defined essential requirements and competencies for students to follow. However, these programs often experience challenges, with respect to the interface between essential requirements and the institution's duty to accommodate its students.

Mindful of the need to preserve the rigor of any given discipline, as well as the freedom of individual faculty to set out the appropriate competencies and requirements for their students, oversight of the definition of essential requirements – at the

departmental, faculty, institutional, or accrediting body level – remains important in order to promote the consistency, equity, fairness and integrity of the discipline.

## RECOMMENDATION 2: CLARIFY ESSENTIAL REQUIREMENTS FOR GRADUATE PROGRAMS

Recognizing the different aspects of essential requirements in graduate education, as well as the inconsistent application and understanding of essential requirements across disciplines and program types, we recommend that efforts be undertaken to educate both students and supervisors about essential requirements and their interfaces with disability and accommodation. Specifically, we recommend that:

- a. Essential requirements for trainees ought to be inclusive of accommodation-related needs of students with disabilities;
- b. Where these have not yet been developed, guidelines be developed and provided to practicum supervisors to help them identify the essential requirements for trainees successfully conducting the practical components of their programs;
- c. Changes to standards for essential requirements in professional accreditation bodies be advocated for, in order to integrate issues faced by students with disabilities;
- d. Professional accreditation bodies consider the impact of disability on time to completion in professional graduate programming for students with disabilities in their accreditation process;
- e. A values and principles of essential requirements guidance framework for institutions and programs be developed and shared;
- f. A faculty guide on essential requirements in the context of disability be developed and shared; and
- g. Creativity, flexibility and cooperation among the student, faculty, supervisor(s), and graduate program staff be fostered to better enable access to accommodations in the context of essential requirements.

## ACCOMMODATION FRAMEWORK IN GRADUATE EDUCATION

*"I did not register because they told me that they could provide only services, such as note-taking. I was able to negotiate extensions for courses and comps with my professors. However, when I needed an extension for my program, I had to register for*

*an accommodation.”*

*“All I was able to get from the disabilities office was some amount of help with trying to get extensions for some course papers. Ultimately, my profs chose to ignore the disability office's recommendations (and the office said that they couldn't do anything further for me) and I was forced to reveal a lot of information about my disability and deal with all of the paperwork myself.”*

*“I was largely unaccommodated. I was able to gain materials in other formats through library services and able to arrange extensions on class work with individual profs. My disability counsellor identified I needed access to hardware and software accommodations that have still not been met, to the detriment of my studies.”*

*“Despite being a PhD student I am treated no differently than an undergraduate student. It seems that all students registered with disability services are treated as a homogeneous group. I find this to be not only incredibly discouraging, but also rather offensive.”*

## RATIONALE

As with disclosure, provision of accommodations for graduate students with disabilities is a complex, ever-changing process that involves many individuals. As a student progresses through their program, their accommodation needs may change based on their evolving needs, the advancement of their research, and the needs of the program. For example, in the early part of their program, which is usually course-based, the student may require a note-taker and other classroom accommodations. As their program progresses to research and field work, the student may require a research or field work assistant. As they move into the writing stage, the student may require an editor. While this is a very simplified example of how accommodation needs may change, it demonstrates the various stages through which the student may progress and through which their supervisor, department and DSO must be prepared to support them. To this end, the data from the National Graduate Experience Survey (Figure 13) made evident that students were often developing or modifying their accommodations, as they recognized that the graduate environment translated into significantly different accommodation needs from the undergraduate setting, and also that their graduate programs may evolve overtime.

Students also identified (Figure 14) that not all their accommodation needs were being met. While some students did identify an ability to manage their programs in the absence of the appropriate accommodation, in their qualitative responses students indicated a greater level of difficulty and stress completing their graduate programs as a result.

Finally, some students identified as requiring a greater breadth of accommodation needs (Figure 15) in the graduate education environment than in the



undergraduate setting. This is expected, given the variety of in-class and out-of-class learning environments found in graduate education, in both research-stream and professional-stream programs.

The project uncovered perceptions (among students) that the DSOs did not provide them with the support they needed for their studies (Figure 16). Additionally, some felt that the DSOs lacked awareness and/or understanding of the requirements of graduate study. With the way the accommodations framework system in postsecondary education is currently set up, it requires that the student understand and identify the accommodations for which they are eligible, as well as request that these be implemented. Among DSOs, Faculties of Graduate Studies and other departments, a need for clarity was identified as crucial in terms of understanding respective roles and responsibilities. As an ultimate result, disability services offices were more likely to meet the accommodation needs of students in professional programs than of students in thesis-based programs (Figure 17).

Funding was also found to be an issue when it comes to accommodations. Traditionally, funding is given without thought of the extra costs that disability can sometimes bring. This resulted in students either not being able to access the accommodations they need or having to pay out of pocket to implement them.

Another important aspect of accommodations that was identified was the student's relationship with their supervisor. Being able to have open conversations with one's supervisor regarding disability and the need for accommodation greatly increases the opportunity for success and likelihood of completion and may enhance the student's overall educational experience. In particular, disability services offices were not seen to be in communication with students' thesis supervisors around accommodation issues (Figure 15), highlighting potential disconnects among the student, the supervisor and the disability services office around accommodation provision and their integration into the graduate setting.

Figure 18 synthesizes our findings and identifies factors that may affect the success of the student-disability services provider relationship in the graduate setting.

*“The student disability service people I have worked with have absolutely no idea how to work with my kind of disability in a graduate school context. They came up with accommodations but few of them were particularly useful to me and my context.”*

*“The process of obtaining accommodations was very stressful – my department was initially not receptive to them. It has made for a tense relationship that makes it difficult to insist on accommodations being honoured.”*

*“I don't feel that my department respects my disability accommodations and it is sometimes difficult to request more information or ask for things that my*

*accommodations cover because certain people have seemed unreceptive, and not supportive, in the past.”*

*“Overall, I feel there is a lack of communication and follow up with the disability department and other departments and faculty staff regarding my accommodation plan.”*

*“I can say I'm deaf until I'm blue in the face. No accommodations were made unless I insisted and then I was labeled difficult. I managed to get a special 'phone' installed, but the second I graduated, it was promptly uninstalled. Someone else in the future could have used it, I'm sure.”*

### RECOMMENDATION 3: DEVELOP ACCOMMODATION FRAMEWORKS IN THE CONTEXT OF GRADUATE EDUCATION

Recognizing that graduate education is, by its nature, more complex than the undergraduate setting, and that the breadth of situations in which a student may need to be accommodated is greater, and further recognizing the corresponding complexity of accommodations for students with disabilities in graduate education, we recommend that the accommodation framework and models in use for the graduate setting be examined and improved to better ensure the success of graduate students with disabilities. Specifically, we recommend that:

- a. Funding and policy/practice models at the provincial level consider the differences between undergraduate and graduate education, and recognize the critical components of graduate learning that take place outside the traditional classroom context;
- b. Funding and policy/practice models in use at the institutional level consider the differences between undergraduate and graduate education, and recognize the critical components of graduate learning that take place outside the traditional classroom context;
- c. A framework for disability services offices to work with liaisons within the Faculty of Graduate Studies and other faculties relevant to graduate education on campus be identified and developed;
- d. All relevant agencies and institutional offices work together to periodically and continually evaluate the changing needs of the student, in the context of the program, advances in the field, and the evolution of the project and the disability;

- e. Universally designed graduate environments be collaborative and inclusive of all aspects of the institution that need to be engaged in the student's case, continually evolving to meet the needs of students and their programs;
- f. Awareness of students, faculty and DSOs with respect to the requirements of graduate study, and the interfaces between disability and graduate education, be increased through appropriate educational programming;
- g. Tri-council agencies (SSHRC, NSERC and CIHR) establish funding mechanisms for students and early-career researchers with disabilities, analogous to those in place within American granting bodies;
- h. The awareness of students with disabilities with respect to the nuances of the student-supervisor relationship and the impact of early and ongoing conversations around disability issues with their supervisors be increased through appropriate educational programming;
- i. Professional development opportunities be provided at relevant regional and national meetings (e.g., CACUSS annual conferences) around the experiences of graduate students in general and graduate students with disabilities specifically for disability services staff;
- j. Professional development opportunities be provided at the institutional level around the experiences of graduate students in general and graduate students with disabilities specifically for disability services staff;
- k. Best practices and principles around the accommodation of graduate students with disabilities in thesis-based graduate programs be compiled for use by DSOs and collaborating agencies; and
- l. Disability Services Officers develop guiding principles around the accommodation of students with disabilities in graduate thesis-based programs that take into account a holistic view of the graduate environment and the evolving context of the program, discipline, thesis project and disability with which the student functions.

*"I think my biggest unmet need has been to have someone help me avoid diverting, or staying on track. As a person with an ABI, I find it very hard to organize and then write out my thoughts. You would not believe the amount of work I have to do, with the organizational help of my partner, to slug my way through a text. Even reading complex material takes more time because I have to take careful notes – otherwise, I just forget what I read."*

*"My disability means that I do not seek out opportunities for collaboration with my peers,*

*but our academic relationship as independent researchers is not affected by my disability (if I WAS having to do group work, it would be). I have a hearing ear dog and the students have been nothing but respectful and inclusive of us.”*

*“My department is not accommodating to students with disabilities and refuse to recognize the unique needs of students with disabilities. The disabilities office at my institution does not advocate for disabled students – they direct students to the university ombudsman when presented with student complains of improper treatment.”*

*“There needs to be a revision of policy covering the accommodations and funding needs of graduate students. We are bunched in with the undergraduate who have different requirements. As well, there needs to be more transparency on how decisions are made on requested support or funding. We are in the dark how they decide it and the explanations just don't make sense.”*

## DISCLOSURE OF DISABILITY AND ACCOMMODATION NEED IN GRADUATE EDUCATION

*“My faculty is very open and accepting. They helped me seek assistance from the disability department. However, I do feel as though once I explained my disability and signed up to accessibility services that was it. Are there not any additional services for students with disabilities. I just felt like perhaps there would.”*

*“There is a lot of competition in graduate school for scholarships and publications, and I think sometimes my accommodations are viewed as unnecessary and threatening.”*

*“They do not see my accommodations as fair and do not like being inconvenienced by my disability. They see the business world as a competitive environment.”*

*“Most students are unaware of my disability. It does sometimes prevent me for making stronger relationships with other students as I tend to keep to myself.”*

## RATIONALE

In graduate school, disclosure of a disability or accommodation need is a process rather than an event, as a student’s need for accommodation will evolve throughout their program. The need for disclosure may change as the student engages in their research work, attends graduate-level courses or as the nature of the student’s disability changes. Institutional complexity, particularly as it is relevant to graduate education, means that disclosure of accommodation needs by the student may occur to several individuals (faculty, department heads, etc.) before the accommodations can be

discussed by a team. The student and DSO must work within the policies and procedures of academic departments, faculties and the institution in order to organize accommodations. However, students are often unaware of these policies. DSO staff may have little to no experience assisting a graduate student to access accommodations within the program and/or be unfamiliar with the requirements of a specific graduate program. Necessary knowledge of policies and practices may need to be developed. As well, policies and practices for accommodating graduate students can translate into a lag between identification of an accommodation need and implementation, potentially interfering with program milestones (e.g., thesis work, research, field placements).

Disclosure in the graduate environment is a complex process, which involves the student and those essential to the student's education, including DSOs, supervisors, faculty, deans and department heads. There are some key differences one must note between disclosing as an undergraduate student and disclosing as a graduate student. Graduate education is more independent, research-focused, and driven by timelines and milestones. For professional-stream graduate programs, there is also the issue of certification and accreditation post-completion.

Research-stream graduate programs are less structured and rely heavily on the mentorship relationship between the student and their supervisor. The lack of structure and formality and variety of environments encountered adds to the complexity of the graduate student environment and to the continual need for novel accommodations throughout a program.

The student's relationship with their supervisor can greatly influence the success of graduate education. Students must decide what is best for them in terms of disclosure based on their interaction with their supervisor, their own comfort level, their needs, and the other supports available to them.

Some students, whether at an undergraduate or graduate level, choose to disclose their disability publicly in order to promote greater inclusivity and better accommodation for themselves and others. The decision to disclose openly is highly personal and is therefore undertaken for varied reasons as suits each individual.

Within the graduate environment, it is important to put a plan in place for appropriate and accurate disclosure. Students, disability service providers and faculty must realize that there is a difference between disclosing a diagnosis and the need for an accommodation. With an increased number of students with diverse needs, understanding disclosure is critical. Given the sensitivity of this issue, it is important for different university departments to work collaboratively to create an inclusive graduate education environment. A proactively designed, universally accessible graduate education environment is an ideal that requires the engagement of service providers, academic departments, schools of graduate studies and other faculties, as well as the full participation of both individual faculty members and students with disabilities.

*“I have not told my thesis advisory committee that I have a learning disability. I am not registered with Disability Services and do not receive accommodations, so I did not feel that they needed to know.”*

*“I had fine relationships with other students before I started having issues due to my disability. They generally don't understand the effect that my disability has on me and think that any accommodations that I get are just ways that I get away with doing less work than them or getting it easier than them.”*

## RECOMMENDATION 4: PROMOTE AWARENESS ABOUT DISCLOSURE IN THE GRADUATE EDUCATION ENVIRONMENT

Recognizing the challenges and stigma often associated with disclosure, as well as the roles that disclosure plays in the student-supervisor relationship and provision of accommodation, particularly at the graduate level, we recommend that efforts be undertaken to provide educational materials and supports to service providers and students transitioning into graduate school on disclosure. These supports are intended to ensure the full awareness of the nuances of disclosure in the graduate environment. Specifically, we recommend that:

- a. Practice guidelines for service professionals around the differences between graduate and undergraduate education, and the impact of these differences on the disclosure and accommodation processes, be developed; and
- b. A toolkit for undergraduate students with disabilities interested in transitioning to graduate education be developed, to educate them on the differences between graduate and undergraduate education, as well as on differences in the involvement of the DSO and other university offices.

*“Overall, students in my program were very supportive of my disability-related issues (much different experience than in my undergrad.) Students in this program were also much more open to self-disclosure, so students with disabilities were able to meet and discuss their challenges and experiences, which is something I had never had the opportunity to do – the environment of being silent and confidentiality and shaming of people with disabilities had always given me the perspective that I was the only one in any given situation with a disability. As well, we were able to talk about our collective problems with the disability office, which gave me much more confidence to fight for my needs and to be angry when I didn't receive them, instead of internalizing everything as my own fault of inadequacy. I found students without disabilities were always interested*

*to hear about my experiences, shocked to hear about the problems that still exist, and always willing to help. They also didn't treat me as 'different' after they found out. There were some students who were ignorant about disabilities (people with disabilities were not very smart, they got all sorts of 'free stuff' from the disability office). I think ALL students should have to do tours of disability services, and should need to understand disabilities as a requirement of their orientation. Also would be helpful because there are tons of people suffering silently with disabilities who do not know it."*

## ALTERNATIVE FORMATS

*"1. Alternative formats – very poorly done to the point where I had to redo them – I was shocked that the alternative format dept. In the library did such poor work – I felt like the first blind student although I know that isn't the case (I've attended 2 other universities and did not run into this barrier) 2. Tactile maps – again so poorly done that they did not help even with assistance 3. Field work personal assistant – this has been the biggest help and has been incredibly valuable 4. Alternative exams – the profs have been good at providing alternative tests 5. Technology for alternative testing – I was shocked that the university did not already have the technology in place for my testing i.e. a braille display 6. Assistance with producing visuals (charts / graphics) for presentations – still trying to work out best approaches for this."*

## RATIONALE

The project's surveys and discussions identified availability of and access to class and research materials as a challenge encountered by many of the study's participants. There may be a lack of understanding among faculty and library/archives professionals of what constitutes accessible formats and who is eligible to receive them. Alternative formats may include Braille, electronic documents, or any other format that provides students with the access they require. Alternative formats were traditionally thought to be for students with print disabilities, such as visual impairments or learning disabilities. However, it has since been discovered that these formats can benefit a range of students. For example, electronic documents allow students with disabilities not to have to carry heavy textbooks, which may otherwise be a challenge. Availability of materials in alternative formats are critical to the success of students who require them. In spite of this, there continues to be challenges around the access to acquiring the needed materials.

In graduate education, this challenge extends well beyond the provision of classroom materials in alternative formats. To elaborate, it can encompass availability and accessibility of materials required as part of background readings in the laboratory, research group, library/archive and fieldwork contexts. Indeed, in many instances, students may need to access materials that are decades or centuries old; esoteric materials not available in the mainstream; and/or custom materials created by other researchers for use in different contexts. Books and records may be fragile or preserved in restricted access areas due to age and/or importance. Students may need materials “on-demand” as opposed to according to the scheduling offered by coursework. Materials in alternative formats may be required for research and employment scenarios in the context of graduate education. The multiplicity of possible alternative format needs and scenarios is further compounded by the diversity of research environments in graduate education – many students are in unique fields, and alternative format materials or approaches cannot often be “amortized” across disciplines or among students currently.

Among the professionals who participated in the project, there seemed to be some confusion around who is responsible for providing the accessible formats – whether it is the supervisor, department, library or IT staff. This resulted in students not receiving the materials they needed on time, which increased their stress levels and created additional educational barriers. This causes undue stress and can end up delaying the student’s education. There is also confusion around copyright issues, which are covered under the Marrakesh Treaty. The Treaty ensures that copyrighted materials are covered under part of the publishers’ alternative format productions. In order for students who require alternative formats to succeed with their education, students, departments, libraries and other pertinent individuals must work together to ensure that alternative formats are understood and easily accessible by those who need them.

*“Alternative formatting was not available for one graduate course that was directly related to my thesis work and I could not take the course as a result.”*

*“While I received some funding for adapting printed document into electronic format, this funding was insufficient for covering the level of research I am now conducting in the context of my research paper/courses. As a result, I had often to resort to a volunteer for doing unpaid transcription.”*

*“The alternative formats remains a barrier, when I asked why the materials were not produced well I was told there are not enough staff in the alternative formats Dept. of the library. Honestly, the books were so impossible to read that I had to redo them myself.”*



## RECOMMENDATION 5: IMPROVE PROCEDURES TO ACCESS ALTERNATIVE FORMAT MATERIALS

Recognizing that access to alternative format materials was identified as a significant challenge to students with disabilities in graduate education, we recommend that academic departments and university libraries work together to determine ways to enhance the provision of alternative format materials to graduate students with disabilities. Specifically, we recommend that:

- a. Best practices for the provision of alternative format materials to graduate students with print disabilities be compiled across institutions and shared with the graduate community;
- b. Professional development opportunities be provided for university library staff, DSOs and IT department staff at relevant regional and national meetings about alternative format materials for graduate students with disabilities;
- c. Professional development opportunities be provided at the institutional level for university library staff about alternative format materials for graduate students with disabilities;
- d. Creativity, flexibility and cooperation be fostered among the student, faculty, supervisor(s), DSOs, library and IT staff to better enable access to academic materials in alternative formats; and
- e. Advocacy be undertaken with the national agencies working on the implementation of the Marrakesh Treaty to ensure that specialized copyrighted materials are included as part of publishers' alternative format materials production efforts.

## PART-TIME ENROLLMENT, REMOTE RESIDENCY AND LEAVES

*“Because I applied to go part-time so that I can do less than a full course load without penalty, I am not eligible for any awards or grants. There is an assumption that I am going part time because I am working, because my program is very professionally focused. I did not know where to seek advice about the benefits and supports of choosing full time v part time status.”*

*“I have found it very difficult in dealing with my illness while in graduate studies. There seems to be little opportunity to extend or suspend my studies in order to seek treatment and recover without penalties (i.e., not being able to work and therefore having to take out bank loans [non-student], extending studies while paying for additional terms). This has only exasperated my condition as I am forced to balance*

*continuing full-time studies while seeking treatment.”*

## RATIONALE

A major difference between graduate and undergraduate education lies in the measure of workload and the residency requirements. While workload in an undergraduate setting is predominantly dictated by the percentage of a full course load a student takes, this definition is only applicable at the graduate level in the context of course-based programs. In research-intensive graduate programs, where the majority of the student's efforts are expended outside the classroom, it is harder to define workload based on the number of courses taken. Indeed, many institutions will mandate a full-time enrollment requirement for research-intensive graduate programs. In this context and dependent upon the needs of the student, part-time enrollment may be a viable accommodation as an institutional best practice.

Furthermore, most graduate programs tend to have a residency requirement, defined as a minimum period of time that the student must spend in the research environment before being eligible to graduate. Traditionally, this requirement has been associated with a minimum time the student must spend in the lab or in the research space on campus. As remote connection and online learning options become increasingly prevalent and accessible, however, it is now possible – even pragmatic – for a student to attend classes and stay in touch with their supervisors and thesis advisory committee members remotely, without physically being on campus. For students in remote and rural settings, or for whom accessible transit and transportation is a barrier, these may be viable options. Based on our survey of student and service provider experiences, these solutions are viable alternatives to more expensive, perhaps less feasible options to accommodate students with disabilities. The issues of part-time enrollment, remote residency and online learning are linked to issues of disability-related leaves while in graduate education, as many scholarships, fellowships and institutional awards and academic employment programs have not yet taken these possibilities into consideration in their eligibility requirements.

*“Government funding (loans and grants) is much easier, the amounts higher, and minimum requirements lower, for full-time students. As I chose a part-time program partly because of my disability, my access to government funding is restricted.”*

*“My thesis advisory committee was not very helpful when I became sick. In fairness to them, they were sympathetic and they have tried to help me complete the dissertation, but at no point did any one help me find information about taking a leave of absence or any other helpful resources available to me as a student with a disability. I've been responsible for ensuring that I can extend my deadlines, etc.”*

## RECOMMENDATION 6: BUILD FLEXIBLE ACCOMMODATION POLICIES AND PRACTICES FOR GRADUATE STUDENTS

Recognizing that graduate students with disabilities may need to carry a partial workload, to work remotely, and/or to go on leave for disability-related reasons as part of their accommodation framework, we recommend that policies and practices around accommodating graduate students with disabilities provide for creativity and flexibility in accomplishing graduate degree requirements, and that eligibility guidelines for scholarships, academic employment opportunities and other components of the graduate student environment take this flexibility into account. Specifically, we recommend that:

- a. Follow-up research be undertaken assessing the impact of remote residency on the graduate student experience and on completion of degree/program requirements for students with disabilities;
- b. Follow-up research be undertaken assessing the potential benefits and challenges associated with online learning approaches for students with disabilities in the context of graduate education;
- c. Follow-up research be undertaken assessing the impact of part-time status on both scholarship eligibility and employment opportunities available to graduate student with disabilities; and
- d. Best practices across institutions for the accommodation of graduate students with disabilities using part-time status, reduced workload, remote residency and online learning be compiled and shared with the graduate community.

### ACADEMIC EMPLOYMENT

*“TA work has been very difficult – have had problems with supervisors and profs being disrespectful, and accommodations have been lacking. Had to quit a TAship and file an informal complaint with Human Resources during my MA. This term I had to have the CUPE union rep sit in on a meeting with the prof. I will be resigning my TAship for spring, even though I need the money.”*

### RATIONALE

A student stipend for graduate students can be comprised of a number of different sources of funding, including grants, internal and external fellowships, departmental funding and employment-related sources (e.g., teaching assistantships

[TAships] and research assistantships [RAships]). The amount and distribution of funding sources is often institution-, department- and even student-specific. Some disciplines (e.g., the basic medical sciences) rely more on grant funding and less on employment funding – indeed, the balance of funding can be such that academic employment can be considered “optional” for students in those programs. On the other hand, students in many other disciplines, particularly in the social sciences and humanities, are dependent upon academic employment to provide the bulk of their guaranteed funding. This integration of academic employment into the role of the graduate student, and the differentials across disciplines and institutions, leads to a series of tensions for students with disabilities navigating graduate education.

Academic employment opportunities are a core part of the graduate student stipend in many disciplines. The amount of pay contributing toward the graduate stipend, and the availability of these work opportunities, can be competitive and varies by institution and discipline. Indeed, graduate students who compete successfully for multiple positions can take on significantly greater teaching loads compared to those for whom opportunities are fewer, setting up disparities in access to teaching and research assistant opportunities, funding from these opportunities, and expectations with respect to the student’s workload. Students with disabilities face several challenges in this environment. Since the hiring process for teaching and research assistantships is often competitive, students with disabilities may not be successful in seeking TA or RAships. Alternatively, as part of their accommodations for their academic program, students may be unable to act as a TA or RA. In the current graduate landscape, it is unclear whether alternative sources of funding are available to the student under these circumstances, or whether the student’s funding is potentially reduced if they are unable to secure a TA/RAship. It is likely that such cases are treated on an individual basis and in a manner specific to the student, the department and the institution.

The provision of accommodations in the academic employment environment vs. the academic program environment, and navigating the differences between “student as employee” and “student as trainee”, can often create stressful situations for the student, due to the potential for confusion and the lack of clarity around these disparate yet essential components of graduate education. Also, the tension between the employment expectations and academic expectations of one’s supervisors can be challenging, and students may be unprepared for the complexity that may arise when these two sets of expectations begin to interfere with one another. Often, particularly when one’s employment supervisor is the same as the academic (thesis) supervisor, the key question that becomes difficult to answer is, “Where does my academic program end and my employment relationship begin?” Given that many programs’ funding guarantees are structurally integrated with academic employment opportunities, this blurring of the lines between student and employee is common in the minds of the students themselves.

Student disclosure in the employment setting also becomes complex and difficult to navigate, particularly since that disclosure is required to trigger discussions around

appropriate accommodations. Students may not realize that multiple disclosure conversations may be required and/or may be afraid to disclose because of stigma.

It is also worth noting that teaching and mentorship skills, along with being able to manage multiple and often competing priorities simultaneously are often viewed as essential “soft skills” learned in graduate education. Students with disabilities who may not be able to avail themselves of academic employment opportunities may thus be at a disadvantage in establishing their competitiveness within their fields of study as a result.

Finally, it is also worth noting that in some disciplines – particularly the life and physical sciences – and training environments – such as teaching hospitals – the academic research environment takes on more elements of a traditional productivity-driven employment setting. In these research environments, the student’s role as a trainee is diminished in favour of the need to achieve defined productivity milestones. These environments may be particularly challenging to students with disabilities, as a lack of clarity around expectations can easily develop between the student and their supervisor.

*“My disability office informed me early on that they were not equipped for addressing my relationship with the faculty as an employee. As a result, all the transcription of print material into electronic format was done voluntarily by a relative. Since I was a TA for an online course on a highly inaccessible website, a relative had to voluntarily help me with the regular marking duties.”*

## RECOMMENDATION 7: CLARIFY ACADEMIC EMPLOYMENT POLICIES FOR GRADUATE STUDENTS

Recognizing the complexity of the interface between the academic programming and academic employment components of graduate education, and the importance of the academic employment setting as a component of the overall graduate student experience, we recommend that steps be undertaken to appropriately clarify or develop policies and practices around disability, disclosure and accommodation in the academic employment setting, and that these be disseminated to students, union staff, faculty and departmental administrative staff, as appropriate. Specifically, we recommend that:

- a. Institutional policies and procedures for accommodating students with disabilities in academic employment be developed and/or clarified, and ensure that this information is clearly communicated to students, unions, faculty and departments;
- b. Dedicated funds for accommodating students with disabilities in academic employment settings, along with clear processes to access this funding, be

established, and ensure that students, unions, faculty and departments know how to access this funding;

- c. Institutions and departments review admissions and employment offer letter practices for graduate programs and academic employment opportunities, to ensure that they are clearly separated, with appropriate accessibility and accommodation language that directs students to the relevant offices for each aspect of their graduate student experience;
- d. Professional development opportunities be provided for faculty and staff around the distinctions between academic and employment accommodations and resources;
- e. Professional development opportunities be provided for academic employment union support staff around disability-related accommodations in the employment setting; and
- f. A resource guide for students with disabilities and student leaders (i.e. teaching assistant union and students' association leaders) be developed around accessing accommodations for academic employment.