# Defining a New Culture: Creative Examination of Essential Requirements in Academic Disciplines and Graduate Programs 

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## Executive Summary

As an increasing number of students with disabilities enter graduate programs in Canada, institutions, academic departments and faculty will need to develop new analytical practices and updated policies. The issues identified by graduate administrators and student services staff as critical in working with this group of students include the interfaces between a student's accommodations, the nature of the essential requirements of their academic discipline, and the legislative and policy framework within which the institution operates. In this paper, we present an examination of these interfaces through a discussion of essential requirements, how they are determined, and the relationship between essential requirements and accommodation.

From our discussion of essential requirements in the context of graduate education, it is evident that:

1) individual faculty members will likely need support from their departments and from the institution's disability service provider to develop and manage accommodations, as issues may be complex, evolve over time and require some additional resources;
2) universities need to fully support inclusion and to be "disability friendly" at the graduate level; and
3) work still needs to be done to develop inclusive attitudes at the graduate level and to educate faculty and departments about the established legal rights of graduate students with disabilities and universities' responsibilities in respecting those rights.

## 1. Introduction

As an increasing number of students with disabilities enter graduate programs in Canada, institutions, academic departments and faculty need to develop new analytical practices and updated policies. Among the issues identified by graduate administrators and student services staff as critical in working with this group of students are the interfaces among a student's accommodations, the nature of the essential requirements of their academic discipline, and the legislative and policy framework within which the institution operates. In this paper, we examine these interfaces through a discussion of essential requirements, how they are determined, and the relationship between essential requirements and accommodation.

It is important to examine potential ways in which academic requirements may be achieved through alternative means, both to retain the fundamental integrity of a curriculum and to explore flexible strategies that constitute accommodations. It is hoped that by using a consistent method to examine requirements, those identified as essential or bona fide will be more valid and defensible, while the flexibility contained in other requirements will be better understood. Using a consistent framework applicable across disability types and disciplines provides an equitable basis on which to make accommodation decisions (Roberts, 2013).

Essential requirements need to be established on a program- or disciplinespecific basis and to take desired learning outcomes into careful consideration. At the same time, accommodations for disabilities need to be determined individually and remain flexible, given that abilities and strengths vary among people with a similar impairment and are also highly dependent on context, including the program of study. Determining essential requirements allows accommodations to be considered on a case-by-case basis while providing clear parameters within which to determine whether a requested accommodation is acceptable.

## 2. What is an "essential requirement"?

Rose (2009) highlights that the essential requirements of a course or program "include (but are not necessarily limited to) the knowledge and skills that must be acquired or demonstrated in order for a student to successfully meet the learning objectives of that course or program" (p.10). Oakley, Parsons and Wideman (2012) described two factors in identifying or defining essential requirements of a program of study:

1) An essential requirement is a skill that must be necessarily demonstrated in order to meet the objectives of a course; and
2) An essential requirement is a skill that must be demonstrated in a prescribed manner.
"Essential requirement" is also a term of art in human rights legislation that has a technical meaning beyond the common ones. An "essential requirement" in this sense is something that must be demonstrated in a particular fashion, with or without accommodation. In other words, it may be something that legitimately cannot be accommodated because it is necessary that the person perform the task in a particular way or via particular methods or equipment, which could preclude a given accommodation. For example, palpating an organ must be done by the person opining on the condition of the organ, not by an assistant. Or, administering chest compressions requires upper extremity strength, speed and coordination; a student without sufficient upper extremity strength might not be able to exert sufficient pressure to pump the heart. Such requirements are also referred to as "bona fide occupational requirements" (BFOR); they are real, authentic, immutable and not negotiable without compromising the inherent nature of a task. They are requirements that are shown to be (1) rationally connected to performance of a job, (2) adopted in the good faith belief of its necessity, and (3) demonstrably necessary, to the point of incurring undue hardship (Alberta Human Rights Commission, 2009). In academia, these could be understood as "bona fide academic requirements" (BFAR) (Roberts, 2013; p. 153). In that context, competencies, essential skills and abilities, expectations, requirements and other similar learning outcomes should meet the above three criteria to be deemed essential or bona fide requirements in the legal sense.

## 3. How are essential requirements identified?

A fundamental question in determining whether a requirement is essential asks whether performing the task in an alternative manner might interfere with the student's successful performance in the discipline, program or course. When exploring whether tasks can be completed in more than one way, it is necessary to examine whether altering how a task is completed will compromise the objective of the task (Wales, 1997; Pardo, 1999; Oakley, Parsons \& Wideman, 2012; Roberts, 2012). It is therefore important to rigorously examine inherent assumptions about the essential requirements of a field of study.

In order to identify which course requirements are essential, Roberts (2013, p. 52) suggests asking a number of key questions, including:

1) What is being tested?
2) What is the nature of the task?
3) Does it have to be done in only one way?
4) If so, why?

In Meiorin (British Columbia (Public Service Employee Relations Commission) v. British Columbia Government Service Employees' Union [1999] 3 S.C.R. 3, 1999 SCC 48), three questions were posed to help define defensible bona fide occupational requirements, or BFORs. These questions were developed in relation to employment and accommodation and are known as the three-step test of discriminatory requirements:

1) Was the requirement established in an honest and good faith belief in its necessity? (i.e., not arbitrary, sincerely considered important, etc.)
2) Is the requirement rationally connected to the task [objective of the course/program]?
3) How is it demonstrated that the requirement is reasonably necessary for completion of the task? What is the evidence for the necessity of doing the requirement in a particular fashion?

Roberts (2013) applies these questions to academic requirements to determine bona fide academic requirements (BFARs).

An additional question was raised based on Granovsky (Granovsky v. Canada (Minister of Employment and Immigration), [2000] 1 S.C.R. 703) as to whether a requirement might be socially constructed in a way that unwittingly excludes people of a designated group (in this instance, students with disabilities) based on assumptions about the group or requirement. This question can be used to ask instructors who determine instructional and assessment methods or practicum requirements to consider how those elements might exclude students with disabilities from participation.

Denial of accommodation on the basis of BFAR or essential requirement is only defensible after application of rigorous analysis of requirements reveals when and why it is not feasible to accommodate without impacting the integrity or nature of the task. Using the questions above to analyze requirements provides a consistent and reliable framework to determine what can and cannot be accommodated (Roberts, 2013).

It should be noted that where bona fide or essential requirements can be achieved with the use of an accommodation or by flexibility in the means of performance, accommodation should be provided. The point of determining essential requirements using a consistent analysis in this context is to identify where flexibility is feasible or to clarify why it is not when such is the case.

## 4. Essential requirements in the graduate environment

At the graduate level, the identification of essential requirements has begun mainly in those professional graduate programs with explicitly defined requisite skills and abilities or competencies, licensure requirements and post-graduate
associated regulatory bodies. Furthermore, the determination of core competencies in research-stream programs has been idiosyncratic rather than systematic, and dependent upon the faculty member or department. One of the significant challenges in determining essential requirements in the graduate environment is that most graduate programs have not formally or sufficiently articulated their program goals, core competencies and learning outcomes in outcomes-based language. The accommodation process then has to include analysis of both program requirements and accommodations.

In the context of graduate professional education, program requirements are thought of as those skills required for qualification in the discipline. These may include:

1) "General" necessary requirements, which are applicable across multiple disciplines (e.g., the ability to perform critical analyses; form testable hypotheses; use professional judgment; establish rapport with clients/patients);
2) Discipline-specific requirements (e.g., technical writing; specific forms of data interpretation; standardized test administration; clinical interviewing); and
3) Technically necessary requirements (e.g., use of specific methodologies, materials, tests and/or instrumentation).

Of note, various licensing and regulatory bodies define the core competencies in a range of professions, particularly those associated with end-of-program licensing requirements such as medicine, nursing, pharmacy, occupational and physical therapy, law and social work. Professional graduate programs in these fields work within this licensing context, teaching to ensure successful completion of licensure examinations. As well, many of these programs are developing explicit expectations of requisite skills and abilities within their respective fields (University of Saskatchewan, n.d.; Council of Ontario Faculties of Medicine, 2003; McGill University, 2013; University of British Columbia, 2013; Nursing Association of New Brunswick, 2014).

However, the majority of research-stream master's and doctoral degree programs do not have analogous qualification requirements; indeed, each field is likely to have numerous affiliated professional societies (regional, national, international) and there is no consensus on definitions of core competencies for research-stream graduate programs. The unique nature of particular degree programs and the various ways in which individual disabilities intersect with the requirements results in a plethora of potential accommodation needs, no two the same. This dynamic interaction between program requirements and individual disabilities makes it difficult, if not impossible, to determine universally applicable requirements.

Interestingly, a similar challenge exists at the postdoctoral level; there, some best practices have evolved through the work of organizations such as the National Postdoctoral Association (NPA) in the United States and the Federation of American Societies of Experimental Biology (FASEB). The NPA published a list of core competencies defined to be a series of general necessary requirements that are recommended as learning outcomes from postdoctoral training, while FASEB utilized this framework to develop material for research trainees to use in evaluating their development of these competencies. These materials are intended to be cross-disciplinary and are adaptable to the graduate environment.

Of note, the authors are aware of a similar effort by the Tri-Council granting agencies (the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council, and the Canadian Institutes of Health Research) in Canada to evolve an analogous research training competency framework. However, to the authors' knowledge, this effort never moved beyond the drafting stage and no documents have been published. Given the wide variability of graduate programs, both research-based and professional, it is therefore critical to examine academic requirements more systematically and creatively to determine BFARs for completion of the curriculum and performance in the field, which aspects can or cannot be accommodated, and why.

## 5. Accommodations in the context of fieldwork and placements

There are many disciplines in which fieldwork is a key component of the course curriculum. Here, accommodations are further complicated by the "limits of institutional reach," such as clinical, archival and community settings; remote research stations for conservation biologists or hard-to-reach field sites for anthropologists and archaeologists. Barker and Stier (2013) have posited some useful suggestions for institutions and programs to consider when accommodating fieldwork. Though their paper looks directly at occupational therapy, Barker and Stier's considerations are applicable across disciplines.

Accommodations in the fieldwork site should ensure that barriers to student learning are minimized. These accommodations could include flexibility in the hours of the placement (e.g., later start time or part-time hours), provision of a location that is accessible to the student, or provisions of specialized equipment (Barker \& Stier, 2013).

When planning field-based learning, the course instructor must be clear on the goals and objectives of the experience and be flexible regarding how the desired development of knowledge, skills or attitudes will be achieved and evaluated. For example, can some work be done remotely via teleconference, video conference, by electronic or in situ simulation learning? Simulation learning refers to an artificial representation of a real-world process to achieve educational goals
through experiential learning (Abdulmohsen, 2010). Examination of expected or desired student learning outcomes should be considered in conjunction with the teaching methods used. Ask what is being taught, how is it being taught and why it must be taught in a particular manner.

When considering sites for field-based learning, the course instructor must be informed about the accessibility of the environment. It is important to select a site that accommodates students who may have mobility or transportation challenges; if such sites are chosen, less work will be required later from the student, the site and the course instructor to implement accommodations (Barker \& Stier, 2013).

Fieldwork coordinators raise questions as to the limits of the institution's responsibility to provide accessible fieldwork sites. As long as the fieldwork is a required part of the institution's program, the institution has a responsibility to provide an accessible site. This can be done through collaboration with various sites that also have a duty to be accessible, consideration of cost-sharing schemes and careful placement of students. It is necessary for fieldwork coordinators to exercise creative and rigorous problem solving strategies to ensure accessible fieldwork sites. Accommodations do not stop at fieldwork-if a placement is required, the institution, the site and the student need to work together to develop effective accommodations toward an accessible learning experience.

## 6. Essential requirements and accommodation

Accommodation "is a means of preventing and removing barriers that impede students with disabilities from participating fully in the educational environment in a way that is responsive to their own unique circumstances" (Ontario Human Rights Commission [OHRC], 2004, p. 7). Similarly, the Alberta Human Rights Commission (AHRC) (2010) states, "Accommodation does not:

1) Require that post-secondary institutions lower academic or non-academic standards to accommodate students with disabilities.
2) Relieve the student of the responsibility to develop the essential skills and competencies expected of all students."

Appropriate accommodations will enable students to meet the essential requirements of the program successfully, "with no alteration in standards or outcomes, although the manner in which the student demonstrates mastery, knowledge and skills may be altered" (OHRC, 2004, p. 24). This would give all students "equal opportunities to enjoy the same level of benefits and privileges and meet the requirements ... without the risk of compromising academic integrity" (OHRC, 2004).

For example, does a student who is blind need to physically hold the pipette in a chemistry lab, or can a lab assistant be employed to carry out visual tasks in the lab, as directed by the student? "If the objective of the task can be achieved with the use of an accommodation, the method of execution is not an essential requirement for the task" (Roberts, 2013, p. 52). It is necessary to explore whether the tasks have to be completed using a specific method to achieve a course objective, or whether alternative ways of completing these tasks can achieve the same objective.

For example, many graduate programs require the development and utilization of analytical and critical thinking skills. However, the evaluation of this skill set might be accommodated by allowing a student with a learning disability to dictate their thesis.

It is tempting to be concerned about the academic integrity of a student's work when they are known to be receiving accommodations. But it is important to remember that many students seek support through writing centres, libraries, friends, and colleagues who read different versions of the student's work and provide feedback. Known, deliberate accommodations should be no different. Thus it is important not to be suspicious of the work of students with disabilities any more than we scrutinize the work of non-disabled students.

There are times when students should not be accommodated, as when altering the method of performance changes the fundamental nature of the task. Both the immutable elements of an academic task or requirement and the functional impairments of the student must be considered in concert to achieve appropriate accommodation or to justify denial of accommodation (Roberts, 2012).

It is important for faculty to use a structured analysis to identify the essential requirements of a course, program or discipline, and to consider a multiplicity of methods for achieving those objectives and incorporate multiple means of participation in course and program design. Principles and practices of Universal Instructional Design (UID) or Universal Design for Learning (UDL) can be enormously helpful in preventing barriers to learning, thereby reducing needs for accommodation ${ }^{1}$. Designing curricula in flexible ways that include multiple means of interaction with material, a range of assessment methodologies and a variety of formats reduces the likelihood that students will encounter barriers to equal participation in the learning environment.

## 7. Time to completion

Program duration is sometimes considered a necessary limitation on accommodation. For this reason, this aspect also requires analysis for whether it

[^1]constitutes a bona fide requirement. Time-to-completion issues may affect professional programs and research-stream programs differently. For example, professional programs such as occupational and physical therapy require handson skills that may decay over an extended program, whereas thesis-based programs might be more amenable to extensions. Due to course sequencing, practicum placement and time requirements of professional programs, there may be very little flexibility available for a part-time or reduced course load. This could pose significant challenges for students who have disabilities, presenting systemic, institutionalized barriers that preclude them from being able to meet the demands of a program (Sukhai et al., 2014). One method to address this barrier is to provide some flexibility on the length of the program or practicum. For example, a practicum that usually lasts three weeks could be extended to meet the needs of a student requiring fewer hours per week. Professional programs need to consider carefully whether the normal flow of academic and practical requirements constitutes a BFAR or whether accommodations can be made in the sequence of academic work and fieldwork, placements or internships.

In both research-stream and professional programs, funding limitations may pose hardships when accommodation needs lengthen students' participation. Funding issues should not be the primary limitation on program flexibility, however. As programs develop flexibility, funding structures will need to follow suit on both systemic and individual levels. Until a systematic approach to flexible program length is established, individual adaptations will need to be developed. Students who need to take longer should have options in terms of the program structure; individual funding solutions could include grants, funding for two years spread over three, Tri-Council funding, or supplemental employment as each situation permits. Programs that have inflexible requirements for time to completion present systemic barriers.

Medical leaves may be considered as both similar to and different from situations requiring ongoing accommodation. Provincial definitions of disability commonly include temporary medical conditions, such that accommodation is required for these as well. Shorter-term, temporary conditions are often more easily understood and mechanisms for medical leaves typically exist in institutional policies so that students can take a stop-out period from their work, with tuition relief, time extensions that reflect the stop-out period, and so on. Long-term, ongoing disabling conditions that present fairly predictable trajectories over time require a more sustainable approach, with attention paid to how the student will interact with program requirements and how time and funding will affect participation. Finally, those chronic conditions in which the need for temporary but unpredictable stop-out periods may be necessary often present the greatest challenge in providing accommodations and the greatest need for flexibility, individualization and academic support. The need to be systematic in ensuring that denial of accommodations is based on BFARs may be particularly important in these situations.

## 8. Essential requirements, the limits of accommodation, and undue hardship

The duty to accommodate requires that accommodation be provided in a manner that "most respects the dignity of the person, if to do so does not create undue hardship" (OHRC, 2000, p. 10). Under the OHRC's Guidelines on Accessible Education (2004), "every student with a disability is entitled to accommodation up to the point of undue hardship." The determination of essential requirements is independent of the determination of undue hardship. Only three elements may be considered in assessing whether an accommodation would cause undue hardship: cost; outside sources of funding, if any; and health and safety requirements, if any (OHRC, 2004, p. 28). The evidence "required to prove undue hardship must be objective, real, direct and, in the case of cost, quantifiable" (OHRC, 2000, p. 24). The institution cannot argue undue hardship based on business inconvenience, employee morale, third-party preference, or collective agreements or contracts (OHRC, 2000, p. 22).

## 9. Concerns about accommodations and "real-world experience"

Faculty members are often concerned that accommodation will not be available in the "real world" and that a given accommodation should not be provided in academia for this reason. This raises the issue of gatekeeping to the profession or work world. A student's request for accommodation cannot be denied in postsecondary settings based on the anticipation that the accommodation may or may not be available in the "real world." Several factors may arise between the study and the practice of a profession. Students may or may not choose to practice in their field; they may self-select into accessible or accommodated settings; they may find employment where accommodation is in fact provided as mandated. Comparisons with "real-world" performance expectations must be undertaken with great caution so as not to refuse accommodation in the program based on assumptions about students and subsequent employment settings. It is helpful to have clinical or applied elements incorporated within the curriculum whenever possible, through which one can explore accommodations that may be feasible in the "real world" and identify with some evidence where accommodation might not be appropriate.

## 10. Conclusions

A critical issue for students with disabilities in graduate programs is the interface between an accommodation and the necessary requirements of an academic discipline. In this report, we presented several important considerations as part of the review of the relationship between a student's accommodations and the determination of essential requirements of their discipline, program or course.

Most importantly, it is crucial to distinguish the evaluation method from the actual competency being evaluated. Notably, there is no consensus on definitions of necessary requirements for research-stream graduate programs.

Faculty members are responsible for identifying the essential requirements of a course or program and thus preventing barriers to participation or compromise of academic integrity through required accommodations. It is important for faculty to work with both the student and the disability service provider to develop appropriate accommodations to meet essential requirements.

Appropriate accommodations enable students to meet the essential requirements of their course or program successfully, with no alteration in standards or outcomes. It is necessary to think creatively and inclusively about academic requirements in order to determine which aspects of the course or program content are "essential requirements" for completion of the curriculum and thus to determine the potential for accommodation.

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[^1]:    ${ }^{1}$ Information on Universal Instructional Design (UID; Bryson 2004) and Universal Design for Learning (UDL; CAST, 2013) is available online at a variety of sites.

