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Accessibility And Academic Libraries: A Comparative Case Study

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Supervisor: Hill, Heather, *The University of Western Ontario* A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Library & Information Science © Claire Burrows 2019

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Abstract

Although individuals with disabilities represent more than 22% of the Canadian population over the age of 15, they remain underrepresented in higher education, and especially in the university setting. Although some library and information science (LIS) research has focused on creating accessible webpages, resources for individuals with print disabilities, and the physical infrastructure of libraries, few studies have included the perspectives of disabled individuals themselves or attempted to understand how libraries are conceptualizing disability and accessibility. By incorporating a disabilitystudies lens into this study, we can develop a more comprehensive understanding of the obstacles that arise in the pursuit of university education for students with disabilities, and perhaps of the ways in which academic libraries may address some of these obstacles. This dissertation, then, examines what Canadian academic libraries are doing to support university students with disabilities and how students are experiencing services in practice.

To answer these questions, a comparative case study was conducted across two provinces, focusing on one institution in Ontario and one in Québec. Ontario has developed the most comprehensive accessibility legislation in Canada over the last decade, while Québec's legislation remains relatively unknown and weak. At each institution, data was collected from a variety of sources: interviews with library staff members; survey with students registered with Disability Support Services; interviews with a selection of students; examination of library policies and reports; and a physical and informational audit. Analysis was carried out using grounded theory, interpretative phenomenological analysis, and thematic analysis.

Key findings suggest that while academic library staff members have good intentions and often support disabled individuals on a one-to-one basis, there is a lack of awareness about accessibility needs and about how services and resources might be

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adapted to accommodate more users. Students highlight positive experiences in interacting with library staff, but they face a variety of obstacles in accessing spaces, resources, and information about accommodations or accessible services.

Keywords

Accessibility; disability; academic libraries; disability studies; students with disabilities; social model of disability

Dedication

This work is dedicated to my grandparents, and especially to my grandmothers, whose

strength, intelligence, love, and kindness constantly inspire me.

Acknowledgements

First and foremost, I want to thank all of the participants of this study. Without you taking the time to share your thoughts and experiences, this study would not have been possible. I would also like to thank the staff at Disability Support Services at the two institutions for their help in recruiting students to take part in surveys and interviews.

I'd like to thank my fantastically bad-ass supervisor, Dr. Heather Hill. I had no idea what to expect in a PhD supervisor. I had hoped for support, but I did not expect fun. Many coffees and several international trips as well as the odd roller derby later, I now expect nothing less. A huge thank you as well to my committee member, Dr. Lynne McKechnie. I could not have dreamed of a more supportive committee and am so grateful and honoured for the chance to have worked with you both. Over my time at FIMS, I have also had the pleasure of working with or taking classes with many other amazing faculty members at FIMS, including Dr. Paulette Rothbauer, who was a member of my comprehensive exams committee, and Dr. Grant Campbell, whose class on critical theory remains one of my favourites. Other individuals at FIMS have also made my experience there a thoroughly enjoyable one, and I am especially grateful to Marni Harrington, Shelley Long, Cindy Morrison, and Becky Blue for this. And thank you to my examining committee, Dr. Joan Bartlett, Dr. Melissa Adler, Dr. Paulette Rothbauer, and Dr. Jeff Preston, for taking the time to read this and for your insightful comments.

My FIMS friends made this doctoral process a lot less lonely and *a lot more* fun than I could possibly have hoped for. I am so grateful for your friendships, Grad Club company, moving help, and your inexplicable willingness to listen to me talking about my pups. In particular, a thank you to Eugenia Canas, Amy Freier, Chandell Gosse, Jennifer Opoku, Kristen Colbeck, Vicki O'Meara, Yimin Chen, Zak Bronson, Kelsang Legden, Davin Helkenberg, Anton Ninkov, Alison Frayne, Nafiz Shuva, Martin Nord, Tiara Sukhan, and Brittainy Bonnis. I will always be grateful for having had the opportunity to go through

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this process with all of you. And to Nicole Dalmer, my fellow Masonville Threatz amiga, thank you for leading the way.

A thank you as well to those friends from London outside of FIMS. Kelly, I am so glad I latched onto you at CDSA years ago. Alexandra and Breanna, your presence always makes me laugh until my stomach hurts. And of course, my bestie forever, Christine, with whom I can have entire conversations about the cuteness of cats. (Cats are cute, aren't they?)

I'd also like to thank everyone at Concordia Library for being so welcoming and supportive during my time there as researcher-in-residence. I'm truly grateful for the interest in and support for my work, not to mention for the many wonderful conversations I've had with so many of you. Thank you to Dr. Beaudry and Dr. Kloda for giving me this opportunity. And a special thanks to Dee Winn for keeping me running, dancing, and 5 à 7ing, and to Jenna DuFour for always being there when there were coffee or dog-conversation needs!

To my parents, Fran and John. I am so grateful for the love and support that you have always shown me, and which have given me the confidence to take something like this project on. And to my brother, Galen, who has become one of the most reliable people—as well as just one of my favourites—in my life. I am forever grateful for your moving help, flying visits, and just your company in general. Thank you to my in-laws, Jean and Richard, as well as the siblings, Jonny, Charlotte, and Lizzie, who have been cheering on from afar. And of course, thank you to my furry family: Lolo (my faithful PhD dog), Delia, Macaroni, and Toby. But not you, Biffy.

Finally and most importantly, thank you to Tom. He knows why. But just in case. I don't think I would *ever* have dreamed of doing this PhD without you. I certainly wouldn't have done it while remaining in one piece. You have supported me in countless ways

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during this entire process, including by telling me to just stop when needed. I love you, my Canadian slunk, and I cannot wait for the next chapter.

This research study was generously supported by a Graduate Student Research Grant from the Canadian Association of Research Libraries/Association des bibliothèques de recherche du Canada (CARL/ABRC) and Ontario Graduate Scholarship Program.

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1 Introduction

This study provides a comparative examination of accessibility at two universities' library systems in Canada—one in Ontario and one in Québec. The availability of accommodated services in the library, librarians' knowledge of accessibility, and students' experiences using academic libraries are key elements of this study.

1.1 Background

The United Nations has declared disabled individuals to be "the world's largest minority" (United Nations, 2006b), and it suggests that "many, if not most people, will acquire a disability at some time in their life due to physical injury, disease or aging" (United Nations, 2006c). Despite the overwhelming prevalence of disability throughout the world and the likelihood that we may all experience disability in some form or another, "persons with disabilities continue to face barriers in their participation as equal members of society and violations of their human rights in all parts of the world" (United Nations, 2006a). This is true in all areas of society, from employment and transportation to health care, recreational activities, and educational opportunities. A consideration of the many ways in which the services, resources, and infrastructure that so many of us take for granted in our society can contribute to the marginalization of some is therefore vital in order to eliminate barriers and discrimination, as well as to create equitable opportunities for full societal participation for all.

Higher education in particular remains an area of exclusion for many disabled individuals, with several authors (Canadian Human Rights Commission, 2012, 2017; Liasidou, 2014; Prince, 2004; Vellani, 2013) indicating gaps in both enrolment and completion of university degrees between disabled individuals and their nondisabled counterparts. More specifically, the Canadian Human Rights Commission (2017) highlights that "the proportions of persons with disabilities who report having postsecondary education at university level as their highest educational attainment is below 15% across Canada, while it varies from approximately 20% to 30% for persons without disabilities" (p. 9). This state of affairs raises the question of why university education remains inaccessible to so many members of the disabled population.

Certainly there are many components of higher education—from faculty attitudes to financial support—that need to be addressed to develop a full picture and understanding of the obstacles that disabled people face in considering an academic degree. The academic library is one of these components. And it is one that is often overlooked in considering academic accessibility, despite the oft-repeated cliché that the library is the "heart of the university" (Kleymeer, Kleinman, & Hanss, 2010; Pennsylvania State University, 2010; Virkus & Metsar, 2004). After all, any given university library provides not only access to core course readings but also, among other resources and services, hundreds of thousands—or even millions—of other academic publications, as well as computer access, study space, research support, and study-skills instruction. It can certainly be argued that without the support of an accessible library, disabled students are less likely to succeed in postsecondary educational pursuits.

1.2 Why study disability?

Disability "is an open-enrollment social category—all humans potentially belong; this makes disability uniquely positioned for fruitful investigations of hegemonic normativity in its myriad formulations" (McDonald-Morken, 2014, p. 19). Bell (2011) too notes that:

It is unlikely that an individual will go to sleep one night and wake up a different race. Similarly, the process of changing biological sex is typically spread over months. Although some individuals alter their class status by winning the lottery or going bankrupt, the vast majority of individuals rarely experience drastic shifts in class. Not so with disability. Disability is, arguably, the only identity that one can acquire in the course of an instant. (p. 1)

To fully appreciate why research that focuses on disabled students is so vital, we must remember that disability crosses age groups, genders, sexualities, races, ethnicities, socioeconomic statuses, and religions. Without a focus on disability specifically, a proportion of the populations of all of these groups will continue to face various degrees of discrimination and oppression no matter the strides that they make in other areas. As Withers (2012) states, "The construction of disability is an essential tool for how people with power work to maintain that power. Without targeting disability specifically and simultaneously recognizing and responding to its intersectionality with other oppressions, the systems and values that create disability will remain intact, replicating disablism" (p. 11). Research in this area is not only a matter of considering how to better support disabled students in university libraries, but also a way of working towards the construction of an accessible society rather than a disabling one. It is important to note that accessibility does not only refer to disability, but also to access for other marginalized groups, such as People of Colour (POC), members of the LGBTQ+ community, and First Nations, Métis, and Inuit peoples.

1.3 Focus of this study

This study examines accessibility practices at Canadian academic libraries through a perspective developed from disability studies, a focus which has seldom appeared in library and information science (LIS) literature. The thesis constitutes a comparative case study of two Canadian universities' library systems, one in Ontario and one in Québec. The exploration of accessibility at these two libraries allows for an understanding of current policies, services, and best practices, as well as of potential areas for improvement. Key to this study is the inclusion of disabled students' perspectives on their experiences of accessing library services. Ultimately, this study aims to understand how disabled students are supported by the library and—every bit as importantly—how they wish to be supported.

1.4 Structure

Chapter 2 of this thesis provides an overview of relevant literature on this topic. I begin by highlighting statistics about the presence of disability both in the international community and in Canada in particular, before providing a brief history of Canada's disability policies. While a federal disability policy is yet to be fully enacted, I provide a brief overview of the Accessibility for Ontarians with Disabilities Act and of Québec's Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration, as well as of the criticisms that they have both attracted. I also briefly discuss relevant policies in both the U.K. and U.S. Next I look at systems of higher education in Canada, and how disability and accessibility have been considered in higher education is also considered before I then discuss accessibility in libraries, which I have divided between practitioner, academic research, and organizational literature. Finally, the literature review sets out the research questions for this PhD study.

Chapter 3 of the thesis provides the theoretical framework for this study. The study itself is grounded in disability studies, which posits that disability is not a negative identity factor, but rather that it is socially constructed. It should be noted at this early juncture that disability studies and many of the theories under this umbrella have emerged from a worldview that places whiteness at the centre and posits it as the "neutral" or "natural" category. Bell (2006) emphasizes that "White Disabilities Studies, while not wholeheartedly excluding people of color from its critique, by and large focuses on the work of white individuals and is itself largely produced by a corps of white scholars and activists" (p. 275). This study, too, has been developed from a white perspective in the sense that I, the researcher, am a white person.

In this chapter, I provide an overview of various models of disability—the medical or individual model, the social model, and the minority-group model—and the historical

circumstances in which they emerged. Although this research borrows heavily from the social model's understandings of disability, current critical disability theory goes beyond this model. Criticisms of the social model lead into a discussion of critical disability theory in general, and of how current theories are attempting to integrate intersectional elements into our understandings of disability. Finally, I emphasize the underrepresentation of disability theory in library and information science (LIS) literature, and I call for greater engagement with disability studies on the part of both practitioners and researchers within LIS.

Chapter 4 focuses on the methodology for this study. A constructivist epistemological approach alongside a framing lens developed from disability studies shape the design of this study. Research methods for data collection include a physical audit, review of relevant policies and reports, interviews with library staff members, a survey with students registered with Disability Support Services (DSS), and interviews with a selection of disabled students. An overview of the analysis methods is also provided through a discussion of grounded theory, interpretative phenomenological analysis (IPA), and thematic analysis. Other key elements such as the way in which a reflexive practice was used and the study's limitations and ethical considerations are also discussed.

Chapter 5 presents the findings from the Ontario library institution. This chapter is broken down into sections by data source. A brief overview of the university institution and the library's place within it opens the chapter, before another brief overview, this one focused on the audit and document-analysis results, is provided. Findings arising from interviews with the institution's library staff are discussed in detail, highlighting key themes such as understandings of the library profession, how librarians at this institution approach providing accommodations, and where they go for support in developing accessible services. A brief discussion of the results of the student survey that was administered provides some context for the findings that emerged from the student interviews. Students emphasized their reasons for going to the library, various barriers they had faced, and questions about what types of accommodations might be available. They also shared their reasons for participating in this study.

Chapter 6 presents the findings from the Québec library institution, and it is organized in the same manner as Chapter 5. A brief overview of the institution itself provides context for the various findings. Important takeaways from the audit and document examination are included. Key findings from interviews with library staff members brought to light themes such as training and institutional support as well as on collaborations with the institution's DSS. Results from the student survey again provide some context for the student interviews. Key takeaways from these interviews included reasons for visiting the library and requirements for comfortable study spaces.

Chapter 7 provides the discussion for this study. How the various themes emerging from the two institutions relate to relevant literature from the field of LIS as well as from disability studies is included. Key elements of the discussion focus on the experiences of attending university and registering with DSS in order to receive accommodations, the library's role in providing a space for study, potential barriers in accessing library collections, and the ways in which library staff members approach their job roles. I argue here that potential barriers to providing an accessible service relate to a lack of engagement with disability theory on the part of universities and their libraries, which in turn leads them to not prioritize accessibility. Finally, a brief discussion of similarities and differences between the two provinces as well as of the potential of universal design in libraries closes this chapter.

Chapter 8 sets out the conclusion of this study. An overall reflection on the findings is presented, along with recommendations for future research.

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1.5 Language of disability

For the purposes of this study, a broad definition of "disability" is used. Disabled individuals may include those with physical impairments, medical conditions, cognitive impairments, emotional or mental health conditions, or sensory impairments. These conditions, impairments, and disorders can be medically diagnosed or be self-identified by the individual. However, it is essential to note that the focus of this study is not medical conditions, but rather the societal obstacles and barriers that limit opportunities for full participation in society.

There are many ways to talk about disability and multiple perspectives on how best to do this. McDonald-Morken (2014) points out the difficulty of speaking about disability, as "the very use of the word implies that disability is definable and recognizable—an indefensible implication, as the work of critical disability studies scholars attests" (p. 36). In practice, many people in North America prefer the use of person-first language, in which one speaks about a "person with a disability" rather than about a "disabled person." The purpose of this term is to emphasize the personhood of those with disabilities. The Canadian government encourages the use of person-first language, as is demonstrated through its use in various federal publications (Human Resources and Skills Development Canada, 2006, 2010, 2011). The Canadian government is certainly not the only entity to do so:

Governments around the globe; the World Health Organization; news media; university disability services offices; most textbooks and course outlines—all these institutions use person-first language and this language has become the dominant linguistic way to represent disability. Person-first language finds its historical roots in Western bureaucratic culture and this "proper institutional speech" of disability is also the culture's way of shaping a "proper speaker." (Titchkosky, 2011, p. 51) Titchkosky goes on to write that "the proper speaker is one who does not collapse the difference between person and disability" (p. 51). However, many within the disabled community, and many who engage with disability studies, reject the use of person-first language. It has been suggested by some that person-first language has the unintended consequence of separating an individual from their disability and that it carries the risk of actually emphasising the disability's medical aspects (Ross, 2013; Titchkosky, 2001). In contrast, speaking of "disablement" and "disabled individuals" arguably allows for an interpretation according to which disablement is imposed on an individual—for example, by a lack of suitable methods for accessing a given place or situation:

Unlike the term "person with a disability," the term "disabled person" does not demand disability to be related to and understood as a disabling condition attached to a person; it does not reinforce that disability is (or is caused by) a person's bodily impairment. Stating "disabled person" indicates that a person is disabled without implying what causes the disablement. (Ross, 2013, p. 136)

In this study, I primarily make use of the terms "disabled people" or "disabled individuals," although at times I may also use person-first language, in part for reasons of flow and sentence composition. I do so to emphasize that disability is not exclusively located within individuals, but that it is societal factors—in this instance our academic libraries and wider university institutions—that create and maintain disabling barriers. These terms will not be preferred by everyone, but I believe that language has the power to help us to examine our assumptions and biases, and it is for these reasons that I reject the strict use of person-first language. As Titchkosky (2011) writes:

Whether we are called people with disabilities, disabled people, the vulnerable, or something else—whatever the expressions used—categorizing embodied existence cannot be avoided. But categorizing embodied existence can also be theorized and represented differently. And so, there is more... (p. 52)

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This dissertation hopes to bring out some of the complexity of what that "more" might be.

2 Literature review

This chapter provides an overview of available literature about disability in Canada, such as governmental statistics and legislation. It also briefly discusses legislation in the U.S. and the U.K., two countries that share Canada's common law tradition—although with significant differences in terms of federal reach—and have passed national-level accessibility legislation. Academic literature about higher education, including the role of academic libraries, is also included. Finally, a discussion of the academic literature about accessibility in libraries—both academic and public—wraps up this chapter.

2.1 International context

The World Health Organization (2011) estimates that approximately 15% of the world's population—that is, over one billion people in 2010—have a disability of some kind, with many of these individuals living in extreme poverty, being denied access to education, and/or facing violence and abuse (United Nations, 2006b). The prevalence of worldwide persecution and oppression led to the establishment of a UN committee in 2001 with the purpose of developing a convention to protect the rights of disabled individuals. After several years, the UN Convention on the Rights of Persons with Disabilities (CRPD)—whose purpose is "to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (United Nations, 2006a)—was adopted in 2006 by the UN General Committee (United Nations, 2006c). This Convention was ratified by Canada in 2010.

The Convention is certainly not the first attempt the UN has made towards protecting individuals who experience disability. Over three decades ago, back in 1981, the UN celebrated the International Year of Disabled Persons, which was based on the theme "full participation and equality" (United Nations, 2004). Lindqvist (2015) suggests that the CRPD's emphasis on a "national monitoring in the field of disability to collect information and evidence of remaining problems" and "the emphasis on the involvement of disabled persons themselves and their representative organizations in the national monitoring process" (p. 21) are unique aspects of the CRPD that prior movements have neglected. However, he goes on to indicate that many nations have done little or nothing to institute these requirements in reality. Additionally, while the Convention certainly places pressure on governments to consider disability, at least in theory, it "is not directly enforceable by individuals" (Moran, 2014, p. 7) unless a country has also signed onto the Optional Protocol. For countries that do accept and implement the Optional Protocol, individuals can communicate to the UN's Committee on the Rights of Persons with Disabilities that their guaranteed rights have been violated by their country. If specific criteria are met—such as the exhaustion of all domestic remedies (United Nations Human Rights, 2019)—the Committee can begin a process of communication and inquiry into the complaint with the nation in question. Canada only recently acceded this protocol, with the announcement being made on December 3, 2018.

2.2 Disability in Canada

It was estimated in 2006 that there were approximately 4.4 million disabled people in Canada, a figure that amounts to approximately 14% of the population (Human Resources and Skills Development Canada, 2011). In 2018, this estimate had risen to approximately 22% of the population—or 6.2 million people—aged 15 and older (with the numbers increasing in conjunction with age) (Morris, Fawcett, Brisbois, & Hughes, 2018). The percentage of disabled individuals varies widely across age groups and ethnicities, and Prince (2004) and Withers (2012) suggest that rates are especially high amongst Indigenous populations. Moreover, it is projected that the percentage of disabled individuals will grow in coming years in Canada and internationally (Burns & Gordon, 2010; Employment and Social Development Canada, 2017; Prince, 2004), due not only to an aging population, but also to somewhat reduced stigmas around identifying as disabled and more recognition of disabilities and chronic illnesses, both physical and cognitive. However, it should be noted that the percentage of disabled individuals in a given population is in many ways misleading, as considerations of who is disabled depend largely on the arguably arbitrary medicalization of various characteristics. Consider, for example, how the line is drawn between a healthy weight on the one hand and being overweight or obese on the other—or the criteria for what is "normal" (Withers, 2012). Furthermore, the Statistics Canada numbers are based upon respondents "report[ing] a limitation in their day-to-day activities" (Cloutier, Grondin, & Lévesque, 2019, p. 9). Thus the figure of 22% may be a helpful starting point, but this number can vary greatly depending on the definitions of disability that are employed in a given context.

Robertson (2016) draws attention to variations in the disabled population found in Canadian national surveys between 1991 and 2012, with these numbers at times decreasing, despite the suggestion noted above that numbers will increase over time. She suggests that "it is critical to understand the various influences, such as how disability was conceptualized, and how such influences impact the outcomes of these and other surveys of disability" (Robertson, 2016, p. 48). Robertson (2016) also highlights that there has been very little research on disability and Indigenous populations, despite the fact that authors such as MacDonald (2016) and Durst (2016) have pointed out that Indigenous people experience higher rates of disability. Durst (2016) notes that "it is important to be clear that the poor conditions of Indigenous peoples with disabilities are the results of a history of colonialism and racism. The conditions reflect the provincial and federal governments' failure to provide adequate health care, housing, employment and services for Indigenous peoples" (p. 168). Thus, although the Canadian government has suggested that 22% of the population aged 15 and over experiences disability, whole swathes of relevant data may be absent from these calculations, and so this figure may substantially underestimate the true extent of disability in Canada.

Many authors have demonstrated that disabled individuals in Canada and other countries face countless instances of systemic and overt discrimination on a daily basis (August, 2009; Burns & Gordon, 2010; Flaherty & Roussy, 2014; Prince, 2009; Ross, 2013; Torjman, 2014). For instance, Prince (2004) and Morris, Facett, Brisebois, and Hughes (2018) have highlighted that disabled individuals in Canada have continuously achieved lower levels of education, are more likely to be unemployed or underemployed, and have lower incomes when employed than their nondisabled counterparts: "Research shows that persons with disabilities in Canada have abysmal incomes (Sherry 2008) because many people with disabilities are forced into cheap labour" (Dunn & Langdon, 2016, p. 39). Human Resources and Skills Development Canada (2010) has also observed a link between incomes and disability, in which average incomes decrease as the severity of disability increases. However, Fichten et al. (2003) and Turcotte (2014) suggest that through greater access to higher education opportunities, the discrepancy between employment rates and incomes for disabled individuals and those for nondisabled individuals is at least partially mitigated. In a neoliberal context in which social programming and benefits are being reduced, and one in which the disabled population is growing, it becomes crucial that we ask what opportunities disabled Canadians are being offered or denied that would allow them the same freedoms and advantages as their nondisabled fellow citizens.

2.2.1 Canada's disability policy

Historically, Canadian policies related to disability were generally geared towards eugenics initiatives, as they were in other countries. These legislative policies supported institutionalization, as well as non-consensual sterilization for individuals with disabilities, and some of these policies remained in effect until the 1970s and beyond (Dunn & Langdon, 2016; Murphy, 2016). Although forced sterilization—at times without the individual even knowing it took place—is no longer the norm for disabled individuals in Canada, there remain remnants of these policies in "the view that people with disabilities should have limited reproductive rights" (Dunn & Langdon, 2016, p. 33), as well as in discussions and practices of aborting fetuses that are found to have or are likely to have disabilities. Canada's history of policies pertaining to disability has certainly not been admirable, and while significant improvements with regards to disabled individuals' rights have certainly been made, some aspects of these historical views are persistent.

At present, disability is increasingly an area of focus for policy development in many countries. Prince (2004) suggests that conventionally "disability policy is about methods and processes, and about what interventions are available or desirable... Disability policy making is about formulating programs and providing services for people in need who have disabilities or who are at risk of developing a disabling condition" (p. 62). One cannot assume that there is a single perspective on disability policy that could be attributed to a category that encompasses such a large and diverse body as that covered by the term "disabled people." However, disability policy from such a perspective might well be about "'enabling people to function in and contribute to society' and about addressing 'what individuals should be enabled to do for themselves and for others'" (Fox and Willis, 1989 as cited in Prince, 2004, p. 63).

Unlike several of its counterpart countries—the U.K. and U.S., for instance—Canada does not currently have comprehensive federal legislation that specifically focuses on disability in place. However, the Canadian government in recent years began seeking public input for the implementation of such legislation in the near future (Employment and Social Development Canada, 2016), and Employment and Social Development Canada, 2016), and Employment and Social Development Canada a proposal for the Accessible Canada Act (Bill C-81). This Act was introduced to the House of Commons in June 2018 and is currently before the Senate for approval. In theory, the Act would lead to "proactive identification, removal, and prevention of barriers to accessibility wherever Canadians interact with areas under federal jurisdiction," such as "banking, telecommunications, transportation industries

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like air and rail, and the Government of Canada itself" (Employment and Social Development Canada, 2018a). Interestingly, the introduction of this Act "received no coverage in the francophone media" (Bénard, 2018).

It is important to note that this Act does not require the development of standards that organizations across the country would be required to meet, for instance in relation to the built environment. Instead, the Act "proposes creating the Canadian Standards Development Organization, which would develop model accessibility standards... Accessibility standards would be published and submitted to the Minister of Sport and Persons with Disabilities, who would consider making them mandatory under the law" (Employment and Social Development Canada, 2018b). The Act would also require those entities under its purview—government, parliamentary entities, federally regulated sectors such as transportation and telecommunications, and federal police—to develop and publish accessibility plans and progress reports, although critics have pointed out there these organizations are not obligated to follow through on these plans, and that the enforcement of any regulations that are developed are splintered across different sectors of government, such as the Canadian Transportation Agency and the Canadian Radio-television and Telecommunications Commission (Council for Canadians with Disabilities, 2018b, 2018a).

The Council of Canadians with Disabilities, while supporting this Act in theory, suggests that additional work must be done to ensure that it takes into account intersectional experiences of discrimination and oppression:

During the consultation phase prior to the introduction of Bill C-81, CCD heard people with disabilities emphasize that no one should be left behind, which means all people with disabilities should benefit from Bill C-81. For this to occur, at a minimum the Bill's preamble needs to be amended to include a gendered intersectional lens to ensure that the work of the Bill will be undertaken in a manner that responds effectively to rights holders with disabilities who experience, in addition to ableism, other forms of oppression (racism, sexism, homophobia, transphobia, xenophobia, classism, colonialism, etc.). (Council for Canadians with Disabilities, 2018b)

Other criticisms, set out in an open letter signed by more than a hundred disability advocacy groups, include the lack of timelines, the power to exempt organizations from compliance, and language that allows for but does not require implementation of actions plans or steps to actually address disabling barriers in practice (Council for Canadians with Disabilities, 2018a). These groups also emphasize that the Bill does not "address the unique barriers experienced by Indigenous and First Nations persons with disabilities" (Council for Canadians with Disabilities, 2018a).

In addition to the current lack of enacted legislation, there is not one standardized definition of disability or set of guidelines for accessibility within Canadian disability policy. This is perhaps both a strength and weakness of policy in Canada, as one could argue that the country's policy is not exclusionary in terms of who is defined as disabled. However, without a clear definition of the grounds on which one faces this discrimination, it may also be harder to draw attention to oppression and prejudice. Disability is included as a protected characteristic in the Charter of Rights and Freedoms—enacted in 1982—and therefore has constitutional status in Canada. It has often been noted that disability was not originally included in the Charter, and its addition was the result of lobbying by disability advocates (Beer, 2010; Pooran & Wilkie, 2005; Prince, 2009; Withers, 2012; Murphy, 2016). Pooran and Wilkie (2005) suggest that the Charter "effectively addresses systemic discrimination" (p. 5), as all laws are required to conform to its provisions. However, they also note that pursuing litigation at the constitutional level is "extremely costly, time-consuming, and complex" (Pooran & Wilkie, 2005, p. 5) when compared with other types of judicial review or rights-based litigation. Disability is also included in the Canadian Human Rights Act, which is widely considered to have quasi-constitutional status (Pooran & Wilkie, 2005). Despite the

prominence given to disability as a protected characteristic through its inclusion in Canada's constitution, disabled individuals in Canada continue to face significant discrimination (Burns & Gordon, 2010; Withers, 2012).

Although constitutional protection seems to demonstrate a strong commitment to the advancement of disabled individuals on the part of the Canadian government, "disability policy in Canada traditionally has been, and remains largely today, a dimension of the health, education, social services, and income security fields" (Prince, 2004, p. 63). Moreover, the pool of eligibility for protection and support becomes "increasingly narrow as the level of and access to resources increases.... These definitions [of disability] remain under the control of those with power and can be changed to serve their [federal and provincial governments' and associated agencies'] needs and desires" (Withers, 2012, p. 113). Moreover, the Canadian government has been accused of negating its commitment to disabled individuals by "stressing gains made on the surface while overlooking the structural gaps" and "downplaying disability as a human rights issue and, at times, discrediting the use of litigation and the Charter of Rights and Freedoms to advance equality and equity claims" (Prince, 2004, p. 69). McColl and Stephenson (2009) suggest that there has also been an erosion of disability programs in recent years, as well as contradictory policies. August (2009) notes that, in conjunction with a decrease in provision of programs and benefits, the Canadian government has done little to reduce welfare dependency among this population. Prince (2004) discusses the Canadian government's approach to assessing disability programs and support through an examination of the various government reports produced over a 20year period from the late 1970s, with each report stressing the need for concrete strategies—such as a disability lens applied to the government's policies—to improve the current availability of support, benefits, and opportunities, as well as to decrease discrimination. However, despite repeated calls for action to be taken (Torjman, 2014), Prince (2004) highlights that there has been none in practice, with essentially no changes to Canadian disability policymaking over the years.

Canada's federal structure also has implications for the provision of disability policy, as policies and services are developed at both provincial and federal levels. Many services that affect disability policies are provided at the provincial level—for example, health, education, and welfare—though welfare policies exist at the federal level as well (Oakes, 2005; Torjman, 2001). There are thus ongoing compromises between provincial and federal governments regarding who is responsible for providing services to the disabled population; these are often related to the distribution of financial resources (Prince, 2004; Torjman, 2001). The negotiations at play between these powerful groups may in fact marginalize the perspectives of the other key stakeholder in this matter, namely the disabled population itself. This is certainly a concern for the disability community, which has called for the federal government to take a strong approach to the issue in order to avoid fragmentation of policy or relegation of disability into the area of health issues (Torjman, 2001). Additionally, Bach and Gallant (2012) emphasize that there are varying definitions of disability across levels of government, which illuminates another difficulty of negotiation. Burns and Gordon (2010) also suggest that Canada would benefit from an overarching national legislative approach that would replace the disjointed provincial policies that currently exist. In practice, there are conflicting approaches to addressing the rights of disabled individuals, demonstrating that constitutional protection does not mitigate the compromises that take place in policy development and enactment.

2.2.2 Government reports

The Government of Canada has addressed disability a number of times over the last few decades, beginning with the formation of the Special Committee on the Disabled and the Handicapped in 1980 (Canadian Disability Policy Alliance, 2012) and its 1981 *Obstacles Report* (Collin, 2012). This working group was followed by other committees, such as the Standing Committee on Human Rights and the Status of Disabled Persons in 1989, and the 1996 Task Force on Disability Issues, as well as reports, such as *A Consensus for Action: The Economic Integration of Disabled Persons* in 1990 and

Completing the Circle in 1993 (Prince, 2004; Torjman, 2001). More recent publications have most often focused on highlighting statistics about the disabled population in Canada (Arim, 2017; Human Resources and Skills Development Canada, 2011, 2013; Human Resources Development Canada, 2003; Statistics Canada, 2013).

Many of these publications include a heavy emphasis on the importance of language to describe disability, with one report entirely dedicated to this topic (Human Resources and Skills Development Canada, 2006). Several publications uphold the use of personfirst language, which promotes the use of terms such as "person/people with a disability" as opposed to the term "disabled person/people." According to the Canadian government, person-first language is appropriate because "choosing words and images that help shape positive attitudes will promote the person rather than the disability" (Human Resources and Skills Development Canada, 2006, p. 6). However, Titchkosky (2001) and Ross (2013) both criticize the unreflective use of this language by various levels of government. Titchkosky (2001) suggests that "people-first phraseology" conceives of disability as a troublesome condition arbitrarily attached to some people, a condition (unlike gender, race or ethnicity) that is only significant as a remedial or managerial issue" (p. 126). She goes on to stress that the seemingly "objective" nature of this language in fact creates a scenario where "difference is overridden, or repressed" (Titchkosky, 2001, p. 128). Ross (2013) suggests that the use and promotion of words such as "disability" rather than "disablement" does little to stress the continued existence of socioeconomic barriers to full participation in Canadian society.

In addition to the emphasis on *how* to speak about disabled individuals, there is also a general focus on health and the biomedical aspects of disability: "Health and disability are wholly intertwined: health problems can lead to disabilities, and disabilities can lead to health problems" (Human Resources and Skills Development Canada, 2010, p. 15). While this proposition is undoubtedly true on some level, the overall focus on it by the

government may have, and may continue to lead to, a disregard of the social effects and other aspects of disability, such as attitudinal barriers.

In addition to the publications on understanding and respecting disabled individuals, there are also several reports on the negative socioeconomic impacts of having a disability (Human Resources and Skills Development Canada, 2010, 2011; Human Resources Development Canada, 2003), although these do not necessarily strive to remedy this situation in a way that questions structural and systemic inequalities. For example, Human Resources and Skills Development Canada (2010) suggests that:

Supporting people with disabilities in maximizing independence and well-being is essential for adequate standard of living. Income and housing are some of the most important components of well-being; however, the statistics presented in this chapter reveal that some adults with disabilities have trouble meeting these basic needs.... Through continued support of people with disabilities through government-funded and non-profit social programs, vulnerable people with disabilities can receive help in meeting their basic needs. Once these needs are met, doors can be opened to other areas of life such as education and employment. (p. 13)

Housing and income for basic living are essential, yet there seems to be little consideration that improving employment and educational opportunities for disabled individuals will aid in alleviating these issues as well. There is, however, little to no evidence that a singular compartmentalized focus on housing and living income will have the desired effect of opening doors for educational and employment opportunities.

At the provincial level, there seems to have been an increased focus on comprehensive disability policies in recent years. This is evident in the development of Québec's 2004 Act to Secure Handicapped Persons in the Exercise of their Rights with a View to

Achieving Social, School and Workplace Integration, the Accessibility for Ontarians with Disabilities Act of 2005 (AODA), the recently introduced Accessibility for Manitobans Act (Accessibility for Manitobans Act, 2013; Disabilities Issues Office, 2015), British Columbia Accessibility Act, 2018 (British Columbia Accessibility Act, 2018, 2018), and finally Nova Scotia's Act—An Act Respecting Accessibility in Nova Scotia (2017). Other provincial protection often falls under the scope of human rights legislation such as the Ontario Human Rights Code. However, in a similar vein to the Charter, "legal proceedings [based upon infringement of the Code] are typically very time-consuming, complex and costly. Moreover, achieving broader systemic change is not easily accomplished through caseby-case determinations" (Moran, 2014, p. 7). Relevant to this study are Québec's Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration and Ontario's AODA.

2.2.3 Accessibility for Ontarians with Disabilities Act (AODA)

The AODA replaces the Ontario Disability Act of 2001 and is intended to benefit disabled individuals, who are recognised as making up a significant portion of the population, by creating the mandate for an accessible province by the year 2025 (Beer, 2010). The Act itself cites "the history of discrimination against persons with disabilities in Ontario" as its impetus (AODA, 2016). Pooran and Wilkie (2005) and Beer (2010) note that the AODA utilizes the definition of disability put forward by the Ontario Human Rights Code. The Ontario Human Rights Commission posits that beyond considering physical impairments, mental health conditions, and learning disabilities,

"disability" should be interpreted in broad terms. It includes both present and past conditions, as well as a subjective component based on perception of disability. Although sections 10(a) to (e) set out various types of conditions, it is clear that they are merely illustrative and not exhaustive. Protection for persons with disabilities under this subsection explicitly includes mental illness, developmental disabilities and learning disabilities. (Ontario Human Rights Commission, 2009)

This definition and its use in the AODA is ultimately aimed at removing barriers rather than at merely stopping overtly discriminatory practices, and thus it constitutes a step forward in Canadian disability policy.

Accessibility under the AODA is to be achieved through the implementation of a number of standards. The Customer Service Standard was implemented between 2010 and 2012 depending on type of organization, while the Integrated Accessibility Standard covering information and communications, employment, transportation, and the design of public spaces—is planned to take effect in various stages between 2012 and 2021 (Beer, 2010; Government of Ontario, 2014). While a health care standard and education standard are in development (Government of Ontario, 2017a, 2018a), further standards are yet to be officially announced at this time. However, it is worth noting that Beer (2010) emphasized in his 2010 review that the Act was likely already behind schedule.

A fair amount of detail about the development processes of the AODA can be found in reviews of the effectiveness of the Act (Beer, 2010). The Act demands that the committees developing the aforementioned standards are to be made up of disabled individuals, representatives from industries affected by the standard in question, and ministry representatives (Accessibility for Ontarians with Disabilities Act, 2005, 2005), with at least half the members of these groups being disabled or community representatives of disability groups (Beer, 2010). While this requirement suggests a strong presence of disability advocates in the development of disability policy, Beer (2010) goes on to discuss some of the compromises that have taken place in this development process, such as a lack of guidance, support, or resources for the committees. This has the potential effect of compromising the involvement of disabled individuals, who may not be able to fully participate due to inaccessibility of materials, lack of time, and lack of personal expertise with regard to the matters at hand (Beer,

2010). It is also not clear whether all parties involved in the formulation of standards actually had an equal say in the negotiation processes in practice.

With regards to libraries, the most relevant standards are those related to information and communications and customer service. The Integrated Accessibility Standards Regulation actually has two sections specifically relating to public or educational libraries (Part 2, Sections 18 and 19) (Accessibility for Ontarians with Disabilities Act, 2005). Both of these sections relate to the provision of accessible materials and resources.

2.2.4 Criticisms of the AODA

Despite the fairly recent introduction of the AODA, criticisms of it have emerged, some of which focus on how the Act has been implemented thus far. The AODA has been praised by some for containing a broad and inclusive definition of disability (Pooran & Wilkie, 2005). The AODA states that disability is:

(a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device,

(b) a condition of mental impairment or a developmental disability,

(c) a learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language,

(d) a mental disorder, or

(e) an injury or disability for which benefits were claimed or received under the insurance plan established under the Workplace Safety and Insurance Act, 1997; ("handicap"). (Government of Ontario, Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11, s. 2)

This definition is broad, and Withers (2012) suggests that it is at times meaningless, as social assistance programs do not necessarily use the same definition, meaning that individuals may be defined as disabled under the AODA but unable to receive financial assistance as they do not qualify as disabled by another program. Moreover, while the AODA's definition of disability includes mental impairments and disorders as well as learning disabilities, Beer (2010) argues that people with nonvisible disabilities have not been adequately represented in the development of this legislation, resulting in their concerns being largely absent in the developed standards.

In 2010, Charles Beer (2010) conducted an independent review of the AODA (the review itself being a requirement of the AODA), in which he described a number of practical compromises in implementation. One of these compromises relates to a lack of ongoing publicity, meaning that impacted organizations and the general public remain unaware of the legislation. A lack of leadership in practice has also led to a poor coordination across municipalities, with local organizations lacking information on how others are implementing accessibility and what best practices are emerging (Beer, 2010). Moreover, implications for noncompliance with the AODA remain unclear. The Act has provisions for financial penalties for noncompliance(Accessibility for Ontarians with Disabilities Act, 2005, 2005), though Withers (2012) suggests that there is little in the Act to ensure that accessibility plans are enacted in practice, a fact supported by Moran (2014) in the second independent review of the AODA. In this later review, a lack of clear guidelines as to what accessibility means and how improvements can be measured was highlighted, ironically with these improvements being "the very thing [the AODA] is intended to produce" (Moran, 2014, p. 21). Many respondents consulted for the report

emphasized continued discrimination, as well as an ongoing lack of publicity, educational campaigns, or public awareness about the existence of the Act. Confusion over interpretations of the various standards was another significant theme (Moran, 2014).The AODA has been under its third review throughout 2018 by Hon. David Onley. It remains to be seen whether these issues are addressed.¹

A further key criticism is the lack of emphasis on how increasing accessibility can lead to positive economic effects for the province as disabled individuals are increasingly enabled to participate in society (Beer, 2010; Ross, 2013). Through focusing instead on costs, the Act may lead to resistance rather than enthusiastic uptake of accessibility initiatives. This potential opposition to change is especially important to consider; Prince (2009) refers to a 2004 study in which Canadians "expressed concern that the integration of people with disabilities in workplaces could negatively affect the rights of those who do not have disabilities to participation in the labour market" (p. 37).

While some criticisms, as highlighted above, relate to a lack of resources and obvious commitment from government parties, others relate to the content of the Act itself. For example, Ross (2013) suggests the language contained in the Act, specifically the use of "disabled" rather than "disablement" ultimately supports a biomedical understanding of disability and does little to address "intangible barriers" (p. 128). Ross (2013) stresses that "these barriers play a major role in shaping conceptualizations of disability and accessibility that permit the general public to regularly move through spaces and use services/systems containing disabling barriers without recognizing and/or taking issue with this exclusion" (p. 128).

¹ This report was released in March 2019.

2.2.5 Québec legislation

Québec was technically one of the first provinces to develop some sort of accessibility legislation, via the introduction of the Act to Secure Handicapped Persons in the Exercise of their Rights in 1978. This law was amended in 2004 and renamed the Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration. This law requires that municipalities and public agencies publish annual action plans, appoint accessibility coordinators, and address accessibility in transportation, building standards, and employment, among other areas. The stated goal of this Act is

to help [disabled individuals] to integrate into society to the same extent as other citizens by providing for various measures to apply specifically to handicapped persons and their families, their living environments and the development and organization of resources and services for them. (Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration, 2004, Section 1.1)

The definition used in this Act is relatively simplistic in comparison to that used in Ontario: "'Handicapped person' means a person with a deficiency causing a significant and persistent disability, who is liable to encounter barriers in performing everyday activities" (Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration, 2004, Section 1g).

The Régie du bâtiment du Québec is responsible for the implementation and monitoring of the Construction Code for Québec. Of note in this Code is that "the majority of historical buildings are not subject to the accessibility standards of the Construction Code, unless these buildings have been renovated or transformed on a large scale" (Régie du bâtiment du Québec, 2018).

2.2.6 Criticisms of Québec legislation

Québec was one of the earlier adopters of disability-focused legislation, but the province's Act has received significant criticism. Québec Accessible—a grassroots disability advocacy group—indicates that ministries and government agencies "are invited (but not required) to **train their employees** [emphasis in original] on the needs of people with disabilities" (Québec Accessible, 2018b) and that "Québec's law doesn't include a deadline for the accessibility of transportation services" (Québec Accessible, 2018c). The Act requires the development of action plans and independent reviews of the Act itself, yet there are no penalties for noncompliance. The first independent report about the policy was three years late and did not address many of the articles contained in the law. Québec Accessible further states that "there was **no public consultation** [emphasis in original] leading up to these reports. People with disabilities and the general public therefore didn't get to give their input on the impact of the law" (Québec Accessible, 2018a).

There is also nothing in the law to force compliance—for example, while annual action plans from municipalities and public agencies are required, "there are no penalties for unsubmitted reports and no requirement to follow through" (The McGill Daily editorial board, 2016). The law itself does not apply to private entities, and it has received very little media coverage in comparison to the AODA.

The 2017 review of the Act (Sogémap Inc., 2017) highlights a number of effects of the law, as well as comparisons to laws in other provinces and countries. Disability activist groups have largely been critical of the law, saying that it lacks the capacity to fulfil the obligations of the spirit of the law: "the representatives of [disability] associations have also been very critical of the capacity of the OPHQ [Office des personnes handicapées du Québec; Québec Office for Disabled Persons] to fulfil its different duties as stipulated in the Act." (Sogémap Inc., 2017, p. 34).

2.3 U.S. and U.K. policy

It is certainly worthwhile to look beyond our borders to develop an understanding of policies in other countries. For example, the Americans with Disabilities Act (ADA) was established in the early 1990s. Due to its prolonged existence and publicity, it is not unreasonable to surmise that at least to some extent Canada's own disability policies have been developed in response to the ADA's strengths and weaknesses. A further piece of legislation that will be considered here is the Special Educational Needs and Disability Act (SENDA) in the U.K. While it is less well known in North America than the ADA, its focus on higher educational opportunities for disabled individuals is especially relevant to this study.

2.3.1 Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) was signed into law in 1990 by President George H. W. Bush. It focuses on civil rights for disabled individuals, especially with regards to transportation, employment, and telecommunications. The Act contains five titles relating to employment, public services, public accommodations, telecommunications, and miscellaneous provisions. It was later amended in 2008. The law itself was not initially supported across the board, and delays in implementing it led to the "Capitol Crawl," in which disabled individuals convened at and physically crawled up the steps of the Capitol Building in order to put pressure on Congress to sign the ADA into law. This event ultimately garnered media attention (Eaton, 1990) and has been pinpointed as key in the passing of the Act (Histories of the National Mall, 2016).

2.3.2 Criticisms of the ADA

Since the ADA has come into effect, it has come under heavy criticism, largely from disability advocates and disabled individuals. It has been suggested that the ADA was developed from the perspective of the perpetrators of discriminatory practices and too

often focuses on individual actions rather than systemic barriers (Erevelles, 2013; Hahn, 2003). This individual focus is further highlighted by Withers (2012), who suggests that the ADA is about disabled people accessing rights that are available to nondisabled people rather than making any challenges to current systems of power.

Much of the criticism of the ADA pertains to its language, specifically the terms "major life activities" and "substantial limitations." The clause containing these terms states that if a disability does not "substantially limit a major life activity, that person would not qualify for protection under the ADA" (Pooran & Wilkie, 2005, p. 25). In practice, courts have often been left to rule on definitions of disability and eligibility. They have generally ruled using strict definitions of disability and limitations, creating a widely held view that the ADA is weak legislation (Pooran & Wilkie, 2005). From the perspective of many disabled individuals, the interpretation that has prevailed constitutes a compromise of their rights as it means that these are subject to limitations, especially as these are only ensured in a reactive manner upon a complaint being upheld. Essentially, protection from discrimination is not a guaranteed right, but a matter to be decided by the courts. In addition to this, Hahn (2003) suggests that many nondisabled people think disabled people are provided with advantages over others through the ADA: "In fact, judicial opinions have increasingly suggested that the protection granted Americans with disabilities constitutes a kind of unreasonable bias that extends beyond the guarantees bestowed on other individuals" (Hahn, 2003, p. 27). This judgement likely further perpetuates systemic oppression and disadvantage, as a segment of the general public fails to grasp the discrimination that exists in reality.

It has also been noted that the ADA is an underfunded piece of legislation (Hinton, 2003; Oakes, 2005), which ultimately leads to a compromise between human rights and economic resources, with resources often being found to have a more important role in the application of policy than individual rights (Oakes, 2005). This fact, in conjunction with the reactive focus of the legislation, ensures that the ADA underperforms in comparison to what it was originally developed to do as a result of the concessions that have arisen in its application. This state of affairs in turn has significant effects not only on disabled individuals, but also on considerations and application of the law in other areas, such as academic libraries.

2.3.3 H.R. 620 update to the ADA

In addition to the above criticisms around weaknesses in the ADA, there have also been attacks on the future of the ADA. In February 2018, the House of Representatives in the U.S. passed Bill H.R. 620, the ADA Education and Reform Act of 2017. The new Bill removes one of the options available to individuals when encountering architectural barriers to businesses. Under the former ADA, individuals had the opportunity to take a business to court in this circumstance. H.R. 620 removes this option, and requires the individual to instead first write to the business in question, "allowing 60 days for an owner to acknowledge receipt of the complaint, plus an additional 120 days before legal action can be initiated" (GovTrack, 2018). Supporters of the Bill suggest that this will cut back on "frivolous lawsuits that benefit trial lawyers more than disabled Americans" (GovTrack, 2018).

The changes have been heavily criticized by disability rights organizations as protecting business owners' rights over those of disabled individuals, and of encouraging businesses not to pre-emptively address accessibility (DeBonis, 2018; GovTrack, 2018). The American Civil Liberties Union (ACLU) suggests the bill "requires people with disabilities to jump through numerous procedural hoops before they can commence a lawsuit to protect their rights. It removes any reason for businesses to proactively comply with the ADA" (Ansley, Mathis, & Leveille, 2018).

2.3.4 The Special Educational Needs and Disabilities Act (SENDA) and the Equality Act

In the U.K., the Disability Discrimination Act (DDA) was introduced in 1995. The Act did not apply to educational institutions, a fact that was later addressed through the introduction of the Special Educational Needs and Disability Act (SENDA), which was originally developed to be incorporated into the DDA as Section IV of that Act. SENDA was introduced in 2001, with various stages of implementation in 2002, 2003, and 2005. The objective of SENDA was to "make further provision against discrimination, on grounds of disability, in schools and other educational establishments" (Special Educational Needs and Disability Act, 2001).

More recently, the DDA was replaced with the Equality Act of 2010, a statute that "brings together 9 major pieces of legislation and around 100 statutory instruments" (Ashtiany, 2011, p. 29) and is aimed at protecting the rights of and encouraging equality for all citizens, as well as at reducing systemic socioeconomic disadvantages faced by many populations in the U.K. It accomplishes these tasks primarily through prohibiting discrimination on the basis of nine characteristics that range from disability to gender reassignment and race. Ashtiany (2011) suggests that many of the definitions and orders from previous legislation remain unchanged, and a review of Part 6, Chapter 2 of the Equality Act suggests that requirements for anticipatory reasonable adjustments in higher education remain unchanged under the new Act.

In general, SENDA can be viewed as a much more proactive piece of legislation than the ADA, which in practice relies entirely on complaints. SENDA contains similar language to the ADA—for example, "undue burden" and "reasonable accommodation"—and there is a lack of clear definitions provided as to what "reasonable" means in practice (Reaney, Gorra, & Hassah, 2012). Again, this suggests a language compromise that is likely in part the product of the Act's being drafted in standard legislative language. However, there is also a significant language difference in this legislation that leads to a different response

from those to whom it applies. SENDA puts forward the need for *anticipatory* and "reasonable accommodations," which "puts the emphasis on institutions being prepared in advance for disabled students" (Tinklin, Riddell, & Wilson, 2004, p. 649). This places more responsibility on higher education institutions and the libraries within them to comply with the policy, and to do so before a complaint is made.

2.3.5 Criticisms of SENDA

SENDA has been the focus of far fewer criticisms than has the ADA. This may be due in part to its relatively recent introduction, meaning that the effects of the legislation are still being measured. Moreover, this legislation is weighted more heavily in favour of disabled individuals than the ADA is, and it places a greater burden on higher education institutions to overcome systemic barriers. Reaney, Gorra, and Hassan (2012) go so far as to propose that SENDA has placed students in the role of consumers, suggesting they are not just passive recipients of accommodation strategies. The primary concerns with regards to SENDA relate to a lack of clarity on what constitutes "reasonable adjustments," as well as a lack of provisions to draw on extra government funding to make necessary changes (Heaven & Goulding, 2002; Tinklin et al., 2004). This concern is especially an issue with regards to older universities, as many of these require major renovations to very old buildings in order to comply.

Moreover, others had previously raised concerns about the DDA as a whole. Alzughaibi (2015) notes that issues arose out of the Act's definitions of who qualified as disabled, as effects had to be "substantial" and "long lasting," and they had to place limits on "normal" activities or functions. Alzughaibi (2015) argues that the use of these terms ultimately supported a medical model understanding of disability, and it excluded many who, while effectively disabled, received no benefits as they were not *disabled enough* to meet the legal requirement. The Equality Act does broaden the definition of disability by no longer referring to specific capacities (Hand, Davis, & Feast, 2012). However, the effects of the DDA's replacement with the Equality Act remain to be seen, and

expressions of concern about disability potentially being sidelined by other "minority characteristics" have been raised (Lee, 2010).

2.4 Higher education in Canada

In Canada, postsecondary education—like secondary education—falls under the remit of provincial governments, and "the federal government has no direct role in shaping or coordinating postsecondary education" (Shanahan & Jones, 2007, p. 32). The federal government does provide a substantial amount of funding to postsecondary institutions and the activities that take place within them, but the legislation and policies that affect how this funding is provided and spent are separately negotiated with each province or territory (Fisher & Rubenson, 2014). This has led to varying approaches to the establishment and purview of both public and private universities and colleges, and to accessibility to postsecondary education through mechanisms such as access to student loans across the country. Fisher and Rubenson (2014) suggest that there has often been "a major line of tension in federal-provincial relations as each jurisdiction attempts to fulfil its respective responsibilities" (p. 13), and postsecondary education is certainly an area of contention at times.

Overall, there are nearly a hundred universities in Canada, and these serve nearly two million students. There are over 20 public universities located in Ontario, which is Canada's most populous province. Nine of these are bilingual or French-language institutions (Government of Ontario, 2018b; Shanahan, Jones, Fisher, & Rubenson, 2014). Québec has both the second-largest population in the country and the secondlargest number of universities, with 18 public institutions. Three of these are Anglophone institutions, while the rest are Francophone.

2.4.1 Ontario

In Ontario, postsecondary education is regulated by the Ontario Ministry of Advanced Education and Skills Development (previously named the Ministry of Training, Colleges and Universities), while primary and secondary education are regulated by another ministry, namely the Ministry of Education. Shanahan, Jones, Fisher, and Rubenson (2014) point out that student enrolment in both universities and colleges in Ontario has increased over the last 20 years but that postsecondary education "has not become more affordable in Ontario, and tuition increases have disproportionately affected lower-income students" (p. 181). The affordability of university tuition was addressed by the Ontario Liberal government in 2017, led by former premier Kathleen Wynne. This government introduced a new assistance program, providing free tuition for students from low-income families (Government of Ontario, 2017b). However, it is not yet clear whether this policy will be maintained by the current Conservative government (Rushowy, 2018).

It is also worth noting that Ontario universities have obligations under the AODA:

The act requires that all institutions receiving public funding (including colleges and universities) report annually on their efforts to make their institutions accessible to persons with disabilities as a precondition for receiving funding for facility maintenance and upgrading under the Facility Renewal Program. (Shanahan et al., 2014, p. 157)

This requirement, along with a general trend of higher education institutions working towards increasing enrolment numbers, would perhaps indicate a commitment to accessibility, as disabled students, as well as other minorities, are underrepresented at universities and thus constitute a targetable market. Shanahan, Jones, Fisher and Rubenson (2014) go on to suggest that it is not yet clear whether attempts to make university more accessible—which they define as having to do with economic access for underrepresented populations have been successful in Ontario.

Accommodations for students with disabilities in Ontario higher education are in part funded through the Accessibility Fund for Students with Disabilities (Ministry of Training Colleges and Universities, 2004). The funds delivered through this program require reporting on numbers of students registered with Disability Support Services at Ontario universities. Although numbers are difficult to come by, the Ontario Human Rights Commission reported that

For 2001-2002, 8,188 university students and 13,549 college students received accommodation for a disability, for a total of 21,737 students receiving accommodation. The most common type of disability cited by students at post-secondary institutions is a learning disability, followed by mobility impairments, and sensory impairments. A relatively small percentage indicate mental health disabilities. (2003, p. 45)

More recently, McCloy and DeClou (2013) found that the number of registered disabled students climbed substantially after 2003 in both colleges and universities: "This has been reflected in the number of students registering with disability offices on campuses, with university registrations increasing by 69 per cent between 2003-2004 and 2010-2011, and by 63 per cent in colleges over the same time period" (p. 9). McCloy and DeClou (2013) also emphasize a vast increase in numbers of students with mental health disabilities, especially mood and anxiety conditions. They highlight a 2011 publication, where "researchers found that 61 per cent of students accessing counseling or disability offices had a diagnosed mental illness" (Mccloy & Declou, 2013, p. 17). Other studies have found greater discrepancies between disabled and non-disabled students in university enrollment as compared to college enrollment (Finnie, Childs, & Wismer, 2011; Zhao, 2012). However, it should be noted that the data used in these studies is limited and often drawn from surveys that are already several years old.

Gallagher-Mackay (2017) highlights the lack of available data and suggests that "there should be serious consideration given to attaching basic demographic data including race, indigeneity, disability, sexual orientation/gender identity and special education needs to the [Ontario Education Number] for purposes of research into equity of access" (p. 28).

2.4.2 Québec

In Québec, postsecondary education is regulated by the Ministère de l'Éducation et de l'Enseignement supérieur, which also oversees secondary education. Québec's higher education system differs from those of the other Canadian provinces in the respect that students who complete their secondary education and wish to continue studying then enter a two- or three-year college program in the CEGEP system. CEGEPs have a variety of diploma options that correspond to whether students hope to enter university or the workforce. CEGEPs generally do not charge tuition for Québec residents, although there are also private CEGEPs that do. University tuition rates for residents of Québec are among the lowest in the country, but they do not apply to residents of other provinces or international students.

Government funding for Québec's universities has recently undergone changes, with new methods of calculating how much each university receives and a promised increase in funding over the coming years (Venne, 2018). According to the Québec government, "the universities are independent legal entities and enjoy a great deal of autonomy" (Gouvernement du Québec, 2018).

In Québec, the number of students registered with disabilities has grown dramatically since the early 2000s: "It suffices to take a look at the 2002-2003 report, which indicates that in total there were 1,645 students with disabilities across all of Québec's universities. This year, the figure stands at 14,652" (Association Québécoise Interuniversitaire des Conseillers aux Étudiants en Situation de Handicap, 2017). These

numbers only take into account students who are registered with Disability Support Services at 17 reporting university institutions. Numbers are likely to be higher in reality, as a variety of students will not make a disclosure for various reasons, such as being unaware of a condition, lacking the financial resources for medical or psychiatric/psychological assessments, and ongoing stigma in identifying as disabled. Interestingly, Fichten et al. (2003) found that rates of disabled students in Québec were significantly lower than in other provinces, and suggest that it is in part due to "lack of recognition of learning disabilities for postsecondary funding by the Québec Government" (p. 71). With the increase of registered students in the last decade, this finding may no longer be the case.

2.5 Higher education and disability

The U.S., U.K., and Canada, as well as many other countries, are seeing increasing numbers of disabled students pursuing postsecondary education, especially those with learning disabilities (McCloy & DeClou, 2013; Riddell & Weedon, 2011; Seale, 2014). However, Liasidou (2014) argues that disabled individuals still remain underrepresented in higher education generally and experience higher than average dropout rates (Vellani, 2013). Accommodation services within universities are improving in some respects, but disabled students still face significant discrimination. Common topics in the literature focused on this area include discussions of legislation—especially SENDA—as well as common barriers such as the need to identify as disabled, required documentation to access services, and discriminatory attitudes. For example, Oakes (2005) points out that many individuals involved in academic activities, including some disabled students themselves, consider accommodations to be a form of cheating that provides an unfair advantage. Other common views are that those with learning disabilities are simply lazy, despite the perception of some disabled students that they work longer and harder to achieve the same results as their peers (Denhart, 2008).

Higher education institutions' general focus on singular accommodations, which are often made possible through individual financial assistance, does not ultimately support more accessible and inclusive practices across the institution as a whole (Reaney et al., 2012). Riddell and Weedon (2011) indicate that the areas of teaching and learning are perhaps especially problematic with regards to accessible postsecondary opportunities. This is further supported by Rao (2004), Riddell, Tinklin, and Wilson (2006), Bishop and Rhind (2011), and Seale (2014), all of whom suggest that while some instructors are supportive, many faculty and staff members lack understanding of disability and are unwilling to support accommodations despite legislative requirements. Within Canada specifically, Duquette (2000), Hibbs and Pothier (2006), Flaherty and Roussy (2014), and Dolmage (2017) all emphasize attitudinal barriers as being significant in limiting access to postsecondary education. Individual accommodations, while currently essential, arguably do little to address these issues.

Accommodations are often highlighted as having the potential to level the playing field for disabled students, so to speak. However, they may actually create new obstacles at times. Requirements of documentation, the placing of the onus on students to request and negotiate accommodations—often with the requirement of having to negotiate with both the Disability Support Service office and with individual instructors—and internalized ideas that this is a form of cheating are all stressed in the literature (Hibbs & Pothier, 2006; Liasidou, 2014; Oakes, 2005; Woods, Cook, DeClou, & Mccloy, 2013). The perspective that receiving accommodations might amount to cheating is exemplified by Hamlet (2013), who goes so far as to suggest that many individuals with learning disabilities are "prescribed mental stimulants that effectively mitigate their disabling condition," and thus the provision of academic accommodations provides "an illegitimate advantage" to these students (p. 494). Hamlet (2013) describes this as a "blatant injustice occurring in higher-level academia" (p. 495).

Furthermore, there may be an institutional reliance on specific accommodations to support specific disabilities, regardless of whether these accommodations are actually appropriate for the student in question. Fichten et al. (2003) suggest that perhaps only 50% of disabled students in Canada are actually registered with Disability Support Services at their given institution. It is clear from these discussions that higher educational institutions are not adequately addressing questions of either accommodations or accessibility. Woods, Cook, DeClou, and McCloy (2013) highlight an internal study at an Ontario college that examined whether students with disabilities took longer to graduate than their non-disabled peers, as well as whether GPA differences existed between the two groups. Conclusions from the study included the idea that "the remaining half of GwD [Graduates with Disabilities] required additional time to complete their program due to a variety of factors, including a necessary reduction in course load to compensate for the impact of their disability, underpreparedness, academic difficulties, and not effectively using accommodations or other services" (Woods et al., 2013, p. 4). The emphasis in these findings are all focused on individual performance or use of supports rather than the nature of accommodations or the educational process itself. However, Dietsche (2012) found in a 2012 study of college students that "students with a disability utilized all campus support services examined, except math skills services, to a greater degree than those who did not report a disability" (p. 76). These findings may lead one to question whether it is in fact ineffective services and supports that lead disabled students to require additional time for their degrees and diplomas.

Building on this theme, Tanya Titchkosky (2011) discusses the unassuming prevalence of the belief that disabled individuals do not belong at university: "The apparent and obvious ease of a statement like 'things just weren't built with people with disabilities in mind' is a way to make inaccessibility sensible under contemporary conditions" (p. 74). It is true that disability was not considered at the time of construction of many higher education buildings. Nevertheless, the repetition of such ideas allows these practices to continue unchallenged. Not only are older buildings not renovated to be made accessible, but new buildings continue to be built without people with disabilities in mind. Titchkosky (2011) suggests that "this language paints the radical lack of access in an ordinary hue, which glosses the issue of human rights, questions of belonging, and other consequences that accompany the power to exclude" (p. 77).

The historical and ongoing lack of access and the many ways in which it is taken for granted continue to exclude disabled individuals from enrolling in and completing higher education degrees. The absence of disabled individuals is then used to justify the lack of access: "Those responsible for the building say that professors keep talking about how students in wheelchairs are going to come to school here, but they never show up. 'Why go through the expense?'" (Titchkosky, 2011, p. 79). It seems common sense that disabled individuals will not show up if buildings, classrooms, and libraries remain inaccessible—and this is not restricted to physical access. Rather than using their absence to prompt questions about why disabled students are not showing up, and what can be done to encourage and support them to pursue higher education, it is often instead used as a justification for continued exclusion.

Beyond considering disability, there are other important factors to take into account regarding the likelihood that someone will attend university. Factors such as socioeconomic status, province of residence, and gender may all play a role, although "access appears to be more strongly related to parental education and other sociocultural factors than to family income and other financial factors" (Finnie & Mueller, 2016, p. 4).

2.6 Higher education and academic libraries

The academic library plays a central role in higher education, and as Brophy (2005) states, it "has not infrequently been described as 'the heart of the university'" (p. 1). Brophy (2005) goes on to suggest that "the character of each library, and the types of

service it emphasizes, are based upon the needs of a particular, well-defined group of users. It is not surprising, therefore, that the university library reflects its university" (p. 1). Libraries play a key role in supporting the research activities of their institutions, but they also play an important physical role on the campus, even as a greater proportion of library collections is now being issued in digital formats: "There is a growing consensus that the chief function of academic libraries is not as a storage facility but as an important center for learning" (Breivik & Gee, 2006, p. 181).

The role of the library in a higher education institution is multifaceted, in part due to the heterogeneous populations who make use of them:

The days when the academic library could assume that its users were either scholars pursuing their research and teaching interests or full-time undergraduates straight from school have vanished. Today's user may be full- or part-time, may be studying at a distance, perhaps on a course franchised to a local college, may be pursuing funded research as part of an international team or may be a part-time teacher brought in to lead a specific module. Many students are mature, with wide work experience and very different expectations from those of their counterparts only a few decades ago. (Brophy, 2005, p. 73-74)

Academic libraries generally provide class resources, such as core textbooks and readings; access to a variety of print, multimedia, and digital resources; information literacy skills teaching and development; support for students, instructors, and others to pursue research; group and individual study and meeting areas; and a variety of other services. Libraries are also often responsible for oversight of institutional repositories and professionalization support, such as publishing guidance or copyright clearance. Many academic libraries also provide support to professionals who are affiliated with the institution, such as to doctors who work in a university hospital. With regards to the impact that libraries have on students' success in academia, Oliveira (2017) provides an extensive overview of LIS research that demonstrates that academic library usage positively correlates with retention rates in universities in the U.S., U.K., and Australia. Beyond the issue of retention,

studies within the Library and Information Science literature have correlated these terms with high grades and high GPA scores. Several authors of such studies indicated that there is a positive connection between library use, in its broadest sense, and high grades or grade point averages. (Oliveira, 2017, p. 319)

The library's role in the university is a unique one, as it provides collections, services, and teaching support, and it also functions as a place for students and other users to conduct research, complete coursework, and collaborate formally and informally.

The academic library building should be the place on campus reserved for nonclassroom academic work....Beyond simply being study space, the library should house other functions that support academic success and provide opportunities for faculty and students from different disciplines to mingle and mix. (Lewis, 2017, p. 161)

In addition, the library serves all members of the university community, whereas many offices and buildings on campus are primarily dedicated to specific disciplines or populations.

2.7 Accessibility in libraries

Accessibility has recently been a growing topic of interest in LIS literature. Previously, much of the literature that was produced was seemingly developed in relation to the introduction of the ADA or SENDA (Foos & Pack, 1992; Gunde, 1991; Harris & Oppenheim, 2003; Heaven & Goulding, 2002; Howe, 2011; Khailova, 2005; Wilhelmus, 1996), and the interest in this field may still be related to legislative requirements.

However, there does seem to be a growing awareness of the need to consider accessibility within the field of LIS.

The majority of publications in the field relate to practitioner experience, are based in the everyday realities of providing on-the-ground library services, or are empirical studies about adaptive technologies or website testing, such as those using the nowdefunct Bobby testing software (Comeaux & Schmetzke, 2013; Coonin, 2002). Other studies have examined whether websites comply with Web Content Accessibility Guidelines (WCAG) (Billingham, 2014; Liu, Bielefield, & McKay, 2017; Maatta Smith, 2014; Oud, 2012) or the accessibility of OPACs or databases (Axtell & Dixon, 2002; Byerley & Chambers, 2002). Some publications provide a positive overview of how libraries are faring with providing accessible services. Lewis (2013) suggests that libraries can provide fully accessible services, but that there is "a lack of awareness of the user, lack of comfort level of the staff, and lack of inclusive programming" (p. 232). Thus, simply remedying these issues will fix the problem. Willis (2012), in a survey of academic health sciences library services suggests that "budgets are being squeezed each year, and often building updates are not the responsibility of the library but the institution. Despite this hardship, libraries are meeting minimum standards" (p. 94). Pinder (2005) suggests that "we should all be aiming for best practice to make life as successful as possible for students. Many would argue that librarians, by their nature, would have done this anyway" (p. 471).

The LIS literature on accessibility falls broadly into three categories: literature that has been produced by practitioners, which includes research studies at times; that produced by academic researchers; and that produced by library associations. Within these categories, both public and academic libraries are at times discussed, while some authors have focused on library services more broadly.

2.7.1 Practitioner literature

Much of the literature pertaining to accessibility has been produced by library practitioners. These publications, which appear in both professional literature and academic journals, often include details about what a specific library has done to improve accessibility (Bobier & Tyler, 2012; Charles, 2005; Forrest, 2006; Will, 2005), or a brief discussion of the need to consider accessibility, perhaps in relation to legislation (Bobier & Tyler, 2012; Chittenden & Dermody, 2010; Fulton, 2011; Gunde, 1991).

Beyond research, several library professionals have written or compiled guidebooks on the provision of accessible library services (Deines-Jones, 2007; Hernon & Calvert, 2006; Kowalsky & Woodruff, 2017; A. Roberts & Smith, 2010; Vincent, 2014). These publications often include details about assistive technologies (Deines-Jones, 2007; A. Roberts & Smith, 2010), relevant legislation (though all of the guides cited above focus on the United States, meaning that what they discuss is not always relevant elsewhere) (Hernon & Calvert, 2006; Vincent, 2014), and practical tips and considerations such as programming ideas and communication strategies (Kowalsky & Woodruff, 2017; A. Roberts & Smith, 2010; Vincent, 2014).

2.7.2 Academic research

Much of the academic literature pertains to studies about the accessibility of library websites. For example, Yi (2015) utilizes automated testing to examine the websites of twenty public library systems in the U.S. in order to determine their compliance with Section 508 of the Rehabilitation Act of 1973. Findings indicate that many libraries are not meeting required standards. Maatta Smith (2014) and Liu, Bielefield, and McKay (2017) conduct studies using an online accessibility evaluator (WAVE) to assess the accessibility of U.S. urban public library websites. Billingham (2014) discusses accessibility testing of a university library's webpages and the library's attempts to make

improvements for a second round of testing. Schmetzke has been involved in several studies pertaining to the accessibility of academic library webpages (Comeaux & Schmetzke, 2013; Schmetzke, 2001) and has conducted testing using the now defunct Bobby software, as has Spindler (2002). Providenti and Zai (2007) discuss website accessibility in relation to U.S. legislation, as does Vandenbark (2010). As most of these discussions relate to the use of screen-reading technologies, they are primarily geared towards considerations of visual impairments. This is not necessarily surprising, as print materials are one of the key resources held by libraries. However, the extensive literature on this one subtopic provides a somewhat limited, or at least fragmented, discussion of accessibility overall.

The academic literature on library accessibility beyond website testing is not nearly as extensive. Walling (2004) discusses a 2000 survey on how LIS programs in the U.S. incorporate discussions of the ADA and accessibility into their Master's programs, finding that while all the schools provide some information on the ADA, the information provided varied greatly in its coverage and depth. Samson (2011) provides an overview as to how several midwestern university libraries have provided accessible library services. Findings suggest that physical access is a primary consideration, whereas consideration of provision of services varied. In a similar vein, Rutledge (2002) discusses the results of a survey that was sent to public libraries in the U.K. in order to examine whether policies and services for library users with dyslexia were in place. Budget restrictions and a lack of knowledge about potential services were presented as key issues.

In 2015, Bonnici, Maatta, Brodsky, and Steele (2015) published a study about librarians who provide services and resources to the National Library Service for the Blind and Physically Handicapped (NLS) in the U.S. This study emphasizes the need to consider services for "legally disabled" individuals. Its authors suggest that "recent studies indicate that fewer than 15% of the three million Americans eligible to use the service

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actually do so" despite "resources and services hav[ing] been updated to provide improved services" (Bonnici et al., 2015, p. 504). With regards to what skills were indicated as necessary for working with the NLS, more than half the respondents highlighted "knowledge and skills in working with information technologies" (Bonnici, Maatta, Brodsky, & Steele, 2015, p. 510). Interestingly, the survey respondents also stated that nearly 90% of their clientele were Caucasian. Although there were calls for more outreach and funding, as well as a "universal access philosophy" (Bonnici et al., 2015, p. 513), there was no discussion as to how factors such as race may affect the low use of the services available. More advanced technologies are unlikely to address low use if other factors such as unsuitable collections or services are not addressed.

Within higher education, several British studies have been developed in recent years in response to SENDA (Forrest, 2006; Harris & Oppenheim, 2003; Heaven & Goulding, 2002; Howe, 2011; Joint, 2005). These generally examine the specific requirements of SENDA and the various obstacles in improving services such as financial restrictions and a lack of guidance. In some cases, assessments of the practical steps that various libraries were taking to respond to the introduction of this legislation are also stressed.

2.7.3 Organizational literature

Another area of LIS accessibility literature has been produced by library organizations, such as the American Library Association (ALA), the now disbanded Canadian Library Association (CLA), and its successor, the Canadian Federation of Library Associations (CFLA). These documents include guidelines and value statements about libraries' commitments to developing inclusive and accessible libraries, and they are applicable to various types of libraries.

In 1997, the CLA published the *Canadian Guidelines on Library and Information Services for People with Disabilities* (Canadian Library Association, 1997). This document suggests that disability needs to be considered in core budgets and policies and that collaboration with local and national organizations is key to developing appropriate services and marketing them (Canadian Library Association, 1997). The CFLA has since taken this initial document and modified it to produce the *Guidelines on Library and Information Services for People with Disabilities* (Canadian Federation of Library Associations, 2016). While the core components of these two sets of guidelines remain the same, the updated guide provides more details and examples on how to apply accessible standards and services, and it also provides resources to consult. In addition, problematic phrasing in the 1997 standards—such as the statement that "the library's services for persons with disabilities should be mainstreamed into its *regular* [emphasis added] public services" (Canadian Library Association, 1997)—have been removed in the 2016 version.

The ALA has also produced a number of documents, policies, and guidelines about accessibility. The ALA's disability policy suggests that "libraries should use strategies based upon the principles of universal design to ensure that library policy, resources and services meet the needs of all people" and that students in library graduate degrees should be required to "to learn about accessibility issues, assistive technology, the needs of people with disabilities both as users and employees, and laws applicable to the rights of people with disabilities as they impact library services" (American Library Association, 2006). The policy also highlights relevant U.S. legislation—namely the ADA and Section 504 of the Rehabilitation Act of 1973. Other resources come from specific subgroups of the ALA—such as the Association of Specialized Government and Cooperative Library Agencies—and these at times provide guidance on serving patrons with disabilities or available adaptive technologies (Association of Specialized Government and Cooperative Library Agencies, 2018a, 2018b; L. Rutledge, 2014).

2.7.4 Accessibility of libraries in Canada

Very little of the literature published to date has related specifically to the case of libraries in Canada—although this will perhaps change in the near future as more

disability legislation is developed across the nation—and what exists is primarily limited to Ontario. For example, Oud (2012) and Hill (2011) conducted studies on the readiness of Ontario libraries to meet the accessible information and communication standards set out by the AODA through assessments of library websites and public-library surveys. Hill (2011, p. 432) notes that at the moment of publication, there did not seem to have been an increase in discussions with disability communities on the part of libraries, and she suggests that this is a key area that libraries should consider as they develop their services to meet AODA requirements. Oud's study focuses on specific WCAG 2.0 guidelines, highlighting issues like markup and contrast errors and correct use of headings on library websites. She found that "public libraries had a significantly lower number of accessibility errors (excluding markup and contrast errors) than college or university libraries" (Oud, 2012, p. 6), but it was not clear what the reasons for these findings were.

Chittenden and Dermody (2010), as well as Nichols and Schnitzer (2015), briefly describe how some of the standards in the AODA—specifically the Customer Service standard and the Information and Communications portion of the Integrated Accessibility Standards Regulation—will affect libraries generally, indicating staff training, policies, and accessibility of print collections as areas of focus. The Information and Communications standard in particular sets out requirements for academic libraries—as well as requirements for public libraries—stating that these institutions "shall provide, procure or acquire by other means an accessible or conversion ready format of print, digital or multimedia resources or materials for a person with a disability, upon request" (Accessibility for Ontarians with Disabilities Act, 2005).

Finally, Oud (2018) conducted a cross-Canada survey of academic librarians to determine the level of job satisfaction for disabled librarians. Results indicated that the majority of disabled librarians had invisible disabilities, and that many of these individuals had not fully disclosed their impairments to colleagues or supervisors.

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Additionally, "librarians with disabilities felt that their workplace was less accepting of diversity than non-disabled respondents did" (Oud, 2018, p. 11).

2.7.5 Theory use in LIS literature on accessibility

Few publications draw on the multiple models for understanding disability (these are discussed in more detail in Chapter 3), and even when mention is made of them, there is limited exploration of how they may affect notions of accessibility from LIS. Few LIS publications on accessibility include the perspectives of disabled library users (or nonusers) themselves (Burke, 2009; Dermody & Majekodunmi, 2011; Hill, 2013), even when they assess the value of a given piece of adaptive technology or the accessibility of a website.

There are of course some exceptions to this trend of limited use of theories in examining accessibility in LIS. Jessica Schomberg (2017) draws on critical disability theory in discussing her own experiences as a librarian with diabetes. This self-reflexive piece centres her own experiences of interacting with colleagues, disclosing disability, and what critical disability studies (CDS) can offer to librarianship: "CDS also reminds us to examine the power structures in place that determine for whom library policies are designed, how library values are operationalized, and who decides what care is necessary and appropriate" (p. 124). Although Jaeger (2018) suggests that "libraries have long included disabled people as their community members" (p. 55), Kumbier and Starkey (2016) highlight that the ALA's statements on core values in librarianship "treats equity and access as economic, political and technical problems to be solved, but does not challenge librarians to assess, and reassess, what access and equity mean beyond the level of practice, or beyond the level of access to materials or information" (p. 470). They go on to emphasize that "disability is an inherently relational, social matter; it is something that happens, over and over, in interactions among people" (Kumbier & Starkey, 2016, p. 472). Discussions of resource accessibility thus do not address the underlying barriers that exclude certain individuals in libraries.

Other theoretical approaches include Adler, Huber, and Nix (2017), who use Goffman's theory of stigma to examine library classification systems on the topic of disability, as well as Hill (2011), who utilizes a capability-approach framework in the analysis of accessibility practices in Ontario public libraries. Copeland (2011) uses critical qualitative analysis in a study on the perspectives of disabled library users and their enjoyment of libraries. It should be noted that both of these studies include disabled participants, a feature which is rare (Hill, 2013), although it is also present in Burke's (2009) survey of disabled individuals' library usage and satisfaction with the accessibility of these libraries, as well as in a few other studies (Creaser, Davies, & Wisdom, 2002; Heaven & Goulding, 2002). Despite these inclusions, it is far more commonly professional librarians whose perspectives are included in these studies on accessibility (Harris & Oppenheim, 2003; Howe, 2011; Khailova, 2005; Rutledge, 2002; Samson, 2011).

Although little of the literature includes theoretical discussions as to the meaning of disability or accessibility, this perspective is increasingly evident. Nichols and Schnitzer argue that a "mental readjustment to focus on accessibility and equity and away from disability and accommodation is a shift from a problem-based model to one rooted in fairness instead" (p. 21). Jaeger (2018) states that "the concept of disability—as well as the accompanying disadvantages and exclusions—is very much a creation of society" and highlights the social model as addressing this common interpretation. However, even this inclusion of discussion about the social model of disability is worth questioning, as he suggests that "the activities of libraries fit firmly within the goals of the social model of disability" (Jaeger, 2018, p. 55). However, while Jaeger (2018) emphasizes the long history of inclusion of disability policies in libraries as key evidence of this integration of the social model, Kumbier and Starkey (2016) point out that "diversity-related policy documents… can function as evidence that the problem (diversity—or in our case inaccessibility) is taken care of because it has been thought about, addressed, and codified in an official, documented way" (p. 477).

The suggestion that librarians have a duty to demand accessibility from database vendors—something emphasized by Nichols and Schnitzer (2015) and Kowalsky and Woodruff (2017)—underscores a potential role for librarians as allies in demanding more accessibility across society. Moreover, more studies are emphasizing the need to include disabled individuals in the planning of services or renovations: "Libraries should make it standard practice to include users with disabilities in planning stages" (Nichols & Schnitzer, 2015). However, even with this emphasis, the possibility of including disabled librarians is seldom considered, although Nichols and Schnitzer do suggest that "if the library has begun to cultivate a climate of inclusion that considered disabilities as part of that portfolio it may be easier for staff members to disclose their needs and receive appropriate accommodations that can help them to become their most productive selves" (p. 24). This suggestion, while true, does not seem to take into account that the profession of librarianship may have already excluded a great number of potential employees. Additionally, the emphasis on productivity may be seen to overshadow other considerations, such as equity in accessing employment opportunities and other services.

2.8 Research questions

Within the LIS literature on accessibility, several gaps are evident. There are significant gaps with regards to how accessibility and disability are considered. Few publications delve into understandings of disability, and the literature on accessibility is sparse when the lens narrows to Canadian academic libraries. These lacunae prompt the following research questions, some of which are overarching in their nature and will ideally allow an understanding of the broader picture of accessibility in Canadian academic libraries to be developed:

- In what ways do Canadian academic libraries conceptualize disability?
- Are disabled students' academic needs being met by Canadian academic libraries?

Broad though these questions may be, they are ultimately small steps towards answering even broader questions about the nature of accessibility in academic library services in Canada and beyond. Libraries and librarians are limited by budgetary constraints and a lack of research upon which to draw in order to develop best practices. Without examining such issues through ongoing research, it is unlikely that academic libraries and librarians will be able to adequately address issues of accessibility in higher education for disabled students, despite the incontestable importance of such endeavours. This research will provide some initial guidance for the consideration of this issue.

Within this study, there are a number of more specific research questions that can contribute to answering the overarching research questions. These questions have been arrived at due to their ability to contribute to the overarching research questions, and they have also been shaped by considerations of constraints on the research, such as available time and resources. As Andrews (2003) points out, "The kinds of questions that can be asked have to be answerable within the time available" (p. 7). The questions to be explored in this study are:

- Do the services provided by academic libraries match up with their policies on accessibility?
- 2. How do those working in academic libraries understand disability? Are disabilities understood based on a model that is medically aligned or socially aligned? Does this understanding of disability relate to or have an effect on the services provided?
- 3. What do library staff consider to be the main challenges and obstacles in creating more accessible library services?
- 4. How do disabled students experience library services? Do they feel supported by academic libraries in their educational pursuits? Are academic library services as accessible as they need to be to adequately serve disabled students?

5. What do disabled students consider to be the main challenges and obstacles in creating more accessible library services?

The first three questions allow for a broader understanding of how academic libraries are conceptualizing disability—whether in purely medical terms or as a social construction—and questions four and five address whether disabled students' academic needs are being met by Canadian academic libraries. Although it is hoped that positive trends and practices on the part of the libraries in question will be found in the results of this study, the extensive gaps in the literature suggest that it is unlikely that Canadian academic libraries are addressing accessibility to the fullest extent possible. An examination of some of the underlying rationale behind accessibility practices may lead to the identification of strengths or weaknesses, and it may also reveal new directions for future practice.

3 Disability studies

The theoretical lens used in this research primarily comes from disability studies, a field that has at times been influenced by feminist theory, critical race theory, and queer theory, among others. Disability studies provides a framing lens that has seldom been used within LIS, despite the seemingly obvious benefits for our understandings of accessibility in libraries through its use. In this study, this lens contributed to the overall shape of the study and aided in determining data sources, questions asked, and methods of analysis. In order to think about accessibility, it is first necessary to think about disability and its multiple meanings.

3.1 Theorizing disability

The field of disability studies is relatively young, but it is quickly growing and beginning to engage with ideas from outside fields. As an academic discipline and movement, it began to take shape in the 1980s, although its roots go further back to when disabled individuals and advocates became increasingly active in voicing the need for protected rights for disabled individuals in North America and Western Europe. In a similar vein to many other fields of critical study, disability theory begins with questions that are focused on how disability is conceptualised and that are based on the notion that disability is a socially constructed characteristic as opposed to an inherent and negatively viewed trait that resides in some people and not others. Although the field of disability studies is growing, there are two principal models for understanding and defining disability that remain influential—and that were utilized in this study—namely the medical model and the social model of disability. These two models remain prevalent, even as criticisms of them and calls for further developments in the field emerge.

3.1.1 Medical model of disability

The discourses present within the medical model of disability have their roots in eugenics movements, and they continue to hold sway today (Goodley, 2011; Withers, 2012). This model emphasizes a focus on biological deficits or "deviant anatomy" (Withers, 2012, p. 31) residing *within* an individual. The medical model "locates the 'problem' of disability within the individuals and... sees the causes of this problem as stemming from the functional limitations or psychological losses which are assumed to arise from disability" (Oliver, 1996, p. 32). Scotch (2000) states that "this model can accommodate recognition of discrimination as a problem associated with disability, but it emphasizes that people with disabilities must 'overcome' the limitations of their impairments in order to function in society" (p. 219).

3.1.1.1 Historical context

The medical model of disability has a history that is closely entwined with eugenics movements of the early 1900s, as well as with the institutionalization of disabled individuals (Withers, 2012). With regards to institutionalized living, this practice emerged with the industrial revolution as more and more individuals moved from rural areas to urban centres:

It is not that disability arrives with capitalism but, rather, that it takes a specific form—i.e. the personal tragedy model—and social oppression becomes more acute... Industrial capitalism established the institution as the principal means of social control. It is manifest in the proliferation of prisons, asylums, workhouses, industrial schools and colonies... The effect was to segregate and isolate disabled people from the mainstream of community life. (C. Barnes & Mercer, 2010, p. 83)

As industrialized societies developed in the West, and disabled individuals were amongst those who were unable to participate in new working conditions, "the [British] institutionalized population rose substantially through the nineteenth century, from three to thirty per 10,000" (C. Barnes & Mercer, 2010, p. 17).

Alongside these increases in institutionalization of elderly and invalid individuals, the eugenics movement arose and had considerable "influence on legislation and policy" in the West (Murphy, 2016, p. 81). Withers (2012) suggests that "it was no coincidence that the eugenic movement developed shortly after the industrial revolution, as it provided the perfect explanation for massive disparities in wealth as well as the increasing poverty and suffering among the working class" (p. 16). The term "eugenics" was introduced by Francis Galton in the late 1800s to refer to selective breeding practices aimed at "improving inherited stock" (Galton, as cited in Withers, 2012, p. 13). Barnes and Mercer (2010) trace the historical support for the development of eugenics: "Scientific legitimacy for such ideas was provided by post-Enlightenment thinkers such as Thomas Malthus, Herbert Spencer and Charles Darwin...[Spencer] maintained that, if left to compete among themselves, the most intelligent, ambitious and productive people would win out" (p. 221). Eugenics practices were thus often aimed at "selective breeding" or "positive eugenics" that were "focused on convincing the 'best' people that is, the brightest, most talented and healthiest—that they had a moral duty to reproduce in order for British society to flourish and advance" (Murphy, 2016, p. 81). Intertwined with ideas about who constituted the "best" were notions of sex, race, class, and disability.

Many nations have engaged in eugenics movements to different degrees over the last century and a half. The most famous and horrendous occurrence of eugenics is the one led by Nazi doctors leading up to and during the Holocaust. However, the U.S., U.K., and Canada were all actively leading eugenics movements of their own—often based around forced sterilization of those deemed undesirable—with aspects of these lasting well into the late twentieth century (Murphy, 2016; Withers, 2012). In fact, in the early 1920s, "Fritz Lenz, a German physician-geneticist advocate of sterilization... berate[d] his

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countrymen for their backwardness in the domain of sterilization as compared with the United States" and suggested that "Germany had nothing to match the eugenics research institutions in England and the United States" (Lifton, 1986, p. 23). Impairments were considered to amount to biological inferiority and were to be eliminated, which at times even meant allowing "newborns to die quietly" (Fleischer & Zames, 2011, p. 138), although not all medical professionals were supportive of this practice (Ummel, 2017).

Eugenics practices were of course not always as explicit as those found in these sterilization policies, and certainly not as horrendous as those occurrences in Nazi Germany. Withers (2012) discusses the appearance of eugenics in immigration policies in both the U.S. and Canada, where "people could be barred for things like varicose veins, asthma, hernias, poor eyesight, flat feet and a gamut of other conditions" (p. 19). Other policies related to marriage and segregation of those deemed inferior. McLaren (1990) highlights demands from the Canadian medical community in the early 1900s that "degenerates, criminals, epileptics, and alcoholics be denied marriage" (p. 74). As the medical profession gained respect amongst the public in the early 1900s, their ideas about eugenics were often accepted. This acceptance was not entirely due to intolerance—although this is certainly a key aspect—but was arguably also born out of compassion and fear:

For the middle class, of course, it was a comforting notion to think that poverty and criminality were best attributed to individual weaknesses rather than to the structural flaws of the economy. This explains why so many otherwise intelligent humanitarians supported the labelling, the segregation, and ultimately the sterilization of those they designated subnormal. (McLaren, 1990)

Of course, there were those who did not agree with these views, nor were the results always so extreme. Eugenicists were instrumental in the development of birth control practices, as well as in lowering infant and maternal mortality rates (McLaren, 1990;

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Ummel, 2017). The move away from eugenics came only after news about the Nazi programs began to filter out into the world:

The backlash was swift. Eugenics was no longer a fashionable topic at dinner parties, universities stopped offering classes in eugenics, and organizations replaced the term 'eugenics' with 'genetics' in their names. Even the most ardent supporters distanced themselves from the movement. (Ummel, 2017, p. 394)

However, even after this shift, population control continued to be a focus for many governments, and many sterilization policies remained in effect (Murphy, 2016; Ummel, 2017; Withers, 2012). Even today, Withers (2012) stresses that "eugenics has not disappeared; it is in our universities, in our courts, in our hospitals, at the border and on television. The eugenics model of disability lies at the foundations of how we think about disability today" (p. 29). Today, this model perhaps appears most explicitly in discussions of prenatal testing and abortion, as well as of physician-assisted suicide.

3.1.1.2 Medical model in practice

The medical model not only focuses primarily on individual limitations but also privileges medical expertise in diagnosing and "fixing"—or at least minimizing—these limitations at the expense of considering the experiences or preferences of disabled individuals themselves (Goodley, 1997; Thomas, 2007). Through this frame, disability becomes a private matter between an individual and their doctor, rather than a societal responsibility to ensure that individuals are able to access goods and services that are appropriate to their needs (Withers, 2012). Despite the prominent power relations at play between doctors and patients, medicalized views of disability are often promoted as being "neutral" (Withers, 2012), and they remain prominent:

The "illness and disability as social deviance" paradigm is remarkably persistent in medical sociology, surviving the changing fashions and fortunes of diverse theoretical perspectives. Medical sociology and medicine have shared an interest in categorising and studying the "abnormal" represented by bodily impairment the former engaging with it socially, the latter biologically. (Thomas, 2007, p. 45-46)

Despite the considerable drawbacks and exclusionary practices that this model produces, it continues to dominate much of the discourse around disability in media and policy, as can be seen in the Government of Canada's reports on disability. For example, Human Resources and Skills Development Canada (2011) suggests that "certain types of disabilities are also much more common than others. Children are more likely to be *diagnosed* [emphasis added] with disabilities related to their academic and social functioning" (p. 5). It also observes that "at early ages, disabilities can be difficult to diagnose, since children develop at different rates, and finding a suitable health professional can be challenging" (Human Resources and Skills Development Canada, 2011, p. 6). The Canadian government's continued emphasis on diagnosis reinforces a medical understanding of disability as an abnormality experienced by some members of the population, and this model remains the prominent one for understanding disability in most contexts (Withers, 2012).

3.1.2 Social model of disability

In reaction to the medical model's understandings of disability, various other models of disability—such as the rights-based model, minority-group model, and affirmation model—have emerged in recent decades. Emerging out of the U.K.'s disability movement, the most prominent of these is the social model of disability, a term attributed to Michael Oliver in the late 1980s. The social model of disability posits that rather than being inherent to functional impairments within any individual, disability is created through the existence of social, economic, physical, and cultural barriers (Oliver, 1996). The social model creates this understanding through differentiating between disability—understood as "all the things that impose restrictions on disabled people...

ranging from inaccessible public buildings to unusable transportation systems, from segregated education to excluding work arrangements" (Oliver, 1996, p. 33)—and impairments, which are the physical and cognitive limitations that disabled individuals experience. This distinction is key to the social model of disability, and it is summed up by the Union of the Physically Impaired Against Discrimination (UPIAS): "In our view, it is society which disabled physically impaired people. Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society" (UPIAS as cited in Oliver, 1996, p. 33). "Impairment" is often used to describe a medical condition, but it is the social construction of "disability" that creates the social, political, and economic exclusions that disabled individuals experience. This occurrence is similar in many ways to the distinction between "sex" and "gender" developed by second-wave feminists. Within the social model, the focus is on challenging social understandings and exclusions, and in doing so fighting against conventional conceptions of disability.

3.1.2.1 Historical context

The British social model of disability has its roots in Marxist ideology, and as such there is often an implicit underlying focus on gaining access to paid labour, education, and independent living in its current forms (Thomas, 1999). Finkelstein (2001) goes so far as to suggest that

we cannot understand or deal with disability without dealing with the essential nature of society itself. To do this disabled people must find ways of engaging in the class struggle where the historical direction of society is fought, won or lost. (p. 5)

This grounding in the Marxist tradition is the result of various historical social and economic factors that took place as industrialization developed in the U.K. Urbanization and the development of factory work meant that "people with impairments were unable to sell their labour-power on equal terms" (Thomas, 2007, p. 54), and "the institutionalization of people whose social utility was discounted was the state-sponsored response, one that persisted long into the twentieth century" (Thomas, 2007, p. 55). Societal organization was dependent on the categorization of individuals in bureaucratic and administrative terms, which led to "the creation of classes of people, including 'the feebleminded', 'cripples', 'in-valids', deemed redundant and dependent on the grounds of their incapacity to present themselves as wage labourers" (Thomas, 2004, p. 35). Furthermore, "illness and disability could be understood to be a direct *product* of the capitalist economic system (through industrial accidents, poverty, and so forth)" (Thomas, 2007, p. 30).

In the 1940s, the welfare state emerged in the U.K. as the Labour government elected in 1945 enacted "wide-ranging institutional reforms" that "targeted the elimination of the 'five giants'—want, disease, ignorance, squalor and idleness—as necessary to advance equality and social integration" (C. Barnes & Mercer, 2010, p. 100). These reforms led to the development of the National Health Service (NHS), compulsory employment insurance, child support, and universal education, amongst other things (C. Barnes & Mercer, 2010, p. 100). At the same time, many industries—such as mining, rail, postal services, steel, and shipbuilding—were nationalized, allowing workers to organize in large and effective unions, and this helped to entrench a shared class solidarity. It was perhaps in part these organizations who had the power to demand fair working and living conditions that inspired the organization of the Union of the Physically Impaired Against Segregation (UPIAS), which first put forward the notion that "impairment was no longer the cause of disability" (Thomas, 2007, p. 52). One of the main focuses for UPIAS was on desegregation across society—especially with regards to institutionalization of disabled individuals—which was to be achieved through state support as well as employment and educational opportunities (Union of the Physically Impaired Against Segregation, 1974). As Thomas (2007) points out, "The message appears to be that the full engagement of people with impairments in the economic

sphere—in employment and labour—will bring an end to their social oppression" (p. 55). While the Marxist roots would seem to emphasize a restructuring of society, Withers (2012) argues that "the social modelists' obsession with participation in paid employment (i.e. participation *within* the capitalist system) works to legitimize capitalism rather than undermine it" (p. 90).

3.1.2.2 Disability and impairment

A key component to the impact of the social model of disability—an impact that should not be understated—was the separation of impairment and social causes of disability. Ross (2013) highlights that "the [social] model pulled apart disability and impairment so that its users would not concern themselves with personal restrictions caused by impairment, which would, in turn, help the users to better identify and address social barriers that could be changed" (p. 132). Withers (2012) emphasizes that "under the social model, impairments may be caused by illnesses, and some ill people may be disabled, but disability is a social construct" (p. 87).

However, this separation of disability and impairment is also a contentious point within the social model of disability, as will be further discussed later. This is often highlighted by feminist, queer, and/or trans disability theorists such as Carol Thomas and A.J. Withers, who suggest that the focus on disability (and relegation of discussions of impairment) ignores individual and often painful bodily experiences. Others have questioned "whether disease or sickness, such as HIV/AIDS, cancer or diabetes, are considered impairments" (Barnes & Mercer, 2003, p. 67-68) and thus matters of concern for the disability community.

Other criticisms have come from feminist disability scholars and advocates, who stress that the separation of disability and impairment presents an untenable understanding of disability (Garland-Thomson, 2011; Thomas, 1999; Titchkosky, 2011). Thomas (1999) encompasses the tensions between disability and impairment in stating that disability is about restrictions of activity which are socially caused. That is, disability is entirely socially caused. But some restrictions of activity are caused by illness and impairment. Thus some aspects of illness and impairment are disabling. But disability has nothing to do with impairment. (p. 39)

Several theorists contend that this separation of disability and impairment ultimately reinforces medicalized understandings of impairments, thus undermining the social model in itself. For instance, Erevelles (2013) suggests that although "on one level delinking disability from impairment will expose the social construction of their oppression, at another level this delinking will be unable to adequately account for the complexity embedded in the formation of disabled identity" (p. 162). Other criticisms raised have taken aim at the lack of inclusion and diversity within disability theory (further discussed in Section 3.3.2), as it emerged with a prominent focus on the experiences of white, middle-class, physically impaired males. Critics have suggested that it has failed to take into account the experiences of those with intellectual or psychological disabilities, or the multiple oppressions that those of other races, genders, social classes, or even impairments experience.

3.1.3 Minority-group model of disability: Two paths to the same end

At the same time that activists in the U.K. were developing the social model of disability, disability activists in the U.S. were also advocating for disability rights. Barnes and Mercer (2010) explain some of the distinguishing features between the disability rights movements in the U.S. and those in the U.K. The ongoing focus on civil rights in the U.S. "provided a major stimulus to an emerging 'disability rights movement,'" whereas "Britain has concentrated on achieving changes in social policy—that is, following a legislative route" (Barnes & Mercer, 2010, p.166). Withers (2012) indicates that "the rights model of disability focuses on human and citizenship rights and ensuring that disabled people have equal access to these rights" (p. 81). The end goals of the two movements are arguably the same: disabled individuals' freedom from oppression and

discrimination. However, likely due in large part to historical societal circumstances, the two movements have converged on this goal from different directions. Whereas the social model calls on some level for "changes to the organisation of society" (Oliver, 1996, p. 24), "the rights model focuses on getting disabled people access to society and changing it only as much as is necessary to establish their desired rights; supporters of this movement do not aim to fundamentally restructure society" (Withers, 2012, p. 82). Within the minority-model movement, "advocates argued that disability is a social condition of discrimination and unmerited stigma, which needlessly harms and restricts the lives of those with disabilities and results in economic disparities, social isolation, and oppression" (Nielsen, 2012, p. 162).

3.1.3.1 Historical context

Social and cultural developments throughout the fifties, sixties, and seventies in the U.S. ultimately led to the creation of the minority-group model of disability, in which "disability activists and scholars... view the elimination of social barriers as a matter of legally protected civil rights" (Berger & Lorenz, 2015, p. 1): "Inspired by the American Civil Rights Movement the Disability rights movement from the 60s onwards continuously exposed the oppressive life conditions which excluded persons with disabilities from participating in community life" (Verstraete, 2012, pp. 23-24). The movement gained traction when Edward Roberts "sued [the University of California at Berkeley] to force them to let him attend" (Withers, 2012, p. 82). Roberts was key in establishing "a makeshift dormitory...[where] he and the quadriplegics that followed him to the Berkeley campus created a spirited atmosphere on the third floor of Cowell Hospital" (Fleischer & Zames, 2011, p. 38), before he and other members of "the Rolling Quads moved out of the hospital and into the Berkeley community" (Fleischer & Zames, 2011, p. 39).

Within the minority-model perspective, there is ultimately a focus on individual rights that are being infringed, as was the situation in Roberts' case of being denied entrance

to Berkeley based upon his disability. Roberts' work in establishing independent living centres is also key to the development of the disability rights movement in the U.S., and "the Centre for Independent Living (CIL)... eventually gained national and even international prominence" (Fleischer & Zames, 2011). In the following decades, Independent-living activists sought the removal of both the architectural and transportation barriers that made civic participation almost impossible for people with disabilities. They worked towards and created institutional supports and accommodations that would enable people with disabilities to live independently, manage their own lives, and make their own decisions (Nielsen, 2012, p. 163).

Beyond the focus on independent living, attention was paid to ending employment discrimination in a context in which, "as more and more began to think in terms of rights and citizenship, many disabled people began to consider seriously their own place in the American story—and who got to define that place" (Nielsen, 2012, p. 173). Further stimulus for the development of the movement centred on the failure of Congress to pass disability legislation, such as Section 504 of the Rehabilitation Act—a failure of action which resulted in the 504 Sit-in. This event featured disability activists protesting at multiple U.S. Department of Health, Education and Welfare offices around the country, and occupying the San Francisco office for nearly a month in 1977. Nielsen (2012) cites this protest as a demonstration of the U.S. disability rights movement's interactions with other civil rights movements:

The Section 504 sit-in exemplifies the ways in which the disability rights movement intersected with and borrowed from the free speech, antiwar, feminist, and racial freedom movements. Many of its activists had first become activists elsewhere, and then learned of the ways in which disability discrimination and oppression paralleled that of others" (Nielsen, 2012, p. 168).

As this sit-in occurred over 25 days, the activists "found unexpected allies—again, often due to the organizing skills of its leaders and their prior activism" (Nielsen, 2012, p. 169).

Nielsen (2012) highlights support received from the Butterfly Brigade, Chicano activists, and the Black Panthers in the form of communication tools and food. Throughout the years, the U.S. disability rights movement has emerged from and developed in response to specific events. It is perhaps for this reason that the movement has focused more on individual discrimination than it has on the societal restructure called for by activists and scholars in the U.K.

The focus on individualism and independence that is part of the American dream, according to which anyone can "make it" with hard work, also links to ideas of rehabilitation and the medical complex in the U.S. While the welfare system of the U.K. (or that of Canada) provides socialized health care—at least to some degree—"in a private insurance-dominated health-care system such as that in the USA, people with impairments have become a huge market for the services and products of health and social care agencies and professions" (Barnes & Mercer, 2010, p. 76). The focus thus remains on individuals, and the discriminations that they face rather than societal change. This group of individuals makes up a minority:

Being disabled is... a way of being a minority with respect to one's body, just as being gay is a way of being a minority with respect to sexuality. It is something that makes you different from the majority, but that difference isn't by itself a bad thing. To be disabled is to have a minority body, but not to have a broken or defective body. (E. Barnes, 2016, p. 6)

3.2 Moving beyond the social model of disability

The social model of disability may have "changed how disabled people saw themselves, each other and the world" (Withers, 2012, p. 88), but it is certainly not without criticism, and some have questioned whether it continues to be of value in its current form. In addition to the previously mentioned criticisms regarding the separation of disability and impairment, Withers (2012) argues that the "priority of gaining access to the formal paid workforce excludes many disabled women and their often unpaid labour, including reproductive labour and housework" (p. 89). It is with these criticisms in mind that some scholars have developed their own models of disability.

3.2.1 Other models

The affirmative model of disability developed by Swain and French (2000) is one such conceptualization that is worth including in this discussion. Swain and French (2000) suggest that even in the case of socially aligned models of disability, there often remains an implicit view that impairments are challenging, and therefore negative in some manner. To address this, they put forward the affirmative model of disability, which not only emphasizes the socially constructed oppressions put upon disabled individuals but also suggests that disability itself can be viewed as a positive characteristic, and one to be embraced. The need for such a model can be seen in the reactions of communities who are impaired in some way but who resist being labeled as "disabled." For example, many people who are d/Deaf have argued that they are a "linguistic minority" (Withers, 2012, p. 103) rather than disabled. There is a rationale for rejecting labels entirely, but resisting the label of "disability" reinforces its negative connotations within the community itself. Withers (2012) suggests that

adopting a radical model of disability, rather than trying to break out of the disability category, would problematize the entire disability labelling process, not just a few communities' membership within it. Successfully eliminating the systems that permit the creation of the category of disability would leave every member of all of these marginalized groups better off. (pp. 105-106)

Withers (2012) goes on to stress that "disabled people are not problems; we are diverse and offer important understandings of the world that should be celebrated rather than marginalized" (p. 98). Both the affirmative and radical models extend beyond simply challenging popular conceptions about what it means to have a disability. They challenge widely accepted ideas of what it is to be normal or deviant and point out that there is nothing inherent in these concepts. Rather than focusing on whether groups fall under the umbrella of disability, Withers (2012) and Swain and French (2000) draw attention to the need to respect and embrace our different experiences, bodies, and identities. Key to this is that pride in and affirmation of one's impairment must not be asserted at the expense of others.

3.2.2 Critical disability theory

Although the social model of disability is sometimes considered to be the key component of critical disability theory, Meekosha and Shuttleworth (2009) suggest that critical disability theory focuses on "incorporating a more complex conceptual understanding of disability oppression in our work that nevertheless still employs key ideas about disability that saw the light of day with the ascendance of the social model" (p. 50). Critiques of the social model's lack of inclusion play heavily into the differences between it and critical disability theory, where a "struggle for social justice and diversity continues but on another plane of development—one that is not simply social, economic and political, but also psychological, cultural, discursive and carnal" (Meekosha & Shuttleworth, 2009, p. 50). An understanding of critical disability theory provides perspectives on disability that the medical model and social model do not offer, and it allows space for the development of further models and understandings. Ultimately, critical theory focuses on hidden structures within society that maintain a hierarchy of power:

Critical theorists argue that reality is shaped by ideologies which reflect the values and interests of dominant elites. Critical studies examine how largely hidden social processes disadvantage people on the basis of class, gender,

ethnicity, and other differences, and aim to identify strategies for emancipatory change. (O'Neill, 1998, p. 129)

Critical theory thus works to "make these unconscious belief systems explicit, thereby freeing individuals by providing alternatives through self-reflection and social action" (Hébert & Beardsley, 2002, p. 204). It is within this vein that critical disability theory has developed.

As I noted earlier in this chapter, the social model of disability was developed largely within a framework aimed at allowing equal participation in employment. Although this conceptualization of disability has been a key aspect in the development of critical disability theory, the body of theory now goes beyond this. Critical disability theory as a whole explores how discriminatory structures are protected and reinforced to maintain power for some at the expense of others. Critical disability theory, then, does not merely focus on achieving "entrance" to the current economic, political, social, and cultural systems, but also requires further understanding and ultimately deconstruction of these systems as a whole. Critical disability theory aims to expose and challenge power relations within these systems and examines how the maintenance of these relations—for example, through the inclusion of accessibility policies only as an afterthought and enactment of accommodations that hinge on the provision of "appropriate" medical documentation—propagates the oppression of disabled individuals. While institutions and governments often formulate their definitions of disability and accommodation in seemingly social-model-oriented terminology, Meekosha and Shuttleworth (2009) observe that this occurrence results in the "cooption of the language of disability studies by the institutions of governments, along with the professional areas of rehabilitation and special education taught within higher education institutions" (p. 50). This occurrence provides yet another reason for the development of critical disability theory.

3.2.3 Mad studies

Another field of inquiry and activism that has more recently emerged is that of Mad studies, which focuses on the complicated politics of madness, and how madness has been dominated by the field of psychiatry. Costa (2014) writes that

Mad Studies is an area of education, scholarship, and analysis about the experiences, history, culture, political organising, narratives, writings and most importantly, the PEOPLE who identify as: Mad; psychiatric survivors; consumers; service users; mentally ill; patients, neuro-diverse; inmates; disabled—to name a few of the "identity labels" our community may choose to use. Mad Studies has grown out of the long history of consumer/survivor movements organised both locally and internationally. The methods, and approaches for research are drawn from other educational fields such as women's studies, queer studies, critical race studies, legal studies, ethnography, auto-ethnography (again, just to name a few). But, Mad Studies, right here, right now is breaking new ground. Together, we can cultivate our own theories/ models/ concepts/ principles/ hypotheses/ and values about how we understand ourselves, or our experiences in relationship to mental health system(s), research and politics. No one person, or school, or group owns Mad Studies or defines its borders.

An integral element of Mad studies is its emphasis on work outside the academic community: "Abstracted academism is unlikely to be of much use. Studies must go with practice to make up praxis" (Beresford, 2013, p. ix). To this end, Costa (2014) calls for people in and outside of academia to "flip the questions. Question the questioners... Flip the scope—maybe it's time we stop answering those questions and have Mad Studies develop our own questions and research agendas." Future directions of disability theory will do well to integrate the discussions and work developing within Mad studies.

3.3 Disability studies and LIS

Until the twenty-first century, library and information science research had not often engaged with theoretical developments outside of its immediate field (Pettigrew & McKechnie, 2001) or with critical theory in general. Since this time, however, more and more researchers and practitioners have worked to address these gaps by bringing various critical theories to the discipline (Collins, 2018; A. Gibson, Hughes-hassell, & Threats, 2018; Honma, 2005; Hudson, 2017). The work and discussions by these individuals have at times focused on cataloguing practices (Adler et al., 2017; Drabinski, 2013); the development of technology such as search engines and apps (Noble, 2018); race, diversity, and intersectionality in LIS (Cooke, 2014; A. Gibson et al., 2018; Hathcock, 2015; Hudson, 2017; S. T. Roberts & Noble, 2016; Schlesselman-Tarango, 2016) and in information and communication technologies (Noble, 2018); and critical information literacy (Nicholson, 2015, 2016, Tewell, 2016, 2018). Despite the increase of critical theories appearing in LIS literature, the appearance of these ideas in LIS curriculums remains limited (Cooke, 2018; A. Gibson et al., 2018; Subramaniam & Jaeger, 2010), and thus it is unclear to what degree these theories impact librarianship in practice. If students in Master's programs are not exposed to these ideas in their education, it is worth questioning whether they may be less likely to engage with them in their work.

It is certainly worth asking how an at times limited engagement with external theories affects the development of LIS practices, and what further reaching theoretical engagement could potentially bring to the field as a whole. In this instance, despite the literature available about accessibility and the good intentions of many LIS professionals, libraries often remain inaccessible for individuals with a variety of impairments (Irvall & Nielsen, 2005). This fact suggests that the methodological and theoretical approaches currently used in the LIS literature have not adequately addressed issues of accessibility. There are many strengths to the methods and discussions present in the LIS literature around the topic of accessibility. The range of topics raised in the literature, from physical access of buildings to the need for staff training and the accessibility of online content, suggests that accessibility is being considered in a broad way across the discipline. It is clear that access to the physical library building itself does not constitute an accessible service, and many authors are focusing beyond this, even if they are doing so in limited ways.

The suggestion that library professionals have a role to play in advocating for accessible databases and publications to which a library subscribes (Coonin, 2002; Tatomir & Tatomir, 2012) highlights the potential role of library professionals as "allies" to disabled individuals, who assume the responsibility of improving accessibility beyond the strict confines of the library itself. This role necessitates "full consciousness of one's responsibility to the [disabled] community" and involves "working for social change rather than for oppression" (Myers, Lindburg, & Nied, 2013, p. 70). It is worth noting that one cannot "self-select the title ally" in practice (Myers et al., 2013, p. 74), as this is a title given to one by the community as one demonstrates a commitment to actively advocating for social change and social justice. For library professionals and researchers to fulfil this role, it is necessary for them to engage much more strongly with theories of disability and for values of truly equitable access to library buildings, services, and resources to guide their work. We can perhaps begin to see this engagement in the increase of library programming for children with autism spectrum disorder, for example.

A significant issue in the LIS literature—and one that a disability studies approach does not allow for—is the lack of perspectives of disabled library users, a finding that is noted by Burke (2009), Dermody and Majekodunmi (2011), and Hill (2013). Disability theory writers emphasize that the experiences and perspectives of disabled individuals have overwhelmingly been sidelined in deference to medical professionals. This exclusion of

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their perspectives is, in fact, one of the foundational features of the medical model of disability, which, as previously discussed, locates disability as a deficit in a given individual. Disability needs to be diagnosed and treated using medical expertise, and within this model the experiences and opinions of disabled people themselves are ignored (Goodley, 1997). The exclusion of disabled individuals' perspectives in the LIS literature can be argued to work in a similar way. Although likely unintentional, the effect is that LIS professionals are portrayed as the experts on what constitutes accessibility in libraries. This ultimately excludes the perspectives of the disabled individuals who will actually make use (or not) of library services. Of course, not all of the literature in LIS falls under this trend. For instance, Green (2009) suggests that disabled people should be included in the development of services: "Patrons with LD [learning disabilities] are sometimes the best source for advice on appropriate [assistive technologies (AT)]. An interactive process is the best method for including the patron in decisions that will affect their use of AT and the library" (p. 66). Despite this suggestion, which is also put forward by Irvall and Nielsen (2005) and Khailova (2005), there is little evidence of this type of inclusion in practice. Even when disabled individuals are included in LIS research, the perspectives that they are able to share may be limited by the design of a study or the questions asked. It is for this reason that a deeper consideration and discussion of research approaches is often noted in disability literature as being vital in research pertaining to disabled individuals (Danieli & Woodhams, 2005; French & Swain, 1997). Without this consideration, research may limit the insights of disabled perspectives, and in turn, it may perpetuate ideas that disability rests within an individual rather than in the oppressive practices of society.

Despite the fact that there are some strengths to the literature on LIS and accessibility, the current limitations in thinking far outweigh these, and academic libraries remain inaccessible to many potential users. Kumbier and Starkey (2016) suggest that "to readers who are not accustomed to thinking of disability as something other than a problem to be solved, the library literature suggests that the profession is doing well by

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our patrons when it comes to identifying accessibility barriers and providing solutions to them" (p. 478). Thus, it is vital to consider new approaches to this topic for real change to occur. It is for these reasons that I use disability studies as a guiding lens in this study.

4 Methodology

This chapter provides an overview of the methodology for this study. The research design, methods of data collection, and methods of analysis are discussed. Limitations and ethical considerations are also highlighted.

4.1 Epistemology and framing lens

This research falls under a constructionist epistemology, which exists in opposition to objectivism. Social constructionists take the view that while there is no objective and external truth in the world, meanings are constructed in a shared culture rather than through individual interactions "with objects in the world" (Crotty, 2003, p. 79), as constructivism suggests. Constructionism, then,

is the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context. (Crotty, 2003, p. 42)

Crotty (2003) emphasizes the "the hold our culture has on us: it shapes the way in which we see things (even the way in which we feel things!) and gives us a quite definite view of the world" (p. 58). Although it is clear how constructionism differs from objectivism— which suggests that "things exist as meaningful entities independently of consciousness and experience, that they have truth and meaning residing in them as objects" (Crotty, 2003, p. 5)—its differentiation from subjectivism may not be so clear. Subjectivism, according to Crotty (2003), involves the belief that "meanings are created out of whole cloth and simply imposed upon reality" (p. 43). The differentiation here is on whether reality exists outside of the constructed meaning:

As Schwandt (1998) stated, "One can reasonably hold that concepts and ideas are invented (rather than discovered) yet maintain that these inventions correspond to something in the real world" (p. 237). However, it is not the event itself that is the issue in our studies; it is the meaning given to these events as evidenced in the action-interaction that follows. (Corbin & Strauss, 2015, p. 25)

This is ultimately a discussion that goes far beyond this research, and one that arguably does not greatly affect the discussions of the research itself. The important distinction in this instance is the rejection of a single objective or "true" reality, and the belief that meaning is constructed in a social setting, and may differ amongst people, even those in the same situation.

Although we can discuss where this research fits within various epistemological, theoretical, and methodological frameworks, it should be noted that this type of categorization in itself may be limiting. It works within and alludes to existing research frameworks that have historically excluded the voices of marginalized populations, as well as held dominion over what is counted as sound and valid research. That is not to say that there is not something valuable to these categories. For example, differentiating between objectivism and constructivist or subjectivist epistemologies works for the purposes of this study. Rather, the point of questioning these divisions is to consider the limitations that one theoretical perspective, on its own, may enforce on the research. Considering this limitation is especially pertinent if we continue to utilize traditionally accepted methodologies and frameworks within a specific discipline, such as LIS, as it may be argued that the field will not expand and flourish as it could otherwise.

The overall study also borrows from a transformative research worldview, which

holds that research inquiry needs to be intertwined with politics and a political change agenda to confront social oppression at whatever level it occurs (Mertens, 2010). Thus, the research contains an action agenda for reform that may change lives of the participants, the institutions in which individuals work or live, and the researcher's life. Moreover, specific issues need to be addressed that speak to important social issues of the day, issues such as empowerment, inequality, oppression, domination, suppression, and alienation. (Creswell, 2014, pp. 9-10)

It is not clear at this time what type or degree of change, if any, this research project could enable. Transformation may only be an aspiration at this time. Nevertheless, it is a starting point to study things as they are with the goal to effect change. Within the transformative research worldview, theoretical perspectives are often utilized to provide a richer understanding of issues such as cultural oppression. Creswell (2014) argues that this practice

provides an overall orienting lens for the study of questions of gender, class, and race (or other issues of marginalized groups). This lens becomes a transformative perspective that shapes the types of questions asked, informs how data are collected and analyzed, and provides a call for action or change. (p. 64)

Ultimately, this study is inspired by wanting to enable change, even if it is not yet clear what that change should be. By opening the topic of accessibility in libraries for discussion, maybe we can start to think about further actions.

Finally, this study makes use of a framing lens developed from disability studies as I examine what accessible library services exist, what these tell us about libraries' understandings of disability, and how students experience these services. This approach guided the development of research questions, the selection of data sources, what questions were asked in surveys and interviews, and how the data itself was interpreted and analysed. This research utilizes the various models of disability—medical and social—as a practical tool to determine how accessibility and disability are conceptualized in libraries. As argued in the literature review, there is limited engagement with alternative understandings of disability in the field of LIS, even in discussions about accessibility specifically. In my view, it is worth exploring what new approaches may contribute to our understandings of accessibility in LIS, as well as whether they may allow for new accessible information practices to develop.

4.2 Research design

The research questions were explored using a mixed-methods comparative case study approach. The study was predominantly qualitative. The focus on primarily qualitative research is appropriate as disability studies often focuses on individual lived experiences within an oppressive social environment, and thus it guides one away from generalizing. In fact, the sole use of quantitative research may actually lead one to a medical model understanding of disability, as the varying individual experiences, the contexts in which they happen, and the opinions of disabled individuals may be overshadowed by the need to classify disabled individuals in various groups for statistical purposes. That being said, the inclusion of quantitative elements such as survey responses provides a more developed overall picture of accessibility than a singularly qualitative study could do.

The case study approach "involves the study of an issue explored through one or more cases within a bounded system (i.e., a setting, a context)" (Creswell, 2007, p. 73). One of the key strengths of the case study approach is the ability to delve more deeply into a topic than is possible with other research designs: "The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon" (Merriam, 1998, p. 41). This type of in-depth examination of the current situation of two academic libraries in Canada—one in Ontario and one in Québec—is appropriate as there is no comprehensive research on this topic to date. The naturalistic case study, in which "you seek to find the underlying reasons—in people's feelings or perceptions, or their experiences of what is going on" (Gillham, 2000, p. 7), helps to build a richer picture than would be possible using other methods such as a survey of institutions across the

country. As a starting point to develop an idea of how library practices affect disabled students in Canada, this method provides opportunities that others would not. Rather than examining only one library, it was decided that two may begin to highlight trends or differences in how various institutions are grappling with accessibility. The decision to examine two libraries rather than more was made due to time and resource constraints.

Within this comparative case study of two academic libraries in two provinces in Canada, the unit of analysis was each library system. Subunits comprised library staff at all levels, documents, physical space, online information, and disabled library users. The selection of the libraries was based neither on their being unique cases nor on their being representative. As previously mentioned, there are no existing studies that make extensive use of disability studies or even focus extensively on universal accessibility in academic libraries. As it is not clear what is happening in various libraries, it was not possible to select libraries based on the criteria of uniqueness or representability. Moreover, the case study "weakly represents" a larger group or phenomenon of interest (Stake, 2008, p. 129), and so representability was not a key concern at this time. Lincoln and Guba (1985) further stress that the naturalist "is likely to be tentative (hesitant) about making broad application of the findings because realities are multiple and different" (p. 42).

The focus on only two libraries is suitable for this study, as a low number is enough where "the issue at hand does not demand an excessive degree of certainty" (Yin, 2003, p. 51). In this instance, the results were not generalizable, and nor were specific outcomes expected. Additionally, if disability and accessibility are understood to be social constructs, then complete certainty is not possible in any event. However, Yin (2003) also indicates that multiple-case designs are considered by many to be more robust than singular case studies. It is for this reason that this study involves two divergent cases.

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One university in Ontario and one in Québec were identified as sites of study for this project. These two organizations are public institutions located in urban areas, and both have student populations exceeding 10,000 students. They offer a variety of programs and degrees at various levels and are fairly standard in this respect. Fisher and Rubenson (2014) point out that "in 2007, Québec, Ontario, and British Columbia accounted for 75% of university full-time equivalent (FTE) enrolment, 79% of the graduates (undergraduate and postgraduate), and 79% of postgraduate degrees awarded in Canada" (p. 10), making the three provinces taken together as fairly typical of the postsecondary education landscape in Canada. This study only includes two of the three provinces mentioned, but their inclusion does provide a strong starting point for understanding accessibility in academic libraries in Canada.

4.3 Research methods

There are multiple data sources to be studied for each unit of analysis (i.e., each library) included in the study. These data sources include:

- the physical library itself and observations about the space, including online information about accessibility services,
- interviews with library staff members at various levels (e.g. front-line staff, librarians, and library management),
- documents, such as public policies,
- a survey with disabled students attending the university,
- and finally, follow-up interviews or focus groups with some of the survey respondents.

The variety of data collection methods used is intended to allow triangulation (Choemprayong & Wildemuth, 2009), in which the data themselves are collected from various sources but are "aimed at corroborating the same fact or phenomenon" (Yin, 2003, p. 99). Yin (2003) suggests that "a major strength of case study data collection is the opportunity to use many different sources of evidence... [and, in fact,] the need to use multiple sources of evidence far exceeds that in other research strategies" (p. 97). With this approach, I was able to look at the topic of accessibility from many different sides, from bureaucratic and administrative to service provision and user experience.

4.3.1 Library audit

An unobtrusive physical-site library audit was conducted, which involved an ethnographic approach of first-hand observation at each library. I did not actively observe individuals in the library but instead walked throughout and mapped the library space—by taking photographs (in which I was careful not to include people) and/or making field notes—through a "disability lens" of sorts. It must be noted that I am not disabled at this time. A person-centred approach (Leiter, 2015), in which I employed disabled individuals to conduct this audit with me, would almost certainly have provided valuable insights that I did not reach on my own. However, resource constraints of time and finances did not allow for me to conduct the audit in this manner.

Although physical impairments are a key consideration in conducting an audit, I attempted to move beyond checking for ramps and elevators. Lighting, signage, and workspace configurations were all considered from the point of view of how they might affect individuals with a variety of disabilities, including invisible disabilities. Leiter (2015) uses observation as part of a mixed-methods study about the accessibility of urban sidewalks in Boston, MA. She includes this practice as part of a "bricolage" of methods, and she describes this mix as having "the added connotation of spontaneity, improvisation, and creativity—even 'wildness' (Lévi-Strauss 1966)—in the process of conducting research" (Leiter, 2015, p. 13).

Yin (2003) notes that direct observation "covers events in real time" as well as the "context of [an] event" (p. 86). I conducted parts of the audits both before and after the student interviews. The audit process provided the study with a richer detail than it

would have without this audit, as it allowed me to contextualize some of the experiences of disabled students at the selected institutions. After all, "the daily activity patterns of individuals are often constrained by the contemporary geography of the community [and] the culmination of earlier human-environment interactions" (Cromley, 1999, p. 51). Cromley (1999) goes onto highlight that "the aim of mapping... is to provide a richer understanding of how communities work in real and imagined geographic space, perhaps as an aid to solving problems within communities" (p. 116).

Data for this audit were collected using publicly available floor plans and "systematic and detailed observations" (Given & Leckie, 2003, p. 273) of accessibility variables. This mapping audit made use of "sweeps checklists" for particular types of data and spaces, which were created in advance of the audits themselves (see Appendix N). The checklists were largely formulated from LIS accessibility literature and include variables such as those set out by Heaven and Goulding (2002), Irvall and Neilsen (2005), and Howe (2011). The checklist was key in this process, though it did not provide a complete list. Given and Leckie include an "other" category in their study on library user behaviour, and a similar inclusion for this study was a vital category to allow for emergent themes and findings.

Furthermore, the library websites at each institution were examined for any information pertaining to accessibility. Both libraries had a page specifically dedicated to this topic. Information on specific services, technologies, alternate formats, and key contacts within the library were among the search criteria for the websites. In addition to availability of information, the descriptions therein were analysed qualitatively for information on what types of disability are considered and how they are defined.

4.3.2 Documents

Policies related to accessibility were collected from the websites of the chosen academic libraries and from the two wider university institutions when available. I also examined

the websites of Disability Support Services at each university for references to the libraries' policies and services. Finally, I collected and examined strategic planning documents at both institutional and library levels for inclusion of information pertaining to accessibility. Yin (2003, p. 86) highlights the strength in using documents as a source of evidence, as these are items that are not created with the purpose of the study in mind. Additionally, they may contain evidence beyond what an interviewee is able to provide—for example, due to their longevity and application to a variety of contexts and they provide a stable source of information. Zhang and Wildemuth (2009) suggest that qualitative analysis of content such as documents allows one to "explore the meaning of underlying physical messages" (p. 309).

4.3.3 Interviews with library staff

An important strength of interviews in case study research is noted by Yin (2003), who says that they are "targeted—focus[ed] directly on [the] case study topic" (p. 86). This focus is a key component of my study, as no prior study has thoroughly examined conceptualizations of disability from the viewpoints of library service staff. Without examining these conceptualizations, any potential critiques of library services themselves will be necessarily limited, as will strategies developed for improving library accessibility.

A selection of library staff at each institution was interviewed to gain a better understanding of how accessibility practices are integrated throughout library services. Library staff were included in the study as these are the individuals who develop and provide services on a daily basis, and who in many ways implement accessibility in practice. Interviews were conducted with staff members in various roles at each institution. Interviewees at the various levels, such as those in managerial roles, reference librarians, and front-line staff, were selected using a theoretical and convenience sample. This process was accomplished by emailing individuals in a variety of roles based upon their job titles. As individuals responded (or did not respond, as also happened), new staff members were invited to participate based upon the roles of existing participants (e.g. if reference librarians had already agreed to participate, new emails were sent to management or library assistants). Corbin and Strauss (2008) suggest that "the purpose of theoretical sampling is to collect data from places, people, and events that will maximize opportunities to develop concepts in terms of their properties and dimensions, uncover variations, and identify relationships between concepts" (p. 143). Potential interviewees were emailed directly and invited to participate in an interview. Staff email addresses were publicly available on the library websites, and these were used to contact potential participants. Two follow-up emails were sent to each person in the event that they did not see the initial invitation or that it came at a time during which they could not respond.

At the Ontario institution, seven individuals were interviewed, while four were interviewed at the Québec institution. After these 11 interviews, few new themes were emerging and recruitment was stopped. The participants in the interview process included library assistants, librarians, and library management, although they are all simply referred to as "librarian" in this study. Random initials have been assigned to each librarian, which do not represent their real initials. The interviews themselves ranged from 41 minutes to one hour and 25 minutes. Interviews were conducted faceto-face in a mutually agreed location. Audio was recorded using a digital recorder, for which written consent was obtained, and it was subsequently transcribed. Transcripts were sent to the interviewees for their review, with the option that they could ask for changes or deletions if they felt that any were necessary.

Interviews themselves were semi-structured (an interview schedule can be found in Appendix D). Questions pertained to the individual's history as a librarian, to their knowledge of accessibility policies or procedures in the library, and to their experiences interacting with disabled students. This structure allowed the process to be open to emergent themes and questions, while also keeping the focus of the interview on the topic at hand. Birks and Mills (2011) suggest that "the emergent nature of the process will require you to be flexible in your use of interviews as a data generation strategy" (p. 75). The semi-structured nature of the interviews also allowed those in various positions to elaborate on their own views of accessibility practices in the university library, and it permitted me to modify questions as appropriate based on their roles and responses.

4.3.4 Student survey

An online survey (created with SurveyMonkey) was sent to students registered with Disability Support Services at each university. It must be stressed that not all disabled students at the universities will be registered with Disability Support Services. However, by sending the survey to this specific population, it could be ensured that the survey reached students who identify as disabled, even if only in administrative terms. The survey was administered anonymously, as invitations to participate were sent to students by the Disability Support Services. There was therefore no way to identify individual students who chose to participate. This led to a convenience sample of those who chose to take part in the study. As I was not attempting to develop any generalizations, and individual perspectives and experiences are key to this study, this strategy was considered to be a suitable sampling method.

Fowler (2014) states that "surveys are designed to produce statistics about a target population" (p. 8). In this instance, however, it was not expected that there would be a high enough number of responses to draw any statistical conclusions (and in practice, this was the case). This expectation was due to both the small populations that the survey was sent to and uncertainty about response rates. The survey was used instead to confirm and support aspects of the overall study, as well as to guide the subsequent student interviews. Questions pertained to frequency and purposes of library use (How often do you visit the university library in person?; How often do you access the library's website?; What are your main reasons for using the library?); experiences accessing resources and interacting with library staff members (In your perspective, have you been able to make adequate use of the library's online resources by using adaptive technologies?; In your view and experience, have library staff been helpful in supporting your information needs?); and disclosure of disability (Have you been comfortable expressing your needs to library staff?; Have you informed library staff members of your disability or accommodation needs?). The complete list of survey questions can be found in Appendix H, and quantitative responses from the survey can be found in Appendix I.

In terms of numbers of responses, there were 67 survey responses in Ontario. In Québec, 67 students also took part in the survey (68 responses are recorded, but one individual did not answer any questions). It is not possible to know the exact response rate, as the number of students registered with Disability Support Services fluctuates throughout the year. However, at each institution, approximately 2000 students were registered with Disability Support Services at the time of the survey. An exact number of students to whom surveys were sent is not available, as the number of registered students can change on a day-to-day basis. Beyond questions about degree type and year of study, demographic information was not collected in this survey.

An important consideration in the design of the survey was its accessibility to disabled students. SurveyMonkey states that it is compliant with WCAG2 guidelines (SurveyMonkey, 2015). However, it must be noted that this platform may not be compatible with *all* adaptive technologies—for example, certain screen readers—that respondents might use.

4.3.5 Student interviews

Vital to any research taking disability studies into account is the inclusion of disabled individuals themselves. In this study, the perspectives of disabled students was integral to understanding how library services were used in practice, as well as where barriers existed. It was for this reason that interviews with disabled students were fundamental to this study. Upon completion of the survey, students were forwarded to another webpage and invited to participate in a private or focus-group semi-structured interview. If they were interested, they were asked to provide their email address for me to contact them (via a separate SurveyMonkey page). Additionally, I asked Disability Support Services at each university to send a separate email to registered disabled students at the institution to invite them to take part in this interview or focus group. Finally, notices were put up in various locations around the two universities' campuses to invite students to participate in this component of the research. Again, this process ultimately provided the study with a convenience sample, where only those who were easy to reach were recruited. Given the lack of current research in this area in Canada and due to the variety of experiences that disabled individuals have, a convenience sample is not considered to be detrimental to the results.

Six students were interviewed at each institution. Most of these students had provided their email address upon completion of the survey, thus allowing me to contact them. In one or two instances, the student had heard about the research another way—posters, word of mouth—and had contacted me directly to take part. Each interview session was audio recorded and subsequently transcribed. Unfortunately, the recording of one interview from the Ontario institution featured a high level of technical interference. This interview was only partially transcribed, as the majority of it was inaudible (from examining the field notes, it was found that most of the themes raised were also discussed by other students). Thus in practice, 11 students were interviewed between the two institutions. Students were in both undergraduate and graduate programs in a variety of disciplines. Some students had recently completed their degree but were still on the DSS mailing lists. Students represented a variety of ages, genders, and races, and some spoke languages other than English as their first language. In the interviews, we did not necessarily talk about these elements of their identities and how they affected their experiences. However, it is important to emphasize that the experiences and views

shared by student participants were not dominated by whiteness, as five of the participants were people of colour and three spoke English as a foreign language.

Saturation was not reached with only 11 participants, and it became clear that the experiences of the students were diverse and that saturation was not a likely or realistic expectation. Additionally, interpretative phenomenological analysis (discussed in section 4.4.2), which was used for analysis of student interviews, recommends the use of fewer interviews, as it aims for depth rather than breadth.

To allow students an element of direction and control over their own contributions to the research, they had the opportunity to decide whether they wished to participate in a private interview or focus group. While focus groups may allow for students to hear each other's views and the opportunity to "share lived experiences" (Liamputtong, 2011, p. 109), some students may have felt uncomfortable having their disabled identity or experiences made available to other students. In the end, all participating students opted for the private interview process. Several individuals at one institution expressed willingness to take part in a focus-group interview. However, there was not enough interest at the same time to allow for this to take place in practice. The interviews themselves were semi-structured, and I made use of a predeveloped list of questions and topic areas at times (see Appendix L). These questions generally focused on their use of the library—how often, what resources they used—and their interactions with library staff members. Importantly, these questions were designed to focus on users' experiences and barriers they may have faced rather than any sort of focus on their impairments. In keeping the process open and flexible, I allowed the respondents some degree of agency in directing the interview, as well as the opportunity to raise points that they deemed relevant to the topic at hand, such as accommodations outside of the library and their general experiences interacting with staff or faculty. Students were given the opportunity to choose a pseudonym if they so wished. Only two students provided this name. The other students are referred to by initials throughout this study.

These are not their real initials and were randomly assigned. I chose initials rather than pseudonyms so as to not assign names that did not represent people's genders, or their cultural or ethnic backgrounds.

The audio of the interviews was recorded using digital recorders or other appropriate technology (for example, recording software in the case of interviews conducted via Skype), and all participants were informed of and consented to this practice prior to the interview itself. Interviews lasted from 42 minutes to one hour and 40 minutes. Students were asked if there were any accommodations that may make the interview process more accessible or comfortable for them. Refreshments were provided (and dietary needs provided for) to ensure that students were comfortable throughout the process. Characteristics of the room where the interview process took place were also taken into consideration. The rooms used were accessible by elevator and had furniture that was light enough to move when necessary.

4.4 Methodology and analysis

This study used a combination of methodological approaches and analysis methods. These approaches were all inductive. Grounded theory and interpretative phenomenological analysis were the primary methodologies used, and thematic analysis was also used for the examination of documents. Lincoln and Guba (1985) suggest that inductive data analysis is "defined most simply as a process for 'making sense' of field data" (p. 202) and that it is a process that involves "unitizing" and "categorizing" (p. 203) the data collected. The inductive approach does not allow rules about categorization of data to be made prior to the study. Rather, these rules emerge as data categories are constantly compared, and the rules are modified in light of these comparisons. Importantly for this study, Lincoln and Guba (1985) suggest that "the naturalist does not always begin empty-handed (and certainly not empty-headed!). Theory grounded in an earlier investigation may be available—but great care must be exercised to be certain that the theory is apt for the now-to-be-investigated context" (p. 209). This approach is appropriate to this study, in which a theoretical framework from critical disability studies exists and is being applied to the cases being studied. However, this framework is not inflexible, and the variety of disability models and reflexive practices will allow for "salient elements [to] begin to emerge, insights [to] grow, and theory [to begin] to be grounded in the data obtained" (Lincoln & Guba, 1985, p. 209).

Grounded theory and interpretative phenomenological analysis fit well under the naturalistic inquiry paradigm, which posits that there are multiple constructed realities and that research itself is never value free. Lincoln and Guba (1985) emphasize that within natural inquiry, the research process is an emergent design. Data collected is continuously analysed, and this affects the future steps of the research process: "Data collection leads to analysis. Analysis leads to concepts. Concepts generate questions. Questions lead to more data collection so that the research might learn about those concepts. This circular process continues until the research reaches the point of saturation" (Corbin & Strauss, 2008, p. 145). In the case of this study, this process can be seen directly in aspects such as the survey and postsurvey interviews with disabled students. The results of the student survey played a role in the formulation of subsequent interview questions and directions of inquiry. Additionally, insights that emerged in the process of any part of data collection (visit of the sites, library staff interviews, policy examination, student interviews) at times affected subsequent data collection or analysis.

4.4.1 Grounded theory

As I have indicated above, grounded theory was used to analyse the staff interviews. Starks and Trinidad (2007) highlight that "the goal of grounded theory is to develop an explanatory theory of basic social processes, studied in the environments in which they take place" (p. 1374). This method was chosen due to this focus on explaining social processes, in this case accessible library services, and its emphasis on building this theory from the ground up. In the case of library accessibility, existing studies have not attempted to ascertain *how* librarians conceive of disability and accessibility. Thus developing this emergent theory to develop a picture of their understanding was considered appropriate.

Grounded theory "posits that meaning is negotiated and understood through interactions with others in social processes" (Starks & Trinidad, 2007, p. 1374). Grounded theory analysis is accomplished through an iterative process, whereby "you start with individual cases, incidents, or experiences and progressively create more abstract conceptual categories that explain what these data indicate. Thus your categories synthesize data and, moreover, interpret them and identify patterned relationships within them" (Charmaz, 2003, p. 82). In opposition to other research processes such as conventional inquiry, grounded theory emphasizes the construction of theory from the data themselves, rather than utilizing data to confirm or disavow existing theories or concepts. Analysis begins while one is still immersed in data collection, and thus it influences the direction of future data collection: "Grounded theory interviewers adapt their initial interview guides; they add areas to explore and delete extraneous questions" (Charmaz, 2003, pp. 89-90).

It is worth noting that theoretical frameworks are not generally encouraged in studies using grounded theory. Corbin and Strauss note that "the whole purpose of doing a grounded theory is to develop a theoretical explanatory framework" (p. 52). Although this would seem to suggest that disability studies should not be used to guide this research study, Urquhart (2013) notes that "this does not mean researchers should ignore existing theories...This idea is beautifully put by Dey (1993) when he says that researchers should have an open mind, as opposed to an empty head" (p. 11). At this point, little to no research has investigated *how* those working in libraries (and the larger institutions) *understand* disability. In this instance, grounded theory was used to better understand how accessibility is thought about and integrated into work practices in the academic library. The literature from both LIS and disability studies was used to bring out existing gaps and as a backdrop against which to set the emerging theory. In this instance, then, disability theory acted as a "sensitizing concept," which Charmaz (2003) describes as providing "a place to start, not end" (p. 85). This use of existing literature within a field is also discussed by Gibson and Hartman (2014, pp. 204-205), who address several grounded theory studies that challenge prevalent social conceptions by developing new theories and approaches to understanding a phenomenon.

Grounded theory has been used in disability studies on a number of occasions, as well as in LIS. For example, Simon Hayhoe (2012) recounts in detail how "a looser interpretation of Glaser and Strauss's (1967) grounded theory coding strategies" (p. 3) was used to explore concepts of blindness and disability in various adult education classes. Kathy Charmaz (2010) provides a review of how grounded theory has been used in studies of chronic illness—with these studies often focusing on receiving a diagnosis, managing or disclosing illness, and normalizing symptoms or impairments—as well as of how it might be used going forward to further complicate and explore experiences of disability and illness. With a focus on postsecondary education more specifically, a variety of studies have used grounded theory to explore students' perceptions of the meaning of education (Weiner, 1999) and their perceptions and experiences around developing "purpose" (Vaccaro, Kimball, Moore, Newman, & Troiano, 2018), as well as the experiences of student affairs personnel (e.g. academic counsellors) in supporting students with disabilities in the United States (Kimball, Vaccaro, & Vargas, 2016).

Within the field of LIS, grounded theory has been utilized on many occasions and in areas such as information-seeking behaviour, information and organizational management, and online learning (Mansourian, 2006). Mansourian (2006) states that the "history of employing GT as a methodology in information science investigations comes back to the early 1980s. Since that time, some seminal works in the information seeking studied have used GT" (p. 395). More specifically, many studies focused on

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academic libraries have made use of ground theory. For example, Constance Mellon (2015) used grounded theory in her exploration of "the feelings of students about using the library for research" (p. 276), a study that highlighted that a large number of students experienced anxiety at the prospect of navigating library resources and services. Fiona Harland, Glenn Stewart, and Christine Bruce (2018) focus on the strategic directions of the academic library, and they suggest that the "library needs to demonstrate that it is contributing to university's goals" but that many academic libraries are failing to do so in practice. Several studies focus on the experiences of academic librarians in their educational and professional lives (Colón-Aguirre, 2017; F. Miller, Partridge, Bruce, Yates, & Howlett, 2017).

4.4.1.1 Library staff interviews

In transcribing and coding interviews, I used an open or initial coding process at first. Birks and Mills (2011) argue that "reading transcripts or fieldnotes, listening to recordings of interviews, or observing visual artefacts, results in the researcher identifying the concepts that underlie incidents in the data and it is these concepts to which a code can be applied" (p. 93). This process "requires a brainstorming approach to analysis because, in the beginning, analysts want to open up the data to all potentials and possibilities contained within them" (Corbin & Strauss, 2008, p. 160). I completed initial line-by-line coding through a process of highlighting and by taking handwritten notes on a given interview before recoding this interview using NVivo software. This process was followed by focused coding, which "means using the most significant and/or frequent earlier codes to sift through large amounts of data. Thus, focused coding is more directed, selective, and conceptual than line-by-line coding" (Charmaz, 2003, p. 97). Focused coding was completed by continuing to work with printed copies of the transcripts, as well as with NVivo and Microsoft Word.

A constant comparative method—in which "future incidents are then compared with existing codes, codes are compared with codes, groups of codes are collapsed into

categories with which future codes are then compared and categories are subsequently compared with categories" (Birks & Mills, 2011, p. 94)—was used in this study. In addition, a process of asking questions and memo writing (Corbin, 2017; Strauss & Corbin, 1990)—this involves considering different interpretations for various words or phrases—allowed categories to be developed. Categories are "higher-level concepts under which analysts group lower-level concepts according to shared properties" (Corbin & Strauss, 2008, p. 159). These processes were ongoing from the start of data collection and are considered vital in the grounded theory method: "It is the constant comparison of the different conceptual levels of data analysis that drives theoretical sampling and the ongoing generation or collection of data" (Birks & Mills, 2011, p. 94).

Later stages of analysis made use of axial coding, which "puts those data back together in new ways by *making connections between a category and its subcategories*" (Strauss & Corbin, 1990, p. 97). This process helps to define one's categories, and when implementing it one works through the ways that categories and subcategories may be linked or related (Charmaz, 2003):

Though we break data apart, and identify concepts to stand for the data, we also have to put it back together again by relating these concepts. As analysists work with data, their minds automatically make connections because, after all, the connections come from the data. (Corbin & Strauss, 2008, p. 198)

This process was completed through manual coding, where I began to compile, organize and re-organize concepts and ideas—identified from highlighted key phrases and notes from interview transcripts—into broader themes across interviews.

Finally, within this grounded-theory-based project I focused on interpretative theorizing, wherein "the very understanding gained from the theory rests on the theorists' interpretation of the studied phenomenon" (Charmaz, 2006, p. 126). Charmaz observes that "constructivists study *how*—and sometimes *why*—participants construct meanings

and actions in specific situations" (Charmaz, 2006, p. 130). This approach is particularly suitable for examining how disability is constructed in libraries, and thus how librarians may respond to supporting disabled students.

4.4.2 Interpretative phenomenological analysis

Phenomenology seeks to "describe the meaning of the lived experience of a phenomenon" and "understand how meaning is created through embodied perception" (Starks & Trinidad, 2007, p. 1373). Within phenomenology, there are several approaches or methods in practice. Interpretative phenomenological analysis (IPA) is a relatively new method of analysis that "explore[s] in detail how participants are making sense of their personal and social world" (Smith & Osborn, 2003, p. 51), and it "employs in-depth qualitative analysis" (p. 52). It emerged from and has most often been used in psychology and health psychology (J. A. Smith, 2004; VanScoy & Evenstad, 2015). Presently, IPA is not often utilized in disability studies (i.e., disability studies as a discipline rather than occupational and clinical-care-related disciplines), although it is perhaps beginning to emerge. For instance, Mullins and Preyde's exploration of the experiences of students with invisible disabilities in an Ontario university utilizes IPA (Mullins & Preyde, 2013). Furthermore, IPA has been used in studies that touch upon disability, such as those focused on special needs education (Borisov & Reid, 2010) or discussions of experiencing chronic pain or illnesses (Osborn & Smith, 1998; S. Smith et al., 2018). It has also been used in studies focused on experiences in higher education (Gauntlett et al., 2017; Lancer & Eatough, 2018; Lech, van Nieuwerburgh, & Jalloul, 2018; Macleod, Allan, Lewis, & Robertson, 2018).

In addition, IPA is slowly beginning to emerge as a method in LIS scholarship (Ahmed & Islam, 2012; VanScoy & Evenstad, 2015). Despite its limited use thus far, VanScoy and Evenstad (2015) suggest that "IPA might be particularly useful in the study of information seeking and use for minority groups or under-served users, whose experience could be different from the majority, but also different from others in their

group" (p. 342). This emphasis works well in this study, as it takes into account the fact that disabled students seemingly constitute an underserved population in academic libraries, as well as the fact that disabled students are not a homogenous group, but rather one made up of diverse users with a wide and eclectic range of information needs.

In a similar vein to the process of conducting a grounded theory study, emergent coding processes are used in IPA. Attention is paid to linguistic elements and how participants choose to express their experiences, as well as to what those choices might mean conceptually. However, there are important differences between the two approaches as well. Key amongst these is that the interpretative element is central to the analysis itself: "The end result is always an account of how the analyst thinks the participant is thinking—this is the double hermeneutic" (Smith, Flowers, & Larkin, 2009, p. 80). Conducting IPA is not only about examining the data but also about "drawing on one's interpretative resources to make sense of what the person is saying, [and] at the same time one is constantly checking one's own sense-making against what the person actually said" (Smith & Osborn, 2003, p. 72). This process thus involves not only an examination of the data—in this case, interview transcripts and recordings—but also requires reflexive considerations of how the researcher is interacting with and interpreting that data.

As I have highlighted above, the emphasis on individual perspectives and experiences within IPA is particularly suitable for a study focused on disability. Too often, disability is taken as an all-encompassing term, and there is an assumption that disabled individuals will share experiences, desires, or perspectives on the world:

There is a danger in assuming that any one person's unique experience will reflect that of another person, although there may be similar structural or attitudinal barriers acknowledged. There are so many diverse factors that influence individuals' daily lives and responses to disability that we must be 96

cautious not to assume homogeneity of experience, while staying alert to the social arrangements which support or curtail people's experiences as valued members of society. (Touchie, Thomas, Porter, & Reagan, 2016, p. 10)

This consideration is particularly important in this study, where disability is conceptualized very broadly. Participants' specific impairments and experiences emerge from learning disabilities, chronic illnesses, brain injuries, and other factors and events. However, it was crucial to focus not on their particular impairments but instead on their experiences of accessing the library, the interplay of disability and educational pursuits, and what obstacles they had come across.

4.4.2.1 Student interviews

The 11 interviews with students were analysed using IPA. Each interview was transcribed before multiple in-depth readings. Having read an interview closely several times, I began the iterative process of thematic analysis, which was done by hand. Smith et al. (2009) observe that at this stage, the process "is close to being a free textual analysis," in which "your aim is to produce a comprehensive and detailed set of notes and comments on the data" (p. 83). They indicate that this is the most time-consuming and detailed round of analysis, and one that "examines semantic content and language use on a very exploratory level"(J. A. Smith et al., 2009, p. 83). In practice, my initial notes focused on conceptual or linguistic elements, or they remained descriptive in practice. Questions I had about potential interpretations were noted and key phrases were highlighted during this process.

Subsequent rounds of interpretation went beyond description and were focused on the development of emergent themes. I made notes of questions and comments aimed to develop these emergent themes. Themes were then organized and reorganized as I searched for connections between them (J. A. Smith et al., 2009). I completed the entire process for one interview before I moved on to the next one (J. A. Smith et al., 2009;

VanScoy & Evenstad, 2015). Smith et al. (2009) emphasize that "it is important to treat the next case on its own terms, to do justice to its own individuality. This means, as far as is possible, bracketing the ideas emerging from the analysis of the first case while working on the second" (p. 100). Finally, I engaged in the process of "looking for patterns across cases," which also "lead[s] to a reconfiguring and relabelling of themes" (J. A. Smith et al., 2009, p. 101).

4.4.3 Thematic analysis

I used thematic analysis in this study to analyse library policies and reports, physical spaces, information about accessibility at the library, and, finally, qualitative elements of the student surveys. Clarke and Braun (2017) argue that "the aim of TA is not simply to summarize the data content, but to identify, and interpret, key, but not necessarily all, features of the data, guided by the research question" (p. 297). To accomplish this aim, I used descriptive coding, which focuses on "the basic topic of a passage of qualitative data" (Saldaña, 2009, p. 70). Saldaña notes that this method is particularly appropriate for studies that draw on various data sources.

Thematic analysis does not rely on any "specific theoretical framework," so it provides researchers the flexibility to apply any paradigm to their analysis" (S. P. Miller, 2018). This is appropriate for the examination of documents and audits, as the information and spaces examined have been developed for purposes that fall outside the focus of this study.

4.4.3.1 Documents

Birks and Mills (2011) suggest that "depending on the aims and focus of your study, documents can prove extremely valuable in your research" (p. 82). In this study, documents provided context for how accessibility was "officially" incorporated into services and promoted by the library. Documents were analysed using a descriptive coding process, and they were then "reorganized and reconfigured to eventually develop a smaller and more select list of broader categories, themes, and /or concepts" (Saldaña, 2009, p. 149). This process of analysis involved a skimming of the documents, followed by "a careful, more focused rereading and review of the data. The reviewer takes a closer look at the selected data and performs coding and category construction, based on the data's characteristics, to uncover themes pertinent to a phenomenon" (Bowen, 2009, p. 32). In performing analysis of these documents, it was crucial to also consider the purpose behind them, as well as their completeness and accuracy. Essentially, it is important to "evaluat[e] documents in such a way that empirical knowledge is produced and understanding is developed" (Bowen, 2009, p. 34) rather than merely reiterating what the document states.

Shaw (2010) suggests that

policy is thought of as a set of processes and actions (or inactions) that have some broad purpose (rather than a discrete decision or programme administered at one moment in time), and embraces both what is intended and what occurs as a result of that intention. (p. 201)

Documents are thus not separate from politics and political interests, and problems might be built into these policies (Shaw, 2010). When accessibility was included in the documents and when it was absent were key considerations.

4.4.3.2 Audits

Audits were analysed using both quantitative and qualitative methods. For example, I measured the height of stacks as well as aisle width; I measured the height of drinking fountains; I counted accessible washrooms in each library; and I took notes on aspects such as signage and lighting. Thematic analysis of online information, such as what types of hardware or software are available and what disabilities these are designed to serve,

was also conducted. Photographs were taken throughout the library spaces. Leiter's 2012 study highlights how emergent themes can come from observational data. In her study, the themes of "hazards," "bricks: aesthetics versus access," and "taking it to the street" arose from a person-centred inquiry about the accessibility of Boston sidewalks (Leiter, 2015). Field notes and photographs allowed for this aspect of the study to be analysed using a thematic analysis. Compiled field notes are included in Appendix P and Q.

4.4.3.3 Student survey

The student survey allowed both quantitative and qualitative analysis to be conducted. The frequency of responses was considered in the case of questions in which the respondent was provided a selection of responses. Several questions also featured an "other" category or open textual responses to be filled in by participants. In these instances, thematic analysis was conducted. This process involved using descriptive coding on users' responses before grouping the responses into general themes and categories.

4.5 Bringing the data together

This study uses a variety of methods of analysis, a decision that was made due to the appropriateness of each individual method for each source of data (as discussed in 4.4.1-4.4.3). Although various methods were used in analysis, there were common elements to these methods. Grounded theory, IPA, and thematic analysis all include drawing out important and recurring themes from the data. In this study, the various sources of data—and methods of analysis—came together to triangulate a broad picture of accessibility in an individual library from the perspective of the institution itself, from the perspective of the librarians within the institution, and finally from the perspective of students who were accessing the services provided. In some instances, there were themes that overlapped amongst the various groups—for example, providing and

accessing digitized materials. These themes were considered from the perspective of provider and/or user as appropriate. Bringing the data together was thus about highlighting the issues, resources, experiences, and priorities that emerged from the various data sources, and about determining where overlap or gaps existed. In conducting this work, a comprehensive and overarching assessment of accessibility in these libraries emerged. The table below provides an overview of how the various methods fit together and respond to various research questions.

| Data collection | Analysis | Research questions |
|-------------------------|--|--|
| Policies and reports | Thematic analysis | Do the services provided by libraries match their policies? |
| Audit | Thematic analysis | Do the services provided by libraries match their policies? |
| Student survey | Thematic analysis | How do disabled students experience library services? |
| Librarian interviews | Grounded theory | How do those working in academic libraries understand disability? Does this understanding of disability have an effect on the services offered? What do staff consider to be the challenges/ obstacles in creating more accessible services? |
| Student interviews | Interpretative phenomenological analysis | How do disabled students experience library services? What do students consider to be the challenges/ obstacles in creating more accessible services? |

Table 1: Overview of methodologies

Each unit of study (the individual library systems) was analysed separately, and a crosscase analysis followed (Creswell, 2007; Yin, 2003). This process allowed similarities and differences between the sites of study to be identified. While the analytical processes, and especially grounded theory, emphasize the importance of emergent concepts and categories, there were some themes that were expected to be present based on a review of existing literature. These themes included limited resources on the part of libraries, and in the case of students they included potential attitudinal barriers and the difficulty of disclosing disability. Moreover, I conducted a systematic search for counterexamples at the end of this process. This search ensured that concepts that did not fit within any higher-level categories were not overlooked or excluded by the analysis. Although the existence of these counterexamples may have contradicted other findings, it is important to acknowledge these contradictions and the inherent messiness of qualitative data. It may not be possible to develop themes that perfectly capture all aspects of complicated human interactions, interpretations, and experiences.

4.6 Reflexive and memo-writing practices

A vital component of this research project is the inclusion of a reflexive writing process. In part, such a process was important for the purpose of considering the power relations between me (the researcher) and the study participants (be they library staff or disabled students). This process was essentially about considering "'researchers' thinking about their own bias on the basis of biography, or more broadly, insider/outsider status" (Cousin, 2010, p. 9). Often this objective is achieved through a process of classifying one's identity categories, such as race, gender, sexual orientation, and social or economic class. Cousin (2010) argues that there are limitations to this type of consideration. Often identity politics turns into a "mathematical concept," whereby various identity markers, such as those mentioned above, are described: "Researchers have to consider whether they are inviting accounts that are overdetermined by a single identity position" (Cousin, 2010, p. 14).

Critically assessing identity is vital in any study, but some might suggest that it is even more crucial in considering disability, as the impairments of disabled people vary so widely:

Perhaps, Shakespeare and Watson capture the realist/relativist nature of disability well when they state that disability is the quintessential postmodern concept, because it is so complex, so variable, so contingent, so situated. It sits at

the intersection of biology and society and of agency and structure. Disability cannot be reduced to a singular identity: it is multiplicity, a plurality. (Goodley, 2011, p. 120)

For the purposes of this study, I focused much of my reflexive writing on my own personal interest in the research questions and on how I came to be pursuing this research project. I engaged in a free-writing practice throughout the research process, in which I considered my own position in the project, power relations between me and participants, the implications of participatory research, and my outsider status—albeit most likely only temporary—in the world of disability, among other topics. This journaling activity provided me with the opportunity to continuously reflect on my own position in this process and on my understanding of critical theories as they relate to the project. This consideration is vital as "no one has easy, stable access to the naming of their reality" (Cousin, 2010, p. 14). Understanding how my own identity-reality experience could and would change throughout the research process, and especially in interactions with participants, was as important as understanding that others would not conduct the project in the same way, even if they shared the same identity markers as me. After all, identities are not fixed and, as Cousin (2010) observes, "researcher reflexivity is grey" (p. 17). Finally, this reflexive process also complements the memowriting processes that are used in both IPA and grounded theory (Bryant, 2017; J. A. Smith, Jarman, & Osborn, 1999) by allowing further exploration of the ideas that come up in these notes.

4.7 Participatory elements

Within the discipline of disability studies, it has been emphasized that the input that disabled people are invited to give is often limited by the shape of the study itself and through power relations with the researchers. Participatory research is suggested as one method to overcome this, at least to some degree. I included elements of a consultation phase in the research by speaking with disabled individuals as to the appropriateness of

the research questions, data collection methods, and interview and survey protocols. However, it would not have been possible to develop a truly participatory study at this time due to the formal requirements that completing a doctoral degree entails. Moreover, it is arguable as to whether truly participatory research is ever genuinely possible to engage in and carry out.

For those conducting research that takes disability studies into account, emancipatory and participatory methodologies are often considered vital. These methodologies necessitate not only speaking with disabled individuals about research that pertains to them—a relatively recent research phenomenon that is still absent in some disciplines but also involving disabled individuals extensively throughout the entire researchdevelopment process. In theory, this involvement will allow the development of research questions and projects that are relevant to the lives of disabled individuals, something that cannot be said about research developed from an medical model understanding of disability, in which research is "about" disabled individuals.

Participatory elements are vital to my understanding of disability research, as "you cannot be independent in research oppression; you are either on the side of the oppressors or the oppressed" (Oliver, 1997, p. 17). However, Oliver (1997) goes on to suggest that participatory research is inadequate in that it does not ultimately challenge the existing structures of research processes, in which researchers benefit regardless of whether or not participants do. I aimed to make this research inclusive, but it cannot be denied that I am the primary (and perhaps only) recipient of benefits from the product of the research. Nevertheless, within the confines of this doctoral research project, the inclusion of participatory conversations was one way in which I could share power in the research process, and in doing so work towards an emancipatory or transformative agenda:

Through participatory action research, people can come to understand that and how—their social and educational practices are located in, and are the

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product of, particular material, social, and historical circumstances that *produced* them and by which they are *reproduced* in everyday social interaction in a particular setting. By understanding their practices as the product of particular circumstances, participatory action researchers become alert to clues about how it may be possible to *transform* the practices they are producing and reproducing through their current ways of working. (Kemmis & McTaggart, 2008, p. 279).

Oliver (1997) argues that emancipatory research is not possible in reality, as one cannot do research that is guaranteed to emancipate an oppressed population. At most, one can hope for such a result, although this also brings up questions as to whether one is engaging in liberating others or promoting self-liberation, which is a problematic concept in itself. Although emancipatory research may not possible in practice, it is still vital to note within this methodological approach that emancipation must include the oppressed population within the research, as it is not the role of "able-bodied" researchers to "free" disabled individuals. Disabled individuals must participate as equals in the research process as much as possible, though it must be kept in mind that it is difficult if not impossible to develop truly equitable terms, as the direction of a research project will often already have been developed to a certain extent by the time its disabled participants are brought into the process, as was the case in this instance. Furthermore, this study is ultimately my research project, and I have the ability to determine the degree to which disabled individuals can participate in the process, thus negating any chance that it could ever be truly participatory. Whether I engage with this process and the extent to which I do so are my decisions, and the uneven balance of power therefore remains firmly in place.

To include a participatory element, I consulted with several individuals who have some familiarity with this topic through their own experiences of disability. Through speaking about this project and through relationships developed through my involvement with the Canadian Disability Studies Association, I came to meet these individuals who helped

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with this work. These consultations helped me to develop appropriate questions to ask of students, as well as ways to think about my general approach to this research. In one instance, someone told me to think about "understanding" rather than about "knowing" disability, and I found this particularly useful to question my intentions and focus throughout this study.

All interviewees were provided with a transcript of their interview and were given the opportunity to clarify, modify, or retract any part of their interview. A few individuals did make clarifications, but nobody requested more substantial changes to their interview. In addition to the transcript review, I invited student interviewees to provide feedback on the interview process itself. I asked them to consider whether they felt that questions may be missing or were unnecessary, as well as whether they had suggestions for future interviews that I was to carry out. Feedback of this type was limited, though several participants did suggest ways of rephrasing questions and additional questions that they thought would shed further light on an individual's experiences, and at times my question about how they felt about the term "disability" was met with a rather exasperated eye-roll.

4.8 Credibility

Lincoln and Guba (1985) state that the "conventional criteria for trustworthiness are internal validity, external validity, reliability, and objectivity" (p. 218). However, as Stake (1995) points out, "Qualitative case study is highly personal research... The way the case and the researcher interact is presumed unique and not necessarily reproducible for other cases and researchers.... A personal valuing of the work is expected" (p. 135). This uniqueness was especially important in the decision to integrate a reflexive aspect into this study, and it remained pertinent in the reflexive writings themselves.

Lincoln and Guba (1985) suggest that credibility, transferability, dependability, and confirmability are important to consider within qualitative naturalistic studies as

counterpoints to the criteria highlighted for conventional research. They go on to note that many of these criteria can be at least partially met through "prolonged engagement and persistent observation, triangulation, peer debriefing, negative case analysis, and member checking, to establish credibility; thick description, to facilitate transferability; and auditing, to establish dependability and confirmability" (Lincoln & Guba, 1985, p. 219). Many of these aspects were met throughout the research process through a variety of activities. These included prolonged engagement through my involvement with the Canadian Disability Studies Association, triangulation through multiple data sources and methods, member checking through providing disabled students the opportunity to read transcripts and alter or withdraw their comments, and an auditing of the research process through an ongoing reflexive writing practice. Additionally, by practicing thick description—in which "the description must specify everything that a reader may need to know in order to understand the findings" (Lincoln & Guba, 1985, p. 125)—of the research process, many of these issues are also addressed.

It is worth noting that interviews are susceptible to response bias, especially here in the case of library staff, who may feel that they will be judged for potentially "wrong" responses. Staff may fear repercussions for criticizing aspects of the library services at an institution where they are employed. To mitigate against this possibility, the institutions included in this study will not be identified, and the identity of staff participants will remain confidential.

Another potential consideration is observer effect, in which library staff may respond to interview questions by giving answers that they think the researcher hopes to hear. There was also the potential that staff would become defensive over library services, a lack of knowledge about accessibility, or their personal attitudes towards disability. I examined the interviews for instances of this effect, but I did not find clear evidence of it—in fact, several library staff members highlighted feeling "guilty" for not having better answers or knowledge at points. However, even if observer effect does emerge at

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points, it is worth recognizing there may be valuable information in these exchanges: "While outsiders may see the data as 'biased,' ethnographers should be prepared to argue that informants' performances—however staged for or influenced by the observer—often reveal profound truths about social and/or cultural phenomena" (Monahan & Fisher, 2010, p. 358). It cannot be fully known whether the librarians' interview responses were in some way "biased" by my presence. However, I would argue that even if this occurrence did take place at points, these responses still hold value as they potentially show what one believes is the "expected" response.

4.9 Limitations and constraints

As this study examined the services of only two universities, no definitive generalizations applicable to other institutions were developed. Indeed, Choemprayong and Wildemuth (2009) argue that this limitation is an integral aspect of case studies, as they are focused on particular cases and thus findings are not applicable to other situations. Furthermore, as I mentioned earlier, policy relating to both disability and education differs from province to province. While there may be some similarities between policies, the lack of consistency across the country further demonstrates that this study cannot lead to wider generalizations about the current climate of accessibility in Canadian academic libraries, or even within Ontario and Québec.

Additionally, the relatively small number of students with whom I spoke means that my study sample is in no way representative of disabled students across the country, or even within the two provinces or at the two institutions. The nature of disability, as well as of factors such as age, race, gender, class, and others besides that contribute to one's identity and experiences in the world are so varied that there is no way to incorporate all of these aspects into a study.

A final but important limitation stems from my own status as a white, heterosexual, cisgender, nondisabled individual. Although I have approached this study with a lens

developed from disability theory, my own positionality coming into this study shapes and in some ways limits my ability to apply this lens. This element of the study was an ongoing consideration in my reflexive writing practices, as I grappled with—and continue to grapple with—what it means for me as a nondisabled individual to be conducting this research.

4.10 Ethics

This study received ethical approval from the REB of Western University (Research Study 108887). This project is focused on a sometimes-marginalized population—that is, disabled individuals—and it is perhaps tempting to suggest that it is therefore a high-risk project. However, the fact that these individuals—who are at least 18 years of age—are pursuing higher education at university level indicates that they have already overcome many of the societal obstacles that limit opportunities for disabled individuals to continue their educations. Moreover, and perhaps most importantly, the framework used in this project emphasizes that disabled individuals are disabled by society rather than by any inherent deficiencies in their bodies or minds. If we suggest that disabled individuals are intrinsically a high-risk population, we risk further medicalizing their conditions. Rather than focusing on the risk of the population, it was vital to integrate into the study a process for reflection, participatory processes that allow disabled individuals to help shape the research itself, and a commitment to "understanding" rather than simply "knowing" disability.

The identity of interview and survey respondents has remained completely confidential. With regards to staff, it must be acknowledged that this confidentiality is harder to maintain, depending on their position in the library. However, the individual libraries themselves are not identified, and this masking, along with a process of not specifying positions or level of role in the library, has hopefully allowed for a high degree of confidentiality. This confidentiality is especially important because staff may consider their participation to have negative repercussions in the event that they criticize their

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employer and workplace. An attempt at mitigating these potential negative effects was made by keeping both the libraries and staff participants confidential.

It was not expected for there to be any negative repercussions for student participants in this study. However, given that interviews touched on people's individual impairments at times, some students may sometimes have felt uncomfortable. This discomfort was minimized as much as possible through my taking some time to get to know the participants and providing them with opportunities to get to know me. This process of relationship building was accomplished by providing ample opportunities to ask me questions about the study and about myself, as well as by my explaining how my interest in disability and accessibility had developed. Vernon (1997) stresses the importance of allowing the "mutual exchange of personal information" and the introduction of "some vulnerability through self-exposure in the same way as we are asking the research participants" (p. 169) while remembering that participants do not necessarily want this information. Participants were sometimes curious about how I had come to be interested in this topic, but generally they did not seem overly interested in knowing much about my background.

The interview process often led to general queries from participating students about accessibility at the library or at the university more broadly. At times, I was able to provide information to answer these queries based on my conversations with others at the university, and when I was able and felt it appropriate to do so, I relayed this information. This action in turn helped to establish a trusting relationship with participants. Furthermore, contact details of specific support services—such as mental health, accessibility, and psychological services at the university—were made available to any students who participated. Details of external agencies and organizations that may also be able to offer support were also provided, and these are included in Appendix M. Staff members who were interested in learning more about accessibility in libraries were also provided with a list of relevant resources (see Appendix E) to follow

up on. Student and staff participants also had my contact details, so if they wished to follow up on some aspect or retract a comment, they had that option.

Respondents (both library staff members and disabled students) had the opportunity to opt out of individual questions or of the interview process or survey as a whole at any point, and they were informed of this both orally and in written form. Participants also received a transcribed copy of their interview. If there were parts of this interview that they wished to retract or clarify, this opportunity for changes was made available to them. This member checking also further contributed to the participatory aspect of this research.

5 Ontario institution findings

5.1 Background

The first institution is a well-established university in an urban area in Ontario. Well over 10,000 students are registered in its undergraduate and graduate programs. Disability Support Services (DSS) at this institution had over 2,000 students registered for its services in 2016.

There are multiple library locations at this institution—as well as archives, resource centres, and specialized libraries—that serve various student populations based on subject area, faculty, or location. There are over 5,000,000 books across the campus, and the university subscribes to over 140,000 periodicals. In the 2016-17 year, there were over 100 staff members (librarians and library support staff) in full-time employment at the university's libraries.

The library has a section of its website dedicated to information about accessibility within the overall library services. Information pertains to facilities, available adaptive technologies, alternative formats, and key contacts. The policy section of the website includes a customer service policy on accessibility in line with AODA requirements.

5.2 Reports and policies

The documents assessed consisted of strategic plans, annual reports, and policies and guidelines, amongst others. Strategic plans and annual reports were available from 2007 to 2018. There were 11 policies or decision-making guidelines that were also brought into the analysis. These documents related to access and loans policies, collection development, computer policies, customer service and reference services, access to electronic resources, and copyright information, among others. Eight policies were noted as being not relevant and thus excluded from analysis. These policies related to aspects such as non-library-related promotional materials, media bookings, and services

for the non-university community. Additionally, collection policies for various faculties and departments were excluded, as the overarching collection-development guidelines that would inform these policies were included. LibQUAL reports were also available from four surveys undertaken over the last decade or so.

Accessibility was rarely mentioned in any polices or reports, with two key exceptions. The primary policy that pertains to accessibility is a customer service policy, which is in place due to the province of Ontario's mandates arising from the AODA. Accessibility was explicitly mentioned in one other policy, namely the reference-services policy, which instructed users to refer to the customer service policy for more information.

5.1.1 Strategic directions and annual reports

Strategic plans generally covered a range of four to five years, while annual reports were available post-2007. The strategic plans generally provided a brief overview of the more detailed information available in annual reports. Each one stated that the library would work to align itself with the broader institution's strategic plans and focus on broad areas of research and scholarship, as well as on teaching and learning. Overall, the strategic plans highlighted the mission and vision of the library system, as well as those of the wider university. Accessibility was only mentioned in one report, which stated that the library would work to "build working relationships with student service groups," which include DSS.

The annual reports provided further details on the priorities and accomplishments of the library each year. Over the decade, these accomplishments and priorities included the introduction and growth of the institutional repository; consortia purchasing agreements with the Ontario Council of University Libraries and Canadian Research Knowledge Network; LibQUAL and other survey results; redevelopment of the website and introduction of various virtual services, including a virtual chat system; and the development of e-learning modules. More administrative factors such as budget cuts and the decline of the Canadian dollar, which affected journal subscription purchases, were also noted in these reports. Accessibility was not mentioned, but there was a continual emphasis placed throughout the reports on the need to support students, and graduate students in particular.

Other key documents pertained to the implementation or development of long-term strategic priorities, specifically with regards to organizational structure and physical infrastructure. The ongoing organizational restructuring emphasizes a team approach to services, as compared to the location-based approach that has existed in previous years. The plan states that it is "not in our interest, or in the best interest of our users, to build or create new silos of activity." The restructuring component is in the midst of being implemented, and this library system has also shared a space plan for future development of some of the libraries on campus. The emphasis is on providing "community space that builds the library's role as the heart of campus."

5.1.2 LibQUAL surveys

This institution has conducted LibQUAL surveys four times in the last 12 years. An overview of the results for each survey is publicly available online, and these include details such as numbers of participants, what users find important in a library service, how they experience those services, and user suggestions. Broadly speaking, the themes that emerged in these survey reports related to staff expertise and responsiveness, access to resources, and physical infrastructure.

Over the years, the survey reports stress that staff at the library are helpful and friendly and that this is of especially high importance to faculty and graduate students. The reports generally suggested that there was satisfaction with this element, with many individuals commenting that staff were knowledgeable and went above and beyond in supporting library users in their research needs. Another important element for faculty and graduate students is the access to resources. The focus was often on e-resources, and the ease of accessing them in practice. Connected to the topic of accessing e-resources was the library's website itself. The earlier reports highlight dissatisfaction with the website, but with upgrades over the years and the introduction of new virtual services, the level of satisfaction also seemed to rise. Accessibility was not mentioned in the reports with regards to online resources.

Undergraduate students regularly expressed that one of their key concerns with regards to the library was physical space. The survey results varied over the years in terms of this group's satisfaction on this topic, but satisfaction levels have seemingly been decreasing. The reports suggest that this is in part due to increasing student numbers, which have led to excessive noise and made it more difficult for users to find spaces in which to work, especially during midterm and exam periods. Students expressed a desire for "quiet and clean individual study space." Another frequently expressed desire over the various years of reports from this group was an extension of opening hours.

Accessibility was rarely included in the published reports, and it is not clear how often it was mentioned in student comments on the surveys themselves. In fact, it was only explicitly mentioned in one report, where the limited number of "accessibility computers"—presumably meaning computers with accessibility software, but potentially also referring to equipment or height adjustable desks themselves—was noted.

5.1.3 Policies

As I have described above, accessibility in relation to disability is rarely mentioned in the publicly accessible policies at this library institution. The term "accessibility" is at times used in the policies. However, it seems to generally refer to a broader definition of "access" to resources, infrastructure, and services. In these instances, accessibility is about sharing limited resources and ensuring that users are able to retrieve or make use

of them. Reference to the diversity of library users is also made in a number of policies, as is the commitment to "anticipating information and service needs...[and] striv[ing] to exceed the expectations of our... diverse users."

The customer service accessibility policy focuses on the library's commitment to provide accessible services. There is information about what services the library provides, including alternate communication methods, staff knowledge and training, and accommodation of service animals or support persons. An interesting addition to this accessibility policy is that the library "may require a person with a disability to be accompanied by a support person while on library premises, in situations where it is necessary to protect the health and safety of the person with a disability, or the health and safety of others on the library premises." Further information about what might lead to this requirement or who would have authority to make such a determination was not included.

5.2 Audit

Physical accessibility varied across the various library buildings, as well as within an individual library. For the purposes of this study, a general audit was performed at the largest of the libraries. Due to constraints in time and resources, the audit was not exhaustive, and it only served to get a sense of how one might navigate throughout the physical library.

5.2.1 Entrance

The main entrance to the library features a double set of doors, which include automatic accessible doors. The radio frequency identification (RFID) gates that one passes through to get in or out of the library are wide enough for a standard wheelchair or scooter to pass through, though they are too narrow for bariatric wheelchairs. The gates

also require one to pass over a small bump. While this is unlikely to actually impede any users, it may cause discomfort for those passing over it in a wheelchair or scooter.

There are several accessible parking spots behind the library. If parking here and navigating to the library, one must traverse the parking lot and onto a pathway, which features a curb cut. Although this meets accessibility standards, one student pointed out in their interview that the curb cut is next to a loading dock. This means that vehicles making deliveries regularly block access to the curb-cut pathway, forcing those using mobility aids to jump the curb and navigate through an unpaved area or travel completely around the library. This alternative path requires an individual to travel nearly an extra half kilometre.

5.2.2 Elevators

In the largest library at this institution, there are four elevators, with three of these grouped together in one area of the building and serving all floors, while the one located in the rear of the building only provides access to the main-floor and basement levels. Elevators featured braille on the buttons, and the floor numbers light up as you reach or pass each one. There was no audio indication of which floor of the library one was approaching.

5.2.3 Bathrooms

Floors 3 to 5 of the library all have two main bathrooms on each floor, one male and one female. None of these are fully accessible washrooms. In addition to these washrooms, there are also two barrier-free private washrooms in the library, one on the main floor and one on the second floor of the building. The library website states that there is a third barrier-free washroom on the basement floor. However, I was unable to locate this space either on a map or in person. The two existing barrier-free washrooms have automatic door openers and locks, accessible door handles, rails, and enough room for someone to access the space using a wheelchair or with a caretaker. As some students

observed during interviews, however, the washrooms have at times been inaccessible to users due to their being locked and a code being required to get in, or due to their being used by students as a study space during midterm or exam periods.

Several washrooms on the main floor and basement-level floor had signage suggesting they are wheelchair accessible, presumably on the basis that they each feature a single larger stall. These washrooms featured inaccessible locks on stall doors and did not have automatic door openers, and in one case getting through the doorway also required making a narrow, sharp turn. Most of these washrooms did also feature sinks, mirrors, and soap and hand-towel dispensers at various heights. However, the lower ones often had garbage cans or other obstacles directly beneath the dispensers, making them potentially inaccessible for someone with mobility impairments. These washrooms may be useable by some individuals who have physical impairments and use mobility aids, but they do not provide an adequate level of accessibility for others.

It should be noted that all of the accessible washrooms, whether barrier free or only partially accessible, are located on the lower floors of the library, meaning that mobilityaid users are required to use the elevators if they are on an upper floor and need the facility. This situation may not arise in practice, as individuals requiring barrier-free washrooms may not be making use of the stacks or study spaces on upper floors due to the inaccessibility of these spaces.

5.2.4 Stacks

The stacks are primarily located on the second floor and above, requiring students to access upper floors in order to use print materials. There are three elevators that serve this area, although the frequency of use and age of elevators can result in a prolonged wait for anyone wishing to use them. The majority of stacks had seven shelves, with the bottom shelf located just under four inches from the ground and the top shelf approximately 76 inches from it (over six feet). Shelving for oversized books varied, but it featured five or six shelves instead of seven. The distance between stacks also varied, but it was generally between 30 and 35 inches. If a stool was in the aisle, the traversable space was only approximately 17 to 18 inches. These measurements are compliant with 2007 standards set out by the local government of the city in which the university is located. However, more recent standards put in place by other cities in the province suggest there should be at least 32 inches between shelves. There is no provincial guidance on aisle width at this time. The American Library Association suggests a minimum aisle width of 36 inches, with a preferred width of 42 inches (American Library Association, 2018).

The reservation hold shelf is near the service desk on the main floor of the library. This location ensures that there is assistance nearby for students who may not be able to reach books on higher or lower shelves or otherwise have difficulty picking up their books. However, it should be noted that students cannot request materials to be placed on the hold shelf within the library in which those materials are normally located. In other words, if one wants to place a hold on an item from Library A, this item needs to be picked up in Library B or C, and vice versa. As several students mentioned, their choice of library is decided by accessibility reasons, or by proximity to their home, classes, or other services that they need to access. If the required books are located in that library, these students are required to travel to another library to pick them up, or else they are unable to request them using the online system.

5.2.5 Signage and lighting

There was both temporary and permanent signage throughout the library. The signage in general related to location of library resources such as book call numbers, book returns, and print stations; key physical features such as elevators and bathrooms; and emergency procedures. Televisions were also positioned at several points in the library, and these featured information about library book displays as well as general library information.

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Other signage was in the form of maps or provided information such as room numbers. Temporary signage tended to relate to locations of materials, to policies, or to instructions on matters such as how to use the printers. Call numbers for stacks were located at the end of each shelving unit. These signs were located at a height of approximately 78.5 inches (6.5 feet). Many of these had been handwritten on three by 5.5 inch cards. The text on the signs was just over one inch in height. Instructions for printing and copyright information were available at the self-print station on the main floor. These signs were located behind the printers themselves, which potentially raises issues for individuals who use mobility aids or have visual impairments, as they might not be able to get close enough to read the information provided.

Other signage throughout the library related to medical-assistance and fire procedures. These signs were located at a height of approximately 58 inches (4.8 feet) and featured small text that explained the procedures. Fire-alarm pulls were located beside these signs in some instances. There was also permanent signage at the entrance to most stairwells (located in each corner of the building), indicating the stairwell number and floor number.

Fluorescent lighting was used throughout the library. In the stacks on the upper floors, the lights were motion sensitive and would flicker on as one took a couple of steps down the aisle. In common areas, hallways, and stairwells, the lights were not motion sensitive. Individual study rooms had lights that could be turned on or off by the user.

5.2.6 Study rooms

There are eight bookable group study rooms in this library, as well as three group study rooms that are provided on a first-come-first-served basis. These rooms can hold between four and ten students. There is also a variety of individual study rooms that are available on a first-come-first-served basis or that graduate students can register to reserve and access for the duration of a semester or two.

5.2.7 Access rooms

The library is home to ten individual study rooms reserved for students who are registered with Disability Support Services, as well as a group Accessibility Lab. Several of the individual study rooms, as well as the Accessibility Lab, house various adaptive technologies available for students to use, such as oversized keyboards and scanners. It must be noted that the technological availability varies across the rooms, and so students who require certain programs or hardware to conduct their work may not have access to it if another student is using the room. Two rooms have height-adjustable desks.

These rooms are available on a first-come-first-served basis, and they are accessed with keys that can be taken out from the service desk of the library. Loan periods are for three hours at a time, although depending on the time of day or week, these periods may be longer (for example, if the service desk is closing, the room is available until the library closes).

There is also an accessibility lab at this institution; it is located below the ground floor of the main library building. The lab has an automatic door and provides working space for students who are registered with Disability Support Services at the institution. There is a variety of seating at various heights, adaptive technology equipment, accessibility software, and adjustable lighting. The room has seating space for approximately 20 students, with seats at various heights and various types of cushioning.

In the past, this room served as a storage closet. However, it has since undergone upgrades that were made possible through a donation in combination with other funds. These upgrades entailed the installation of many of the features listed above, such as adjustable lighting, and even the creation of the barrier-free path to reach the room.

5.2.8 Software and hardware

The library has one adaptive workstation PC—which includes accessibility software—in a common area (as does each of the other libraries within the wider system). Installed on these computers are Kurzweil 3000, which provides text-to-speech services and writing templates, and ZoomText. In addition, the access lab has several other software programs, including JAWS screen reader and Dragon Naturally Speaking. The majority of the programs available are for users with visual impairments, although some are also useful for individuals with mobility impairments and learning disabilities.

5.2.9 Online information

The library website features a page about accessibility at the library. Details of software programs, equipment, and the location of PCs at each library are included, as is the name of an individual to contact for more information. There is also a link to the accessible campus map, which highlights features such as accessible parking, automated doors, and accessible ramps. However, the map is out of date and does not feature campus changes that took place from at least late 2013 onwards. During this time, at least three new buildings have been constructed on campus.

Other information provided on the library accessibility webpage relates to requests for alternative formats, photocopy services, and reference services. There is also information about gaining access to the Accessible Content E-Portal (ACE), to which the library subscribes. Although it states that requests will be processed within two business days, there is no information about the approximate timeline for receiving the material itself.

5.3 Library staff interviews

Interviews were conducted with seven library staff members at this institution, and these were analysed using grounded theory. A number of themes and subthemes

emerged from these interviews. These themes suggest that librarians understand themselves to be in a helper profession and that they are doing their best at supporting students with disabilities despite a lack of knowledge and resources. The following table provides an overview of how the key themes and subthemes are broken down. These themes and subthemes provide the structure for this chapter.

| Themes | Subthemes |
|----------------------------|--|
| Library profession | Working with the public |
| | Staff development |
| | Culture of helping |
| Doing our best | Accommodating on the spot |
| | Designing services |
| | Experiencing change |
| Conferring with experts | Identifying the expert |
| | Working with DSS |
| | Uncertainty |
| Working in an institution | Campus culture |
| | Priorities and ownership |
| | Messaging and logistics |
| Library users | Imagining the student experience |
| | Identifying students |
| | The right service for the right people |
| Using the library | Navigating the space |
| | Renovations |
| | The digital and online environment |
| Conceptualizing disability | What is disability? |
| | Staff with disabilities |
| Looking forwards | |

Table 2: Overview of staff interview themes

5.3.1 Library profession

This theme relates to the general profession of librarianship, which I am defining loosely as the tasks and roles associated with working in a library. The themes within "library profession" are not necessarily particular to the librarianship practised at this institution but also relate at times to a broader culture and understanding of the profession.

Working with the public

Nearly all the library staff members interviewed emphasized that there were frontfacing elements to their job roles, regardless of what level of the library they were working in. Most of the individuals interviewed spent time working at the front service desk, whether this was a regular occurrence or only when they were otherwise short staffed. In some instances, the front-facing nature of their role was more related to spending time on the floors of the library, checking in with students either in consultations or in passing, or working with staff members who were posted regularly on the service desk. Additionally, those members who did not have as much direct contact with students in their current roles emphasized previous roles that they had held and their work with students or other members of the public in these jobs.

Staff development

At this institution, some members of staff had recently been involved in an accessibility audit across the library system. Several of the individuals interviewed mentioned this audit as an initiative geared towards increasing accessibility in general. The audit itself brought to light several areas in need of attention for improving accessibility, one of which was the need for staff training.

Librarian L.J.: After doing the audits, a lot of the directors were like well can I have my individual report back so we know. And everyone actually asked for more clarification with policies and for training. Everyone, absolutely everyone across the board was like training, yeah training would be good. In Ontario, there is a legal requirement for staff members in organizations providing services to the public to receive accessibility training under the AODA. The content of the training did not seem to have made a big impact on staff members.

Librarian D.S.: There's certainly, there's certainly the encouragement to be understanding, and to confer with experts in the area, but in terms of actual training...? I don't know... When I moved here, I had to take the, you know WHMIS, and the... It starts with A...

Claire: The AODA.

Librarian D.S.: There you go, the AODA. That would be some of the training that I received.

None of the individuals interviewed spoke about the content of the training beyond the fact that it was related to legislation and to providing a general accessible service. In practice, this AODA training consisted of an online module and assessment.

It was also not evident that all members of staff at this institution had actually received this training, although most of the staff members interviewed had done it at some point. It is not clear in the other instances whether individuals had not received the AODA training—perhaps because they were not officially public facing—or whether they did not consider this module to be training or had merely forgotten about having taken it.

While accessibility training beyond the AODA module was not currently offered and would not be mandatory, there was an expectation that most staff members would take training if it were available. It was also emphasized that many staff members were highly motivated to take advantage of training opportunities.

Librarian L.R.: And I mean staff themselves, they don't want to be at the desk and be asked something and not know how to do it. So they're, they're pretty eager to learn because they know they're going to be asked. One librarian suggested that mandatory training on accessibility was unlikely to be helpful, as their experience with other training sessions was that they were too broad to be of much specific value in the library. However, generally there was support for the view that further training on accessible practices might be of benefit to library staff. Several librarians suggested that an element of this training may consist of a presentation by DSS. In fact, one librarian suggested this would be especially useful, as they were unclear on the work that DSS did and how many students they were working with.

Librarian S.H.: [sigh]. Um, I think it might be good actually if we worked a little more, if we worked differently with the [Disability Support Services]. There are some people in [the library] that work with them a little bit. But I think it would be helpful if more people in the library were aware of what they do, and what we do. Um, and maybe that would be the way to raise awareness more effectively.

Claire: Okay.

Librarian S.H.: We have no idea how many students would, how many students they provide services for, or how many students would use our facilities. We really, don't really have any idea of what their facilities are. And I think it's an area where we could work a little more closely than we do, or be more partners with them.

Librarians did not necessarily agree on how awareness should be developed or on what training might consist of. However, there was a general consensus amongst those interviewed that further awareness building or training about accessibility would be helpful for those working in the library.

Culture of helping

Directly related to the idea of librarianship as a public-facing role is the idea that it is a helper profession. Librarians emphasized that individuals working in academic libraries were generally interested in working with and supporting library users.

Librarian K.B.: Nobody really works in a library unless they want to help people... And whether you do it well or not is just whether you've been trained to do it well or not. I mean you can be well-intentioned and not do well, and that's frequently what happens with issues like accessibility because we, our prejudices get in our way. But I think most people, almost everyone I can think of would want to do better if they had the opportunity.

The culture of helping extends beyond basic services and encompasses a commitment to accessibility, at least at the level of intentions. Several interviewees suggested that libraries are often better placed than other types of organizations when it comes to supporting disabled individuals, in part because of the emphasis on front-line service and support:

Librarian K.B.: I think that... you know, a generalized culture of nondiscrimination is one I would say exists. And I would say as organizations go, [the university library] is fairly conscious of nondiscrimination, and operating from a space of low prejudice. I've worked for organizations where this is very much not the case... Um, not any libraries. Cause I don't think... libraries tend to be better than your standard organization around this.

Overall, positive beliefs about the goals and priorities of libraries, as well as a commitment towards supporting users, were demonstrated throughout the interviews.

5.3.2 Doing our best

This category relates to the knowledge and practical strategies that librarians had for implementing accommodations, providing accessible services, and supporting students with disabilities. At times, it was clear that librarians did not feel that they had the requisite knowledge to support students or that resources needed for improving accessibility in general were lacking. Thus, it was suggested by several librarians that they could only "do our best" in working with students, as perhaps those students' needs could not be adequately met at this time.

Accommodating on the spot

Accommodating on the spot refers to a flexible approach to service and is related to the idea of librarianship as a helper profession. Librarians emphasized that services could often be adapted to support users, and that they were committed to making these changes when needed:

Librarian T.R.: But we just, we try to take. At this point what we can do is take it one person at a time I guess. I mean we do try to make any accommodation we can for those, for anybody really.

One important element of adapting the service is identifying when there is a need to do so.

Librarian T.R.: I mean if there was a request, yeah, we would try to make that happen. It would just depend on the individual request, whether it would be to come to me or whether I could go to [name] and see what they can do. Or ask for advice that way. But for the most part, we don't get asked that much. They use the rooms quite, they're very highly used. So that's good. But yeah, we don't get too many, too many requests. It was clear within this theme that students at times needed to ask for support beyond the "regular" service in order to receive it.

Librarian L.R.: So that [set up]'s working for Frank.² I'm sure there's lots of students out there like Frank who probably need that help too, but it's not a formal thing that we have. He had to ask for it.

Several librarians suggested that it was likely that there were students who were not receiving the support that they needed, but these librarians also said that they were unaware of who these students were or what their particular needs were, and thus the librarians felt that there was little that they could do. Additionally, the informal accommodations that were at times implemented for individuals—for example, providing a student with working space in a staff area if student areas were inaccessible in some way—would not necessarily be possible to put into effect for all users who needed this accommodation due to a lack of resources and space.

Although the librarians felt that accommodations were getting better generally and that the informal workarounds were supporting many students in practice, they all also acknowledged that there were students who remained unsupported. The key obstacle in providing more accommodations on the spot and a more accessible service seemed to lie in librarians' not knowing about those particular students and what they needed.

Designing services

Several librarians highlighted that accessibility was being considered more and more regularly in the design of services:

² Frank is a stand-in name provided by the librarian.

Librarian T.R.: So we're starting to really try to think about that whenever we're implementing a service, to have that accessibility in mind at the time of design as opposed to, we just implemented a new print system, but they're too tall. So we're learning some lessons for sure.

This consideration seemed to stem from a number of factors, such as learning from previously made mistakes, as in the instance mentioned above, and learning from the advocacy of some individuals in particular.

Librarian L.J.: I think people are starting to think about [accessibility]. But it's been me, or a few other people being involved going hey, did you think about this?

The advocacy of these few individuals relates back to the idea of librarianship as a helper profession. It seems from these interviews that library staff are supportive of inclusive strategies, at least in theory, and that much of the difficulty in fact lies in a lack of awareness and forethought about accessibility. It is difficult if not impossible to include accessible practices into services if one has not considered accessibility in general, as one librarian emphasized:

Librarian K.B.: I would just say as a general rule, if we're not actively trying to work towards accommodation, accessibility, then we're probably working against it to some extent. Not consciously, but just through our subconscious bias.

The emphasis on how accessibility was more regularly being included at a foundational level of service development suggests that a lack of awareness and/or ignorance rather than resistance to the idea are what tend to undermine accessibility in developing services.

Librarian L.J.: One of the things I was, as I said as I was looking through the intranet, not the Inter, the Intranet site. Is that accessibility is more and more popping into individual things, so it's just something you think about as it... So that's showing a starting shift in the culture.

Claire: Mmhmm.

Librarian L.J.: I think that will be important, so for people to think about things at the beginning of a service or a... and people are starting to think about it. So it was, but you also get the frustration. So if you are having a new service, is there an accessible version? How would someone use it? Is it... do you have another thing? And with a lot of the newer technologies, that has helped with a lot of things. So I remember asking, and it was changed, but you have to think about it at the beginning, for the self-check out. Can they be done from a wheelchair, or is there at least one that can be done?

This subtheme shows that designing and providing accessible services is an ongoing process and that there is still a great deal of work to be done. This theme also links back to the need for accessibility training to develop greater awareness of the experiences of disabled individuals and potential strategies to remove barriers. It also relates to the next category, which focuses on the need to have experts on hand in order to support the ongoing inclusion of accessible practices.

Experiencing change

Some of the library staff had been working at this particular institution for many years, and at points they emphasized that they had seen many changes over their time in various roles. These experiences of change had various effects on the staff themselves. Many instances of changes over time were seen as positive. However, there was also at times a level of doubt about whether things would actually change in practice. Accessibility at the library had certainly increased over the years, and all librarian interviewees emphasized that accessibility was an important topic to be considered in academic libraries.

Librarian S.H.: There's certainly a much greater awareness of the need for our services and facilities to be accessible.

Librarians shared stories that revealed how these changes had occurred across time and how they had affected both students and the ability of staff to support students. One librarian suggested that staff had previously been *"flabbergasted"* when a blind student had attended a workshop in the past, as the staff did not have any ideas on how to accommodate this individual. They went on to say that now it would not be an issue to include this student, as there now existed facilities to help that had previously been lacking. Comments such as this one emphasized how positive changes had occurred over time and how much more accommodating and inclusive library services were in the present as compared to in the past. Generally speaking, the changes with regards to accessibility were positively received.

Librarian S.H.: Um, well because I've been here for so long, I've seen a lot of changes. Because of the legislation, to make things more accessible for more people. And those changes have, all been positive. Um... over the years we have been able to implement a lot of different, make a lot of changes to the facility to improve accessibility. We've implemented software for accessibility purposes. And those sorts of things.

Changes aimed at developing more accessible services were viewed positively, but other changes in library operations were not necessarily embraced. One librarian emphasized that change could be difficult in itself, in this instance in the context of speaking about how the organizational structure of the library was evolving. They suggested instigating changes in the library could be viewed as a commentary on the performance of library staff. Changes might be difficult to accept in practice when people's job roles form important components of their identity. An emphasis on supporting staff members through these changes was thus a key concern.

5.3.3 Conferring with experts

This theme relates to how and when library staff identified support in accommodating disabled students. The theme relates to what librarians know or do not know and when they would need to draw upon outside expertise. Additionally, the matter of who librarians have identified as the experts in this situation provides valuable insight into how they think about disability in the context of providing library services.

Identifying the expert

Identification of individuals with knowledge of accessibility practices was an important consideration for members of the library. Several "experts" were highlighted throughout the course of the interviews. In some cases, this expertise was informal and related to individual staff members who had family members who had disabilities. These experiences gave them some insight into potential barriers, and several interviewees stated that this knowledge was a valuable resource, as these staff members could point out issues that others might overlook.

Other experts occupied more formal roles such as positions at DSS and the post of accessibility librarian. There were expectations that these individuals would have an inside knowledge about policies, practices, and standards of accessibility. There was certainly an assumption on the part of several librarians that the accessibility librarian— described as the *"system-wide accessibility person"*—would have background details about how services were developed, regardless of whether the person themselves had been involved in that development process.

Claire: Okay. And in terms of the customer service, sort of AODA policy, do you have any sense about how that was developed?

Librarian T.R.: Um no. That would be, something that [name] would know for sure. Yep.

In some instances, library staff members stated that they would first approach this individual if they were uncertain about a process or policy or otherwise needed information about accessibility. In this way, the accessibility librarian served a valuable function as knowledge holder and support person for other librarians.

Librarian D.S.: I would probably start off with [accessibility librarian], since [they're] the library expert in the area... And then with [their] work through, if [they] can address the issue fully, or advise me, you know, how best to do it. And if necessary reach out to beyond.

It should be noted that the accessibility librarian had a variety of other responsibilities, and accessibility was in fact only one small part of their role. This type of role is far from unique in Canadian university libraries, as most academic libraries do not have a fulltime staff member who is fully "responsible" for accessibility or other equity initiatives. I am certainly not suggesting that this individual is not an expert with regards to accessibility, but rather that there is a reliance on them, as well as an assumption that they will have answers. What is not clear from the interviews is how this individual is supported by the institution and whether they are given time to prioritize this aspect of their job role. One librarian noted that the accessibility librarian had a lot of work on their plate. It is thus not clear how the various responsibilities are balanced across their role or whether they are afforded the time and resources to fulfil this role of "expert."

The other potential experts who were mentioned in the interviews were the staff at Disability Support Services, although certainly not all librarians had cause to contact them in the course of their work.

Librarian T.R.: But I'm trying to continue to build the relationship, and to really work closely with [DSS] to see what else we can do. Because they're the experts in that area, right. And so, how can they help us, help our users. And how can we work together to do that... And yeah, what else can we do. So I hope to continue to strengthen that relationship.

Several librarians indicated the potential of getting support from experts in addressing accommodations or accessibility, although not all librarians had found the need to do so in practice.

Working with DSS

Knowledge about the relationship with DSS varied between library staff members. Some worked more closely with staff members from DSS and were thus more aware of the services offered than others were. This awareness may have come about because they had more direct experience processing DSS administrative forms in their roles or because they worked more closely with staff from DSS who were responsible for administering a service that was located in the library itself.

Other staff who were less involved in these regular administrative roles were not necessarily aware of the relationship between the two services. Although these individuals may have contacted DSS at particular times when they had a specific query, they also lacked an understanding of the nature of the services offered.

Claire: Okay, okay, great. Um, you also mentioned that there is [Disability Support Services]. What can you kind of tell me about the relationship between that office and the libraries?

Librarian D.S.: I do not know anything official. I'm sure they advise the libraries, as well as all other units on campus how best to, um, you know, how best to deal with, you know, either creating accessible physical space or dealing with specific, accessibility needs of a student or a group of students.

While in practice DSS at this university (and others) does often receive and provide answers to queries on accessible practices to the best of its staff's abilities—librarians emphasized that DSS was very responsive when contacted for support—its primary mission is to provide academic accommodations to students who register with the service.

Uncertainty

All of the library interviewees expressed some degree of uncertainty as to what disabled students' needs were. This was evident in various instances where librarians referred to the limits of their knowledge.

Librarian J.L.: Yeah, it's not always obvious and it's also, it was new to me too in this role. I did not come from a background with this.

Another librarian indicated that they relied on others who had more knowledge in the area to develop more accessible practices.

Librarian D.S.: Yeah, like I know it's been pointed out to me that my overnight return bins are not, physically accessible. So you know, there are small but important things like that. But I, I rely on the experts, the people who are advocates in the field, to educate me. And I'll be happy to follow their advice.

This subtheme relates back to that of staff development, with regards to which many staff members suggested the need for further training on the topic of accessibility. It also relates to what librarians see as key obstacles in providing a more accessible service, namely clear information and guidance as to best practices for supporting disabled students.

5.3.4 Working in an institution

This category relates to how the library fits within the wider university institution. This category is especially important because the institution as a whole often affects the directions and priorities of the library, which in turn can affect everyday work practices.

Campus culture

The culture of librarianship emerged as an important subtheme, but so too did the culture of the institution itself. The priorities of the university as a whole and how it had focused on accessibility emerged in the interviews when librarians talked about how accessibility was supported in the library.

Librarian J.L.: But the culture isn't there throughout the campus. Let's put it that way. And I think there's also really not an understanding.

This culture also affected librarians in their understandings of how disabled students fared across the university. One librarian emphasized what they had learned from working with one particular student and from how he had had negative experiences across the university. In putting into place informal accommodations to support this student and in developing a relationship with the student through doing so, the librarian learned about the difficulties that the student had experienced in accessing the campus in general.

Librarian L.R.: And he was saying to us, cause we talk to Frank a lot, you know when he decided to go to university, he did his research. He looked to see what universities have accessibility and so on, and [the university] has a great narrative on their website, and in all of their packages, and sort of the discourse says come here because we're fully accessible and all of these things. And then he said he got here and it just wasn't the case. And it really upset him, and he's really, really struggling, and he really doesn't feel that he can do the work because, what he thought was here isn't here.

This subtheme relates to that of priorities and ownership, as librarians may feel that they have little power over changing the campus culture.

Priorities and ownership

Deciding on priorities within the library system is a complicated process, as it is affected both by the university as a whole and by the needs and decisions of those in management within the library. Based on the interviews, it seemed that the prioritization of accessibility fell to the management personnel of an individual library within the system. In this way, accessibility was not systematically prioritized across the library system.

Librarian T.R.: But it is based on an individual. Like at this point it is based on an individual library's own priorities. So because I put them in, it's because I put them in. Yeah, and so it's not quite system wide that way.

Beyond the approach of prioritizing accessibility within a single library, librarians were also restricted by the facilities and budgeting of the university as a whole. Several librarians emphasized that decision making could be ignored or stalled by the upper levels of the university, and this tendency could at times work to undermine accessible initiatives. In some ways, accessibility was considered to be out of the hands of the librarians, as they did not necessarily have the authority to implement some of the needed changes.

Librarian L.R.: And we do the best that we can. But the restraints really are what the campus can offer.

Moreover, there was the issue of identifying ownership of the problems. This issue was of particular concern in addressing known accessibility issues. For instance, one librarian suggested that making the campus administration aware of an accessibility issue did not mean that the issue in question would be addressed.

Librarian L.R.: They continued to respond to fixing the elevators but we couldn't really get anywhere with replacing the elevators... Until not this past June but the one before, one of them caught on fire. And then we got our elevators replaced. So. Now we are in a much better position with elevators... It's almost just like a tragedy has to happen before you...

Claire: An elevator catching on fire...

Librarian L.R.: To get responses. Yeah.

When asked what obstacles existed in providing a more accessible service, one librarian suggested that this issue of owning the problems was one of the principal ones.

Librarian L.R.: Providing accessible service? I would say that who owns it, moving things forward, figuring out how to move things forward.

In some respects, it is common for this question of ownership to arise at institutions of all kinds, and it is a matter that is unlikely to be easily solved. However, it is an especially distressing issue when it directly impacts on students.

Librarian L.R.: Yeah, so when we do have someone who's irate and upset, because they were stuck in a bathroom for an hour. Who's responsible for that? Is it me? Is it facilities? Is it the chief librarian? Is it the provost? Like who's responsible to answer to that person and apologize and make it right?

Messaging and logistics

Related to the above subtheme of negotiating ownership of accessibility is the coordination of messaging, definitions, and logistics. One librarian suggested they had

received various, at times contradictory, messaging with regards to definitions of accessibility.

Librarian L.R.: And also just agreeing on what accessibility means. So, um, like I said, we say our bathrooms are not accessible and the response we get is, well when this place was built in 2002 they were accessible. So... [laughs] they are. So that sort of, what is accessibility? What is [the university], how does [the university] define that? And how do we know where we stand with that? So, I guess that sort of, that, yeah figuring out, are we or are we not? And if we're not, who's responsible for that?

More problematically, the librarian had also received contradictory messages about key safety issues, such as procedures for fires.

Coordination of messages and procedures was stressed as a key area in need of attention. Although the librarians had experience of coordinating messages across the library system—and improving this coordination was a key element of the organizational restructure—it seemed that a lack of coordination and support within the wider university community was a difficult obstacle to overcome. At times, librarians felt that their hands were tied in terms of their ability to address accessibility, as they did not receive support—be it financial or affirmational—from the institution.

5.3.5 Library users

This category pertains to the experiences of disabled students themselves, and at times it touches on those of nondisabled users as well. Librarians spoke about what they imagined the experiences of disabled students to be like, as well as about their attempts to identify the needs of students who they were charged with supporting. Librarians' perspectives on these themes were often based on their own working relationships with particular students and on how they had worked to provide accessible services for those individuals.

Imagining the student experience

Library staff had widely varying views on the experiences of students with disabilities and on these students' experiences in accessing the university in general. While all librarians highlighted that there were access issues, some suggested that needs were oftentimes met, creating positive experiences for students.

Librarian F.J.: Um, well the students that have the accessibility issues, I'm sure that they're delighted that their needs are finally being met. And probably far later than sooner than they should have been. If you mean other students that don't have accessibility issues and how that's working out, I think it's just a common thing now that people recognize that you can't ignore these things. And you need to apply certain procedures, or physical things to make it right. And that they should have the same chance as everybody else.

Others suggested such a belief was not necessarily true. One librarian who had worked closely with several students with disabilities and had experience of putting into place informal accommodations to support them in the library suggested that students continued to face challenges at the university.

Librarian L.R.: Um, I mean judging from the things that Frank would tell me, and other similar things I've heard from students, I feel like they're challenged. I feel like in their residences they feel good. But on the campus itself and trying to get around the campus, they find it really difficult, to navigate.

Another librarian imagined that the advocacy that students likely needed to perform constantly pointing out accessibility issues to those who were unaware—was likely to be an exhausting and frustrating process:

Librarian D.S.: Um, I think sometimes students with disabilities must, become really tired of being their own advocates. Constantly having to, or feeling, I

assume. Some may feel that they constantly have to accommodate themselves. I mean, like they say oh no, it's okay. Or, you know, I can do something that's really not okay, or awkward or something. Um. So I can imagine that must just be, very difficult.

This difficulty relates to whether the library is explicitly working to create accessible services and facilities, an endeavour that might in turn provide an environment where students are perhaps more likely to express their needs because they will feel that they will be listened to.

Librarian K.B.: I think the lack of explicit attention to certain other areas, accessibility areas will probably make it challenging for students who have those issues to engage with them.

Identifying students

At this institution, students who were registered with DSS had the option to request accommodated services at the library, such as access to DSS rooms. To register for this service, students meet with a member of DSS, who affixes a sticker to their student cards. The student can then show their card to staff at the library service desk to borrow a key in order to access the rooms. This process takes place outside of the library, and the library does not have access to any of the students' records regarding DSS registration.

The identification of students who may need accommodated services was a key concern for nearly all the librarians interviewed. This concern was especially acute in the case of less "obvious" disabilities such as invisible conditions of all kinds.

Librarian S.H.: And obviously disabilities aren't always visible, so we can... we can make mistakes because we don't realize that there is a disability that they're working with, dealing with. There was some consensus that while issues of physical accessibility and mobility were not always addressed, there was at least an awareness of the issues. However, other types of impairments or accessibility issues that affected students were not so obvious.

Librarian K.B.: I mean, I don't know. I suppose all students use accessible library services in a variety of interactions. I mean, um. Okay, I mean we can start... there are students with physical disabilities, students with mob..., with challenges around mobility, students with visual impairment, students with audio impairment. Those are the kind of more obvious, more visible disabilities. And we have, you know, structures and policies and physical spaces that are designed to help enable those students to interact with the library. Um, we certainly have students with challenges, with accessibility issues that may relate to their gender or their sexuality, or their mental health, neuro-atypicality. And I think we're less, consciously engaging with those issues.

Library staff drew on personal experiences of working with particular students when speaking to me about accessibility. Many of the people interviewed had stories in which they had worked closely with a particular student, and generally they seemed to have learned a great deal from these experiences.

The right service for the right people

Part of the difficulty of determining students' needs was related to the limited resources that were on hand in the library. Changing or developing new services at times meant more staff time would be required, and it was thus important to consider how to implement services that could be accessed by those who needed them but would not be abused by those who did not need them.

Librarian T.R.: For the people who need it. And that's the thing, right. Is like, it doesn't even matter. What we worry about at [the library] is that we are still very print based. So our hold, our paging lists are long already. And so, while I'm totally happy to do that for people who need it, will other people just take advantage of that when they can go up into the stacks and just grab their books? Claire: Yep.

Librarian T.R.: Like it's not a good use of my staff time. But, the alternative absolutely is. So how do we create a mechanism for the right people to get the right service?

This difficulty raised by some librarians ultimately points to the need to manage limited resources. Additionally, it perhaps speaks to a worry about how negotiated resources are shared. This misgiving was also mentioned by another librarian, who was reflecting on a previous experience.

Librarian D.S.: So you're kind of wondering, well, okay. You know, like there's legitimate, it's been verified. You've got the medical certification. Great, that's fine, but let's work together on trying to, you know, address the ongoing problem.

I am not suggesting that these anecdotes indicate that the librarians are suspicious of disability in general, although there may also be elements of a "deserving/undeserving" mentality around accommodations. Either way, these comments reflect the difficulties of providing limited resources to increasing numbers of students while budgets are in fact decreasing. Negotiating ways to support students in fair and equitable ways may mean making difficult decisions about how to allocate resources, which may in turn mean that some students are left unsupported at times.

5.3.6 Using the library

This theme relates to both the physical and the online or digital environment and infrastructure of the library. How individuals move through the space to find resources

and use facilities as well as experiences and difficulties related to renovations were key considerations.

Navigating the space

Librarians brought up the physical library spaces and how users navigate these spaces in practice. This topic was mentioned by all librarians interviewed, which suggests that disability is often considered with regards to physical mobility.

Librarian L.R.: So yes, so for the space it's more about the physical space and the software. Students being able to use the computers, and be able to get into the stacks to get print material. To be able to move around the space, use the different study spaces and technologies.

Librarians were at times particularly aware of how difficult it could be for users to use a particular facility in a meaningful way. Again, the underlying idea is generally related to physical mobility and in particular to access for wheelchair users.

Librarian T.R.: Our big giant service desk that's very tall. Is a huge barrier. So those are all things we'll think about. I mean even the access lab, accessing the access lab is in a terrible, it's in a terrible place.

Another staff member stated that bathrooms in particular were an area of concern. Interestingly, this is a matter that emerged in the student interviews as well.

Librarian J.L.: I mean the bathrooms are a prime example, and it's not just the libraries. It's the entire campus. [Pause]. They're a major issue... The student, there was no accessible bathroom. You can get in but you can't get out again. Could push in but couldn't get out. And when we were doing the audits, we were actually looking at like stall width and everything else. Is there actually enough room to turn around?... Campus overall isn't good for that. I would say. Um, the university was built at a time when they weren't expecting people to, to leave their houses I think.

All librarians emphasized the navigability of the physical library space in relation to one or more of the matters of elevators, washrooms, or service desks. These comments were nearly all focused on physical navigability and on thinking about how users with a mobility device such as a wheelchair would interact with the space.

Renovations

This library institution had not undergone a large-scale renovation in some time, although this type of project is likely to happen in the coming years. Several smallerscale renovations and upgrades had taken place in previous years, however, and library staff discussed some of these changes. These projects brought about positive changes and increased access, for instance through their implementation of up-to-date building codes in some areas, but they also introduced difficulties. Librarians had a variety of experiences around the enactment of building standards, and it was not always clear who was responsible for knowledge about including accessibility in designs.

Some librarians suggested that facilities management was responsible for implementing accessible standards and that they were proficient in doing so.

Librarian F.J.: Of course facilities management has their own designer. And she knows the rules and what needs to be done.

The reliance on the knowledge of facilities management in the context of implementing accessibility went beyond construction and extended to furniture.

Librarian D.S.: I mean when I was organizing this improvement of the physical space. And ordering new furniture. I dealt with a certain department of facilities management. And they were all aware of how wide the aisles had to be. It is almost certain that facilities management does indeed incorporate at least the minimum legal guidelines in any renovations or furniture purchases. However, not all librarians interviewed seemed to have had an experience in which accessible practices and standards were automatically implemented.

Librarian L.R.: When the design was going on, it was the librarians saying there doesn't seem to be enough room between the door and the post for a wheelchair to get through. Then they would say, oh okay, we'll redesign it. There didn't seem to be that awareness in the designing phase.

Of course, librarians themselves are not expected to know about building codes and certain technical legal requirements. However, it is also unknown to what extent facilities management or architects are implementing these standards. One would expect that the minimum legal guidelines are incorporated, but this assessment is ultimately beyond the scope of this study.

The digital and online environment

The online environment, which includes digital materials, was mentioned by nearly all of the librarians. The librarians emphasized that there were processes for digitizing materials within the library system and that these processes included conversions to OCR output. The existence of these procedures likely stems from the requirements of the AODA. Several librarians also mentioned the institution's membership of the Accessible Content E-Portal (ACE) initiative, which provides and shares digitized materials across Ontario's higher education institutions.

The difficulties of digitization were also raised. One librarian suggested that the implications of AODA requirements were not yet fully understood. There were also concerns about the potential costs of scanning and digitization work. These costs could be especially high in the instance of graduate students whose work relied heavily on having an abundance of accessible texts.

Overall, the view seemed to be taken that successful strategies were in place for dealing with digital materials and the online environment. Despite potential costs, there were processes in place to convert texts to include OCR formatting, and this was done automatically for all digitized materials. This procedure meant that the library was in a better position to quickly and effectively add tags and other required formatting when these were needed by a student with accessibility needs.

5.3.7 Conceptualizing disability

This category relates to how librarians actually conceptualize disability itself. The types of impairments that they noted in the course of interviews reflected to some degree what they consider disability to be. Ideas of disability were broad and inclusive in general. Nevertheless, there remained a strong focus on visible disabilities such as mobility and visual impairments.

What is disability?

Generally speaking, ideas about disability were broad and inclusive. Library staff, when asked about disabled students, emphasized a wide range of impairments. The more obvious ones included wheelchair users and users with visual impairments, but staff also emphasized learning disabilities and mental health conditions, indicating that these were of particular concern, as they were often not visible.

Librarian L.R.: Usually for the physical, um, accommodations, we've been able to figure it out. We don't have too many challenges. I'd say the thing that probably, challenges the librarians most, and I don't know if this is part of your study, but if we can see that there's mental health issues.

Many members of the library staff had received some training focused on supporting students in crisis, and this training seemed to be well received, as was demonstrated by

how many staff members had received it and by the confidence that they considered themselves to have in supporting students in difficult situations.

Librarian L.R.: Sometimes they just need a good cry in the stairwell and we just make sure they're okay. And sometimes we'll, we will have had staff that will walk them over to the health services, because we think they need it at that time. I mean, our staff have gone to mental health training, and it's, we offer it every year. So staff can update it.

The library was also continuing to develop further services and relationships to support students in accessing mental health counselling when needed. Some of these services included therapy-dog visits and promotion of the campus wellness centre during exam periods.

Beyond mental health, one librarian in particular broadened the concept of accessibility considerably and suggested that intersectional elements such as race and gender also affected one's access to the library environment.

Librarian K.B.: The thing is accessibility is such a multifaceted concept if you really get into it. There's this easy facile definition of it, like can someone walk into this room, but it's really much more than that. Accessibility includes nonobvious disabilities, it includes mental health, it includes economic anxiety, it includes racial issues, gender issues.

While library staff generally had broad definitions of disability—especially in the instance described above—there was still an element of considering physical disabilities as visible and invisible disabilities as related to cognitive and psychological elements. No library staff members mentioned chronic illnesses and the physical and invisible impairments that may arise from various medical conditions. Additionally, one librarian suggested that the less "obvious" disabilities were perhaps not receiving the level of attention and engagement that they should.

Librarian K.B.: There are students with physical disabilities, students with mob..., with challenges around mobility, students with visual impairment, students with audio impairment. Those are the kind of more obvious more visible disabilities. And we have, you know, structures and policies and physical spaces that are designed to help enable those students to interact with the library. Um, we certainly have students with challenges, with accessibility issues that may relate to their gender or their sexuality, or their mental health, neuro-atypicality. And I think we're less consciously engaging with those issues.

Staff with disabilities

Many of the individuals interviewed emphasized that there were also library staff members with disabilities in the institution, and that they were generally supported as needed. Although this study is not focused on disabled library staff, it is interesting that this point was brought up in nearly all of the interviews. Interestingly, these comments did not necessarily identify these staff members as having expertise on accessibility due to their experiences. Rather, these comments were more related to how accommodations were generally put into place when needed, although at points it was pointed out that these library staff members still at times faced difficulties in conducting their work.

5.3.8 Looking forwards

The array of challenges set out by library staff members is too big to fully discuss in this dissertation. However, several key challenges that emerged were related to budgets, management of priorities, support from the university, and the scope of accessibility. It was clear that intentional and deliberate commitment was required for accessible library services to come about, on the part of both the library and the wider university.

Librarian F.J.: Yes, yes. I mean cost is always a big deal unfortunately. I mean that's the reality of it. But, and other, if the campus wants to claim to be an accessibility friendly campus, then they've got to cough up the money to do it.

This commitment would require making prioritization decisions about which aspects of accessibility to address in a given moment.

Librarian F.J.: Cause obviously you can't do it all at once. And you're probably going to have to do it in steps. So what are the priorities? What makes something happen first, compared to something else? Who makes that call, type of thing.

Accessibility clearly affects all areas of the library, and huge amounts of both knowledge and energy are required to implement accessibility in meaningful ways across library services.

Librarian K.B.: I mean, I'm tempted to say it's exhausting but then I'm also tempted to say like that's a very privileged fucking thing to say, that you have the right to be exhausted. So yeah. I mean that, you know, you work with what tools you have as much as you can.

5.4 Student survey

The majority of students who participated in the survey (76%) were pursuing an undergraduate degree. Approximately one-fifth (19%) of respondents were registered in a Master's-level degree, and only three students were pursuing doctoral studies. A wide variety of disciplines was represented, such as languages, politics, applied and physical sciences, medicine, psychology, and business, amongst others. The majority of students (66%) also stated that they were in their second year. However, as nearly a quarter of the overall students were graduate students, it is not clear whether a higher proportion of second-year undergraduates responded.

The majority of students who responded (73%) said that one of the main reasons for using the library (both in person and online) was to find and use books and/or journals. Other common reasons included to use study space (70%), to access printing services (46%), to access course reserves (35%), to meet with friends (35%), and to use research guides (32%). With regards to adaptive technologies, six students (9%) indicated that this was a key reason for their use of the library. For at least one of these individuals, this adaptive technology referred to the private study rooms available to students registered with Disability Support Services.

Many students made positive comments about their experiences of interacting with staff at the library. Some suggested that staff members were "Always smiling, friendly and helpful" or "Very helpful, attentive, and knowledgeable," or they commented that "Anything I ask for help with (ie how to print) they have answered with enthusiasm. Very helpful, did it with me and taught me how to do it from then on." Two students in particular emphasized that they felt accepted by staff members: "All the staff is awesome. I feel accepted regardless of my disability"; "Very good at explaining the study rooms and don't ask why I need it or look at me oddly (my disabilities are invisible)." The majority of respondents (at least 60%) had not disclosed their disability to staff at the library, and several stated that they would not feel comfortable doing so: "My disability is not visible, so I don't feel comfortable telling them, they don't ask so it's just not stated and therefore can't be addressed." For those who have chosen to disclose their needs, the reaction from library staff has been perceived as mixed, with positive, negative, and neutral experiences emerging in comments: "It's been mixed. Some understand my needs while others do not." Another student reiterated that the reception that they received depended on the staff member with whom they interacted.

Student: I've had a mix of experiences... However, I rarely spend as much time at the library as I had when I first started my MA. I had a lot of problems with all levels of administration about the inaccessibility of the graduate study rooms, the time limit for the accessible study rooms, the inaccessibility of the "accessible washrooms," and the inaccessibility of the Access room and its lack of functionality for students with disabilities. I had made complaints to [various departments]. Since then some things have changed, but not to the extent that I feel comfortable with using the library as a work space.

Quite a few students emphasized that staff members had "Always been cordial and helpful ③" or that interactions with them had "Always been a very positive experience." One student suggested that the staff members' own experiences related to disability played an important role in their reactions: "Library staff with children with disabilities are more active in accommodating my accessibility needs when there is construction or intensive cleaning done at the library."

With regards to sharing their thoughts and suggesting improvements, several important elements were raised. A key theme here was that information about accessibility at the library was not readily available to students.

Student: [Disability Support Services] counselor should tell every student that the library has accessibility support because I had no idea that this support existed. It would have been helpful to have someone retrieve books and articles for me.

Another student suggested that a handout describing accessibility services would be helpful:

Student: Students with disabilities need to know what services are available to them... it would be helpful to have a pamphlet or hand out to describe what services are available to all students at the library as well as specialized services.

One student remarked that they did "not even know where to access note takers," which further suggests that essential information is not necessarily making it to students who require it. Another common theme was the wish for more study spaces. Students appreciated the quiet and distraction-free environments that these spaces provided, but they also suggested that "There commonly is a lack of rooms available" and that "Many times there are people in the rooms for hours after their loan time is up."

Services for students with invisible disabilities came up in several ways. Students suggested that invisible disabilities, whether these be learning disabilities, mental health issues, or head injuries did not seem to be considered. The lack of clear information and accessibility outreach was a theme here as well.

Student: I hope that the libraries can provide more information about the range of services and options that are available for students with invisible disabilities. Unfortunately, we are also often unsure what we can do to bridge the gaps.

The need to disclose a disability in order to receive accommodation is at times particularly difficult for individuals with invisible disabilities, as the following student suggests:

Student: Given that I only recently got accommodations and that it may only be temporary, it feels uncomfortable asking for accommodations because you do have to actually talk to people in order to get what you need which can feel judgemental because people probably see me and wonder why I need accommodations.

This feeling might be stronger if the individual feels that there are no accommodations for invisible disabilities in place. One user felt that the accessibility information provided by the library focused on users with mobility impairments but did not address users with other needs.

Student: It might be beneficial for there to be information disseminated to students that there are accessibility options for accessing the academic libraries. I

am very pleased to see you have a web page specifically for Library Accessibility However, it is biased towards accessibility with regards to mobility. This may make people with other disabilities feel a bit left out. Icons for different types of disability might be helpful.

With regards to improvements, many students emphasized that prolonged borrowing periods would be helpful. It was not clear whether these comments were made in relation to short loans such as course reserves and study rooms that are only available for a few hours at a time or whether they referred to extending the length of regular loans.

The possibility to have books retrieved was also specifically mentioned by three students. There is an online option to request books, but students are only able to do so if the book is located at a different library to the one from which they wish to pick it up. However, this creates barriers for some individuals who have difficulty navigating the stacks, as they have to either go to a library location that is less convenient for them or have to retrieve the book themselves.

Student: It would be helpful if there was an option to request books be retrieved for me. I struggle to walk long distances and it is hard to get books from the stacks. I had tried to place the item on reserve but I can only do that if the book is located in another library.

Although the response rate for the survey was low, there were some important findings that emerged from students' comments. It is clear that students had not heard about potential accessibility options at the library and were largely unaware of what accommodations might be available. Students generally had had positive experiences of interacting with librarians, although few of these interactions had been in relation to accessibility services in the library. Students' perspectives on disclosing disability to the library staff were mixed. Although a few students had spoken to the library about accessibility, more students had not, and some suggested that they would be uncomfortable doing so.

5.5 Student interviews

All of the students interviewed at this institution were either graduate students or "mature" undergraduate students who had spent time away from educational pursuits. Students were enrolled in programs from arts and humanities, social sciences, and health sciences. The programs themselves were either course based or research based.

From the IPA analysis of the interviews, eight overarching or superordinate themes emerged, and within these themes were a selection of "nested themes." Owing to the variety of disabilities experienced, as well as to academic backgrounds and study preferences, the superordinate themes affected participants in very different ways. For some, physical accessibility was very prominent, while for others, physical infrastructure did not as obviously affect their use of the library. The following table provides an overview of the structure of this section.

| Superordinate theme | Nested themes |
|-------------------------------|---------------------------|
| Experiences of disability | Visibility |
| | Stigma |
| Academic progress | Delayed progression |
| | Study skills |
| Using the library spaces | Disability study rooms |
| | Design of spaces |
| | Bathrooms |
| Using library resources | Digital texts |
| | Software |
| | Website |
| Interactions in the library | Core library function |
| | Helpful and positive |
| | About accommodations |
| Accommodations in the library | Awareness and advertising |
| Working around disability | Planning ahead |
| | Financial workarounds |
| | Other workarounds |
| Reasons for participation | |

Table 3: Overview of student interview themes

5.5.1 Experiences of disability

The overall impression of what disability meant to participants was complex, multifaceted, and, at times, contradictory. One individual emphasized that "disability" was "an inaccurate term," as it merely suggested that someone was unable to do certain things, but it was unclear what these things were. Another used the term strategically to highlight their need for support. Student C.M.: I think that there's a lot of stigma attached to the word. But if I don't use it then I'm not always taken as seriously.

Claire: Okay.

Student C.M.: And my condition is not taken as seriously. So sometimes you need to say it to almost... shock people into believing you that you have health problems... Because otherwise then it's not believed.

Visibility

The visibility of disability was an important factor in terms of how disability affected students in a given situation. For some, the visibility varied:

Student W.L.: I think it's harder for them to understand that I am someone with an invisible illness. And sometimes it's very visible. So there's some sort of stigma there.

The visibility of impairments also at times affected the information that students received with regards to accommodations. One student told me that they had not been given information about navigating upper floors of the library building at another university they had attended, floors for which there was no public elevator:

Student C.M.: Because I didn't have anything that was a visible disability, and because my disability counsellor at the time didn't say that that was an option, I would go up to, as high as I could with the elevator for students and then I'd have to make the trek up. And on some days that was not always feasible.

In this instance, the individual may actually be disabled by the invisibility of their disability and others' common assumptions that anyone not using a mobility aid can navigate stairs, a common issue with ableism.

Stigma

The understanding and interpretation of what "disability" meant varied greatly amongst the students. However, there was generally a consensus that there was often stigma attached to the word, which in turn created difficulties or discomfort in navigating a given situation. Students' need to emphasize their disability in order to receive support contributed to their discomfort and to confusion as to what "disability" actually means.

Student W.L.: It's strange because we tend to force people to use the term being disabled or living with disability to identify themselves in order to get supports or programs or... access to certain places, yet we keep telling them that they're able to do a lot of things. So there's always, there's internal tension about am I really able or disabled or... it's really weird tension.

Students had a variety of definitions of "disability" and viewed their own identity of being disabled as complicated. Some felt the visibility of their disability was an important aspect of how they understood disability, and some felt that there were mixed messages in terms of what they were able to do or not do.

5.5.2 Academic progress

The theme of academic progress relates to students' experiences of progressing through their academic degrees. The focus here was often related to timelines and the need to drop courses or take time off, as well as to whether students were studying full or part time. Other aspects of this theme relate to the skills that students relied on to get through their degree and to how these skills were developed. Previous educational experiences as well as employment experiences contributed to students' perceptions of their educational skills and knowledge.

Delayed progression

All of the students interviewed had taken or were taking a longer-than-average time to complete their current or previous degrees. Extensions in the duration of their studies came about in several ways. In one instance, a student was enrolled part time, while in another a student had taken a leave of absence for health-related issues. Two students had had to drop courses at points due to health concerns or due to a lack of accommodations in place by the time the semester drop date came. These two students were thus unable to complete the full-time course load that they were attempting. One student was generally progressing on a "standard" schedule in their current degree. This student had previously dropped out of several university programs before being diagnosed with their disability and subsequently completing a program with accommodations in place.

Study skills

The majority of students interviewed did not attend workshops or sessions put on by the library. For the most part, students emphasized that they had already developed the skills needed for their work through previous studies or through their professional life. Although they had little interest in workshops during their present studies, several students had previously attended workshops. Two students suggested that the previously attended workshops had not been particularly helpful. In one case, the information was too general and thus of limited use in the context of a specific program: *"It's general skill sets, but it's not like the most efficient bang for your buck skills."* In the other case, the student informed me that sessions were not led by librarians and contained incorrect information at times. Only one student emphasized the helpfulness of the available workshops to the progression to their current stage of studies. Interestingly, they suggested that these sessions, as well as meetings with individual librarians, had helped them to develop the research skills that had allowed them to transition to being a distance student. They also suggested that the knowledge from these sessions allowed them to contemplate returning to studies following time away for health reasons.

5.5.3 Using the library spaces

With regards to the role that the library plays in the students' academic lives, the emphasis was predominantly on a space to study in and access to resources. Interactions with staff were not brought up as being a core function of the library (although students did regularly interact with staff members in signing out keys, paying fines, etc.), with some exceptions. It was when considering accessibility and accommodations that the role of library staff members became more apparent.

Space to study

Library space itself was a common theme that was raised by the student interviewees. Their thoughts on this theme touched on competition for limited space, inaccessible spaces, navigation, and the general design of spaces. The physical space is clearly important, as one of the key features of the library for students is its role as a place in which to study. One student said that going to the library *"predetermine[s] your mindset. I'm going to the library. What do you do at the library? You study."*

Another student emphasized that they wished that they could use the library as a comfortable space in which to study.

Student W.L.: Yeah. I would like to be there cause it's a better place for me to study. It's nice to get out and be amongst fellow students. Like I find that I have more of an energy and like, I don't know, a focus when I'm on campus studying versus in my apartment when I'm surrounded by like, just misery. [laughs]

Unfortunately, this student was not able to use the library in this way due to the lack of accessible work spaces and furniture. As the LibQUAL survey results indicate, the desire to work in the library and having difficulty in finding appropriate space certainly affected

nondisabled students as well. Noise, light, and the general atmosphere all seemed to contribute to problematic experiences in this regard. However, the impact of a lack of suitable study space is at times more profound in the case of disabled students, who may not have the same degree of flexibility to make do with a less than ideal space because the physical or mental impacts of its shortcomings may affect their ability to work or study to a greater degree.

Student W.L.: They used to actually, back in my undergraduate days, have certain desks set up on the main floor where it was designated either as a guest and accessibility spot. But now there's no designation. So it was nice to know that, cause there's times when I go there and I just really need to use the computer, but I also have to sit down, I can't stand at the kiosk. But they'd all be taken up. And especially during exam time or whatever, where people leave their coats and jackets and say this is my spot... So there's ways to like regulate things like that, where it's, like fair use, but also enough spaces for students with disabilities that they don't have to feel like they have to compete with able bodied students for very limited space to study, or have access to computers.

Issues such as a lack of choice of chairs or an off-putting scent in the air may simply be a minor annoyance for some students, but for others they may actually cause persistent physical pain or nausea.

Student W.L.: If there's more areas that were accessible and um, eating friendly, but not to the point that it takes over the whole library. Cause the worst thing is when I go sit down and then there's a rotting apple or something that's triggering my nausea.

The same student emphasized that they were unable to use many of the chairs in the library without discomfort.

Student W.L.: Because going back to when I was thinking about, when I was actually using the graduate study rooms, like, it wasn't really suited for me to be in there. It was just a hard chair, cold, and not comfortable.

In reality, issues of hard chairs or smells in the air actually make certain areas of the library completely inaccessible for some students with disabilities.

Disability study rooms

Several students emphasized the limited number of private rooms set aside for students registered with Disability Support Services. Students are able to use the rooms by going to the front desk and borrowing a key for several hours at a time. They are not able to reserve the rooms in advance, and the keys are granted on a first-come-first-served basis. In practice, many students attempt to take out the keys at particular times to ensure access to a room for a prolonged period after the circulation desk closes.

Student A.C.: So your key lasts for three hours. However, if you can get there and get your key right around I think it's like... the front desk closes at 10:00 on weekdays I believe, and so if you can get your key at 7:01, then you have the key from 7:01 until midnight that night... There's a, like not a jockeying, but people know that right. So they're always trying to get the key right at that time. Same on the weekends... People are aware that it's a limited resource and they act accordingly.

Another student emphasized the limited number of rooms when it came to busier periods of the academic year such as midterms and exams: "And then there's 10 rooms

for disabled people. During exam periods, you'd be better off playing 6/49."³ Clearly, this service is highly utilized, and the demand vastly outweighs the supply.

Some students are particularly reliant on these rooms in order to be able to do their academic work. The potential scenario of not having that space available at times leads students to opt for financial penalties rather than take their chances at losing a needed resource.

Student B.R.: One time, I took a \$25 penalty so I could study for an exam.

Claire: Okay.

Student B.R.: Because it was so busy that, well if I gave the room up, I would not have the space. And I had class. So I left the room [booked] out when I went to class so it would be there when I came back. So I could continue studying.

Claire: Right.

Student B.R.: And I gave it back. When I left the campus I gave it back. I know that's not what I'm supposed to do, but dire situations, dire situations.

When the spaces that one can use are so limited, there is no scope for making a choice about where to study, leaving students with the options of not studying or resorting to less than desirable measures. Some students did not use these rooms at all. For some, this was because of the inaccessibility of the rooms, as they do not have automatic doors, room for mobility devices, or comfortable furniture. For one student, the issue was the requirement to retrieve a key from the desk and the necessity of having a

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³ 6/49 is the name of a lottery in Canada.

sticker on their student ID card indicating that they were registered with DSS. Ultimately, this student was uncomfortable with the need to out themselves as being disabled in accessing a library service. Beyond this discomfort, the student was uncomfortable with this sticker being seen in all the other situations in which a student card would be utilized.

Although the study rooms are currently heavily utilized, they are certainly not accessible for all the students who might benefit from them. It should also be noted that in the proposed renovations to the building, these rooms seem to be removed and replaced by a group space for students registered with DSS. This development may address some of the current issues with the inaccessibility of the rooms. For example, ergonomic furniture could perhaps be made available; automatic doors could allow students to bring their mobility devices into the room; and cards could perhaps store students' DSS registration electronically, which would allow access to the room via scanning rather than via stickers and keys. However, the replacement of both the access lab and individual study rooms with one access lab will reduce the overall space allocated to disabled students in the library. It is not clear whether other spaces throughout the library will be designed to provide the same accessible options—for example, heightadjustable tables and adaptive technology—that are currently only available in the access lab.

Design of spaces

The design of library spaces was mentioned by several students, and specifically openconcept spaces were characterized as being unhelpful in some academic situations. For one student, these spaces provided too many distractions to be a conducive space for studying.

Student A.C.: I don't know why libraries think that open spaces is like a smart idea for studying for students.

Claire: Okay.

Student A.C.: Cause like everywhere in a library is open space. I wouldn't need like a special room if there was more of like, I don't know... But it's just strange to me that everything is open when you go through a library. And even quiet spaces, it's like, it's not that quiet. I don't know. So I don't, I would find it very challenging if I was, if I wasn't a registered student with disabilities to study.

Another student was unable to use open spaces when they were doing "actual work" due to their use of adaptive technology.

Student B.R.: Um, the majority of study spaces provided to students are either open air, which means I cannot use my Dragon in a conversation friendly zone in the university. Because the other voices that are similar to mine would confuse my voice recognition.

Claire: Yep.

Student B.R.: And I obviously can't go into a quiet study zone and use voice recognition in a common area, because then I would be speaking. So, which limits me to the private study rooms.

The lack of appropriate spaces in which one could use voice recognition was also brought up by several library staff members in their interviews.

Bathrooms

Finally, several students raised bathrooms as an area of concern. There are two barrierfree washrooms in one library on campus, but there are not any in the others. Accessing the barrier-free washrooms had been an issue on at least some occasions for two of the students interviewed. One student had been unable to access the washroom as the door featured a key-code lock, and the student had not been given the code. Student W.L.: There's been times when I've spoken to the front desk about many accessible issues like one that really annoyed me was, this is when I was going there for the study room purposes, to do work and you need to use the washroom. And they have accessible washrooms, but these accessible washrooms have codes on them, so you can't get in them unless you know the code.

Claire: Right.

Student W.L.: So I had to go to the main floor and ask the front desk how do I get into the washroom. They had to call somebody to get the code.

Claire: Okay.

Student W.L.: And then, so that was eventually resolved. But it was just like the concept... an accessible washroom with a code that if you have a disability, you don't know, doesn't make sense where you have to go out of your way to get into the washroom. And thank god it wasn't an emergency, that I didn't wet myself.

Another student had not been able to access the washroom at times because other students had begun to use it for study space and had locked the door from the inside. It is not clear at this time what the general policy on the locking of the bathroom door is. They are described online as being "non-public," which means that the access I experienced in conducting the audit may have been coincidental.

5.5.4 Using library resources

Students considered the provision of resources to be another key service of the library. These include both print and electronic texts, as well as the ways that one accesses these materials, such as through the website.

Digital texts

Most of the students interviewed highlighted their predominant use of digital texts as compared to print texts. There were several reasons for this preference, including the speed with which such texts are published and the convenience of remote access to ejournals and e-books. It was also at times more specifically based on accessibility considerations, especially if the student in question was unable to navigate the stacks or physically manipulate a print book.

Software

None of the students interviewed made use of the accessibility software available on library computers. Students who did mention using accessibility software indicated that they had their own versions on their laptops because they make use of this software regularly. One student mentioned that they would be interested in knowing more about accessibility software, because although they had attended a brief introduction session on one such program, they had not received enough information to feel comfortable about making use of it on their own. It is unclear how many students experienced the issue of being uncomfortable using the programs and resources available on library PCs, or how many were making use of them successfully.

Website

Accessing the library system's website and its various features was another common subordinate theme that emerged from the interviews. Students described their use of the catalogue and search interface in finding materials for their coursework. Several students also spoke about the accessibility information on the website. One student emphasized the need for this information to be clearly highlighted, as they were not able to focus on a screen for the length of time required to find it. Student T.S.: I think, what I would say, probably some of the gaps would be that there's really no information about [accommodations at the library], or I haven't found it. It could be out there but I haven't seen it. Um, and I have to confess that I haven't searched that hard with respect to the information that's on the library.

Claire: Yep.

Student T.S.: Which would be a challenge for me right now anyways. To kind of do that, searching through everything to find it. But if there was a page that talked about some of the accessibility services that were available at the library, like what you've kind of mentioned to me. Like if you have a need for accessible services, here are some things that are available. And here is someone you can talk to. I don't know if that is on the library, but if it isn't that would be really great. And if it was fore fronted, like somewhere on the landing page, that would be great for someone like myself, who... The amount of time it would take me to kind of search through things and to find that kind of feedback or support, would probably diminish my ability to actually do anything with that information. [Laughs]

One of the features on the website is a virtual chat facility, through which students can ask library staff questions without needing to visit the library service or reference desk in person. Several students stated that this function was useful and that it had helped them in their search for appropriate materials. One student suggested that extending this service to include a text feature would be helpful at times when they needed support in the library.

Student W.L.: Yeah, I think it would be nice to see that expanded in a way, cause I'm just thinking if I was once again asking for assistance in the library, I'd have to find a computer first and then do all that versus like maybe from my phone, could I just text a person or something. One student had not used the chat feature and emphasized that it was not compatible with their accessibility software.

Student B.R.: Um, I would [use it]. Except the interface is not compatible with Dragon. Those are one of those technical issues that no one thinks about.

Claire: Yep. What sort of things do you think you would use that for, if it were compatible?

Student B.R.: Well normally, I have to either leave my study room or I have to call down using the thing. So everything. I would use it for literally everything if I could use it, because the only things that I ever talk to a librarian for, is if there is a text that I need. That isn't already digital. I have to contact someone. They have to fetch it, scan it, and then email it to me in PDF forms.

Students' reactions to the information contained on the website and to the usability of the site's various features were mixed. Although all students used the website in some form, their abilities to utilize certain features or find information was at times limited owing to the inaccessibility of the technical components or to the time required to locate relevant webpages.

5.5.5 Interactions in the library

One of the key questions that I asked students focused on their interactions with library staff members, leading to the theme of interactions in the library. Common issues and experiences nested within this subordinate theme related to having generally positive interactions with library staff, and whether students disclosed their disability to staff in practice.

Core library function

For the most part, students did not bring up these interactions as aspects of the process of accessing the library until I asked about them specifically, suggesting that these interactions are not necessarily considered core functions of the library itself from the perspective of students. In fact, one student went so far as to suggest that libraries were quickly losing relevance.

Student B.R.: In the 21st century, books are dusty things... That are a relic of the past. I personally don't think libraries will last, for very much longer to be honest with you. I think they'll become a server. [Laughs] Located in a room with a bunch of computers.

This comment is focused on books, but the underlying suggestion is that librarians are not central to the overall functioning of a library. The emphasis here is on the resources themselves, and with more and more of collections becoming digitally accessible comes the suggestion that libraries themselves will cease to exist.

Helpful and positive

All participants emphasized that interactions with library staff had for the most part been positive, with one student suggesting that these were in fact the only positive experiences that they had to recount. Generally, it was not clear whether students were speaking about library staff at the front desk—more likely to be library technicians and paraprofessionals—or whether they were speaking of librarians—for example, subject librarians. However, in one, the student interviewee did draw a distinction.

Student C.M.: And I feel like the librarians would most likely be more receptive to providing accommodation over library staff.

Claire: Okay.

Student C.M.: But I don't know because I've never done it. It's just that's the impression that I've gotten, not just with her but with other librarians that I've spoken with in the past. They just seem, more willing, or maybe because they have a better understanding of the importance of having a good relationship with patrons. But they want people to be coming back and so, if making a patron's life slightly easier means that they're going to come back, then they're going to try to do it at least.

Several students acknowledged that library staff were especially good at regular library functions, such as helping students in accessing resources.

Claire: Okay. Did you find that generally your questions or your problems were resolved through these interactions?

Student C.M.: Yes.

Claire: Were there any instances where you felt like, they were not resolved?

Student C.M.: No. But I mean, it's all pretty standard stuff that I would be asking. So I didn't really have any encounters where things weren't getting solved. Now if I went up and started asking them for accommodation let's say, that would be a different story. But I don't usually do that.

About accommodations

Although students generally described positive experiences in interacting with library staff, they were not necessarily confident that they would have the same positive experiences if they requested accommodations. Several students talked about how they believed accessibility issues were more complicated than many library queries, and they suggested that they may not receive the required support if they had these issues. Student W.L.: [pause]. I think they're like on top of when it comes to like academic information needs. It's just when it comes to those other needs, that's where it gets harder.

Claire: Okay.

Student W.L.: Cause I see them work with like, other students with disabilities to find certain resources and whatever. And they'll ask them literally anything. How do I reference this; where can I find that; how do the microfiche work? ... Or even like requesting books from other universities or whatever. They can assist with that... For me, it's more accommodations wise when it comes to finding an appropriate place to study. Finding, yeah, just a place that works for me, so that I can go to the washroom without having to ask somebody to assist me all the time.

Some students did not feel comfortable in disclosing a disability and assumed the library staff were only trained to satisfy the information needs of what a nondisabled student might require.

5.5.6 Accommodations in the library

Students stressed that the process of receiving accommodations in the library was problematic in multiple respects. One of the key issues was that there was a lack of information about what services might be offered in practice, making it difficult for students to access those services.

Awareness and advertising

Several students said that they were unaware of what accommodations the library system offered and suggested that further advertising was needed to promote these services.

Student C.M.: I think there just needs to be more awareness. And more... I don't want to say advertising, but that's the best word I can think of right now of the services and things that are available. Because, I mean otherwise, students won't want to go, like for me, I have chronic pain, chronic fatigue. So to make that effort to go just to find out that I can't get what I need isn't worth it. So I'll try to find a work around.

Another student said it would not have even occurred to them to go to the library to obtain study support related to the needs arising from an impairment.

Student T.S.: So I never really actually, as a student. Didn't really think about approaching, approaching a librarian for that sort of thing. My automatic instinct was to go to the accessibility office. I don't know if there's anything like on the website or whatever, about accessibility, like consulting with a librarian for the kind of resources that are available at the library.

Students were generally unfamiliar with potential services or accommodations at the library beyond access to study rooms. This relates back whether students think about library staff as constituting a core service provided by the library, and thus being available as an academic support.

5.5.7 Working around disability

A key theme that emerged throughout the interviews was the strategies that students employed to work around impairments and the lack of available support that required them to do so. Several of the students had experiences of requesting services, accommodations, or other support either in or outside of the university library.

Planning ahead

One student emphasized that they had to make plans ahead of time to access certain services. One such service provided at the university was access to a volunteer helper,

who could support one in a wide variety of tasks. However, accessing this service required a good deal of schedule planning and coordination.

Student W.L.: Cause having a disability, I feel like I have to plan my entire life, so sometimes when I just need to go and get something when I have the time... So I get that they're trying, but there's just like, there's nothing to deal with those tough times where it's just like, I just need it now. Or I need it tomorrow. And it's like well you should have planned that. But, sometimes things just come up.

Interestingly, this student was also affected negatively by the lack of planning and information provision on the part of the university at times.

Student W.L.: But some accessible issues like, construction or anything going on, that's blocking like an accessible door, there should be a plan for that, dealt with... So, an alternative door will be set open, or, something, that they plan for these things.

Claire: And for people to be notified.

Student W.L.: Yeah, that's one of those things. Cause even just around campus there's so much construction or changes that, I'll be on my scooter and great, now I have to backtrack two blocks before I can find like a safe way to get around.

Requesting alterative formats also required students to plan ahead, as the process of digitization and formatting takes several weeks. Again, while the student was required to plan ahead to access resources, the deadlines and schedules of external agents also affected them.

Student B.R.: There is a service that you can [get texts digitized], but it takes two, three weeks. You submit something and it takes two to three weeks, sometimes a month to process... But when you have academic due dates... At times, students were in fact forced to drop classes because of the university's failure to plan and proactively implement accessible facilities or services.

Student B.R.: Because I'm forced to drop classes, if I do not have the accommodations that are needed for the classes by that time.

Students are expected to plan ahead, but it is clear from the comments of several students that the university entities—be it the library, facilities management, or other department—are not bound by the same expectations.

Financial workarounds

Issues of time delays in implementing accommodations, a lack of information, or inadequate support meant that student interviewees had developed their own practices to get around the obstacles that they faced. The workarounds that were needed often had financial implications or meant making use of what was more easily available rather than attempting to find more appropriate services or resources.

Student C.M.: I'll just do it myself and then find the best way of doing it.

Claire: Okay.

Student C.M.: And sometimes that means I'll end up having to pay. Like there'll be a financial cost to that. So let's say, if the books that are on reserve. If I know that we're going to be covering every single chapter in it, chances are I'll end up buying the book, because to have to constantly take out the book, do the photocopies, or don't even get me started on copyright issues photocopying the entire book, but like I don't really have an option. I either photocopy the entire book or I attempt to sit in the library and read it, but I can't because it's going to hurt too much. So it's like, well what do I do? I buy the book. That's my work around. The resilience and self-reliance required for developing various strategies and workarounds may first come across as positive traits. However, the reality of implementing these workarounds in practice can have negative effects on students, such as financial costs.

Other workarounds

Students also described other workarounds that they used in navigating the university environment. One student emphasized that they used their "*charisma*" to get people to help them when this was necessary.

Student B.R.: Usually my charisma can, solve most issues, that I come across, with enough application of charisma [laughs]... If there generally was a staffing issue, then no amount of charisma will solve the problem. Because unless people want to help, they won't.

The other key workaround that emerged was making use of the resources that were available. One student emphasized that they did not bother with print texts unless it was absolutely necessary for them to do so, as the weeks required to convert these into an accessible digital format undercut the usefulness of this service.

Student B.R.: I honestly don't use print sources that often... I generally use the stuff that is available on the online library.

Another interviewee suggested that they save their library tasks for the days when they felt they had the time and energy to navigate the spaces and services.

Student C.M.: Cause I have a chronic illness so some days are good, some days are bad. So I usually just try to go in on the days that I can actually handle getting lost and spending a lot of time in the library, and then that's my work around. Overall, students had a variety of methods or workarounds to navigate the university environment in general and the library specifically. One student emphasized that many disabled individuals will adapt to their situation as best they can:

Student B.R.: And not many disabled people are willing to fight. They'd rather just adapt the best they can on their own, and muddle through.

These workarounds are thus developed out of necessity when the environment is not accessible in some way.

Student B.R.: If the world will not accommodate you, you must accommodate to the world.

5.5.8 Reasons for participating

One unexpected theme that emerged from the interviews was students' reasons for participating in this study. Several students thanked me for providing them with the opportunity to participate.

Student T.S.: I'm glad I had the opportunity to participate. And I hope that it helps with making things better for students.

Another emphasized that speaking about accessibility was worthwhile because doing so provided opportunities for others to learn:

Student B.R.: I attribute most of my troubles to simple ignorance... Not to any malice. Just to plain and simple ignorance.

Claire: Okay.

Student B.R.: And that's why I think, speaking about it, and activities like this, can change things greatly.

In another exchange, a student emphasized that research on accessibility would be vital in future if reluctance to accommodate for disabilities were to increase.

Student A.C.: Like we understand that we need to increase equity within our society, but I think that like your research is really important... It legitimizes it because right now we have a Liberal government. What about when we have a Conservative government and all of a sudden, this whole idea of, you know, tolerance, goes kind of out the window and people are just saying like, where's the research... It's challenging... Disability services and disability identification and eligibility are all very challenging kind of grey areas.

Overall, these comments also reveal that disabled individuals are not often asked about their perspectives on available and needed resources and services or about their experiences of navigating environments such as academic ones.

5.6 Overall picture

The overall picture of accessibility at this library is complex and varied. With regards to physical accessibility, there are several areas that are less than ideal. The age and style of the building create difficulties with regards to implementing large-scale changes, as do budgetary constraints. Some areas of the building can be considered accessible—at least when everything is fully operational. However, this cannot be said of the whole library. Users with mobility devices in particular are likely to be affected by these limitations.

Generally, library staff seem willing to accommodate and support students, but they are often unsure about how to do this in practice. A lack of training and of understanding of disabilities or potential solutions that will increase accessibility are key obstacles. Increased critical awareness certainly has a role to play in ensuring that academic libraries work towards providing more accessible and inclusive services, as the development of these services will require an ongoing, active, and intentional commitment.

The library service makes some information about accessibility available, primarily via its website. However, there are also services and practices that are not actively promoted online but that are seemingly made available upon request. In hearing from students, it is evident that many of these services and potential accommodations remain unknown, even in circumstances in which they may be useful.

Students generally had positive comments about their interactions with library staff. However, they at times struggled to access services or resources offered by the library. For various reasons—for example, time, comfort, and privacy—students did not necessarily disclose their needs to staff members at the library. Instead, they created their own solutions and workarounds. These solutions required technological skills or financial resources, or they amounted to the student making do with more easily available but potentially less appropriate resources.

The institution has various policies and statements about its commitment to accessibility. However, full effect is not necessarily given to these in practice. This lack of implementation is not necessarily the fault of any particular person or people. It is the product of shortcomings in terms of resources, knowledge, and the authority to make decisions. In practice, while library staff members have good intentions, they are at times powerless to implement the required changes. Additionally, a lack of funding for accessibility initiatives both within the library and across the institution as a whole means that library staff have to make difficult decisions about how to prioritize limited resources and funding to serve increasing numbers of students.

6 Québec institution Findings

6.1 Background

The second institution is a public university in an urban area of Québec. It has over well over 10,000 students in both undergraduate and graduate programs. More than 2,000 of these students registered with DSS for the 2016-2017 academic year. Nearly 50% of the students registered with DSS are recorded as having mental health issues or multiple disabilities. This number has increased substantially in the last 10 years; there were fewer than 800 students registered with DSS in the 2007-2008 academic year.

There are multiple libraries at this institution, and they house over 1.5 million titles and employ over a hundred staff members. In a similar vein to the first institution, this library also has a webpage about accessibility at the library. Information here pertains to materials retrieval, digital materials, study rooms, and available software, amongst other topics.

6.2 Reports and policies

I consulted a variety of reports and publicly available policies at this library institution. The reports included strategic plans that cover the 2016-2021 period and annual reports and objectives that focus on the 2014-2018 period. Overall, 10 sets of policies or guidelines were included in the analysis. These documents related to loans, lost and overdue materials, computer use, and the library's general code of conduct. The policies that I did not consult related to areas not relevant to this study, such as donated materials, weeding processes, and library exhibitions and displays, amongst other topics. The Québec institution's library system, in a similar vein to that of the Ontario institution, had conducted a number of LibQUAL and internal surveys and shared the results on its website. I consulted the results of five LibQUAL surveys and one internal survey. Accessibility was at times mentioned in these documents, although it certainly did not regularly appear.

6.2.1 Strategic directions and annual reports

This institution's current strategic plan is available online, and it is based on four areas. These relate to library space, collections, services, and staff development. The plan explains how these areas will contribute to the institution's current strategic campaign. While a number of the elements of the report may have a bearing on accessibility—for example, the document considers new approaches to interactions between library staff and users, the provision of timely access to physical and digital collections, and the communication of information about the library's services and resources—accessibility itself is also explicitly mentioned once, in the context of "ensur[ing] inclusivity and accessibility of all services."

The annual reports describes accomplishments as well as events and facts related to the library and its staff or to users. Much of the content focuses on renovation projects and various events such as therapy-dog sessions. Reports also include details on annual library visits and holdings. The renovation projects have incorporated a number of new spaces for various user groups across the library system. Accessibility is explicitly mentioned in only one of the reports, which states that the renovated "design... included special-needs considerations of users with disabilities." Additionally, a collaboration with the university's DSS has facilitated the provision of several types of accessibility software on public PCs in the library.

The annual reports also affirm that the library is committed to creating a safe and inclusive environment across a variety of study areas and spaces and that it is focused on helping users to discover its services and resources. Ensuring that the collections and spaces meet users' needs is another key priority.

6.2.2 LibQUAL and survey results

The results of five LibQUAL surveys (conducted between 2006 and 2017) are available online. In general, the library received the highest ratings in terms of service provision in each of these surveys, with both undergraduates and graduate students generally finding that staff members met their expected minimum standards. Levels of satisfaction with information resources varied across the years, though generally they have increased over time. Graduate students tended to rank the information resources lower than did undergraduate students. The biggest issue for undergraduate and graduate students alike was the library as a place. This area of focus consistently received the lowest satisfaction marks from student respondents. After a major renovation, the satisfaction levels for this category increased significantly. However, it should be noted that while this library as place, the availability of a quiet place for independent study was still highlighted as an issue for many students.

The library also conducted and shared results of a one-day survey, which was intended to get a "snapshot" of users on a typical library day. Every person who entered the library had the opportunity to answer three questions related to their purpose for using the library that day, their user group, and their faculty. The vast majority of the student respondents were undergraduates. In the case of both undergraduate and graduate students, the vast majority of respondents indicated that the main purpose for their visit was to do work either alone (over 70%) or in a group (over 20%). Using library resources (over 20%) or printing facilities (over 15%) were also common responses. Interestingly, these results support those from the survey that I administered to DSS-registered students as part of this study.

6.2.3 Policies

At this institution, there is one policy that explicitly relates to students who are registered with the university's DSS. It establishes the procedures for one of the services offered, namely a proxy borrowing option through which registered students can appoint someone—a friend, a fellow student, or a family member, for example—to conduct library interactions on their behalf. The proxy can borrow, return, or place on hold library resources for the registered student. The policy itself lays out the criteria for accessing this service, such as the need for the DSS-registered student to submit an authorization form and take responsibility for the proxy's actions.

Two other policies, while not mentioning accessibility or disability, have the potential to directly impact students with disabilities. These are a code of conduct policy and course reserves policy. The first of these supports the university's code of conduct, which lays out responsibility so that the university community can "pursue their work, studies and other activities related to University life in a safe and civil environment." The library code of conduct sets out expected conduct related to behaviour, noise, and food consumption. Users are expected to contribute to keeping the environment quiet and clean, and as such users are not permitted to consume food outside designated areas or speak loudly in the library. The code also states that only users who will make explicit use of the specialized features found at certain workstations—adaptive workstations, for instance—are permitted to occupy these places. It is not clear from this policy whether or how such use is monitored.

Other policies relate to loans and overdue materials and detail the borrowing privileges and charges for various user groups; to the use of computer facilities and various rules such as not using facilities for commercial purposes; and to spaces through information about reserving and making use of the various teaching spaces. These policies do not contain information related to accessibility at the library.

6.3 Audit

An environmental audit was carried out at the institution's main library. This audit focused on the physical environment, as well as on information about accessibility on the library website. Again, due to time and resource constraints, the audit was not exhaustive, and it only served to gain a sense of how one might physically navigate through the library.

6.3.1 Elevators

The main library at this institution is located on the second floor of a university building. Users can access this floor by stairs or by elevator. There is one public elevator that provides access to the second floor, as well as a freight elevator that can be used when the public elevator is out of order. Within the library, there are two public elevators that provide access to the upper floors, as well as staircases at either side of the building.

The ground level of the building that houses the library has a bank of four elevators, but only one of them provides access to the library. Although there is signage on the elevator to indicate that it provides access to the library, the lettering blends into the elevator doors. The other elevators provide access not to the library but instead to the upper floors of the building, which house an academic department.

6.3.2 Washrooms

There are four washrooms on each floor of the library. On most floors, there are two men's washrooms and two women's washrooms. On one floor, there are two men's washrooms, one women's washroom, and one gender-neutral washroom. At least one washroom for men and one for women on each floor are described as wheelchair accessible, and so is the gender-neutral washroom. There are no barrier-free washrooms in any of the library spaces (or in the building in which the library is housed) and no automatic door openers to access any of the washrooms. In fact, many of the wheelchair-accessible washrooms feature a double set of doors that must be passed through to gain access to the washroom itself.

The wheelchair-accessible washrooms each feature an oversized stall. The locks and handles on the doors vary, with some of these being larger or easier to manipulate than others. Some of the wheelchair-accessible washrooms feature slanted mirrors as well as lower garbage cans and hand dryers. Some of the hand dryers are at a height of over four feet, though they are all operated via motion sensors.

6.3.3 Stacks

The library in question has several different styles of stacks. In most areas, the aisles between stacks are approximately 39 inches in width. However, in some areas, the distance is as little as 36 inches. With a stool present, the aisle width goes down to 26 inches.

In most places, the stacks have eight shelves. The bottom shelf is three inches from the floor, while the top shelf is at a height of 7.8 feet. To facilitate access to the top shelves, both stools and stepladders have been placed around the library. When a stepladder is positioned in an aisle, there is approximately 14 inches of clearance to move around it.

Finally, the length of stacks varies across the library. In many places, the stacks extend for 45 feet, and in some areas they stretch over as much as 72 feet. Given that approximately 60 inches is needed for someone to turn around in a wheelchair, someone using a wheelchair and accessing these stacks would need to traverse the entire 72 feet or reverse out of the space in order to exit.

6.3.4 Signage

The signage at this library is much more consistent than the signage at the Ontario institution. This consistency is likely the product of the recent refurbishment project. There were no handwritten signs.

Interactive kiosks provide a variety of information related to wayfinding in the library, real-time computer and laptop availability, library facilities, and upcoming events both at the library and across the university. In addition, the kiosks feature a sequence of PowerPoint type slides. These slides feature information about events; academic support; resource guides; new items available for loan, such as standing desks and charging cables; accessibility software; and policies. A number of TV monitors provide the same information slides.

6.3.5 Study rooms

There are 15 group study rooms at the main library that can be booked. Approximately four to six students can be accommodated in each room. These rooms are all equipped with television monitors and the hardware required to connect laptops and other technological devices to them, and they also contain whiteboards. Some rooms are also soundproofed and feature recording equipment, meaning that they can be used as a space for practising presentations.

There are also two or three large reading rooms on each floor. One of these reading rooms features an automatic door opener, and seven of these rooms feature public-use PCs. There are three dissertation-writing rooms and one reading room set aside for use by graduate students. All of these rooms are silent spaces. There is also one zero-noise room in the library, in which even keyboard noises are not permitted. Several of the reading rooms can only be accessed by going up or down several steps.

6.3.6 Software and hardware

One notable feature of this library is that there are three software programs available on all public PCs. These programs are a screen magnifier (iZoom), a screen reader (JAWS), and ClaroRead Plus, which provides both text-to-speech tools and support for reading and writing. The library system also holds a limited number of licences for Antidote, a piece of writing-support software. There are two adaptive workstations in the only reading room with an automatic door. Each workstation features two computer monitors, an oversized and high-contrast keyboard, and a SmartView magnifier. The stations are located on fixed-height desks with a 28-inch knee clearance space underneath. This clearance meets minimum ADA standards (which stipulate a 27-inch knee clearance), but individuals with oversize wheelchairs would not be able to use these spaces. Other equipment such as portable standing desks is also available to be borrowed from the library.

6.3.7 Online information

The library has a webpage dedicated to information for students with disabilities. The information relates to the various services and resources available for these students, and it assumes that students with disabilities will be registered with the university's DSS.

The services described on the page include the proxy borrowing service; a retrieval service that can be accessed online, by phone, or in person; access to group study rooms on an individual basis; and information that one can request additional time for course reserves. The webpage also describes the availability of accessibility software, adaptive workstations, and special equipment that can be borrowed at the various library locations. Although the site describes a variety of offered services, it also specifies the limitations imposed on these services. For instance, students are responsible for their own photocopying or printing needs, and if they require support in this regard, they must go to the DSS office. Digitization of materials, including of course textbooks, also must be negotiated through DSS, as the library does not have the resources to provide these services.

6.4 Librarian interviews

I conducted interviews with four members of library staff at this university. Staff members filled various roles at various levels in the library, some of which were public facing and some of which were not. The interviews were analysed using grounded theory, and this process resulted in the development of seven themes and multiple subthemes. Many of the initial themes matched those from the Ontario institution, although some differences also emerged, especially in relation to the topics of legislation, policy, and training. The following table provides an overview of how the key themes and subthemes are broken down. These themes and subthemes provide the structure for this chapter.

| Themes | Subthemes |
|----------------------------|------------------------------------|
| Library profession | Describing job roles |
| | Staff development |
| | Culture of service |
| Working in an institution | Policies |
| | Priorities |
| | Working with outside teams |
| Working with DSS | Collaborating |
| Library users | Identifying students |
| | Imagining the student experience |
| | Assessment of services |
| Using the library | Navigating the space |
| | The digital and online environment |
| Obstacles | |
| Comparing provinces | |
| Conceptualizing disability | Impairments |

Table 4: Overview of staff interview themes

6.4.1 Library profession

This theme relates to how library workers understand their roles both in this specific library and in the profession of librarianship more broadly. Interviewees spoke about the various responsibilities of their roles on day-to-day and longer-term bases. They also spoke about various training opportunities that they had had and about how they understood the profession of librarianship to be one focused on service.

Describing job roles

This subtheme is about the tasks that each interviewee associated with their job. The descriptions here focused on day-to-day tasks or on overall roles and responsibilities (or on both). There are also elements of previous experiences that come into play in this theme, as interviewees' job roles change over time. For instance, some people worked in more public-facing roles in the past.

Staff development

The subtheme of staff development related to the formal training that staff received at this university, and in particular what topics were covered and how often such training took place. Characteristics of the training varied depending on the staff member's role and on the moment when they joined the institution, as new processes and training programs were sometimes developed over time. At this institution, there was no explicit training focused on the topic of accessibility.

Claire: Okay. So um, as far as you're aware, there's no kind of mandatory training around accessibility.

Librarian C.W.: I've never had it. And no one's ever talked to me about it.

Library staff's responses about the variety of general training that they had received varied, with some individuals stating that it was extensive and others suggesting that it was not.

Librarian P.Y.: And it's, I don't know if it's part of the incoming training... If it is, I did not receive it and I did not contribute to it in any way. So I think it's probably a good thing, but I also, I don't know... I don't know as part of the onboarding process, what happens. Like I feel like it's different at each place. Kind of in each department. And I know there's been checklists in the past. But I don't, I don't know. Again, the departmental role and time at which the staff member came into the institution seemed to affect the training they received.

Culture of service

Generally interviewees had positive things to say about the culture of librarianship. They stressed the willingness of staff members to serve the public, and they emphasized that both this particular library and libraries more broadly have such a culture.

Librarian D.R.: We do have a general mandate of service. And a general culture of friendly and willing assistance too. So what's not regulated, I think I can confidently say that any student who came to the [reference] desk, right at the opening of the library and said I need help with x would receive that help.

One librarian emphasized that the service mandate of libraries in general likely had a positive effect on students in their interactions.

Librarian H.W.: But when you're dealing with people you're dealing with different personalities. And I think that that might be the obstacle... So you'll get people who are quite happy to figure out what you need and go the extra mile. And I think in the library you get a lot of people like that.

Overall, interviewees had a positive view of the culture of libraries, seeing them as useroriented places where the staff members are committed to supporting patrons so that they can access spaces and services.

6.4.2 Working in an institution

Echoing the comments made by the library staff at the Ontario institution, the personnel at this institution were affected by the policies and priorities of the institution as a whole. Institutional priorities shaped the working priorities, the places to which resources were allocated, and the sorts of projects to which the library was expected to contribute.

Policies

The services of the library and the focus of library staff are in many ways related to the library's own policies and to institution-wide ones. The library itself does not have an overall accessibility policy, but there are policies that affect students registered with the institution's DSS. Awareness among interviewees of institutional or library policies pertaining to accessibility was limited.

Claire: Okay. Okay. So you've mentioned that like on the website that there's like a list of services. Is there kind of an official accessibility policy for the library?

Librarian P.Y.: So, there was. And I had no idea about it, until just a few months ago... And a lot of those things that were listed on the website came from that policy. And so it was really interesting to find it, because it wasn't on the website, it was buried on a wiki somewhere.

The lack of clarity regarding the policies can also be seen in the following exchange.

Claire: Alright. So are there strategies or policies that are in place to help disabled students across library services that you're aware of?

Librarian C.W.: Um, I mean do they exist, yeah. Am I particularly aware of them, no not really.

Claire: Okay. Um, okay, but like you're aware that they exist... so...

Librarian C.W.: I'm assuming that...

Claire: Okay [laughs].

In the past there had certainly been a lack of clarity amongst staff about what these policies were and what processes existed to support services. More recently, staff had reviewed the policies and processes in order to address this issue, but the information produced by this review had clearly not reached all staff when I conducted the interviews.

One librarian did suggest that developing further policies was a potential way to further integrate accessibility into services and practices at a foundational level.

Librarian D.R.: Some policies could put accessibility into our workflow, and some policies could put accessibility into our training program. And I think that the fact that we have a librarian designated to liaise with [Disability Support Services] probably also helps to keep things from falling through the cracks.

While there were technically some policies and procedures for certain services in the library, there was no overarching accessibility policy, nor were all staff members aware of the existing policies.

Priorities

The priorities of the institution as a whole affect the services that the library provides. The kinds of legislative requirements that are prompting conversations about accessibility in Ontario do not exist or are not as effective in Québec, and accessibility did not come across as being a key priority at the Québec institution at this time. Librarians sometimes felt that this lack of prioritization at higher administrative levels meant that accessibility would continue to be a neglected area.

Librarian P.Y.: Yeah. So I think there's things like that where like, there are spots that, if we had something like that, would be of great benefit. But we don't, and it's hard to say, like I think we should divert a significant amount of resources to *like... If it's not being pushed by the university, and it's not being pushed by the administration of the library, it's not going to happen.*

Librarians suggested that if the institution as a whole prioritized accessibility, this in turn would perhaps lead to further resources and support to develop accessible services within the library in particular. However, without this institutional prioritization, they suggested that services were unlikely to be significantly impacted in practice.

Working with outside teams

Several librarians suggested accessibility may have been part of conversations about the development of new services or spaces, although some also emphasized that they were not sure whether it was included in conversations in practice.

Librarian D.R.: I do know that in general with that [renovation] process, I was impressed by the forethought that went into making sure that the space made sense. And was usable in general. And so it would be my expectation that [accessibility] was a discussion. I would be, it would really surprise me. Even just in our culture as, again as a user-oriented place. If no one had asked. Or even that the architecture firm that we worked with wouldn't have had that part as part of their procedures. But I don't know. I've not heard nor read anything related to it.

This suggestion relates back to ideas about the culture of librarianship. The general focus on serving users in this instance means that the librarian assumes that accessibility would be included, because this is a topic that is focused on supporting users. This comment also points towards potential beliefs about who has expertise on and responsibility for accessibility.

6.4.3 Working with DSS

Relations between DSS and library personnel varied from one staff member to another. Some library staff members had more contact with DSS and worked more closely with the members of staff there. Others were unaware of what sort of communication was going back and forth between the two services.

Librarian C.W.: I know we have the office of disabled students. And I know they're in communication with the library, but what they're working on, is not particularly filtered down to us.

The degree of contact between a librarian and DSS can potentially affect whether the librarian understands the role of DSS in the university.

Collaborating

The discussion points that form this subtheme focused on describing the relationship between the library and DSS as well as on who is involved in these relations and how often communication takes place and by what means. There was some variation in terms of staff's knowledge about this topic. Some teams were more likely to have contact with DSS than others, and thus they had more information about DSS's services and the relationship between DSS and the library. While some library staff worked more closely or were in more regular contact with DSS than others, the information going back and forth between the two services was not necessarily passed along to all staff.

Librarian C.W.: Um, on my level it's pretty invisible. So whether there is a lot of communication on other levels, I really couldn't tell you. But, like I really can't remember ever being, even in a meeting with anyone from [Disability Support Services].

That being said, DSS had recently made a presentation to library staff about the work that it performs. The aim of this presentation was to raise awareness about how the two services could collaborate and to provide some background information about the students who register with DSS.

Librarian P.Y.: So I think, when [DSS] came and did those sessions, I was like, can you please show everyone a graph of like the types of disabilities that students have? So I think that was helpful. Because, people were like, oh, 90-85%, I don't know, it was a high proportion. It's an invisible disability, right.

Moreover, some library staff contacted DSS directly when a general question about accessibility arose in the course of their work.

Librarian D.R.: So, it would be a good thing to know about. We did contact, it's a little bit embarrassing actually. I haven't thought about them in a while to think what did we do? But when we first... I'm pretty sure that I contacted someone in disability service, or accessibility service, what do we need to keep in mind about this? So they might have given us just sort of some basic guidelines.

Claire: Okay.

Librarian D.R.: But, I'm not sure where it went after that.

To some degree, this communication reveals that there is still some unawareness about the general services provided by DSS, as this type of information provision is not part of its formal purview (although is a regular part of the office's work in practice)

6.4.4 Library users

This theme relates to how library staff described student users in interviews. How students with disabilities were identified for the purposes of provision of accessible services and considerations of whether students' needs were met were key points that emerged throughout the interviews.

Identifying students

At this institution, a list of students registered with DSS is downloaded once a term by the library, and the data is incorporated into the corresponding student records so that a note pops up when a registered student's card is scanned to let staff know that the student is eligible for "special services."

Librarian H.W.: So we did a lot of talking, so we met [with Disability Support Services]. But then we met again with the person, cause there's a database of all people when they register. And trying to get that information into our catalogue... So we finally set it up in such a way that twice a year now, this is the first year we've done it, we download a list of people and we're able to tag all of the patron records of students who are registered.

Claire: Okay.

Librarian H.W.: And so if staff open it, like they get a student ID card, and they wand it and that student is registered, a box comes up that says "special services apply." Whereas it used to be just in the notes.

Students are tagged in the library's record system, but identifying students away from the service desk is another matter. At this institution, students who are registered with DSS are able to book and use group study rooms by themselves. The availability of this service was raised by several librarians, but they were unsure to what extent students were making use of this service. One librarian expressed concern over how this service was monitored, as students who are not registered with DSS are not permitted to use a group room on an individual basis.

Librarian D.R.: I don't know how it's managed when a student wants to use a group study room by themselves. If, I mean... That would have come up at various meetings. Like it's come up somewhere that I needed to know that if I saw a student alone in a room, that might be why. And I guess, I guess you could potentially ask them.

Claire: Okay.

Librarian D.R.: Well, there's privacy issues around that. So anyways, it's a question. I don't actually know how we manage privacy and also the student securing that space for themselves un-harassed. But most of us would assume that they're with [Disability Support Services].

In this instance, the difficult balancing act of providing equitable services while maintaining privacy was a concern.

Imagining the student experience

Like their colleagues at the Ontario institution, the librarians in Québec considered how various impairments, accommodations, and barriers might affect students' experiences in accessing university.

Librarian D.R.: Yeah sure, sure. I mean it certainly affects their timelines. So other students who would have an option to grab a book at the last second. That's more difficult. So there probably needs to be planning ahead. There's identifying themselves at [Disability Support Services], as well as whatever documentation's required. And then identifying themselves at the library. Um, I think probably, there's also a lot of extra work to be done. Those things like JAWS aren't easy to learn by any means. So there would be that kind of learning, and whatever support's provided here. And probably similarly outside too.

Claire: Okay.

Librarian D.R.: And there would be a lot of that kind of, you know, there's a lot of negotiating of things that other students wouldn't have to do. So thinking about

assignments, thinking about exam times, exam locations, thinking about extensions, what needs to be talked about with a faculty member, what... that balance of privacy and receiving services. Um but I think, I think there can probably be a cumbersomeness that [pause], that can make work more difficult. Even, even with lots of support in place.

Another librarian first considered visible and physical disabilities before highlighting that mental health issues would also affect students' experiences.

Librarian D.R.: I think I forgot a group when we were talking about students who might be served by [Disability Support Services] and the library. We didn't talk anything about things like anxiety as well. I don't know to what extent, I don't know to what extent students would identify with [Disability Support Services] there, but I'm assuming that there can be some provisions too, especially around exams. And maybe the library hasn't thought too much about that, but it's an important aspect of our work, always to consider what it's like for any user to come to that desk and ask for help.

Some librarians expressed uncertainty about what they imagined the student experience to be, perhaps in part because they were unsure who the disabled students were. Librarians emphasized that at times the library services were not designed to take into account invisible impairments, and they suggested that students may be negatively impacted by this fact.

Assessment of services

In terms of identifying and meeting students' accommodation needs, there were no straightforward processes in place in the library, although assessment happened informally in some situations. One librarian emphasized that the library had not carried out any sort of assessment with regards to accessibility.

Claire: Um, so how do you feel current accessibility initiatives kind of affect students?

Librarian P.Y.: [pause]. Um, I mean, they're, we've done absolutely no assessment on this. I have no idea. Like it really is hard to get a sense of that. In the library.

One interviewee spoke about providing workshops and considered whether accessibility would be an issue in this situation. While they indicated that they had not necessarily thought about this issue specifically, they pointed out that checking in with students was a key component of these workshops. In doing this work, it was hoped that needs were assessed and met.

Librarian D.R.: I'm also imagining those workshops and thinking is there any element of workshops I've made that would have a, that would be an issue. And, not so much... you know there's speaking, and there's text to complement speaking. And maybe it's a kind of important step to put in there, or maybe it's a question I can also ask [Disability Support Services] and say is there something I should be thinking about here that maybe I've not thought about before.

Claire: Okay.

Librarian D.R.: But those workshops tend to be small groups. We tend to do a fair bit of checking in with students on what they need in the classroom. Um, there's lots of room for kind of questions and trying things out. So I hope there's a lot of room for everybody in there.

The process of checking in with students does integrate a degree of assessment into workshops, as students have the opportunity to ask questions or ask for repetition or clarification if needed. However, this type of assessment relies on students to feel comfortable asking for these clarifications, which requires them to be comfortable sharing that they have not been able to follow along in some way.

6.4.5 Using the library

This theme is about librarians' perspectives on how students use the library and what obstacles they might face in doing so. Librarians described potential issues centred on finding resources and using digital materials. The ways in which students would navigate the spaces was also mentioned at points.

Navigating the space

Perhaps because of the relatively recent renovations undertaken in parts of the library, moving around the library spaces was not brought up as much as it was in the Ontario interviews. When this topic was mentioned, it was generally related to thinking about users with physical disabilities. One librarian emphasized that the stacks were difficult to access for a number of patrons.

Librarian C.W.: Yeah, I mean even just structurally. The stacks and that type of thing. You don't need to have that big a mobility issue to have a hard time getting stuff, getting around in the stacks.

Claire: Mmhmm.

Librarian C.W.: Yeah, so just structurally. The library, like most things in society are not made for people with disabilities unfortunately.

Another librarian suggested that the signage may also prove problematic for students when they are looking for resources, as navigational information only appears in some locations.

Librarian D.R.: So I think there's probably just different moments where, their need may not have been anticipated, and they still have to ask for assistance of some sort. Like there might be little things, like we tend to post... Our signage that say which books are where, tends to be on the walls near the stairwell. Some libraries may have it in the elevator for example. So depending on how you made your way through the library, you might not notice those signs. You might have to go out of your way to find them.

Interestingly in this case, navigating the space was not just considered with regards to the physical infrastructure, but also in terms of how users might find relevant spaces.

The digital and online environment

In talking about the digital environment, librarians spoke about the digitization of materials within the library. The library was not currently able to digitize books or journals for accessibility purposes owing to a lack of equipment, staffing, and money within the circulation departments where such work would otherwise take place.

Librarian H.W.: Obstacles? I don't think there's too many obstacles, but I guess it depends on what services you talk about. So, digitizing the books, and making those available. I think it's resources. Both money and people. Because what's happening in circulation departments now is those departments are shrinking. Cause the loans are going down... And then there's a cost involved, and you need equipment and things.

One librarian stated that copyright and licensing issues might also limit what the library was able to do in terms of producing alternative formats for materials that it subscribed to.

Librarian D.R.: There is typically the option to transform the format of a book or item. So I'm sure that we must do that here either through the library or accessibility services as typical.

Claire: But you're not sure whether that would be done at the library or...

Librarian D.R.: Well, I would expect that it would be sent out. There are services outside that actually do the producing of something new, right. And according to our, our subscriptions and things, I don't think it's within our purview to actually make a new copy in another format of something within the library. I think there would be procedures, but I don't know what they are. .

The library website also came up in discussion. One interviewee suggested that this area of the library would be one where accessibility would be built into the development and assessment of services, meaning that it could be used by all students.

Librarian H.W.: I would imagine, because I think with web development, [accessibility is] sometimes more kind of part of creating webpages and trying to be more, so that maybe that was considered when they created the webpage. I would hope.

Claire: It's supposed to be but... [laughs]

Librarian H.W.: Yeah but whether it really is, I don't know. So that's the one place where I feel that might have been on a check mark on a thing.

The digital library environment, like the physical one, has many separate components to it. Although accessibility has at points been considered, librarians stated that they did not necessarily have the resources or time to implement more accessible practices. It was also not clear from the interviews to what degree accessibility was considered and implemented in the development and enactment of various digital services.

6.4.6 Obstacles

A key theme that emerged from the interviews was that of obstacles. I asked each of the librarians what they saw as the main obstacles in developing more accessible services I the library. Interviewees referred to limited resources in terms of factors such as time and budgets as well as to the library's approach to prioritizing these. *Claire: What do you see as some of the main obstacles in providing an accessible service from the perspective of the library?*

Librarian P.Y.: I think... uh. The same thing it always is, is like money, time. You know, and then people. Like I think all of those things are finite. And so what the priorities are, what are the objectives of the library, what are the priorities of the library? Those things, you know, and if it's not made a priority then you know, money and time and people aren't going to be devoted to it, and so therefore, it doesn't happen.

Another librarian emphasized that librarians were responsible for many services across the library and needed to know about all of these, as well as services they were not directly involved in. This interviewee suggested that this requirement perhaps limited their ability to develop knowledge of new practices or resources at times. Again, the lack of prioritization of accessibility came up when the librarian interviewees emphasized that it was not part of services and procedures currently under development. Essentially, accessibility comes in as an afterthought.

Librarian D.R.: Um, there's generally a lot for everybody to know at the library in terms of, especially when you get into things like software and procedures and stuff like that. So if you don't use it, you kind of lose it a little bit. So it's just keeping that knowledge up. And... I think... I mean perhaps it is also a barrier that it's not kind of embedded in our procedures that we would take a moment to consider all the accessibility implications of a thing.

One final obstacle discussed in the interviews concerned communicating with students and how awareness-raising activities to promote accessible services were limited.

Librarian C.W.: So I think student outreach. Like our rules seem really set in stone, whereas in my experience, we have policy that we have to abide by. But, you know... things can be adapted. I've seen it done. You know. It's not unreasonable to make accommodations, and that's something we do all the time.

Claire: Mmhmm.

Librarian C.W.: ... I don't know if the unwillingness to sort of make that publicly known is that they're worried people will take advantage of it, I have no idea. But I don't think there's a huge amount of outreach towards that end. Like letting people know that like you can get extra help, you can get borrowing privileges changed. You can have your services adapted.

This issue relates to students' awareness of what options might be available. Interestingly, this obstacle focuses more on the relationship with students and on a reliance on students' asking for accommodations than do the others, which relate more to handling of accessibility before students attempt to use a service.

6.4.7 Comparing provinces

At the Québec institution, several librarians drew comparisons with practices and priorities in other provinces. Most often, this theme came up when library staff referred to accessibility legislation in Ontario in the course of discussing the lack of similar legislation in Québec. Librarians generally suggested that the prioritization of accessibility is much higher in Ontario than it is in Québec, although there was some uncertainty as to how different services were in practice.

Librarian D.R.: And I don't know how it would be different from a library in Ontario, which I guess what I mean is... I don't know, maybe it is as thorough here as it is there as well, even though we don't have the same legislative requirements.

Some library staff members were not sure of the extent of legislative differences between the two provinces.

Claire: Okay. Um and, as far as you're aware, am I correct in understanding that there are essentially no real legislative requirements around accessibility here?

Librarian D.R.: Yeah, I um. It's a good question. [pause]. I don't, I wouldn't be that comfortable saying there are no legislative requirements, but certainly, I don't think they're very strong.

Claire: Okay.

Librarian D.R.: You don't hear about them as much compared to other institutions... I mean Ontario's well known for having very strong legislation.

One librarian cited legislation as being a key factor in the relatively low prioritization that in their view is given to accessibility.

Librarian P.Y.: Like I think, I think accessibility at this library is, it's not prioritized, but I think when at all possible, should be done. So it's, it's a weird thing. Like I feel like there are a lot of projects that are like, pushing to make the library more accessible, but if there's something that comes up and it's like feasible for us to do it, then of course the desire is there for it to be done.

Claire: Okay.

Librarian P.Y.: Which I find kind of hard sometimes. Especially having like a... construction project, and then having like a few basic things not worked in from the beginning... And I blame that in part on the lack of legislation in Québec. Like they were allowed to choose to make some decisions, where in other places you don't get the choice.

Claire: Mmhmm.

Librarian P.Y.: So I've found sometimes things like that happen. And not just here, but like in this province, as a whole.

Several librarians suggested that stronger legislation would mandate that accessibility be included in the development and provision of library services and would require resources to be allocated to these ends.

Librarian P.Y.: We buy all the textbooks for all undergraduate classes, and stick them in a room. And if you have a print disability, like there's no way. They're not accessible. Like they're not digitized, we can't digitize textbooks on demand... you know so that student still has to buy a print copy of the textbook and have it digitized, which can take, you know, some time. And I mean, that puts them at more of a disadvantage compared to their peers, who then if they don't want to, don't have to buy the textbook because they can come and get it from the library for three hours. So it was like, things like that... But like that would be a lot of time and money and staff to kind of then... so I don't think that's a priority to figure out a way to do that. And I know, in Ontario, they have to by law, figure out a way to do that.

Claire: Yeah.

Librarian P.Y.: And so I think that's the, the difference there too. Is like lacking a, you know, we don't have to comply with anything. It's more... if we choose to do it.

This theme was not referred to by all librarians, and it is possible that whether or not a given interviewee raised it was affected by whether they had ever worked in other provinces. However, it is worth noting that these provincial comparisons did not emerge in the Ontario interviews.

6.4.8 Conceptualizing disability

The theme of conceptualizing disability relates what librarians understand disability to be. The types of impairments that they have considered as they have attempted to

provide an accessible service suggest that it is perhaps easier for librarians to think about how they might accommodate more "obvious" disabilities.

Impairments

One librarian mentioned that a conversation with a colleague had provided them with insight into how many people expect disability to have physical and visible characteristics.

Librarian P.Y.: And I think that shift hasn't happened for a lot of people. To be like 90% of the people who are registered with the [Disability Support Services], you have no idea. And then there's so many people who have again, like temporary, or things that they have not registered with the [Disability Support Services], because they don't want to do that or they don't see it as being a help, or don't want to identify in that way. The policy should be broad enough to help those people too. So, that was just a really interesting conversation, because I just was like, oh, everyone still expects a person with a disability to just be in a wheelchair.

Claire: Yep. Or to have like a white cane.

Librarian P.Y.: Yeah, like that's it. You're either completely blind, or you can't use your legs. And then that's the only disabilities that exist. And it's like, that is not in any way what things look like.

This belief links back to the need for awareness raising, perhaps in the form of training. It also speaks to the partial ways in which a library might focus on accessibility: if there is a belief that most disabilities are physical, then the installation of a facility such as an elevator may be seen as the main accessibility feature that is required. In another exchange, a librarian observed that students who experience anxiety may also register with DSS and that this group had not been considered in the provision of library services. Librarian D.R.: I think I forgot a group when we were talking about students who might be served by Access Services and the library. We didn't talk anything about things like anxiety as well. I don't know to what extent, I don't know to what extent students would identify with [Disability Support Services] there, but I'm assuming that there can be some provisions too, especially around exams. And maybe the library hasn't thought too much about that, but it's an important aspect of our work, always to consider what it's like for any user to come to that desk and ask for help.

Overall, a wide variety of impairments was suggested by the librarians when they considered who disabled students might be. Several individuals first thought of more "obvious" disabilities such as mobility impairments, but they also mentioned learning disabilities, mental health, and "invisible" disabilities in general.

6.5 Student survey

The majority of students who participated in the survey (84%) were pursuing an undergraduate degree; 7% were registered in a Master's-level degree and another 7% were pursuing a doctoral degree. Two individuals were completing graduate certificates. A wide variety of disciplines that, among others, included education, fine arts, engineering, natural sciences, psychology, and business was represented.

The reasons for using the library that the survey respondents gave were similar to those put forward by the surveyed students at the Ontario institution. Nearly 80% cited their use of library study spaces as one of their primary reasons for visiting one of the university's libraries. Other key reasons included finding and using books and/or journals (68%), printing (50%), accessing course reserves (48%), and accessing computers (31%). Meeting with friends (25%) and using research guides (17%) were not as commonly cited as they were at the Ontario institution. Seven students (20%) stated that using adaptive technologies was a key motive behind their library visits.

Many respondents stressed that the staff at the library were very helpful and friendly, saying that they were "Approachable and kind" and that "Online chat and subject librarians are especially helpful." However, some negative experiences were also described by respondents. One individual commented that "They are very expeditive [sic] and made me feel that I was taking their time more than once, or even that my questions were annoying." Another student responded:

Student: I asked a question about how to cite web pages from the web archive and how to cite web pages for multiple dates... They quickly looked at my example and discarded it without doing any research. I had a few similar incidents so I stopped going.

These comments suggest that at times, perhaps during especially busy periods, the staff can seem dismissive of students' queries. Ultimately, this response may mean that the student in question does not return to ask for further assistance from staff at the library, which demonstrates that it is imperative for library staff members to engage with students. It is not clear whether these individuals' experiences were in any way linked to their impairments. Nevertheless, the students who described such issues clearly did not feel that they had been supported when they had sought assistance or information. The implications of this perception are underscored by a student who explained their experiences by saying,

Student: My disability is not physical, it is mental. I suffer from PTSD and anxiety disorder. On the outside I look "normal." Most people in these situations don't need to know because if I feel they want to help me it will put me at ease right away. But if they are impatient when I ask questions or need information, then I can become nervous and unclear, and I don't think they understand that their attitude has this kind of repercussion. Several other students also said that they were unaware that the library had any services to support students with disabilities. For example, one student wrote, "*I was not even aware that I had the option to have accommodations for the library. I wish they made that knowledge more known, I maybe would have been more likely to use the library.*"

When asked whether there was anything else students wished to share, responses fell into four general categories: navigating the space; study spaces; adaptive technology and alternate formats; and advertising or promoting information about these services. The category of navigating the space shed light on the difficulties of accessing different floors in the library as well as of accessing books in the stacks, and it also touched on the lack of library staff available to help throughout the library:

Student: Reaching certain books in the library may be difficult for some, and there appears to be no accommodations for this matter. Such as there being an absence of librarians on higher floors, and unable to aid those who may need help reaching or accessing books.

Study spaces were also raised as an issue by some students. The majority of the places in the library are open plan, and while there are silent reading rooms, there are still often too many distractions and too much noise for some individuals. Three students made suggestions to the effect that *"Students with disabilities should have a separate area to study where people would respect silence,"* which suggests that the absence of such an area is a major obstacle for some individuals. One student suggested that this type of space would ideally *"Be closed rooms that have various kinds of assistive technology available as well as information about how to contact a librarian/library staff person who can provide support specifically to students with disabilities."* Other factors that were mentioned by students as contributing to a distracting environment were scents, lighting, and the sheer number of people using the library. Finally, with regards to how the library could work to improve its accessibility in order to provide a safe and inclusive environment for all, aspects mentioned by students included more e-materials, longer loans for laptops, and a better understanding on the part of library staff regarding how disabilities affect students.

Student: It would be good if library staff in general were better informed about different kinds of disabilities so as to be better equipped to support as many students as possible.

Another student emphasized that this knowledge and understanding would extend to staff having an awareness of various adaptive technologies.

Student: Understanding a range of disabilities, screen readers, beeline reader available on computers, allowing prolonged borrowing periods, allowing rental of microphones and providing speech-to-text software on laptops.

6.6 Student interviews

I conducted interviews with six students at this university. Most students were registered in undergraduate programs or courses, and several had had previous experiences of studying in a higher education setting. Several students had just completed or were very near completion of their programs.

I analysed these interviews using IPA, and through this process ten superordinate themes emerged. Like their counterparts at the Ontario institution, the Québec student interviewees experienced a range of impairments; some encountered physical barriers, while for others teaching methods and environmental components had a more profound effect. The following table, which sets out the ten subordinate themes and their related nested themes, provides an overview of the structure of this section.

| Superordinate theme | Nested themes |
|-------------------------------------|----------------------------------|
| Experiences of disability | Useful or vague |
| | Identifying as disabled |
| | Being the only one |
| Accommodations | Negotiating outside DSS |
| | Self-accommodating processes |
| | Asking for help |
| Progress timelines | Previous degrees |
| Using the library space | Doing coursework |
| | A place to study |
| | Finding spaces or being confined |
| Using library resources | Databases, catalogue, books |
| | Course reserves |
| Accommodations in the library | Limited awareness |
| | Elevators |
| Interactions in the library | About disability |
| | Positive experiences |
| Sharing the space | Social media |
| | Inappropriate behaviour |
| | Anxiety |
| Learning experience | Grateful |
| | Teaching methods |
| | Need to test accommodations |
| Understanding the world around them | |

Table 5: Themes from student interviews

6.6.1 Experiences of disability

The students interviewees revealed diverse experiences and understandings of disability that at times contradicted one another. One student in particular was interested in the focus of the study and in why I had asked to speak with students who were registered with Disability Support Services.

Student R.J.: I wonder that well... Okay, so let me put it this way. So why, why actually let's say you have to select part of the populations, have something to do with the [DSS] centre?

I would highlight that this question led to an interesting discussion about the meaning of "disability" and the lack of attention paid to supporting disabled students in academic libraries and in higher education more generally.

Useful or vague

Students described their understandings of disability as being complicated, vague, or unclear. One student suggested that the term "disability" is useful as a descriptor of a status or experience, while another student suggested that the opposite was true. The collapsing of multiple impairments, conditions, and experiences under one term created a degree of confusion and misunderstanding for this interviewee.

Student R.J.: I feel the term disability... to me, is very vague.

Claire: Okay.

Student R.J.: It's very vague. As I mentioned to you at the beginning, it can be commonly misunderstood by lots of people. So actually, in order to lessen or reduce the level of confusion, we could actually, as I said, we could let's say make this word more specific. For example, we could say, well that person with some, with sort of degree of psychological disability, or with sort of physical disability, or mental disability.

Understandings of what "disability" means are affected by many factors, such as medical or psychological diagnoses, personal experiences and interactions, and cultural or generational understandings. There were also differences between interviewees in terms of whether they self-identified as having a disability or being disabled, as I will discuss in the next section.

Identifying as disabled

Students' personal experiences of identifying as disabled were also complicated. For one interviewee, being disabled meant not being able to do something that they could do previously. For another, identifying as being disabled or having a disability was a process that one had to come to terms with.

Student L.T.: How do I feel about it? [Sigh]. I don't know. I mean, I know I feel something about it. I don't think I've really formed kind of like my emotional connection to it yet.

Claire: Okay.

Student L.T.: I kind of, like the first time that I really realized that I was I think disabled was when I went to this recruitment event that they have here. And I kind of like felt good about it, because it kind of gave me an advantage when I applied for jobs. So in that sense it feels good. But in the sense of, like being a disabled person, it sucks.

Although some students identified as being disabled or having a disability—whether this was a positive or negative experience—not all students interviewed fell into this category. This nonidentification with this status was the case for two individuals with learning disabilities. These students suggested that they were uncertain about being

labeled as "disabled" because they understood this status to be connected to physical impairments or limitations, neither of which were applicable to them.

Student Francesca: I think disability is just kind of a way to say that people are differently abled, I guess. It's kind of just unusual I suppose... Compared to, people without a disability. Although it's not so unusual anymore. But I mean, I don't know, I don't really refer to myself as having a disability. I have ADD, ADHD. But I don't really say like I have a disability.

Claire: Yep.

Student Francesca: I don't know. Well, I suppose I say I have a learning disability. Because to me, disability also means more physical. And I don't have any physical limitations.

While the second student noted that they did not have physical impairments, they also stressed that their disability was in fact caused by the standard methods of teaching that had proved counterproductive to their educational progress.

Student H.M.: My, my experience as a student with a disability, and then again I like to underscore that if I'm using the word disability, it's because someone at some point has determined that what I have is incompatible with a standard way of teaching things.

Overall, the six students' experiences and ideas of identification with the term "disability" and what they understood this term to mean varied considerably.

Being the only one

Several students at this institution at various points in the interview wondered whether they were the only ones with their experiences. One student said that their condition was more severe than what most people experienced, while another suggested that relatively small numbers of students experienced the diagnosis that they had. In both cases, these students emphasized that they were not the only ones in their situation:

Student H.M.: But I mean, I'm not the only one. There are a few people like me. However, are we disabled? No, we might be unusual and incompatible to the standard. But that does not make us, uh, disabled, I think.

Another student stressed the removal of study cubicles from the library as having a negative effect on their experiences. Previously, they had used these cubicles as an environment in which they could concentrate with minimal distractions. This interviewee suggested that perhaps they were the only student who had been negatively affected by the removal of cubicles.

6.6.2 Accommodations

The accommodations that the interviewed students received varied to some degree, although there were some common ones as well. Special conditions for exams had been arranged for all of the students interviewed. These largely consisted of extended time for thinking and processing or for being able to move around during the exam. Several students commented that they were especially grateful for these accommodations, as they were able to actually finish the exam and experienced far less anxiety in doing so.

Student Francesca: But, for the tests and the exams, [DSS] is wonderful. Like, I get my time and a third. I'm actually able to complete the test. Um, you know, I'm able to do well on it. Whereas like, I would rush through like in high school... I would rush through the exams, and it was like how the fuck, how do I finish this, you know?

Another student highlighted the improvement in their grades once they received appropriate test and exam accommodations.

Student R.J.: So in addition, I actually, let's say, I ask the permission to see if I was able to have more, let's say, more time to finish the quiz, the test, the examination for each course... So it actually helped me a lot. And it also helped me improve my marks.

Another common accommodation was extensions for coursework, and this was something that many students had negotiated without any assistance or input from Disability Support Services.

Student Askew: Well I mean, I would say number one this time is, I've just ended up telling my professors, and sometimes teaching assistant in a lab course, that I have some disabilities and that, that affects the context in which I get school work done. I would say probably, the most consistent accommodation I've accessed so far is agreement to extend deadlines.

Other accommodations brought up in the interviews were ergonomic seating, support from learning counsellors, and digitized materials.

Negotiating outside DSS

As previously stated, most of the students interviewed indicated that they regularly received extensions on coursework as an accommodation. Some students had this arrangement as an official accommodation, but other students also had to negotiate such extensions with their instructors. None of the students suggested that they had had negative experiences or had been unable to receive the extensions that they needed. However, this process does demonstrate that even with official accommodations, students often need to disclose information about their disability to people outside of the Disability Support Services office. In one instance, a student described how they had worked closely with their academic department's administrative assistant, as that staff member had the most up-to-date and comprehensive information about official deadlines.

Self-accommodating processes

Students had various strategies for dealing with their impairments and the environment. These included using earplugs, hats, and sunglasses; minimizing certain activities—at times with this course of action having a profound effect on the individual's social life and simply using resources that are easily available rather than trying to find those that might be more appropriate but are harder to access.

Student M.M.: I'm going to use what's available.

Claire: Yep.

Student M.M.: Because it's less stressful, easier to do, and less time consuming. Cause my interest is in reading the stuff, not in looking for it.

Additionally, several students drew attention to the need to schedule their lives around their disability. In some instances, they made such arrangements in order to work with volunteers or learning counsellors, and in other cases they scheduled their completion of coursework and their study time around the effects of medication, such as Ritalin.

Student H.M.: It was always regarding the pill. Unfortunately. It was never really me. It was how long will the effect last. I need to profit from the effect. So yeah.

Claire: Okay. Okay.

Student H.M.: Oh yeah. You don't live for yourself at that point. Once you understand that you are able to do it within, only the effect of a pill. Then you need to reschedule your life.

Asking for help

Finally, one student talked about asking for help as a key accommodation that they used in their everyday and academic life. This student emphasized that this was not their favoured approach for getting around or accessing services or resources. However, over time this interviewee had come to rely more heavily on this method, and in fact they found it a faster and more efficient way to get what they needed in comparison to navigating physical or digital spaces on their own.

Student M.M.: I just come up and ask for what I, for help, for what I need. And at first it was very difficult to ask for help. But I've got so used to it now, I don't do anything for myself. I ask for help.

Claire: Okay.

Student M.M.: I ask for help at accessibility and here [at the library]. Simply because doing things by myself probably takes me two to ten times longer to do than having somebody else do it. And that's, that's the only reason. It just takes me too long.

6.6.3 Progress and timelines

Several of the students interviewed were not following the "typical" timeline for degree completion, with their progress most commonly being slower than the standard time. Students had experienced a reduced course load or had taken time off from their education for various medical or health reasons, thus delaying their progression in some way.

In Québec, students who are registered for at least "20 course hours a month" and "have a major functional disability that is recognized by Aide financière aux études" (Ministère de l'Éducation et de l'Enseignement supérieur, 2018) are considered to be full-time students. Several of the students interviewed fell into this category. One in particular described how beneficial this status was:

Student Francesca: I get designated as full time even though I only take two courses.

Claire: Okay.

Student Francesca: Which is like really helpful, because then I can get like my bursaries. Because you can't get bursaries unless you're full time. At least not with the government.

Previous degrees

Three of the students interviewed had previously completed university degrees. Two of these were at undergraduate level, and one student had completed various degrees to the level of doctorate. These experiences were important in several ways.

One student had previously completed their undergraduate degree many years before they were diagnosed with a variety of learning disabilities. They indicated that their choice of degree, as well as the experience of completing it, had been informed by the self-belief that they were unintelligent. In speaking about the accommodations that they received in their current degree, they informed me that they did not want to know if accommodations would have been available to them during their first degree had they received a diagnosis at that time.

Student H.M.: Like, if you know that in 1996, I had everything that I benefited from in 2015, I would have never... Please do lie to me; I don't want to know it. Because it took me nine years to finish that degree that served me for nothing.

Claire: Yep.

Student H.M.: That diploma is in a drawer. I didn't do nothing with it. And it took me nine years. So, if you do know that there were accommodations for people like me, please don't tell me. Lie to me. This exchange demonstrates to some degree the perseverance that the student needed not only in completing the former degree but also in choosing to go back into the educational environment several years later in order to develop or change their career.

Another student had had a much more positive experience in previously accessing higher education. They had previously completed four degrees, including a doctorate. They described themselves as a "*professional student*" and were now taking courses out of interest rather than for career change or progression. While their access to materials was highly affected by their impairment, and although they faced various obstacles and lengthy processes when they attempted to access materials in an appropriate format, they noted that they were not completing a Master's or PhD and thus were not concerned that they were unable to find or access comprehensive resources.

6.6.4 Using the library spaces

This theme relates to students' use of the library. Important aspects of this theme included students' reasons for using the library and the spaces that they used. In some instances, students were confined to certain areas of the library because other spaces were not accessible in some way. Two students highlighted how they had previously made heavy use of library spaces but did not do so anymore for various reasons.

Doing coursework

For the students interviewed, the primary purpose for accessing the library was to do coursework or study, and this purpose affected how frequently they visited the spaces. Many students suggested that they visited the library very regularly, with one even suggesting that it was like a second home to them.

Student L.T.: And so like I use the library a lot. Like a lot. I'm here all the time. Because in my previous studies, when I was younger. I kind of read, I don't know *if it was a study, or where I read it. But I read that people who live on campus perform better.*

Claire: Okay.

Student L.T.: And I don't really live on campus... So basically the cleanliness of the space and the lack of distractions, it helps me focus.

Especially as coursework begins to pile up and midterms or exams approach, many of the students begin to frequent the library far more often. However, this was not the case for everyone. One student in particular said that they were unlikely to use the library during these periods, as there were too many people. When visiting the library was unavoidable, they scheduled their visits so that they took place during hours when most students would be sleeping, such as before 6am.

A place to study

As was reported by the Ontario student interviewees, finding a place in which to study was also a key concern for students in Québec. Nearly all of the students interviewed suggested that their main reason for visiting the library was to study. However, several students talked about how they would at times use other university spaces to study, such as resource centres or even empty classrooms. These students suggested that these choices were due in large part to the busyness, noise, and potential distractions that accompanied working in the library. For those students who did study in the library more regularly, location, opening hours, and access to a comfortable space were important factors in choosing to work at the library. For several students, working at home was not feasible for various reasons, such as the presence of other people or environmental factors such as light. Nearly all students mentioned the extensive hours that the library was open and available for them to work in, and they suggested that they had positively benefited from these hours. Two students did, however, suggest that they wished that the service hours for support and technology loans were extended, rather than the library merely functioning as a study hall after a certain time.

Finding spaces or being confined

Key considerations in finding a space to study involved the furniture, as well as the ability to shut out distractions. For one student, there was only one area of the library that had appropriate seating that did not cause them pain when they used it.

Student L.T.: But it sucks that I have to be confined to the sofa chairs here, cause that's literally the only place that I don't get pain, right. Don't get my wrong, I love the poofs and being able to take off my shoes and doing my notes. But when it comes to like math stuff and, it would be nice to have another space to be able to do it.

Another student felt they were no longer able to use the library space at all as cubicle seating—which they used to shut out distractions—was removed and replaced with open seating. In addition to allowing students to limit distractions, cubicles and other marked carrels can be helpful when sharing spaces with other students.

Student Askew: However, when there's been a more average amount of student presence there, it feels, it's felt a little bit harder for me to find where I can, I can set up some personal space, for myself for my work.

Claire: Okay.

Student Askew: Whereas having kind of individually marked out carrels at this location, it feels more clear to me. Like okay, there's an understanding of how social and work space is, is like parcelled out here. So I've found that environment a little bit more, useful here in some ways. Although the renovated areas of the library are all open plan, many areas do feature number markings, plugs, and evenly spaced chairs, which all provide some clarity as to where one student's space ends and the next student's space begins.

6.6.5 Using library resources

The theme of using library resources relates primarily to using the library collections, both print and digital. This theme also includes how students find the resources that they use. Finding resources was a key issue for one student, who used a text-to-speech application and was not able to browse the e-book collections.

Databases, catalogue, books

All of the students interviewed unsurprisingly mentioned databases, the library catalogue, books, and journal articles when they considered their use of library resources. The majority of them suggested that these resources were adequate for their needs and that they were able to easily complete their coursework and other assignments with the resources provided.

Only one student interviewed needed materials to be reformatted to be accessible to them. In order to receive this service, the student had to take books from the library to Disability Support Services to have them digitized.

Student M.M.: They can do that. They can only do that, but they can't do that if you don't have the book... And from another library, they can't do it. They can do it only from this library. There was a time they wouldn't even allow me, as a blind person, to, to photocopy the whole book if I needed it. You know, because that wasn't allowed. But they've come around to... You're blind, you need the whole book. Although e-books are also available at the institution, this same student indicated that they had had ongoing difficulty accessing them. This individual had issues not only with finding e-books in the catalogue but also with being able to browse the listings.

Student M.M.: And that is my major complaint. I come and I say to them, how can I get into the e-books just so I can see what's there.

Claire: Yep.

Student M.M.: No, they say. You can't do that. Our library is made, if you want something, you have to tell me what you want, and then you'll go and get it.

Unfortunately, this process does not allow for serendipity in searching for materials. Additionally, as this student highlights, it relies on an individual knowing what they want or need and hoping that it is available. If they are unsure about what they need, they are not able to browse for what might be suitable for answering their questions or satisfying their information needs. This experience led the student to comment that libraries are not necessarily designed to support students or users.

Student M.M.: I'm going to add one more thing. Sometimes I feel that the library is organized in a way that suits the needs of the librarians.

Claire: Okay.

Student M.M.: Not the students.

Claire: I can see that. [Laughs]

Student M.M.: No, that... It may not be true, but that's how I feel. Like when I've been trying now for three years to get e-books.

This comment conveys some of the frustration felt by this individual. Although they were often able to get materials that they needed and had developed various

workarounds, there were still many obstacles standing in the way of their ability to use the library in a meaningful way.

Course reserves

Course reserves are heavily used at this library, and they include textbooks and course packs from undergraduate classes. Several of the students spoke about course reserves and whether or not they made use of them. For one student, the additional organization required to take out a book for three hours was onerous, and thus they generally bought the books that were required reading.

6.6.6 Accommodations in the library

Students were asked in the interviews about what library accommodations they were aware of and if they had made use of any of these services or resources. Nearly all students mentioned elevators as an available accommodation. Other accommodations were only mentioned by one or two students. These accommodations included therapydog visits, adaptive software, study rooms, and standing desks.

Limited awareness

Although most students mentioned elevators, the extent of awareness of library accommodations was limited, and many of the students said that they did not know what options and services were available. Several students were unaware of being able to extend loans of course reserves upon request or of being able to use group study rooms on an individual basis, although they suggested that these services would have been useful.

Student R.J.: No. To answer your question, no. It seems to me that if you want to borrow, for example let's say a textbook, from course reserve centre. So it doesn't

matter if you are a student registered with [DSS] or not. So three hours is the, is the bottom line.

Claire: Okay.

Student R.J.: So there's not any exception to that policy.

Although this information is available online, some students are clearly still not receiving these details that could make the library more accessible to them. One student suggested that providing more details about accessing the services was an important component of making them more available.

Student Askew: I think that it would, you know my main, one of my main, improved access propositions in general in the world, is just for greater transparency and advertising of all the details that you would actually need to know.

Including a highlighted tab about accessibility on the website was also suggested as a way to make this information stand out to those who required it.

Elevators

Several students noted that there were elevators both to get into the library and to navigate throughout the space, and they listed this as an accommodation that the library provided. However, one of these students also said that the elevator to gain entrance to the library was frequently broken.

Student L.T.: Well I know that they offer like the elevator. That's one of the major problems, because it's like always broken.

Although this student had difficulty with navigating stairs at times, they clearly had not received any information about alternative methods for entering the library. As well as

mentioning that the elevator was frequently broken, this student highlighted that access was not always available in the evenings.

Student L.T.: And sometimes they block it off, like at night. I know that they say that you can ask for permission. But it's like, you know, first of all some people feel embarrassed. Second of all, it shouldn't really be blocked off, in my opinion.

There is in fact an alternative elevator that can be used to enter the library on the second floor in the scenario of the library elevator being broken, and access to it is provided by security upon request. However, as this student points out with regards to use of the regular elevator in the evening, such access requires disclosing their need to security. This disclosure might be especially stressful to users with an invisible disability, as they do not know how security will react.

6.6.7 Interactions in the library

This theme relates to students' experiences of interacting with staff at the library. The majority of the students described positive experiences in speaking with staff, although few had spoken to staff about their library needs as these related to their disability.

About disability

There were differences between students in terms of whether they had disclosed their disability to library staff members and how subsequent discussions had proceeded if they had done so. One student suggested that they were unlikely to disclose their needs, as they did not feel that staff in the library had any control or power over provision of the required support (which in this student's case related to furniture):

Student L.T.: I don't know if they really have the power to do anything about it. Because I mean they just work here, right. So I don't know. It's kind of like a complaint that I have, right. That's why this research for me was interesting because it was like a way for me to voice how I feel about the seating. Claire: Yep.

Student L.T.: I don't know if I did something like that, if I, if it would do anything. If they could do anything. I'm assuming it would probably go up some kind of a chain or something.

Another student had disclosed some information about their needs when they had informed staff that they were no longer able to study in the library because of renovations that were taking place there. They suggested that staff were understanding and sympathetic. However, this disclosure had not been helpful, as staff were unsurprisingly—unable to reinstate former procedures or furniture.

Positive experiences

All of the students interviewed suggested that they had had mostly positive experiences in interacting with the library professionals. Students described the staff overall as helpful, friendly, professional, and kind.

Claire: Okay. Okay. So can you tell me a little bit about your experiences interacting with staff at the libraries?

Student H.M.: Very pleasant. Very pleasant. Very, very helping. All of them, all of them. Like seriously, at least in my experience, for the few times that I had to ask a question... they were very, very nice people. Very professional, and they were very helpful.

Another student emphasized that while they had had difficulties in accessing library resources, working with staff had never been an issue, and their interactions with librarians had always been positive.

Student M.M.: And every librarian has been kind and interested, and helpful. Did not rush. I have absolutely no complaints about the librarians.

Claire: Okay. Well that's good.

Student M.M.: I want to make that clear, clear, clear!

One student highlighted that the librarians had not only provided them with the required information but had worked patiently with them to develop a step-by-step set of processes for finding the information.

Student R.J.: Actually, those employees to me are very skilled and professional. And also friendly. They did not simply tell you that okay, I give you the link to the relevant website as requested by you. You could go there and study by yourself. They also show you step by step so that you are able to find, I mean, first of all, for example, let's say I need some academic resources. They would tell me which one is good, is acceptable. Which one is not good, which one is unacceptable. And after I have let's say the scholarly or peer-reviewed articles, then they would show me, well if you would like to cite the sources you've just found in the library, if you want to let's say cite some in APA style, then I would show you. So they are actually very patient. They are very patient. So I actually had very positive experiences in working with those people.

Many of the interactions that students spoke of referred to in-person interactions. However, some students also referred to using online chat to obtain information that they needed. In many instances, the required information was of a general nature opening hours, for instance—and did not relate to information resources. Generally, reactions to the online chat service were positive, and students emphasized how quickly they received the required information. Only one student explicitly suggested that the chat system was not useful, and they held this view because their impairments made typing difficult at times.

6.6.8 Sharing the space with other students

Several interviewees stressed that the presence and activities of other students at times made the library less accessible for them. Disruption to the students' environment of this kind took various forms, and in most cases it came about because of the openness of the library spaces. One student noted that the level of distraction that they experienced from other students' actions was beyond their control.

Student H.M.: This isn't voluntary on my part. I wish, Claire, I had a chance, like you and like most human beings, to concentrate on command and say, I don't care if you are studying upside down like a bat. I don't care. But unfortunately this is not my case. I do care.

Social media

A key issue for one student was being able to view the social media use of other students around them.

Student H.M.: So Facebook. For those students who are capable to pull off an A+ by being on Instagram or being on all these things, and they don't care about anybody else. But you know what, I'm paying the same tuition fees as you. And I don't have it as easy as you do. So respect the space.

This interviewee suggested that students were essentially not able to use the same space on equitable terms, as students with certain conditions such as ADHD, are heavily impacted by the activities of others. They suggested that a social-media-free room could address this issue. The student acknowledged the existence of the silent rooms, as well as the fact that they did not use these spaces because their own fidgety nature would be disruptive to the other students. However, they suggested that banning the use of social media and other non-study-related services on electronic devices in other quiet spaces would provide them a space to work in without being disrupted by their fellow students.

Inappropriate behaviour

One student described things other than accessing social media that their fellow students did and that they found to be disruptive. These behaviours were sometimes a consequence of crowding in the library, especially during busy periods such as exams, and they were so disruptive that the student had come to avoid accessing the library at such times.

Student R.J.: So I feel that well, especially when it comes to midterms and final examinations. To me that was not a library. It was more like a zoo.

Claire: Okay. [Laughs]

Student R.J.: Packed with so many students. And most students were not studying. [Laughs] They were chatting. They were gaming. Or even some of them were very funny, for example, doing things totally irrelevant to what we call the academic library. For example, watching porn. That was very interesting. Or maybe dating.

The student spoke about how they at times felt embarrassed or uncomfortable due to the behaviour of their fellow students. They stressed that they were not merely unable to focus but actually felt compelled to leave the library on occasions because it did not feel like a welcoming environment in which to undertake academic study.

Anxiety

Finally, one student brought up their need to shut out other students in order to avoid feeling anxious when working in the space. Previously, this student was able to create a restricted environment by using individual study carrels. However, these carrels had been removed, and they were now unable to find a space where they would not see movement that had the potential to distract them. Additionally, this open space created a level of anxiety because they felt that other students were watching them as well.

Student Francesca: I mean it's really beautiful. It's gorgeous. Like I mean there's no complaints in that area. There's plenty of computers now. But it's totally open. So I see people, and I get distracted. And then I get distracted because I get anxious that they're all seeing me. And then... the anxiety makes me more distracted. And then it's just all, kind of like a vicious circle.

6.6.9 Learning experiences

The theme of learning experiences encompasses a range of nested themes that includes the ways in which teaching methods were unsuited to supporting students' learning needs and the learning curve involved in developing strategies that allowed them to be successful in their studies. Some of these experiences took place in the library, while others took place in classrooms and other areas of the university. This theme also touched on how students described their overall experiences at this university, which were predominantly positive.

Grateful

Nearly all the students interviewed at this institution stressed how grateful they were overall for their experiences at the university. Several students spoke highly of the instructors, librarians, and other students with whom they worked.

Student H.M.: Oh yeah. My [university] experience was a beautiful experience. Globally. There was room for improvement, of course. But I mean, there will always be room for improvement. But it was globally a beautiful thing to live, and to share. While several students had experienced barriers and had struggled at points to navigate the university environment, the overall enjoyment of their university experience was clearly very meaningful to these students as well.

Teaching methods

One student spoke about their experiences in the university learning environment and about how they felt that they were at a disadvantage because the teaching methods that were used in various courses, such as statistics, were incompatible with their learning needs.

Student H.M.: Um, it's not quite clear to me if, since it's not physical... I have attention deficit disorder, dyscalculia and dyslexia. It's a very complicated combo to deal with within an academic context. But since I do have my two arms and my two legs, and I could displace myself and I could travel from point A to point B on my own without having to have a prosthetics or a physical support of any kind, besides myself, sometimes it is not clear to me that what makes me disabled is the way, the way we have embraced culturally, our teaching methods within a classroom.

This student questioned why it was that these teaching methods were used uncritically, and they emphasized that multiple students were affected by the lack of flexibility in teaching.

Student H.M.: So you know, I don't know. Is it because we don't have the time or the resources to teach those students who are, yes it's true it might be a small percentage of the population, but we do exist. And somehow the status quo of the methods that we use to teach math, physics, chemistry, statistics, are applied for those ones, the majority. But I mean, is that what makes me disabled? I don't know, I'm not quite sure. Interestingly, these questions and comments reflect the ideas developed within the social model of disability, although this student informed me that they were unaware of this particular theory.

Need to test accommodations

In addition to their participation in the "regular" learning that goes on in the university, disabled students also often have to learn about or develop their own accommodations in order to progress through their degrees. Testing accommodations or learning strategies to determine their usefulness or appropriateness for various situations takes time.

Student Francesca: So it just, it was like, just getting really ridiculous. And the more stuff I had to like pile on to like not be distracted, it was like, the more difficult it got. Because it was like I had to keep figuring out new solutions, which were then time consuming to figure out, and try out, and see if it worked.

The time required to test out accommodations often takes up time that students would otherwise spend staying on top of their coursework and testing requirements. One student spoke about their experience attempting to learn new computer software programs in order to complete an accommodated exam.

Student M.M.: Using, they were trying to get me to use the PCs here for the exam. It just didn't work out. You can't be trying to use new equipment. I mean even though I came a week before and tried several times, it wasn't, it wasn't wise.

These necessities essentially add another layer of work and learning to the workload arising from the courses that the student is taking.

6.6.10 Understanding the world around them

One final theme that is worth discussing is how the interviewed students understood the world more generally. The comments that make up this theme relate to sociological understandings of the world and to how one's experiences as a woman, gay person, or disabled person in some way inform one's understanding of the world. Students spoke about having to adjust to standards that they did not automatically fit into.

Student H.M.: I mean, from the very outset I had to adjust my life, and my ways, to the standard. I'm gay too, you know I have to comprehend life in a way where every single thing was not made for me to fit. Nothing... So yes. And I do not feel like I'm stupid. I became an A+ student towards the end. I, I mean, of course. Of course, it was not about me, it was about the [teaching] method.

Another student, a woman in her eighties, evoked the various reactions she experienced from young men and women who were enrolled in classes with her.

Student M.M.: Because what's nice, this is really neat. The different reactions of men and women... The women will come up behind me, put their hand out and say to me, you know, when I get to be your age, I want to be just like you.

Claire: Yes.

Student M.M.: The fellows will say, I was wondering if I should take this course, and I figured if you could take it, so could I. [Laughs]

Students' experiences of disability obviously affected their perspectives and what they saw as the barriers to their success in education. However, their experiences beyond disability—related to gender, sexuality, age, and other factors—also impacted how they understood their life experiences.

Student M.M.: So all this to say, I'm learning more about our society now that I'm at the end of life than I knew at the beginning. At the beginning I actually thought I could belong to it... How naïve.

6.7 Overall picture

The overall picture of accessibility at this library is no less complex and varied than that of the Ontario institution. While the library's strategy emphasizes the importance of accessibility of all its services, it is not clear that staff members who are developing and providing those services had been given ways to implement accessibility in practice. For example, librarians emphasized that while they had good intentions and a strong philosophy of service, they did not necessarily have the resources to implement certain services such as digitizing course reserve books.

Several librarians drew comparisons with the situation of libraries in Ontario. The library has put into place clear procedures for certain accommodations that it offers, such as those for the proxy borrower service. However, some librarians were still unfamiliar with the specifics of some of the other processes and accommodation options—or even their very existence.

Key considerations on the part of students had to do with study spaces and finding distraction-free areas so that they could concentrate. The primary use of the library as a place to study emerged in interviews, the survey, and internal library assessments such as various LibQUAL surveys. Other issues relate to a lack of awareness about what options might be available, the lack of browsability of the catalogue, and the difficulties of sharing spaces when other students' behaviour was disruptive.

7 Discussion

In this chapter, notable findings from the two provinces are discussed. The significance of the various themes that emerged in relation to the existing literature on disability theory, librarianship, and accessibility is also considered.

7.1 The experiences of disabled students

This section discusses various aspects of the student experience in attending university, and it seeks to begin addressing the research question of how disabled students experience academic library services by illustrating their experiences in university more broadly. How students understand their identity in relation to disability and their experiences of accessing accommodations are highlighted. Other important points relate to ideas of advocacy and the supplemental information that students provided to me in the course of our interviews.

7.1.1 Identifying as disabled

The students whom I spoke with in this study had varying reactions towards the term "disability." At times, they felt the term was needed to demonstrate their need for support. When considered in combination with the generally negative connotations that are attributed to "disability," it is not surprising that many students had mixed feelings about the term.

Student L.T.: How do I feel about it? [Sigh]. I don't know. I mean, I know I feel something about it. I don't think I've really formed kind of like my emotional connection to it yet.

Claire: Okay.

Student L.T.: I kind of, like the first time that I really realized that I was I think disabled was when I went to this recruitment event that they have here. And I

kind of like felt good about it, because it kind of gave me an advantage when I applied for jobs. So in that sense it feels good. But in the sense of, like being a disabled person, it sucks.

Another student reflected on how disability was often linked with considerations of ability.

Student W.L.: Um, it's a complicated feeling when I think about the term disability. I find that the term itself implies that people are unable to do a lot of things when just because someone is not able to do certain things doesn't mean that they're unable to do other things. Or even do other things better than what we consider the normal, based on the normal standards.

However, while there is increasingly a focus on the abilities of disabled individuals, there is simultaneously an emphasis on identifying as disabled in order to access support.

Student W.L.: It's strange because we tend to force people to use the term being disabled or living with disability to identify themselves in order to get supports or programs or... access to certain places, yet we keep telling them that they're able to do a lot of things. So there's always, there's internal tension about am I really able or disabled or... it's really weird tension.

Another student also focused on what disability meant with regards to abilities, suggesting that "disability" was an "*inaccurate term*."

Student B.R.: Disabled means that you are unable to do something. Um, but again, unable to do what? Many people can, are unable to do lots of things. I'm sure you can't do theoretical physics.

Claire: No.

Student B.R.: [Laughs]. Neither can I. Does that mean we're disabled in the area of theoretical physics?

One student suggested that disability refers to how "people are differently abled," a term which is perhaps used in an attempt not to reiterate the stigma that often accompanies disability. While another student suggested that this term was more accurate—as it does not emphasize what people cannot do, as disability does—they also suggested it was meaningless in some ways.

Student B.R.: Some people floated differently abled, which, much more accurate, but kind of soft because it can mean just about anything. So that's one of those catch 22 situations.

Some individuals may find "differently abled" to be more accurate or inclusive, but there are others who suggest that "although they may be considered well-meaning attempts to inflate the value of people with disabilities, they convey the boosterism and do-gooder mentality endemic to the paternalistic agencies that control many disabled people's lives" (Linton, 1998, p. 14). Linton (1998) goes on to suggest that these are "defensive and reactive terms rather than terms that advance a new agenda" (p. 15).

Nearly all of the student interviewees expressed confusion and mixed feelings about their emotions in identifying as disabled. Riddell and Weedon (2013) found similar mixed emotions in their exploration of how teacher education students in Scotland navigated identifying as disabled:

Recent research on the experiences of disabled undergraduates (Riddell, Tinklin, et al., 2005; Fuller et al., 2009) indicates that, even when an individual discloses a disability to the university in order to receive reasonable adjustments, there may remain some degree of reluctance to acknowledge disability as a key part of that individual's identity. This is in line with findings of researchers such as Watson (2002), who has argued that individuals with an impairment may choose to

identify as disabled for reasons associated with identity or administrative convenience, but may also choose to pass as normal in order to avoid discrimination and stigma. (Riddell & Weedon, 2013, p. 41)

While they suggest that many individuals will identify as disabled in postsecondary education, as there is an advantage to doing so with regards to bursaries and accommodation support, many disabled students subsequently choose not to disclose upon entering the workforce, as the disadvantages of doing so may in fact outweigh the advantages. Accommodations are increasingly put into place to support disabled individuals, but there nevertheless remains a element of stigma:

The idea of disability as stigma, as described by Goffman, still persists, making disability a shameful marker of physical or mental imperfection and consequently an unattractive identity for many people to accept. Counteracting this are the efforts of the disability movement to establish disability as a political category by promoting positive images of disabled people, drawing on discourses of difference rather than deficit and focusing on an individual's environment, rather than their impairment, as the direct cause of disability. Clearly, these competing discourses have knock-on effects in terms of the identity of those who either choose to be categorised as disabled or are categorised in this way by others. (Riddell & Weedon, 2013, pp. 45-46)

In addition to navigating various interpretations of disability and how it affects one's identity, several students brought up questions or comments about being the only one with a disability or a particular need. These discussions were used either to highlight that they were not the only student with a particular experience or to wonder whether perhaps they were the only one affected by it.

Student Francesca: And I don't know if I'm the only one being affected by the cubicles disappearing, I don't know. Maybe I am. I don't know.

Ultimately, these discussions demonstrate how experiences of being disabled can be internalized and lead people to feel that there is something wrong with them when they do not fit a societal standard. Several students emphasized that there was a small population of individuals with their particular impairment, or with a disability in general.

Student H.M.: But I mean, I'm not the only one. There are a few people like me. However, are we disabled? No, we might be unusual and incompatible to the standard. But that does not make us, uh, disabled, I think.

One student questioned whether these small populations warranted the funding that would be required to make the educational environment more accessible.

Student B.R.: And then it's still up to library staff how that budget is given away. And of course, disabled people, since we're only less than 10% of the population, we're on the bottom of the barrel. And that may seem like it's a bad thing. But we're only point... if it's 2000 people, and at 30,000 students. Should we be given this massive amount of funding?

Claire: Mmhmm.

Student B.R.: I'm torn on this, because I have my own needs. But then I look at the big picture, and I go...[Pause]. But then why do a token gesture if it's just going to be a token gesture?

"Disability" is a complicated term, and one whose definition changes regularly. How people identify with that term—that is, whether they do so on a purely administrative basis and with various caveats or in a more positive manner—is of course also complicated. There remains a great deal of stigma around disability, as well as notions that it impacts people in purely physical ways. Several students said that they did not personally identify as being disabled as they did not have physical impairments. One indicated the temporary nature of their disability, which was the result of a concussion. The visibility of disability also played an important role in how people identified, as most of the students interviewed could "pass" at least some of the time as nondisabled.

7.1.2 Going to university

In Canada, students with disabilities are provided a variety of accommodations in order to facilitate access to the educational environment. Hibbs and Pothier (2006) write that "accommodations can be conceptualized in two broad forms: accommodations within the general standard (i.e., flexibility for all), and accommodations by means of individual exceptions to the general standard" (p. 199). Accommodations often include extended time on exams and tests, extensions on coursework, or access to technological devices, such as audio recording equipment or laptops in lectures. All of these are examples of individual exceptions to the general standard. The process for accessing individualexception accommodations is not necessarily straightforward.

Depending upon the institution, the level of specific requirements documented within the assessment will vary. Often a diagnosis alone will not be sufficient to receive accommodations; additional information that may be required includes the type of learning disability, required accommodations from the postsecondary institution, and strategies to treat (Cox & Walsh, 1998). There are also considerable costs associated with learning disability assessments, with fees oftentimes exceeding \$3000 in some jurisdictions. Given the demand for this service, there are considerable wait times that vary from several weeks to several months before completion of testing. (Chambers, Bolton, & Sukhai, 2013, p. 55)

Once students have gone through the processes of acquiring documentation and registering with Disability Support Services, the accommodation process is not necessarily just in place and active. Jay Dolmage (2017) writes that "for most students who seek accommodations for our classes, they aren't allowed to know what the actual range of accommodations might be" (p. 90). In the interviews, it was clear that many students additionally negotiated directly with their instructors to receive extensions on their coursework or figure out how to successfully complete a lab component. This finding is supported by literature on disability in higher education (Dolmage, 2017; Mullins & Preyde, 2013). In other instances, students may also have to disclose disability in a situation where the instructor has banned laptops in lectures or tutorials. The need for this type of negotiation "inappropriately assumes that a balance of power exists (or can be made to exist) between the instructor and the disabled student with whom he or she is negotiating" (Hibbs & Pothier, 2006, p. 197).

On top of learning the course content required to progress successfully through a course and degree, students with disabilities often also have to use various assistive technology programs (software or hardware). However, being able to use these programs requires a process of learning as well:

When starting to use information technology (IT), everyone exerts a cognitive effort: the use of IT means learning to deal with specific equipment, understanding software logic and, finally, interacting with specific software applications or website interfaces. Additionally, users with disabilities often must learn how to use a technical aid and spend additional money to buy it. (Ballesteros, Ribera, Pascual, & Granollers, 2015, p. 583)

This requirement ultimately amounts to additional work that disabled individuals need to take part in. One student interviewee described their experience of trying to learn a new software program days before writing an accommodated exam and the difficulty of taking this work on.

Overall, the process of attending university as a disabled student is often timeconsuming, exhausting, and filled with bureaucratic and attitudinal barriers that must be navigated. Mullins and Preyde (2013) emphasize that navigating these barriers requires "an enormous amount of effort... This additional time commitment means that students with disabilities have to be organized and utilize good time-management skills" (p. 152). Several students whom I spoke with emphasized the need to schedule their lives around their accommodations or their impairment in various ways. Potential changes to an external schedule—such as reduced library hours—can have a profound effect on some students. For example, these changes at times affected when one student took medication to ensure they got the most out of it.

Student H.M.: But those days [when the library closed early], then I would actually have to know, I would have to subtract eight hours. Go back eight hours and then pop my pill. If the effect of the pill was eight hours, then I would have to count. Because at 11:00 pm, I have to be out of the library.

Support from volunteers, while appreciated, was also difficult to rely on. Students with disabilities did not necessarily feel that they were supported when they experienced last-minute needs of the kind that may arise from circumstances outside of their control.

Student W.L.: Cause having a disability, I feel like I have to plan my entire life, so sometimes when I just need to go and get something when I have the time. It's like, great, I can't wait a week for there to be a response ... a volunteer should meet me here at this time to help me with x, y, z. So I get that they're trying, but there's nothing to deal with those tough times where it's just like, I just need it now. Or I need it tomorrow. And it's like well you should have planned that. But sometimes things just come up. Someone brought their book back to the library finally and you really want to read that chapter before you finish your paper.

In addition to the requirement to plan ahead to receive accommodations, many students will also be grappling with the requirements of scheduling around their impairments themselves. Miserandino (2003), creator of the spoon theory, writes about

her experience of explaining to a friend what it was like living with chronic illness. She speaks of decisions about what clothes to wear, when and what to eat (and how this coincides with the need to take medication), which activities to partake in and how this will affect whether one has the energy to do other activities, and how to ensure that one does not overextend oneself (Miserandino, 2003). For some students, all of these decisions will need to be made on top of planning access to accommodations or doing work before the effects of a medication ware off. Miserandino (2003) speaks of life with chronic illness versus life without in terms of luxury:

I explained that the difference in being sick and being healthy is having to make choices or to consciously think about things when the rest of the world doesn't have to. The healthy have the luxury of a life without choices, a gift most people take for granted.

Two students also framed some of their academic needs as a luxury and said that they had not had these luxuries in their educational experiences.

Student W.L.: The access lab was the thing that pissed me off the most. That sort of had me ranting and raving because it's supposed to be a space where I can go do my work and have access to printers and what not, but I didn't have that kind of luxury. I think everything wasn't working.

The idea that students would refer to having working technology or the ability to concentrate when needed as a luxury demonstrates that these experiences are taken for granted by other students. Titchkosky (2011) too stresses that the accommodations used by most students (and faculty) go unnoticed:

The dis-education of the sensorium includes a way to sense and make sensible the legitimate participants with their legitimated "normal" accommodation expenses: lighting, chairs, technology, privacy, directional signs, pleasing eyescapes, and of course, a place to pee. Legitimate participants rarely, if ever,

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confront access as a question since they can take for granted the "normal" education of the sensorium to expect a massive infrastructure of and for able-ist consumption and use. (p. 83)

While all students have to make choices in terms of classes, scheduling and priorities, and extra-curricular activities amongst other things, many disabled students also have the added burden of decided when and where to spend their time and energy—for some, very limited energy—to plan access to the resources that their non-disabled counterparts do not need to think about because their required accommodations are automatically provided.

7.1.3 Progress

Hannam-Swain (2018) writes about her experiences as a disabled PhD student in the U.K. One of the issues that she discusses is how waiting for accommodations affected her time, and what happened when these accommodations fell through:

The problem with these [automatic door openers] is, as with all technology, they fail and it seems these fail pretty often. I lost about a month of PhD time at the start waiting for these to be fitted, and since then because they have broken down suddenly, I have had to go back home and write off numerous days due to it being unsafe for me to be in a room alone which I was not able to exit. (p. 139)

Several students mentioned experiences of waiting for accommodations, which perhaps came into place only at the end of a semester as they were finishing a course. In one instance, a bathroom needed an automatic door opener.

Student B.R.: I requested that in September. They managed to get that by December. When a semester is four months, a four month turnaround time on accommodating someone from request to action, does not help. Every student whom I spoke with had had their timeline of studies affected in some way, whether this took the form of their taking time off from studies, registering as incomplete while they finished coursework after the end of term, or registering as full-time with a part-time course load. Knight, Wessel, and Markle (2018) note that it is common for disabled students to take a longer than average time to complete their degrees, a fact which is certainly supported by this study.

Two students spoke of their experiences of not being diagnosed with a learning disability when they first attempted to complete a degree. In one instance, this entailed the student dropping out of several programs, while in the other it meant the student took nine years to complete their degree. In both of these instances, this seemed to have some stigmatizing effects on the students themselves, whether that was in the emphasis they put on the successful completion of their degree or in their comments that this degree had been worthless.

Similar to Hannam-Swain's (2018) experience, students whom I spoke with mentioned library elevators or automatic entry doors that were frequently broken, or even the issue of the automatic doors being blocked by construction or vehicles. Not all of these have had the longer-term effects of a student needing to prolong their studies. Nevertheless, they do affect students in the moment. One student emphasized that the library's response to an automatic door being blocked was that it was just temporary, and stressed "*But it's still me trying to get into the library*." Experiencing broken doors or elevators becomes more complicated when the individual in question has an invisible disability, as information about alternative access routes is less likely to be provided. If the student is required to speak with security or other personnel for access to this alternative route, this raises yet another layer of complication, as this once again requires disclosure to an audience who may or may not take the student's needs seriously and provide support.

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7.1.4 Advocacy

Advocacy is a key consideration with regards to combatting ableism—and other forms of discrimination—in all arenas. Self-advocacy is often highlighted as being necessary for students to receive the support they need to successfully navigate the university environment: "College SWD [Students with Disabilities] must learn to disclose their disabilities and advocate for themselves, a role often previously fulfilled by others" (Knight, Wessel, & Markle, 2018, p. 365). Test, Fowler, Wood, Brewer, and Eddy (2005) suggest that "self-advocacy is a concept and skill associated with self-determination (Field, 1996)" and that this skill has knock-on effects after graduation (p. 43). However, they also suggest that "skills and opportunities to self-advocate are frequently not included in the instruction of students with disabilities" (Test et al., 2005, p. 43).

In this study, several library staff members acknowledged that students needed to selfadvocate in asking for accommodations or working with librarians to address accessibility in the library overall. Two librarians suggested that if students advocated more for their needs, this would be helpful to the library in order to understand what those needs were.

Librarian T.R.: As I said [name], he's very outspoken. And I think we need more of that. I can advocate for the students but until students advocate for themselves... I feel like they might think it's obvious that they shouldn't have to, that it's obvious that they need better service... I think it would help if they advocated strongly... Because they need to get their voices out there. But how can we help that too? Like how can we help them get their voices out there?

Claire: Do you think that there are reasons that students are not advocating strongly?

Librarian T.R.: I don't know. I think that's probably a personal... They already feel like they need help and they don't want to point it out I guess? I think that's a personal thing... I think it would help the university listen. More effectively.

And in another exchange:

Librarian S.H.: There are probably things we could be doing that we don't know about, and things that students haven't asked for, because, it doesn't occur to them that we might be able to help them.

Claire: Yes. Do you have any sense of maybe why students don't want to go to [Disability Support Services]? And you know, take advantage of some of the services that are available?

Librarian S.H.: Probably just pride... Don't want to ask for help.

Certainly there are times where disabled students do not want to ask for help, as is demonstrated by some of the students' comments in the interviews. Students suggested that the arduous process for seeking support, or even just their feeling unwell at times, were key reasons why they might not seek out support in a given situation.

Student W.L.: It's hard because the things I might need help with, there's so much documentation to go along with it and sometimes it's just not having the energy to do it. And it's not the same people. Like if I wanted books to be picked up on campus, great, but I'm not too sure how it works. I think there's just a form to fill out to say this person can do it. But when it's a volunteer thing where any volunteer can show up, it's just like great. So I have to come in to fill out paperwork. And it just becomes another process or the delay in the paperwork getting there, or delays in... getting the stuff I need to do.

Embarrassment, which is arguably linked to pride in many ways, was another reason given by one student for not wanting to ask for access to an elevator.

Student L.T.: And sometimes they block it off, like at night. I know that they say that you can ask for permission. But it's like, you know, first of all some people feel embarrassed. Second of all, it shouldn't really be blocked off, in my opinion.

Gabel and Miskovic (2014) suggest that these types of response are not unusual:

Finally, some students are reluctant to seek support because they are struggling with a new disability identity or perhaps are uncomfortable with the new ways in which they are valued or devalued. Discomfort can serve as a barrier that prevents students from seeking needed support. (p. 1152)

Students' approaches to and engagement with advocacy are a complicated matter, and there are many factors that affect whether and to what degree a student advocates for their needs. One of these may be exhaustion with the process—that is, "the 'wearing out' of the experience of seeking accommodations, something Annika Konrad calls 'access fatigue'" (Dolmage, 2017, p. 93). It is interesting that several librarians suggested that students need to advocate for themselves more to create a more accessible university environment and to help the university listen. Students who register with Disability Support Services at the institution are in some ways advocating for themselves, whether advocacy is necessarily their intention or not. However, in this act, they are also ascribing to an individual, medicalized understanding of disability:

The onus is placed on the student to initiate and maintain accommodations on their own behalf. Individualized approaches, then, are seen to preclude proactive practices on the part of the university, and to add to its reputation as rather passive and reactive (Kraus, 2008). Finally, operating within the biomedical model often places the student in an "adversarial position" (Devlin & Pothier, 2006, p. 197), in that their educational and vocational goals could be compromised if they do not self-identify as disabled or provide the required documentation. As such, individuals are required to align with the institutionalized biomedical understanding regardless of the beliefs they hold about themselves (Devlin & Pothier, 2006). (Hutcheon & Wolbring, 2012, p. 46)

I would argue that students are keen to advocate for themselves when given the opportunity. Nearly all of the students whom I spoke with emphasized the importance of this study or in some way mentioned why they had chosen to take part.

Student B.R.: Speaking about it, and activities like this, can change things greatly.

Another said that taking part in this study gave them the opportunity to voice their opinion about their experiences. Several others stated that they hoped their participation could help future students. For another, the study represented a way to express their feelings and experiences in accessing spaces in the library.

Student L.T.: It's kind of like a complaint that I have, right. That's why this research for me was interesting because it was like a way for me to voice how I feel about the seating.

I have not included these comments in an attempt to inflate the importance or scope of my findings. Rather, it is to emphasize how seldom it is that disabled students—and disabled individuals in general—are asked about their experiences and for their opinions in relation to matters that primarily concern them. In a discussion on what constitutes or does not constitute disability studies, Linton (1998b) emphasizes "the absence of subjectivity and agency of disabled people" (p. 526) in both applied fields—such as occupational therapy—and liberal arts through the general omission of their voices and perspectives. She argues that "scholars of all stripes must recognize their moral and intellectual obligation to evaluate the gaps and faults in the knowledge base they disseminate to students which are a result of the missing voices of disabled people" (Linton, 1998b, p. 531). Although librarians emphasized the need for students to speak up and voice what their needs are, there did not seem to be active solicitation of these ideas within the two library systems, and nor was there a clear engagement in

conversations directly with these students about what would be beneficial to them. Suggesting that disabled students should advocate but not actively working towards creating safe spaces to foster these conversations is problematic, to say the least. This advocacy requires disclosure of a disability, which is both a very personal and often negative experience for disabled people. The requirement for someone to disclose an impairment to obtain a service ultimately takes away their choice as to whether they want to disclose, and we need to recognize that this may well put someone in a difficult, uncomfortable, and vulnerable position.

7.1.5 Other stories and information

One final component worth mentioning here is that several students told me stories or recounted experiences that they did not want included in the study transcripts. It would be easy to just gloss over these, but they are important because they speak to the lengths to which some students have to go to in order to get through their academic degrees, lengths that students who are able to study in any location and access any text do not have to take. I should emphasize that the stories did not include illegal activities or acts that would violate academic regulations at the universities, but they did indicate that students at times had to take drastic measures in order to complete their degrees.

In addition to these stories, students also shared additional documentation such as letters and email communications with me. These were unsolicited on my part, but again, the fact that students wanted to share them perhaps demonstrates that they do indeed want to share their experiences. Several students also emphasized that they hoped the study would have positive effects on future students.

Student T.S.: So I'm glad that I had the opportunity to participate. And I hope that it helps with making things better for students.

I would argue that students are indeed advocating for themselves when given opportunities, but they often lack forums in which to do so.

7.2 Taking up space and belonging

This section continues to address how university students experience library services and whether they are supported in their academic pursuits. The section also touches on the research question of what disabled students think the main obstacles in providing a more accessible library service are. The discussion relates to students' use of the library, and whether they feel that the library is a place where their needs are considered or not, or in other words whether they belong in this space. The idea of belonging, sometimes expressed as "having a place at the table," is oftentimes brought up in relation to race and representation. For example, Nicole Cooke (2014) recounts her experience as a pre-tenure faculty member in the U.S.: "Metaphorically speaking, I had earned a seat at the table... In higher education having a seat at the table is important, and especially significant for minority faculty as it portends some level of achievement and hopefully equality" (p. 39). Conversations about being at the table touch on people's right to be present, to speak, and to be heard, although the reality of making it to the table does not mean these things necessarily follow (Cooke, 2014; Hathcock, 2015). This idea of having a right to be present came up in the course of interviews in this study at times, although not always in relation to disability.

Librarian K.B.: I was reading Twitter today about AHCRL and the keynote speaker April Hathcock having a conversation, where April's like "I'm just here cause I'm black. And I want to say I have a right to be here." And I'm like fuck yeah, April. You should.

This right to be present is also embodied in notions of access. Titchkosky (2011) writes that,

Access, then, is tied to the social organization of participation, even to belonging. Access not only needs to be sought out and fought for, legally secured, physically measured, and politically protected, it also needs to be understood—as a complex form of perception that organizes social-political relations between people in social space. (p. 4).

Interestingly, Titchkosky stresses that access needs to be fought for and protected. It is worth considering how individuals who fight for that access understand their own right to be present, and how this may in turn affect their sense of belonging. Mullins and Preyde (2013) describe students' experiences of hearing "comments that students with their [invisible] disabilities did not belong at university" (p. 154). Goodley (2014) also writes about the presence of disability in education, and how it can force educators to examine their own failures:

Disability demands humility on the part of educators in terms of what they are trying to achieve in educational settings. The presence of disability provokes a reconsideration of ableist education. Education's obsessive relationship with academic standards and school performativity becomes destabilised or cripped by disability. Pedagogies are found lacking and educational settings are revealed to be horribly instrumental. Disability exposes the failings of educational institutions that still, after years of disability advocacy and activism, fail to anticipate their responsibilities to a wide body of students and to the varied bodies of individual learners. Being surrounded by such failings – and our candid appreciation of their failings – provokes action. One of these, stealing from Tanya Titchkosky (2012b), is evacuation: leave the institution! And only re-enter if and when the institution has changed for the better. (p. 104)

In the case of physical disabilities, this right to be present and to take up space can be further complicated by the fact that someone with a disability may need more physical space than an individual without a disability will.

Librarian L.R.: And I have also heard, students and staff talk about the buses. Like they're really challenged by the buses. That there's no room for them on the buses when they're in their wheelchairs. They feel really guilty taking up so much room.

This experience of taking up space can be especially complicated when there is no suitable space, as well as when there is a competition for available spaces. For instance, several librarians and a student pointed out that there were no spaces in the library for using dictation software such as Dragon Naturally Speaking.

Student B.R.: Um, the majority of study spaces provided to students are either open air, which means I cannot use my Dragon in a conversation friendly zone in the university. Because the other voices that are similar to mine would confuse my voice recognition.

Claire: Yep.

Student B.R.: And I obviously can't go into a quiet study zone and use voice recognition in a common area, because then I would be speaking. So, which limits me to the private study rooms.

Claire: Okay.

Student B.R.: And in the normal group private study rooms, the desks either, are slightly too low, because they're made for normal chairs. Or they're all booked by student groups, and ethically speaking, me as a one person taking group study room, is an issue.

I will not speculate as to the characteristics of this student's sense of belonging and right to be present, but I will emphasize that it is the student who is put into this uncomfortable situation even though it is it design of spaces that creates the problem.

7.2.1 Library as place

As the various LibQUAL and internal library surveys, this dissertation's survey and student interviews, and the LIS literature all indicate, students mainly use the library as a space in which to study.

Student A.C.: Cause it's like uh, predetermine your mindset. I'm going to the library. What do you do at the library. You study.

This predominant use is complicated when students are not able to access the space in meaningful ways. There are few areas of most universities that in practice fulfil the roles of the library in terms of provision of space for all users, spaces that feature appropriate technologies, and spaces in which to work individually or in groups.

7.2.1.1 Spaces and getting around

Various considerations about accessibility arose in the course of the interviews with both students and librarians, and many of these related to the physical spaces of the library. Elevators and doorways were key themes, especially for students who experienced barriers when these were out of order. One librarian in Québec suggested that the elevators were *"fairly reliable,"* but the significant impact on students when these services were broken was nevertheless undisputable. Several librarians also emphasized that automatic doors and elevators tended to break and suggested that the campus was slow to react in addressing these issues.

Seating options represent another important theme for students. Several students indicated that their library had limited furniture that they could use without experiencing pain and that this state of affairs reduced the likelihood that they would be able to work in the library at all.

Student C.M.: I can't sit in those chairs long term. After about 20 minutes, the pain kind of kicks in. So it's like why would I go to the library and torture myself?

Online library accessibility information at the two universities studied provides details on adaptive technology—sometimes with specifications of its locations also provided and other facilities such as elevators. Maps and floor plans are available on other areas of the library websites. Although permitted noise levels for different zones (e.g., silent zone, quiet zone, conversation zone) are indicated on these maps, there is a lack of further information about how students can find areas where they can limit the environmental distractions around them. Several students also indicated how the behaviour of others who were using social media or socializing had severe effects on their ability to concentrate.

7.2.1.2 Bathrooms

Accessible bathrooms were raised by both students and librarians in this study. One particularly difficult exchange during the interviews came when a librarian relayed the story of a student being trapped in one of the library bathrooms.

Librarian L.R.: We certainly do not have accessible bathrooms. They have some accessible features but they, they would not be what I would call accessible. We've had someone in a scooter, last year, who couldn't get out of the bathroom and had to yell until the security guard heard her because there's no buttons to push, and her scooter, she couldn't reach the door and get the scooter out. We've had just people having, not being able to use the bathrooms.

The issue of bathrooms presents various complications for students. These include whether they are barrier free or merely wheelchair accessible; whether a code is needed to enter and whether students receive this code automatically or only at the time they realize it is required; whether other students have access and use this space to study in because of limited space in other areas of the library; and whether facilities in the washroom—sinks, mirrors, stall locks—are easily manipulated and positioned at an appropriate height.

Ultimately, these factors determine whether some individuals can stay and use the library as a place in which to study and do their work or whether the library can be for them nothing more than a place that houses books. Budgets are a key consideration here, as barrier-free washrooms require automatic doors, and they also occupy more physical space than washrooms with multiple stalls do.

At one of the institutions studied, the body responsible for campus facilities seems to have taken the position that the existence of a barrier-free washroom near to the library was an adequate solution for students who required such a facility:

Librarian L.R.: We've talked about it to the campus, their response has been, there is an accessible bathroom in the front of [the building] in the new section, so anybody in the library who needs accessibility can go use that bathroom. So that's where we are with bathrooms. [laughs].

As Titchkosky (2011) points out, this type of justification "paints the radical lack of access in an ordinary hue, which glosses the issue of human rights, questions of belonging, and other consequences that accompany the power to exclude" (p. 77). She goes on to say,

In the round of everyday life, and in places where people come to notice that there are barriers preventing the participation of some, comments about such exclusions erupt. "Justification" is one dominant type of comment... the washrooms remain as what is—inaccessible. (Titchkosky, 2011, pp. 76-77)

7.2.2 Sharing the space

One of the complications of meeting users' needs in the library is that demand often outstrips supply, whether it be with regards to facilities, collections, or other resources. Students in Ontario stressed the competition for private study rooms and suggested that in response to it, students had developed the strategy of borrowing a key at a time that meant that they would have the room for the evening rather than just for a couple of hours. In Québec, the busyness of the library made some users feel that they were unable to find quiet spaces where they could work comfortably.

Moreover, sometimes the needs of a user came in direct conflict with those of others. This aspect of competing needs emerged in conversations about the disruptiveness of the behaviour of other students, for example in their use of social media. It also emerged from one student's experience of not being able to use their accessibility software, Dragon Naturally Speaking, in the library. Library spaces were either quiet areas, where the student would be disrupting others, or conversation friendly, where the noise from others would immobilize the software. Interestingly, when librarians raised the issue of a lack of suitable spaces for someone to use this software in, they emphasized *either* the disturbance to other students in quiet areas *or* the functional problems of using the software program in louder areas, but not both. This difficulty does not only emerge in the case of using accessibility software. Another student said that conversation-friendly zones of the library and even quiet ones were too noisy for them to be able to concentrate there. However, they found it helpful to recite terms back to themselves, which would disturb other students if they were to work in silent areas.

Within the various LibQUAL surveys, and also in the interviews, the need for quiet space for individual study was underscored on multiple occasions. At the same time, academic library planners tend these days to opt for information-commons environments in which collaborative spaces predominate:

As collections shift to digital formats, space that was once devoted to physical collections is freed up and use of that space becomes an issue. Academic libraries take up a lot of real estate, and they must justify the use of that space or risk losing it. As such, it makes sense for academic libraries to make physical space a priority and to align the development and use of the space with

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institutional mission and goals (Matthews & Walton, 2014). The rise of the learning or information commons is one manifestation of the library's attempt to redefine space around teaching and learning goals, rather than collection warehousing. (Saunders, 2015, p. 289)

Gayton (2008) suggests that many academic libraries are increasingly focused on developing social spaces. These include spaces for "social functions and services like cafés, art galleries, group study facilities, and info commons creates spaces and models of behavior that are open to conversation and cooperative work" (Gayton, 2008, p. 60). However, the development of these spaces comes at the expense of spaces where individuals can work independently but alongside each other. The emergence of social spaces in the library emerged in the libraries' LibQUAL surveys, as well as in the interviews and surveys from my study.

Student A.C.: I don't know why libraries think that open spaces is like a smart idea for studying for students.

Claire: Okay.

Student A.C.: Cause like everywhere in a library is open space. I wouldn't need like a special room if there was more of like, I don't know.... But it's just strange to me that everything is open when you go through a library. And even quiet spaces, it's like, it's not that quiet. I don't know. So I don't, I would find it very challenging if I wasn't a registered student with disabilities to study.

7.2.3 A communal space and welcoming environment

A key goal for many individuals working in libraries is to provide welcoming spaces for users. One librarian interviewee suggested that "*we want welcoming, useful, appropriate spaces for all students. That are accommodating for all.*" The importance of welcoming spaces in academic libraries is partly because libraries ought to be the places on campus where community members, students especially, feel the most free to talk about difficult topics, to express and explore the full range of opinions and ideas on the highly charged topics that are part of their social world. For many students, college is a time when they are forming and reforming their identities, and they need spaces where it is safe to try on opinions and ideas and feelings about the world and their place in it. (Bourg, 2016)

One important component to the development of a welcoming environment is safety. In Ontario, one of the librarians raised the use of security guards at night, which enabled the library to remain open as a study space for longer periods.

Librarian L.R.: We don't have staff in the library evenings and weekends. We stay open quite late. Midnight, sometimes past midnight. So the library hired security guards, and the library pays for that. So that there is a security guard present, so that people... So that women, or people that feel vulnerable, they can use the space. They have equal use of that space... So I feel like that was an attempt by [the library] to make the spaces available more equally to everybody. Um, so that they would feel safe. So that seems to work quite well for us. Because we didn't have the resources to keep staff, a full staff here for 24/7. This is a way that lets us to sort of make it a safe spot. And we do have a lot of students tell us they do feel safe here.

Importantly in this instance, students are stressing that they do feel safe in the space. Feelings of safety are at times affected by one's gender. Applegate (2009) suggests in an examination of study space at an American university that there were some gendered differences in what areas of the library people chose to work: "The 'soft chair' area is a somewhat secluded, separate room. It is seldom used for groups, and it is possible that individual women may prefer a more visible area" (p. 343-344).

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The use of security guards certainly allows some individuals to feel safe in the space, particularly in the evening. However, it is worth questioning whether the opposite is also true at times. Although it did not come up in interviews with regards to security, one librarian noted that students come from a wide variety of cultures and experiences.

Librarian C.W.: Also, we have students from all over the world, lots of different backgrounds. So, yeah, I guess formal institutions mean different things to them.

There is a potential risk of some students feeling unsafe with security present, for example due to previous experiences with police or other institutional authority, an experience that disproportionately affects those with mental illness or disability (Segrave, Spivakovsky, & Eriksson, 2017). Students may also feel unsafe due to racial profiling through which "law enforcement or security officials, consciously or unconsciously, subject individuals at any location to heightened scrutiny based solely or in part on race, ethnicity, Aboriginality, place of origin, ancestry, or religion, or on stereotypes associated with any of these factors" (Tanovich, 2009, p. 157). Racial profiling was not raised in any interviews in this study, and nor did any students express concerns over the security guards present. In fact, one student suggested more security would be beneficial to mitigate the chances of theft in the library. However, taking it for granted that security personnel will make people feel safe is perhaps emblematic of the whiteness of librarianship.

7.3 Library collections and access

Access to library collections is a key component of accessibility in libraries, as collections are one of the main characteristics of the academic library. Both institutions characterize their collections as being among their main strengths, and they also emphasize the importance of collections in supporting students and faculty in teaching, learning, and research. This section thus address research questions of whether policies for an accessible library are supported in practice, as well as of how disability is understood in libraries. A focus on specific services or resources—for example, providing accessible resources for individuals with visual impairments—provides insight as to who librarians are considering as disabled and needing support, as well as who they are not considering. Additionally, this section provides insight into the impact that policies—often influenced by legislation—have on library services. The impact of policy on collections and access is perhaps most obvious because these resources are the most tangible service that libraries provide.

7.3.1 Webpage and catalogue usability

How users access services and the catalogue are important considerations for library accessibility. Kowalsky and Woodruff (2017) suggest that online chat facilities provide a quick and easy method for users to get the information that they need: "The relative anonymity of some libraries' chat services is an attractive option that often levels the playing field for users when communicating online" (p. 161). Several students did say that they appreciated this service, as they received answers quickly and without needing to go to the front desk, something which could be particularly beneficial for individuals with mobility impairments or anxiety. However, the online chat features are not necessarily compatible with some assistive technologies. One student was not able to use this feature even though it would have been useful for this reason. In this instance, chat features provide only some users with a convenient method of communication, while others will need to continue to go to a service desk.

Another issue that arose in student interviews was the inability to browse for e-books in the library catalogue at one institution.

Student M.M.: I come and I say to them, how can I get into the e-books just so I can see what's there.

Claire: Yep.

Student M.M.: No, they say. You can't do that. Our library is made, if you want something, you have to tell me what you want, and then you'll go and get it.

This requirement removes the possibility of serendipity from the search process for users with visual impairments. This student suggested that alphabetical order of results would be helpful for this process. Although this type of ordering may not be useful for all students, including an option to sort items alphabetically would be beneficial for some.

7.3.2 Books and digital resources

One might assume that a key reason for using the library is to access printed books, but this use was not necessarily the case for people involved in this study. As I highlighted previously, many students in fact make use of the library primarily as a place in which to study and do their coursework. This use is in line with various research studies, which find that students "come to the library to use the quiet study space" (K. Hall & Kapa, 2015, p. 11).

Several students not only indicated that they use the library more as a workspace than as an access point for printed resources but also stated that they often found digital resources to be more useful than print ones because the former are published more quickly, which is an important consideration when a student needs the most up-to-date materials. For some, digital materials were necessary, as the students were unable to retrieve or manipulate print books. The rise of digital resources also brings up questions about the function of libraries themselves:

Because the electronic availability of journals and books is only going to increase, at some point patrons may never have to enter academic libraries to make use of their collections. This notion has led some to claim that the academic library is all but dead. (Gayton, 2008, p. 61) Gayton (2008) goes on to discuss how academic libraries are working to create communal or social spaces where students and other users can study individually or in groups for extended periods of time: "Academic library patrons continue to see value in communal library spaces that facilitate serious study" (p. 63). However, if these spaces are not accessible to some students—because there is no accessible washroom, for example—then the library, for all intents and purposes, is useless to them.

Student B.R.: Um, it's a library. In the 21st century, books are, um... dusty things. That are a relic of the past. I personally don't think libraries will last, for very much longer to be honest with you. I think they'll become a server. [Laughs] Located in a room with a bunch of computers... It'll be a computer lab, not a library. [Laughs]

7.3.3 Digitization

The digitization of texts is another important theme arising in this study. Obviously, digital texts at times are much more accessible to users than are print texts, because they can be accessed both remotely and with a variety of accessibility software such as screen readers. The CFLA emphasizes that alternative formats should be a collection priority for libraries, as should providing access to assistive devices and creating accessible websites. Importantly, they also highlight that "where accessible formats are not readily available, procurement decisions should be documented and continency plans developed as to how accessible formats can be secured to accommodate a patron request" (Canadian Federation of Library Associations, 2016). One method to achieve this goal is through digitization of print resources, a process that is permissible under Canada's adherence to the Marrakesh Treaty (Government of Canada, 2016).

In these two institutions, the digitizing process takes place in the library or in DSS, depending on staffing, facilities, and workflows. It is important to question to what degree accessibility procedures are included in the digitization process. Thompson

(2009) observes that while "it would seem that electronic document distribution is clearly advantageous for patrons with disabilities... library documents are often delivered in formats that are inaccessible to the assistive technologies used by the individuals described above" (p. 296). Creating an accessible document as a PDF, a commonly used format for document delivery services, entails several steps, and these can be time consuming (Thompson, 2009).

At the Ontario institution, digitization of texts is completed in-house in the library. This digitization occurs in two contexts. The first is an article delivery service, through which a user can make a request for a journal article or chapter of a book to be digitized and delivered via email. This service is not designed specifically to address accessibility, but texts that are digitized under this service go through a level of OCR formatting. These texts are then entered into a database, and if an accessible format was requested by the user, they undergo a further level of tagging. This tagging process is less time consuming when it is undertaken at this later point, as the texts have already undergone OCR formatting. The second instance is when a request for an accessible text comes through. In this case, the text is digitized and converted to an OCR format in house. Additionally, as this institution has membership status with the ACE Portal, any accessible items can first be requested here. Eligible students who are registered with DSS receive a token for ACE, and they can check item availability on their own. Both the clear digitization process and development of the ACE Portal program are directly linked to the accessibility legislation in Ontario, which mandates that educational institutions must "provide educational or training resources or materials in an accessible format" (Accessibility for Ontarians with Disabilities Act, 2005). In fact, these initiatives demonstrate the most obvious impact of the AODA on this academic library.

In Québec, the process is slightly more complicated. The library has facilities to digitize materials, but it is not clear whether they have the facilities to add OCR or other tagging, as several librarians were unsure about whether this step was taken. In practice,

students are required to take books to DSS, who will do the scanning and add an OCR layer. There is also an article delivery service at this library. Journal articles or book chapters are digitized and delivered via email. As I stated, it was unclear from the interviews whether these items were formatted with OCR in the library. If this process does not happen, DSS *can* do this work for students, although some students may be aware of OCR-formatting processes that they can perform on their own. There is currently no equivalent to the ACE Portal in Québec. The lack of clear digitization processes at this library are likely related to the less developed legislation in this province and in turn demonstrate the primary strength of the AODA in Ontario.

It would seem that steps are being taken to increase the accessibility of digitized texts at these institutions. However, as Falloon (2016) emphasizes, "Digital does not automatically mean accessible" (p. 14). Students indicated the validity of this point when they informed me that they have experienced issues accessing these documents.

Claire: Yep. Okay. And um, what has been your experience getting something that is inaccessible put into an accessible...

Student B.R.: I'm on my own.

Claire: Okay.

Student B.R.: There is a service that you can but it takes two, three weeks. You submit something and it takes two to three weeks, sometimes a month to process. And then, it comes out in a couple of different common formats. Kurzweil PDF. But then sometimes the person who's making the PDF will then copy lock the PDF because the software that they normally use to turn things into digital copy might be set up to do that. Because certain publishers want it that way. And then, even though I've got it in a supposedly accessible format, I have to then go off and do something else to it to actually be able to use it. This student emphasized that they regularly experienced these issues in accessing digital documents.

Student B.R.: And if you're going through that many, I would say, a third of them, have problems in some way. Either they're not OCRed, or they're copy locked. Or they're OCR and copy locked. Or they're a bad photocopy of a bad photocopy. Or... there's three dozen other ways.

In addition to digitizing materials, librarians have a key role to play in acquiring accessible e-content from external vendors.

Librarian P.Y.: Yeah. And I think, I think what's missing there, is we do have a lot of e-content that we're trying to do. Like e-books and we're starting to try to go to that angle, but I don't know... [Sigh]. In terms of the usability of those econtent platforms. I don't know which one is better. Should we be looking at a few of those to make recommendations to be like when you have the choice between this platform, this platform, and this platform, this platform is better?

Claire: Mmhmm.

Librarian P.Y.: And I mean, and that goes not just for like visual impairments, but like if people need the PDF because they can't read because of the information processing. And need something. I think that needs to be looked at.

Again, it should not be assumed that digital resources will be accessible. Falloon (2016) argues that "e-resource workflows need to be redesigned to include the additional step of evaluating the accessibility, not just the usability, of the product or service" (p. 1). One potential strategy to increase knowledge of how to assess whether content is accessible is to develop knowledge about creating accessible content: "In essence, if a librarian knows how to create accessible content, then evaluating vendor-created

content based on the same principles is more effortless and understandable" (Falloon, 2016, p. 4).

7.3.4 Workarounds

Students at both institutions recounted how they had ultimately developed a number of workarounds to access resources and services that they needed at university. The workaround strategies included using technological skills to break through restrictions such as locked PDFs, making do with what is available rather than focusing on what would be better, and getting others—for instance, librarians—to do tasks such as finding articles on a topic.

At times, students' workarounds had a financial impact on them, especially when it came to accessing course texts. Many university libraries have begun to buy copies of textbooks and course packs and place these on reserve to help mitigate the rising cost of textbooks (DeMartini, Marshall, & Chew, 2018; Pollitz, Christie, & Middleton, 2009). DeMartini, Marshall, and Chew (2018) suggest that not all librarians support such practices:

Beck reports that while some librarians believe that it is "outrageous" and "unfair" for students to rely on their libraries for help with their textbooks, other librarians feel that it is a demand that needs to be met, especially for those who cannot afford to purchase textbooks. (p. 238)

Although this service addresses financial access for many students, several interviewed students suggested that they were unable to use course reserves for a number of reasons. These included an inability to sit on library chairs for two to three hours to use the reserve and the additional work involved in organizing their schedules so that they could borrow items for such a short period of time. In these cases, a workaround was to buy copies of these texts rather than using the course reserves.

7.4 Librarians with good intentions

This section relates to how those working in academic libraries understand disability and whether this understanding of disability has an effect on the services provided. It also begins to shed light on what library staff consider to be the main obstacles in creating more accessible library services and how these obstacles impact the actual services they can provide. This section highlights that the librarian interviewees approach their work with a strong mandate of service and a strong desire to support library users. However, while they have positive intentions, there are also barriers to providing support and accommodations in practice.

7.4.1 Culture of being a helper profession

Librarians emphasized their professional values and expressed a belief that librarianship is overall a "helper profession," meaning that they wanted to help students with their needs and wanted them to come back. Kumbier and Starkey (2016) suggest that "there is evidence that library workers mean well and that they try to work within the existing frameworks for understanding disability (as a problem) to provide services to users" (p. 478). Jaeger (2018) suggests that librarians do not just conduct information work: "We provide information, we promote inclusion and equity, and we foster rights" (p. 60). Based on the student interviews, as well as on the LibQUAL surveys at both institutions, it seems that librarians are indeed seen as being helpful and friendly and a valuable resource for students who make use of their services.

Claire: Can you tell me about your experiences interacting with staff at the libraries?

Student B.R.: Oh it's been great. Um, that's the one area that, everybody has no problem.

Claire: Okay.

Student B.R.: People see the problem, and they're wonderful help. Um, I've never had an issue.

Tied to the perspective that librarians are helpers was the emphasis placed on the viewpoint that librarians would always try to informally accommodate at the point of need if and when a student approached them for help. There is certainly a strong willingness to work with disabled students to ensure that their needs are met.

Librarian T.R.: I mean if there was a request, yeah, we would try to make that happen. It would just depend on the individual request, whether it would be to come to me or whether I could go to [name] and see what they can do. Or ask for advice that way. But for the most part, we don't get asked that much. They use the rooms quite, they're very highly used. So that's good. But yeah, we don't get too many, too many requests.

The willingness of librarians to help and to work out accommodations when needed is an essential ingredient in the creation of accessible services at the point of need. Nevertheless, it is certainly worth considering why students are not necessarily making requests for further services, and how this impacts on their use of the library.

Students' comments overall supported the idea that library staff were supportive and helpful in general. Several student interviewees had interacted with staff members in various ways—in person, through online chat, and in workshop settings—and had received helpful information that fulfilled their needs in that moment. Much of this information was related to wayfinding, hours of operation, and other logistical topics such as printing support.

Only a few of the students had attended workshops led by library staff. Those who did found these to be generally useful, although not always immediately relevant given where they were in their studies. Providing relevant information at a time when it can be acted upon is a common concern amongst library staff (Walker & Pearce, 2014). Few of the students included in this study had shared information about their accessibility needs with members of the library staff. One survey respondent said that library staff did not need this information. When students did disclose their needs, the responses received from library staff members were almost all positive in terms of understanding, although staff members' ability to address obstacles and needs varied depending on the nature of the obstacle and/or need. In some cases, informal workarounds such as access to a staff office provided a temporary working solution. However, often the response received was that budgetary constraints did not allow solutions that satisfied students' immediate needs to be implemented.

7.4.2 Having authority

Some library users questioned whether it was worthwhile sharing their experiences with library staff members, as they did not think that the staff would be able to implement changes in practice.

Student L.T.: I don't know if they really have the power to do anything about it. Because I mean they just work here, right.

The suggestion that library staff may lack authority to implement change is supported by comments made by library staff members, who felt that they can make suggestions but that it was up to the administration of the library or university to act upon these suggestions.

Librarian F.J.: We're always trying to think of better ways to improve things. But a lot of it's out of our hands. I mean we can say we want to do something and push it up the ladder, and see where it goes.

These ideas are relevant to the questions of who has a responsibility to implement accessible practices and why students may or may not speak to library staff about their accessibility needs. Not only are students potentially dealing with access fatigue, but they may also think that there is no point in sharing their experiences because they believe that those whom they have contact with lack the power to improve their situations.

While some librarians suggested that students needed to advocate for themselves more, another component of advocacy is the role of librarians themselves in working towards increasing accessibility. The CFLA suggests that "all library staff and trustees have a responsibility to advocate for equitable access to library services" and that "library staff and trustees should be proactive in keeping up to date on library accessibility issues" (Canadian Federation of Library Associations, 2016). While some librarians did suggest that there was room for more advocacy on the part of libraries and their staff, there was also a sense that decision making was ultimately out of their hands.

7.4.3 Supporting accessibility in practice

It is clear from the interviews that librarians support the idea of accessibility in theory. But how this support is implemented in practice is not always as obvious. In part, this may be the product of differences in understandings of what accessibility means:

Like *diversity, accessibility* is unique in that people often agree on its value (accessibility is good, we are committed to accessibility) but may disagree on its meaning (is this accessible? how do I make that accessible?). This quality, as well as its links to legal and technical discourses of compliance on the one hand and to library values of access on the other, makes accessibility rhetorically very useful. Promoting access is a core value in librarianship, and many in the profession are aware that we are supposed to promote accessibility. (Rosen, 2017)

Although promoting accessibility is certainly an important part of increasing accessibility in libraries, this promotion does little to help users in practice if services, resources, and physical spaces are not made more accessible. Additionally, if services or resources are accessible but are not in fact promoted, users again do not receive the support they need:

Certainly verifying that students with disabilities are aware of what the library can do for them is important, but faculty, staff, and other users should also know from handouts and readily available web information (that is not buried on the site many clicks deep) how they can make the most of library services. (Nichols & Schnitzer, 2015, p. 23)

Although librarians are generally working under the premise of helping users and are actively committed to this goal, these individuals are likely still operating from within a medicalized understanding of disability, as this perception tends to prevail across universities:

Even in those postsecondary institutions that see equitable access as a worthy goal and have dedicated services to facilities access and accommodation for disabled students, the theoretical framework of disability under which they operate significantly impacts how policies and practices advance the goal of equitable access. (Hibbs & Pothier, 2006, p. 198)

7.4.4 Sprinkle of suspicion

Although librarians generally expressed a strong desire to support disabled students, concerns about staff time being used by "illegitimate" requests for accommodation or assistance were also raised. Such worries imply the existence of suspicions that some students will take advantage of the system if given the opportunity.

Librarian D.S.: So you're kind of wondering, well, okay. You know, like there's legitimate, it's been verified. You've got the medical certification. Great, that's

fine, but let's work together on trying to, you know, address the ongoing problem.

In this exchange, the concern was about overdue books not being returned, even when they had been requested by other users. This concern is certainly valid, as the resources the library supplies are often in high demand. However, while this librarian suggests that the disability is indeed "*legitimate*" because it has been medically verified, the fact that the librarian would feel that it is necessary for corroboration of the disability to be provided hints that librarians may have some suspicions about the effects of some disabilities and whether specific accommodations are really necessary. Dolmage discusses how concerns about "faking disability" are prevalent in the media through an examination of a *Toronto Star* article by Heather Mallick. Dolmage (2017) writes:

At one point, Mallick used the word "scam" to suggest that students might fake a disability. But it is more realistic to assume that many disabled students are not seeking any accommodations at all...

So what prevents disabled students from getting the supports they need and to which they have a right? There is the very stigma that Mallick reinforces in her article. This begins with the idea that the university is the space for society's most able, physically, mentally, and otherwise—not a place to admit to any weakness or challenge. There is also the quite reasonable feeling that you will be accused of faking it, even though the financial cost and labor involved in faking a disability would vastly outweigh any benefits. (pp. 95-96)

Other instances of this suspicion emerge when accommodations are put into place and people question whether those accommodations are in fact appropriate. Bruce Pardy, a columnist for *The National Post*, suggests that Canadian universities

award [emphasis added] extra time on exams and assignments to students who claim mental and cognitive impairments. Extra time for mental disabilities is as

unfair to other students as a head start would be to other runners. Human rights legislation does not prescribe such measures. The practice is illegitimate and inconsistent with the law. (Pardy, 2017)

Some librarians expressed a worry about limited resources and whether students might take advantage of services that were not necessarily needed.

Librarian H.W.: So it's agreed, anyone who's registered with the [Disability Support Services] could have an additional three hours. And we kind of let all the staff know... So just that, but we've now put it on the website too.

Claire: Okay.

Librarian H.W.: And we'll see how it goes. Because, it's understood that not probably everyone who's registered with [DSS] needs an extra 3 hours, so there's the worry the some people may, and there are a lot of people registered, that maybe people will abuse that.

Interestingly, there does not seem to be much research about student demand and course reserves, which is needed to determine how extra time for some students would affect others. Pollitz, Christie, and Middleton (2009) suggest that there is a "lack of detailed knowledge regarding costs involved in providing a physical course reserves service... Several libraries commented that the physical reserve collection was underused, yet students are looking to course reserves as a strategy for cutting their costs" (p. 472). Of course, "libraries are resource-intensive organizations...[and] libraries' funding from their parent organizations is likely to be insufficient for all of the libraries' needs" (Budd, 2005, p. 135). Ultimately, it is not known to what degree more advertisement of extended borrowing periods would have on a service such as course reserves and whether or not students who are not registered with DSS would be negatively impacted.

7.5 Expertise for access

A key question that is raised by this study is where academic librarians can go to get information about and support for providing accessible services. The librarians in this study talked about a number of resources that they might turn to, which was necessary as the required expertise did not necessarily exist in the library itself. Crucially, students themselves were not raised as a potential source of information in this regard. This section of discussion ultimately relates back to the research question of obstacles faced by librarians in providing a more accessible service—namely knowledge of best practices—but also to how they understand disability. In many ways, ideas of disability remain focused on individuals, a notion that ultimately reinforces medicalized understandings of disability.

7.5.1 Disability Support Services

Oftentimes, the Disability Support Services staff at a university are considered to be the experts on supporting disabled students. Some individuals working in a university institution believe that DSS is responsible for policies, teaching, and even management of physical infrastructure. This belief was touched on at points by librarians in the course of the interviews.

Librarian D.S.: I'm sure they advise the libraries, as well as all other units on campus how best to, um, you know, how best to deal with, you know, either creating accessible physical space or dealing with specific, accessibility needs of a student or a group of students... I imagine there's policy developments, elaboration of procedures, probably advocacy on behalf of particular students.

Jaarsveldt and Ndeya-Nereya (2015) refer to the findings of a South African study that found "a lack of knowledge with regard to the nature of services rendered by the USD [Unit for Students with Disabilities]" (p. 203). This lack of knowledge in some ways led to assumptions that "the USD was responsible for the students" and that instructors and others did not share this responsibility (Jaarsveldt & Ndeya-ndereya, 2015, p. 203). The reality of DSS advocating for accessibility across the university may not correspond to such beliefs, as these offices are generally acutely understaffed and under-resourced (Dolmage, 2017). In many ways, the role of DSS staff is an administrative one, as it centers on the application of a standard set of accommodations such as time adjustments for exams:

Often in such cases, the institution is represented by the disability service provider, who is increasingly defined as a legal gatekeeper for the institution, relegated to monitoring whether the student legally qualifies for support and accommodation. Service providers must be able to balance these sometimes conflicting imperatives, to act on behalf of the student and also the institution. (Wolforth, 2016, p. 138)

Disability Support Services are considered by many to be the experts on supporting disabled students, but it is interesting to note that these services request recommendations from medical professionals about the accommodations that would support students:

Even when the appropriate academic accommodation is less obvious, the proposal that medical documentation include recommended accommodation raises serious concerns. What is problematic about this practice is the assumption that medical professionals are best suited to speak to issues of academic accommodation, that is, that they are knowledgeable about and can recommend specific academic adjustments and so-called coping strategies for the student. (Hibbs & Pothier, 2006, p. 210)

Medical professionals may have important information about the symptoms and impairments that often accompany a diagnosis of a particular disability. However, they

are not pedagogically trained. The idea that students themselves might be the authority on appropriate learning supports is not often suggested, despite the fact that "once a disability is acknowledged, the student's input as to what works for him or her may be the most important expert opinion" (Hibbs & Pothier, 2006, p. 210).

Certainly, there are students who will not know what accommodations or supports would be helpful, but conversations between these students and DSS do not always happen in meaningful ways:

Student T.S.: [pause]. Um so one of the, I guess one of the challenges, that happened, was I did go to report the situation to, uh, to student accommodations. And because I'm in a graduate program, they really didn't know how to deal with my situation. They weren't really able to provide very much support or services, or explain what could be done to help support me.

Claire: Okay.

Student T.S.: So I had, I had such a time kind of explaining my situation with regarding, with respect to my program, but they weren't really aware of, you know, what they could do to help. And I wasn't really aware of what to ask for.

Claire: Right.

Student T.S.: Outside of, you know, possibly getting a medical leave of absence, which is what I ended up doing.

Rose (2010) notes that "graduate students are accommodated under the general rubric of their undergraduate-focused accommodation policies... although requests are increasing, and requests for accommodation are becoming more complex on the graduate side" (p. 3). Mullins and Preyde (2013) spoke with students with invisible disabilities and found that "most of the graduate students indicated that they had the impression that 'usually students don't need accommodations anymore when they're in graduate school'" (p. 155).

It is clear that there is an overreliance on the work performed by and the effectiveness of DSS at many academic institutions. Dolmage (2017) points out the limited resources and staff numbers within these offices. However, even if financial support for DSS was increased in Canadian universities, these offices essentially operate under the premise that disability is an individual and medicalized issue (Titchkosky, 2011):

It is now time to apply universal design principles to disability service offices, who need to abandon the medical model and assess how they can change their own practices and image to conform to both the social and universal design models. However this will be a challenge for service providers steeped in working from a reactive framework as the campus experts and deciders on disability accommodation issues. (Wolforth, 2016, p. 142)

7.5.2 Accessibility librarians

Libraries in North America are increasingly developing staff positions dedicated to outreach, inclusion, and accessibility (Pereyaslavska, 2015). Other institutions that are not necessarily developing specialist positions may instead have a librarian who is a liaison to DSS. Given the recent development of these roles, is it not yet clear what impact they have had on students. However, Mullins and Preyde (2013) found in a 2013 study that having access to a private library room with adaptive technology and "a librarian devoted to coordinating these services" was positively received by disabled students: "Participants valued their access to this reserved location because it promotes a sense of acceptance, community, and safety" (Mullins & Preyde, 2013, p. 152). The CFLA also suggests that "one staff member should be designated as the resource person responsible for the library's accessible services" (Canadian Federation of Library Associations, 2016). However, the Guidelines also emphasize that *all* staff have responsibility for "basic accessibility knowledge... All staff should be able to respond to questions that do not require expertise in disability issues" (Canadian Federation of Library Associations, 2016).

In addition to the lack of current research on the effects of accessibility librarians for students, it is also not clear at this time what sort of institutional support these librarians are receiving to develop their expertise in practice. Rosen (2018) emphasizes that most of these roles do not focus exclusively on accessibility: "In an informal email survey of U.S. and Canadian library professionals who work on accessibility, only three respondents had *accessibility* in their job titles, and all three had compound titles (e.g., user experience and accessibility librarian)." Having a liaison librarian is an important step, as it can give students with disabilities a face to connect with in the library. But the existence of this role will not address accessibility if the individual is not given time and resources to develop knowledge in this area:

Accessibility, much like copyright and assessment, is an area of tremendous growth and high specialization which takes time and education to develop. This expertise can be acquired through professional development opportunities such as workshops, conferences, and continued education or through active engagement with accessibility experts across the community. (Pereyaslavska, 2015)

The accessibility librarian may be expected by colleagues to have information on any initiatives, services, or communications that pertain to accessibility in the library. However, communications with DSS and the development of services may take place without this library present. As one librarian emphasized, the ability to make decisions on the front line is vital.

Librarian J.L.: I do believe that the people on the front lines have to have the authority to be able to help the student or faculty or whatever.

The authority to make decisions is an important consideration. However, this may mean that the access librarian is left out of these conversations at times and thus will not know what sorts of issues users are having.

The accessibility librarian is the invaluable link between the diverse user base and the library staff, being able to relate user experience to the library staff and explain how services and websites can be improved to serve all users better... Advocacy is a huge component of what an accessibility expert does, as their role is inextricably linked to outreach, building trust and reliable working relationships with stakeholders, building bridges across community members with similar expertise to establish a community of practice, and fostering a dynamic information-exchange practice. (Pereyaslavska, 2015)

7.6 Why the library remains inaccessible

Throughout the interviews, a variety of reasons were given for why accessibility remained problematic in the academic libraries. The resources and support provided to librarians was at times limited, since academic libraries have to work with decreasing budgets. Librarians in practice are doing more with less, and the capacity to develop expertise and best practices in new areas is therefore limited. This section addresses the research question of what librarians see as being the main obstacles and challenges that they face in providing more accessible services.

7.6.1 Downsizing in the library

Librarians at the two institutions cited staff numbers and a lack of time as being key obstacles in improving services. Indeed, while student numbers are rising at institutions across North America, the numbers of library staff are not rising in concurrence (Canadian Association of University Teachers, 2017). On top of their performing traditional tasks such as collection development, librarians are often also expected to teach workshops (and sometimes courses), provide reference services, participate in committee work, and engage in scholarly communication and research activities. Moreover, the development and integration of new technologies into the library may require new skills and knowledge on the part of librarians:

The possible methods for academic reference librarians to reach out to and collaborate with members of their academic communities continue to evolve and grow as new technologies emerge, but each academic library must decide which skills its reference and instruction librarians require in order to develop realistic, sustainable service models that meet the needs of their specific communities. (Forbes & Keeran, 2017, p. 96)

Librarians have also had to contend with heavier workloads. Auster and Taylor (2004) explored downsizing in Canadian academic libraries over a 15-year period that ran between 1983 and 1998, and they found that in some situations in which new positions were created, "The new position was a combination of what were previously two positions. In effect, 'the position went away, the work didn't,' as one librarian put it" (p. 117). The effect of librarians' having more work to do is that "academic librarians often mentioned that they no longer had time for professional development and reading" (Auster & Taylor, 2004, p. 118). While this study is now 20 years old, academic libraries have certainly not seen an increase in their budgets in the time since it was conducted, and the situation is unlikely to have changed for the better.

Moreover, librarians who took part in the interviews highlighted that lack of knowledge and training were key concerns. These concerns are closely linked to those of time, as library staff may be expected to know and do more with less time and fewer resources, as Auster and Taylor (2004) indicate. Because of the scope of accessibility—it touches on all aspects of a library's operations, from collections to facilities to services to technology—and the specialist expertise required to implement accessible practices, many librarians may feel they are not qualified to consider or assess accessibility. Several librarians who participated in the interviews felt the scope of accessibility was just too big, making the process of learning about it even more daunting.

Librarian P.Y.: And it's hard, cause I don't actually sit down and think about it a lot in terms of what can be done. Just because I don't, I don't know what can be done. It's, it just always seems too big. Too big of a thing.

Even focusing on just one aspect of accessibility, such as physical spaces, was daunting.

Librarian K.B.: I mean there's so many architecture decisions that you have to make in order to really have a commitment to this.

While the Ontario institution provides some training around accessibility, the effectiveness of this training is not clear. It does, however, meet the legal requirements put upon the institution through the Customer Service standard of the AODA. Flaherty and Roussy (2014) argue that these requirements are not stringent enough to facilitate a deep understanding of accessibility and the barriers that exist: "Although the creation of a basic training requirement is appropriate, the AODA's training provisions do not do nearly enough to effectively address or eradicate attitudinal barriers" (p. 20). Librarians in Ontario were certainly aware of the existence of the law, yet I found little clear difference between their accessibility knowledge and that of the librarians in Québec. In fact, it may be the case that the main outcome of the AODA training is simply awareness that the AODA exists. Further training on how the information environment (be it physical, digital, or other) may actually limit some individuals' opportunities to participate did not seem to be available in practice. Training on "providing information on the rights and needs of persons with disabilities, and [to] help develop positive and appropriate attitudes" (Canadian Federation of Library Associations, 2016) was likewise not evidently provided.

7.6.2 Institutional support

The priorities of the library and the institution were brought up as factors that affect whether accessibility was emphasized in the library. Although librarians were supportive of increasing accessibility in the library, they also indicated that they feel as though many decisions were out of their hands. Library administration determined priorities within the library, but priorities were also affected by institutional directions. One librarian suggested that funding was needed to implement accessibility and that the university should provide this funding so that accessible service provision could be equal to the public image promoted by the institution.

Librarian F.J.: If the campus wants to claim to be an accessibility friendly campus, then they've got to cough up the money to do it.

Finally, budgets are another key issue, and one that student interviewees found especially frustrating when it was raised.

Student W.L.: And that's the hard thing. Cause when you always hear, well for me I always hear, well it's a budgetary thing when it comes to either treatment that I don't need. Well not that I don't need. It's treatment that I need, or accessible devices that I need, or getting the proper amount of care through a PSW. It's always a budgetary thing. Yet, if it's a commitment to accessibility and inclusion, then I feel like there needs to be more of a push than to just say there's no money, versus looking for it or figuring out how it can be done. There's always that answer and that's the end of the conversation.

Ultimately, libraries and universities have budgets that amount to hundreds of millions of dollars, and in spending this money they prioritize certain activities and users over others. Generally, this money is spent on facilities and resources that are accessible to nondisabled users, who do not face the same exclusions as disabled students do, although certainly they may face access issues in other ways. Aside from ableism, they may encounter micro- or macroaggressions in response to their statuses as members of marginalized communities and a lack of support for "nontraditional" students. Accessibility is a certainly a multifaceted area, and there are many obstacles to overcome in developing more accessible spaces and services. However, as Titchkosky (2011) points out,

Whether or not the reasons for lack of access are judged good or bad, the social activity of people seeking reasons fosters the sensibility that lack of access is reasonable. Thus, lack of access is a space for and of reason. (p. 77)

7.6.3 Assuming it's happening elsewhere

At various points in the interviews, librarians put forward assumptions that accessibility standards were being put into place by other people or teams, or that the practices of the library—for example, in digitizing materials—corresponded to the highest standards possible. This phenomenon occurred when they spoke about renovations and furniture purchases.

Librarian D.S.: They basically gave me a selection of here's various furniture that you can choose from. And so I assume that anything that they were presenting to me met whatever criteria is legally required. Or you know, beyond legally, it's just something that [the university] would like to, you know, be seen as leading in the particular area. But we did not explicitly talk about accessibility issues.

Another librarian spoke about creating Web content:

Librarian: I would imagine, because I think with Web development, that's sometimes more kind of part of creating webpages and trying to be more, so that maybe that was considered when they created the webpage. I would hope.

Yet another mentioned standards for digitizing materials:

Librarian D.S.: We'll run whatever we scan through this program to make sure that it's searchable, and meets various, like the highest level of PDF that exists. Or I assume.

In many instances, these assumptions may well be true, and it is certainly not realistic to expect that a single librarian will know about the required standards for electronic content, architecture and building codes, policies, and other areas. However, it is the assumption itself that is worth examining.

Ultimately, these comments speak to a hope that conversations about accessibility are happening elsewhere beyond the librarian's knowledge, because the librarian has not been involved in such conversations. This hope may arise for a few reasons, such as a belief that accessibility is important; a lack of personal knowledge about the issue that is compensated for by the hope that others are taking up that work; and even the hope that others are taking up that work because the librarian does not have the time, resources, or expertise to do it themselves.

In one instance, a librarian stressed that it was library workers themselves who raised accessibility during conversations with architects.

Librarian L.R.: When the design was going on, it was the librarians saying there doesn't seem to be enough room between the door and the post for a wheelchair to get through. Then they would say, oh okay, we'll redesign it. There didn't seem to be that, awareness in the designing phase.

This example demonstrates that while one may assume that facilities management or university web developers will check the accessibility boxes and make sure standards are met, there is no guarantee that this will occur in practice. Ballesteros, Ribera, Pascual, and Granollers (2015) state that "on the web, the greatest accessibility pressure is placed upon the web manager, rather than the developer... and content creators lack the training and knowledge to design perceivable and robust content" (p. 584). Accessibility is not necessarily on the radar for many of those individuals who have responsibility for implementation of a space, service, or resource, even when there are legal requirements in place.

7.6.4 Talking to disabled people

Based on the interviews with librarians at the two institutions, it would seem that it is not a common practice for librarians to speak to disabled students or other disabled users about their experiences of using libraries. Hill (2013) emphasizes that within LIS literature on accessibility, "there appears to be a lot of discussion about people with disabilities, but little direct involvement of these people in research" (p. 141). This lack of involvement with disabled people in many ways goes back to societal understandings of disability, according to which disabled people are not considered to be the experts on their own lived experiences. Within the medical model of disability, the expertise of medical and support professionals is held in high regard. In the university, the expertise of DSS personnel is emphasized, and they in turn privilege the accommodation suggestions of medical professionals. In fact, the absence of disabled individuals in most discussions around accessibility in libraries suggest that disabled users are not actually expected to show up in libraries:

How people talk about matters of access or accommodation has something to teach us regarding who we are, and this is not just because such talk reveals a bureaucratic milieu, an economic rationale, or a legalistic mindset. Matters of access and accommodation rely on, and constitute, conceptions of who belongs. (Titchkosky, 2011, p. 37)

One of the main roles of academic librarians is to teach others about how to find information and assess its reliability by thinking about the origin of that information and authority of the information source. There is thus an irony in librarians not doing the same when it comes to information about disability. The assumption on the part of librarians that Disability Support Services are the experts on accessibility in education while not in turn thinking about the expertise disabled students may hold—certainly raises questions about how we implement our teachings in practice.

7.7 Provincial similarities and differences

It is difficult to draw any generalizations on systematic differences between the two provinces given the relatively small sample sizes and nature of case study research. However, a few differences that are worth brief discussion did emerge. Some of the librarians in Québec put forward an assumption that accessibility was more ingrained in Ontario and that legislation brought with it resources to address accessibility. In all of these comments, there was perhaps an underlying assumption that the staff at Ontario libraries were better equipped to support disabled students in practice. In some ways, this belief is true, as there certainly is a broad awareness that there are legislative requirements around accessibility in Ontario. However, that awareness does not seem to have translated in a discernible way into a superior provision of accommodations, with the exception of digitization processes. There were similar uncertainties expressed across the two provinces in terms of what options might exist to support students with disabilities. Librarians in both provinces suggested that Disability Support Services might be the best resource for obtaining support on this topic, as its staff were seen as the general experts.

Training on the topic of accessibility was mandatory for those working at the university institution in Ontario, while it did not exist at the Québec institution. However, the effectiveness of this training session was not apparent in practice. Some librarians had a vague memory of completing an online module, but the overall content of this training session had not had a significant impact on them. However, perhaps in part due to this training, there was an awareness of accessibility legislation—the AODA—among all the Ontario librarians interviewed. Several Québec librarians were also aware of the Ontario legislation, perhaps at times due to previous work or educational experiences outside of

Québec. Interestingly, none of the librarians in Québec was explicitly aware of the legislation in this province.

The digitization of resources was the other key difference between the two provinces. The Québec library system carried out digitization efforts but was not currently set up to digitize materials *and* make them accessible for disabled students. It was unclear whether they could format resources with OCR, but they seemed to rely to some degree on DSS to convert materials into accessible formats. The Ontario institution, on the other hand, had clear processes for digitizing materials and included OCR formatting on all of these documents. Further tagging and formatting could then be applied when required by a student or other library user. The differences in digitization processes are almost certainly affected by the legislation in the two provinces, as accessible materials are clearly mandated under the Information and Communications Standard of the AODA, whereas there is currently no similar requirement in Québec. This difference in processes appears to be one of the most obvious effects of Ontario's legislation in the library.

7.8 Accessible services are good for all

Many of the accommodated services that libraries offer or could potentially offer are arguably also beneficial for students who are not disabled. Private, distraction-free study spaces, extended loans, and retrieval services would likely be welcomed by all students. This argument is often raised in support of universal design in the context of building infrastructure:

One of the major arguments for UD [Universal Design] is that it is good for all students. But of course there is some danger here of falling into what critical race theorists would call interest convergence—the idea that conditions for the minority group improve only once the effort can be justified as helping the majority as well. (Dolmage, 2017, p. 135)

The promotion of universal design on the basis of its potential benefits for the nondisabled majority may in fact undermine access for disabled individuals, as it might lead people to continue to focus on accommodations for disabled individuals: "The suggestion is that accommodations may be about students with disabilities, while UD is for everyone" (Dolmage, 2017, p. 136). This point is not to suggest that universal design does not have benefits, but rather that without critical engagement with the ideas of universal design, accessibility may in fact be undermined.

7.9 Gatekeeping the library

Librarians have at times been described as "gatekeepers of knowledge for countless students, researchers, and professors" (Sugimoto et al., 2014, p. 145). This description is not a unique one: "The librarian acts as the guardian, caretaker, and curator of the world's knowledge" (Jantz, 2017, p. 224). Some have even said that as curator and provider of information, librarians are in a position to champion inclusion. For example, Dewey (2017) writes:

The library is ideally suited to provide leadership in diversity and inclusion, not only in diversifying the library itself but also by motivating the institution as a whole to increase diversity efforts. Libraries represent the diversity of knowledge and the human experience... Librarians' professional philosophies and ethics of creating a welcoming environment, championing academic freedom, and providing access to information and scholarly resources from many perspectives make them the obvious choice to assume the role of ambassadors for inclusion and diversity. (pp. 23-24)

These are all noble sentiments, but the lack of diversity in librarianship at times affects how accessible services and libraries are.

Librarian K.B.: I think that there are accessibility issues that arise when all the public facing individuals you see are like white people of a certain age... and that's going to cause accessibility issues.

Ultimately, gatekeeping the library is about power relations. In the situation of disabled students attempting to access the library, the librarian holds power while the disabled student relying on accommodations, formal or informal, does not. The librarians in this study were all committed to supporting the students at these two universities. However, this may not always be the case. Furthermore, regardless of whether the library staff members are service oriented or not, the fact that in practice students rely on positive interactions with these staff members in order to access the library in meaningful ways demonstrates how the balance of power is not in their favour.

These accessibility issues are likely to be amplified if librarians do not understand the obstacles that disabled students—and those from other marginalized communities— experience in accessing the library and university. I would argue that librarians are indeed gatekeepers but that this role is not one that we should aspire to, as it implies a limitation of access. Instead, librarians should be critically and actively engaged with the removal of these gates. As Morales, Knowles, and Bourg (2014) emphasize, "We believe that libraries can and should play a key role in promoting social justice; and that a commitment to diversifying our profession, our collections, and our services is critical to social justice work in and for librarianship."

7.10 Research questions revisited

The two broad research questions for this study were: In what ways do Canadian academic libraries conceptualize disability?; and are disabled students' academic needs being met by Canadian academic libraries? Unfortunately, it seems that the libraries themselves maintain a medicalized understanding of disability. There is a focus on accommodations to services rather than inclusive and accessible services, and the

emphasis on registration with DSS to access these accommodations also upholds this understanding. Although the CFLA suggests that "a self-declaration of a perceptual disability (or print disability) should be sufficient for patrons who want to access a library's alternative format collection" (Canadian Federation of Library Associations, 2016), the libraries in question have not implemented such open policies in practice. In part due to limited resources, the library instead focuses on meeting "legitimate" needs. Just as Withers (2012) highlights how governmental definitions of disability become "increasingly narrow as the level of and access to resources increases" (p. 113), there is some degree of this practice in the library as well.

With regards to whether disabled students' needs are being met, the answer is mixed. Many students appreciate librarians themselves and have had positive interactions with the staff members at their academic libraries. However, disabled students also face significant barriers in accessing the library and at times are struggling with basic needs like access to bathrooms and study space. Barriers around access to resources in specific formats did not affect all students in this study, but limited resources and the policies developed to mitigate these limitations—for example, course reserve policies—did affect students in practice. Although the library cannot realistically be expected to proactively meet all the needs of all students in the university, disabled students' needs are often minimized or not considered and thus these needs are at times not met.

8 Conclusion

The overall themes emerging from this PhD study are complicated, and at times contradictory. Accessibility and disability are both multifaceted concepts, and ones that defy easy explanations or understandings. However, there are a few important takeaways that have emerged over the course of this study.

8.1 Key takeaways

The first takeaway is that disabled students continue to face barriers in accessing university education in Canada. These barriers come in the form of requiring substantial financial resources to be able to register with DSS; the need to negotiate with DSS, as well as with instructors to receive accommodations; and the need to develop workaround strategies to bridge the gaps when accommodations and services are not adequate. Disabled students tend to require additional time to complete their degree, and the need to advocate for their needs may contribute to access fatigue. Additionally, previous negative experiences in requesting accommodations—the need to request accommodations at all being a potentially negative experience—at times affect whether students will seek support in new situations.

Another key takeaway from this study is that librarians have good intentions and clearly wish to provide accessible services that meet the needs of students. However, a lack of knowledge about options, a lack of resources, and a lack of institutional support often hinder these efforts before they start. Librarian at times rely on the expertise of DSS at their institution, which perpetuates a medicalized and individual understanding of disability. Unfortunately, librarians may feel that accessibility is beyond their authority, or that they do not have the support to implement changes in practice. Additionally, they may want to protect the limited resources that the library has to offer, and at times express concerns over whether students truly need adapted services, or whether some students will "take advantage" of services if they are promoted. An interesting gap between the experiences of students and librarians is a lack of communication. Librarians may not know what services would be beneficial to students with disabilities, and at times may be waiting for students to tell them. However, students may not be aware of what options are available, nor that the library would be open to this discussion. Stronger relationships not just with DSS, but with the students who are registered with these services may address this communication gap to some extent.

This study touches on the topic of accessibility legislation and its impact on library services. The findings here suggest that the legislation itself does not have a strong impact on its own. Legislation may provide an impetus, but significant time, energy and advocacy are needed to implement practical strategies to support disabled individuals in the library. However, the implementation of legislation may lead institutions, such as universities, to introduce roles and support the development of expertise that will in turn positively affect students in future

This study differs from others within LIS owing to its deployment of a disability studies lens. One of the main benefits of this deployment resides in the study's focus on the experiences of disabled students. The experiences that students shared with me in this study shed light on the barriers that they face in accessing higher education and academic libraries. These experiences also demonstrate that the medicalized approach to providing support at universities in Canada—in which individualized accommodations are put into place for students—often leaves gaps. Speaking to students about the obstacles that they face has demonstrated how students are affected when accommodations do not address their needs or when something beyond their control occurs.

Ultimately, this study demonstrates that those individuals working in Canadian academic libraries may be working within a medicalized understanding of disability. While these individuals certainly have good intentions and wish to support disabled

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students in theory, there remain misconceptions about disability in and of itself, about what disabled students may require from the library, and about the extent of services themselves to support these students. Unfortunately, many disabled students in the two libraries examined—and likely beyond these two universities—are not being adequately supported by their libraries and are not receiving the same level of service as their non-disabled peers.

This study also demonstrates the continued utility of the medical and social models of disability. While there have been theoretical critiques of the social model of disability— as discussed in Chapter 3—there are significant strengths to the social model as a practical tool. Applying the social model allows us to see where barriers are erected— through policy, infrastructure, resource allocation, and human interactions—that negatively affect disabled students and ultimately limit their participation in academia. Beginning to identify these barriers will allow us to start to develop ways to remove them, as well as to consider how to develop new products and services that do not recreate the same obstacles. As such, this model serves as a tool that can be applied to a service to examine accessibility and determine what barriers may need to be addressed.

8.2 Recommendations for future research

Further research is needed in order to develop strategies for improving accessibility. Outreach and accessibility librarian roles, as well as DSS-liaison librarian roles, are beginning to emerge in Canada. However, it is not clear at this time what effect these roles have on students, nor is it clear how institutions are supporting the work and expertise needed to fulfil these roles in a meaningful way. Research studies that focus on the effectiveness of these roles, and how they are developing in practice would shed light on how libraries are attempting to address accessibility.

The limited scope of this study in examining one institution in Ontario and one in Québec also highlights the need for further research from across the country. Provincial legislation around accessibility varies, as does legislation pertaining to higher education. Research from institutions that are in the process of developing legislation, as well as those who currently lack legislation is certainly needed to develop a more comprehensive picture of accessibility across the country. International research aimed at comparing approaches across countries may also provide valuable insights as to how academic libraries might work to better meet the needs of their disabled students.

Finally, further research on the accessibility of libraries that involves disabled students is certainly needed. Ideally, disabled individuals would be involved in the research process at all stages. At the very least, they certainly need to be involved in assessments of how libraries are working to provide services and resources as well as the accessibility of the facilities in which these are housed.

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Appendix A Ethics approvals

| Western Research | and the second | N |
|---|--|---|
| | Western University Non-Medical Research Ethics Board NMREB Delegated Initial Approval Notice | <u>1</u> |
| Principal lavestigator: Heather | на | |
| | mation and Media Studies/Faculty of Information & Media Studies,V | Centern University |
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| NMREB File Number: 108887 | d accessibility in Canadian academic libraries | |
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| NMREB Initial Approval Date: | Jamusey 19, 2017 | |
| NMREB Espiry Date: January 1 | | |
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| Documents Approved and/or R | | (and the second se |
| Document Name | Comments | Version Date |
| lastruments | Student draft interview schedule | 2016/12/20 |
| lestrumenti | Student survey question | 2016/12/20 |
| Other | Student further support information ' | 2016/12/20 |
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| Destruments | Library staff further information | 2016/12/20 |
| Recruitment Ituma | Library stuff draft interview schedule | 2016/12/20 |
| Recruitment liens | Recruitment poster | 2016/12/20 |
| Recruitment Items | Recruitment email script for student survey | 2016/12/20 |
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| Recruitment hema | Recruitment poster | 2016/12/20 |
| Recoulment hems | Recruitment email script for staff interviews | 2016/12/20 |
| Letter of Information | Recruitment entail script for student interviews/focus group LOI for Student survey | 2016/12/20 |
| | 1.01 & Consent for student focus groups | 2016/12/20 |
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| Western University Protocol | LOI & Coment for Stati interviews | the second se |
| Board Recommendations | Initial Business in Article Arts and an and allow a second at the | 2016/12/22 |
| Board Recommendations | Initial Recommendations (no recommendations - approved an aubra | ined)[2017/01/19 |
| nitial Approval Date noted above | emains valid until the NMREB Expiry Date noted above, conditional | |
| TCP52), the Ostario Personal He | operates in compliance with the Tri-Council Policy Statement Ethica afthe Information Protection Act (PHIPA, 2004), and the applicable is | ws and regulations of Ontario |
| Members of the NMREB who are when they are presented to the RE | named as Investigators in research studies do not participate in discu 30. | asiens related to, not vote on a |

Ethics Officer: Esika Bayle ______ Cole Kaniki __ Grace Kelly __ Katelyn Harrs __ Vikki Tran __ Karen Gopani __

Western University, Research, Support Services Biog., Ste. 5250 London, ON, Canada N6G 109 1, 519,661,2161 1, 519,661,3907 www.westernu.ca/tesearch

Research Ethics



Western University Non-Medical Research Ethics Board NMREB Annual Continuing Ethics Approval Notice

Date: February 01, 2018 Principal Investigator: Heather Hill Department & Institution: Information and Media Studies\Faculty of Information & Media Studies,Western University

NMREB File Number: 108887 Study Title: Disability theory and accessibility in Canadian academic libraries

NMREB Renewal Due Date & NMREB Expiry Date: Renewal Due -2018/12/31 Expiry Date -2019/01/19

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed the Continuing Ethics Review (CER) form and is re-issuing approval for the above noted study.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), Part 4 of the Natural Health Product Regulations, the Ontario Freedom of Information and Protection of Privacy Act (FIPPA, 1990), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

OVAN

Ethics Officer, on behalf of Dr. Randal Graham, NMREB Chair

EO: Erika Basile __ Katelyn Harris __ Nicola Morphet __ Karen Gopaul __ Patricia Sargeant __ Kelly Patterson

Western University, Research, Support Services Bldg., Rm. 5150 London, ON, Canada N6G 1G9 t. 519.661.3036 f. 519.850.2466 www.uwo.ca/research/ethics

CERTIFICATION OF ETHICAL ACCEPTABILITY FOR RESEARCH INVOLVING HUMAN SUBJECTS

| Name of Applicant: | Ms. Claire Burrows |
|-----------------------|---|
| Department: | Libraries |
| Agency: | N/A |
| Title of Project: | Disability theory and accessibility in Canadian academic libraries |
| Certification Number: | 30009287 |
| Valid From: March 20 | 2018 To: March 19, 2019 |

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

Dr. James Pfaus, Chair, University Human Research Ethics Committee

Appendix B Librarian recruitment email



Email Script for Recruitment

Subject Line: Invitation to participate in research study on library accessibility for students with disabilities

Hello,

We have received your email address from the [University Library] website. You are being invited to participate in a study that we, Dr. Heather Hill (Principle Investigator), Claire Burrows (PhD Candidate; co-investigator), and Dr. Lynne McKechnie (co-investigator) are conducting. Briefly, the study involves participating in a one-on-one interview that will involve answering questions that relate to your experiences providing academic library services to students with disabilities. Interviews will last approximately 60-90 minutes, and will take place in a mutually agreed upon location in the library or nearby campus area.

[1st email:] A reminder email will be sent to potential participants in approximately two weeks, with a second and final reminder in a further two weeks. [2nd email:] A final reminder email will be sent to potential participants in approximately two weeks. [3rd email: delete this line]

Further details of the study can be found in the Letter of Information attached to this email. If you would like more information on this study, please contact the researcher at the contact information given below.

Thank you, Dr. Heather Hill Associate Professor Faculty of Information and Media Studies University of Western Ontario [email] [phone]

Co-investigators:

Claire Burrows PhD Candidate, Faculty of Information and Media Studies University of Western Ontario [email]

Dr. Lynne McKechnie Professor Faculty of Information and Media Studies University of Western Ontario [email] Appendix C Librarian letter of information and consent



Letter of Information and Consent

Project Title: Disability theory and accessibility in Canadian academic libraries

Document Title: Letter of Information and Consent - Library Staff Interview

Principal Investigator: Dr. Heather Hill, Associate Professor, Faculty of Information and Media Studies, University of Western Ontario

Additional Research Staff: Claire Burrows, PhD Candidate, Faculty of Information and Media Studies, University of Western Ontario

Dr. Lynne McKechnie, Professor, Faculty of Information and Media Studies, University of Western Ontario

1. Invitation to Participate

You are being invited to participate in this research study focused on accessibility in academic libraries because you are a staff member at [University Library].

2. Why is this study being done?

The purpose of this study is to develop an understanding of accessibility at academic libraries in Canada. Policies and practices will be examined, as well as how students experience the services.

3. How long will you be in this study?

It is expected that you will be in the study for 1 day There will be 1 study visit during your participation in the study and this visit will take approximately 1-1.5 hours.

4. What are the study procedures?

If you agree to participate you will be asked to meet for a one-on-one interview. Questions pertain to accessibility practices and policies at the library, and experiences working with students with disabilities. The interview will be audio recorded.

5. What are the risks and harms of participating in this study? There are no known or anticipated risks or discomforts associated with participating in this study.

6. What are the benefits of participating in this study?

You may not directly benefit from participating in this study, but information gathered may provide benefits to society as a whole, which include contributing to ongoing conversations about improving services for students with disabilities at academic libraries in Canada. This process may also contribute to the ongoing development of library policies to meet the Accessibility for Ontarians with Disabilities Act.

7. Can participants choose to leave the study?

If you decide to withdraw from the study, you have the right to request withdrawal of information collected about you.

8. How will participants' information be kept confidential?

All data collected will remain confidential and accessible only to the investigators of this study. If the results are published, your name will not be used. While we will do our best to protect your information there is no guarantee that we will be able to do so. Representatives of The University of Western Ontario Non-Medical Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

9. Are participants compensated to be in this study?

You will not be compensated for your participation in this research.

10. What are the rights of participants?

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. If you choose not to participate or to leave the study at any time it will have no effect on your employment at the university.

We will give you new information that is learned during the study that might affect your decision to stay in the study.

You do not waive any legal right by signing this consent form

11. Whom do participants contact for questions?

If you have questions about this research study, please contact Dr. Heather Hill (principle investigator) at [email]Claire Burrows (coinvestigator) at [email], or Dr. Lynne McKechnie (co-investigator) at [email] If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) 661-3036, email: [email]

12. Consent

A consent form is found at the end of this letter.

This letter is yours to keep for future reference.



Consent Form

Project Title: Disability theory and accessibility in Canadian academic libraries

Document Title: Letter of Information and Consent – Library Staff Interview

Principal Investigator: Dr. Heather Hill, Associate Professor, Faculty of Information and Media Studies, University of Western Ontario

Additional Research Staff: Claire Burrows, PhD Candidate, Faculty of Information and Media Studies, University of Western Ontario

Dr. Lynne McKechnie, Professor, Faculty of Information and Media Studies, University of Western Ontario

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

I agree to be audio recorded in this research.



I consent to the use of unidentified quotes obtained during the study in the dissemination of this research.



Participant's Name (please print):

Participant's Signature:

Date:

My signature means that I have explained the study to the participant named above. I have answered all questions.

Person Obtaining Informed Consent (please print):

Signature:

Date:

Appendix D Librarian semi-structured staff interview schedule

Project Title: Disability theory and accessibility in Canadian academic libraries

Instrument attachment: Library staff semi-structured interview schedule

Introduction

Thank you for agreeing to participate in this study on the accessibility of academic libraries in Canada. It's expected that this interview will take approximately 60-90 minutes to complete. The interview will be audio recorded. It's important that you know before we begin that you have the right to refuse to answer questions, and to withdraw from the study at any time. Before we begin the interview itself, do you have any questions about the study?

General information

What is your role in the library?

Is this a public facing role?

If so, how many desk hours/online support hours do you have?

Approximately how long have you been working in the library system at this

institution? In this specific role?

Did you previously work in previous roles at this institution? What roles and for

how long?

Did you previously work in an academic library setting at another institution? If so, approximately how long?

*Can you start by telling me about accessibility at the library? [key question that will likely determine depth of the interview]

What strategies, policies or initiatives are in place to help disabled students access library services?

What are the main accessibility initiatives at the library?

Formal elements

Does the library have an accessibility policy?

Where is the policy located?

What can you tell me about the content of the policy?

How was this policy developed? Who was consulted? [question for upper

management staff]

Do library staff receive accessibility training?

If yes, what does this training involve? Is it mandatory?

Who gets this training?

How often is training required and how often is it offered?

Who does the training?

Can you describe the relationship between the library and disability support

services?

Is accessibility included in any system reviews that the library performs?

Is accessibility included in unit workload planning?

Students

Who are the students who use accessible library services?

What sorts of disability does the library primarily consider in their services?

How do you feel current accessibility initiatives affect students in practice?

What sort of "proof" (e.g. disability card) is required for students to be accommodated?

Have you specifically spoken with or helped a student(s) who required accommodated library services?

Do you feel their information needs were met?

Have students approached you without the required documentation/card?

Do you feel their information needs were met?

What generally happens in the scenario that a student doesn't have the disability card?

Improvements

What do you see as the main obstacles in providing an accessible service form the perspective of the library?

What do you see as the main obstacles that disabled students may face in using the library?

What strategies or changes do you think are needed to improve accessibility in the library, if any?

What else do you think can or should be done, if anything? Do you think more *can* be done?

Conclusion

Is there anything else you would like to tell me about accessibility in the library?

Thank you for taking the time to participate in this interview.

Appendix E Support information for librarians

Project Title: Disability theory and accessibility in Canadian academic libraries

Instrument attachment: Support for library staff

The following resources can provide library staff members with further information about their responsibilities under provincial law, as well as strategies for approaching issues of accessibility in academic libraries.

Accessibility Information Toolkit for Libraries

For more information, please visit the following website:

http://ocul.on.ca/accessibility/

Ontario Council of University Libraries Scholar's Portal

Scholar's portal about Accessible Content E-portal.

For more information, please visit the following website:

http://guides.scholarsportal.info/ace

Government of Ontario

Information about accessibility laws in Ontario, namely the Accessibility for

Ontarians with Disabilities Act.

For more information, please visit the following website:

https://www.ontario.ca/page/accessibility-laws

Appendix F Student survey recruitment email



Email Script for Recruitment

Subject Line: Invitation to participate in research study on library accessibility for students with disabilities

Hello,

[Disability Support Services] is sending this message on behalf of the researchers for this study. You are being invited to participate in a study that we, Dr. Heather Hill (Principle Investigator), Claire Burrows (PhD Candidate; co-investigator), and Dr. Lynne McKechnie (co-investigator) are conducting. Briefly, the study involves completing an online survey. Questions relate to your experiences using library services at university. The survey will take approximately 30 minutes to complete.

If you would like more information on this study, please refer to the Letter of Information that is attached to this email.

[1st email:] A reminder email will be sent to potential participants in approximately two weeks, with a second and final reminder in a further two weeks. [2nd email:] A final reminder email will be sent to potential participants in approximately two weeks. [3rd email: this line removed]

The survey can be accessed at: [link] *Please note that information submitted may be open to access by American regulatory bodies.

Thank you, Dr. Heather Hill Associate Professor Faculty of Information and Media Studies University of Western Ontario [email] [phone]

Co-investigator:

Claire Burrows PhD Candidate, Faculty of Information and Media Studies University of Western Ontario [email]

Dr. Lynne McKechnie Professor Faculty of Information and Media Studies University of Western Ontario [email] Appendix G Student survey letter of information and consent



Letter of Information and Consent

Project Title: Disability theory and accessibility in Canadian academic libraries

Document Title: Letter of Information and Consent – Student Survey

Principal Investigator: Dr. Heather Hill, Associate Professor, Faculty of Information and Media Studies, University of Western Ontario

Additional Research Staff: Claire Burrows, PhD Candidate, Faculty of Information and Media Studies, University of Western Ontario

Dr. Lynne McKechnie, Professor, Faculty of Information and Media Studies, University of Western Ontario

1. Invitation to Participate

You are being invited to participate in this research study focused on accessibility in academic libraries because you are registered with [Disability Support Services at your university] or self-identify as being disabled/having a disability.

2. Why is this study being done?

The purpose of this study is to develop an understanding of accessibility at academic libraries in Canada. Policies and practices will be examined, as well as how students experience the services.

3. How long will you be in this study?

It is expected that you will be in the study for 1 day. There will be survey during your participation in the study and this survey will take approximately 30 minutes to complete. If you complete the survey, you will also be asked if you would like to participate in a one-on-one or focus group interview on the same topic. If you take part in the one-on-one or focus group interview, you will participate for one additional day for approximately 1-2.5 hours.

4. What are the study procedures?

If you agree to participate you will be asked to complete an online survey regarding your experiences and opinions of using academic library services.

5. What are the risks and harms of participating in this study?

There are no known or anticipated risks or discomforts associated with participating in this study.

6. What are the benefits of participating in this study?

You may not directly benefit from participating in this study, but information gathered may provide benefits to society as a whole, which include contributing to ongoing conversations about improving services for students with disabilities at academic libraries in Canada. This process may also contribute to the ongoing development of library policies to meet legislative requirements, such as the Accessibility for Ontarians with Disabilities Act.

7. Can participants choose to leave the study?

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must tell the researcher before June 2018.

8. How will participants' information be kept confidential?

All data collected will remain confidential, anonymous and accessible only to the investigators of this study. If the results are published, your name will not be used. While we will do our best to protect your information there is no guarantee that we will be able to do so. As the survey is anonymous, there is no way survey responses can be linked to you as an individual. Representatives of The University of Western Ontario Non-Medical Research Ethics Board may contact you or require access to your studyrelated records to monitor the conduct of the research.

9. Are participants compensated to be in this study?

You will not be compensated for your participation in this research.

10. What are the rights of participants?

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. If you choose not to participate or to leave the study at any time it will have no negative consequences, or effect on your academic standing.

We will give you new information that is learned during the study that might affect your decision to stay in the study.

You do not waive any legal right by consenting to participate in this study.

11. Whom do participants contact for questions?

If you have questions about this research study, please contact Dr. Heather Hill (principle investigator) at [email] Claire Burrows (co-investigator) at [email] or Dr. Lynne McKechnie (co-investigator) at [email].

Western

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) 661-3036, email: <u>ethics@uwo.ca</u>.



Consent

Completion of the survey is indication of your consent to participate.

Appendix H Student survey

Introduction

The purpose of this study is to develop an understanding of accessibility at academic libraries in Canada. Policies and practices will be examined, as well as how students experience the services. More information about this study can be found in the Letter of Information attached to the recruitment email for this survey.

There are 23 questions in this survey and it is expected that it will take approximately 30 minutes to complete. The survey is anonymous, and you have the right to skip any individual questions or to withdraw from the study at any time. Completion of the survey is indication of your consent to participate.

Demographic information

- 1. What level of degree are you currently pursuing?
 - □ Bachelor's
 - □ Master's
 - Doctoral
 - □ Other (please specify): [TEXT BOX]
- 2. What year of study are you currently undertaking (for current degree)?
 - □ 1st
 - \Box 2nd
 - □ 3rd
 - □ 4th
 - □ Other (please specify): [TEXT BOX]
- 3. Are you part time or full time?
 - □ Part time
 - □ Full time

 What is your (intended) major of study? [TEXT BOX]

Using the library

- 5. How often do you visit the university library/ies in person (on average)?
 - □ Daily
 - \Box A few times a week
 - \Box Once a week
 - □ Every other week
 - \Box Once a month
 - □ Never
 - □ Other (please specify): [TEXT BOX]
- 6. How often do you access the library's website (insert link)?
 - □ Daily
 - \Box A few times a week
 - \Box Once a week
 - $\hfill\square$ Every other week
 - \Box Once a month
 - \Box Never
 - □ Other (please specify): [TEXT BOX]
- 7. Do you access the library's online information at the library or from offsite (e.g. home, café, other area of campus)?
 - □ Library
 - \Box Offsite
 - □ Both
- 8. Is accessibility a factor in your decision to access the library's online information from the library or offsite?
 - □ Yes
 - 🗆 No
 - □ Unsure

- 9. What are your main reasons for using the library? Check all that apply.
 - $\hfill\square$ To find and use books/journals
 - $\hfill\square$ To access course reserves
 - $\hfill\square$ To use research guides
 - □ To use special collections (e.g. atlas materials, archives)
 - □ Study space
 - $\hfill\square$ To access computers
 - □ To print
 - □ Workshops (e.g. research skills)
 - \Box To meet with friends
 - □ To use adaptive technologies
 - □ Other (please specify): [TEXT BOX]

Accessibility

- 10. Do you use adaptive technology/ies to access the library's website or catalogue? (If no, skip to question 17).
 - □ Yes

□ No

- 11. If yes, what type of adaptive technology do you use? (e.g. screen reader, oversize keyboard, etc.) [TEXT BOX]
- 12. Do you use your own versions of these adaptive technologies or ones provided by the library?
 - \Box My own
 - □ Library's
 - □ Both
 - □ Neither
- 13. In your perspective, have you been able to make adequate use of the library's online resources by using these technologies?
- 14. Is there an adaptive technology that would make the website or catalogue easier to access? If yes, please specify if possible.
 - □ Yes (please specify) [TEXT BOX]

□ No □ Unsure

- 15. Do you use other accommodations to access the library services (e.g. prolonged loan periods)?YesNoUnsure
- 16. What accommodations do you use in accessing the library's services? [TEXT BOX]
- 17. In your view and experience, have library staff been helpful in supporting your information needs? If you feel comfortable, please provide any details and/or examples.

□ Yes □ No

□ Unsure

[TEXT BOX]

18. In your view, do library staff members understand how your disability may affect your requirements? If you feel comfortable, please provide any details and/or examples.

□ Yes □ No

[TEXT BOX]

- 19. Have you been comfortable expressing your needs to library staff?
- 20. Have you (or disability support services on your behalf) informed library staff members of your disability or accommodation needs?

 \Box Yes

□ No

□ Unsure

□ N/A

21. If yes, has this been a positive, negative or neutral experience? If you feel comfortable, please provide any details. [TEXT BOX]

Improvements

- 22. Are there ways that the library and its staff could better support your information needs? Please specify what these are if possible (e.g. understanding your disability specifically, getting materials in a different format such as large text or braille, allowing prolonger borrowing periods, etc.). [TEXT BOX]
- 23. Do you have any further comments on the topic of accessibility in academic libraries that you would like to share at this time? [TEXT BOX]

[separate page of survey, not connected to the responses]: Would you be interested in participating a one-on-one or focus group interview on this topic? If so, please enter your email address to be contacted by the research team. Your contact details will not be connected to your survey responses. You can also contact Claire Burrows (co-investigator) at [email] if you would like further details on the interview process.

Thank you for taking the time to participate in this survey.

Appendix I Student survey results

Demographic information

1. What level of degree are you currently pursuing?

| Answer choices | Ontario Responses | | Answer choices Ontario Responses Quebec responses | | nses |
|----------------|-------------------|----|---|----|------|
| Bachelor's | 76.12% | 51 | 84.85% | 56 | |
| Master's | 19.40% | 13 | 7.58% | 5 | |
| Doctoral | 4.48% | 3 | 7.58% | 5 | |
| Other | | 0 | | 2 | |

2. What year of study are you currently undertaking (for current degree)?

| Answer choices | Ontario Respo | onses | Quebec respo | onses |
|-----------------|---------------|-------|--------------|-------|
| 1 st | 11.48% | 7 | 35.00% | 21 |
| 2 nd | 60.66% | 37 | 16.67% | 10 |
| 3 rd | 9.84% | 6 | 28.33% | 17 |
| 4 th | 18.03 | 11 | 20.00% | 12 |
| Other | | 6 | | 8 |

3. Are you part time or full time?

| Answer choices | Ontario Responses | | Quebec respo | onses |
|----------------|-------------------|----|--------------|-------|
| Part time | 17.91% | 12 | 32.84% | 22 |
| Full time | 82.09% | 55 | 67.16% | 45 |

4. What is your (intended) major of study?

[TEXT BOX]

Using the library

5. How often do you visit the university library/ies in person (on average)?

| Answer choices | Ontario Resp | oonses Quebec responses | | onses |
|------------------|--------------|-------------------------|--------|-------|
| Daily | 19.35% | 12 | 13.79% | 8 |
| A few times a | | | | |
| week | 41.94% | 26 | 29.31% | 17 |
| Once a week | 8.06% | 5 | 24.14% | 14 |
| Every other week | 8.06% | 5 | 6.90% | 4 |
| Once a month | 14.52% | 9 | 22.41% | 13 |
| Never | 8.06% | 5 | 3.45% | 2 |
| Other | | 4 | | 7 |

6. How often do you access the library's website (insert link)?

| Answer choices | swer choices Ontario Responses | | Quebec respo | onses |
|------------------|--------------------------------|----|--------------|-------|
| Daily | 9.84% | 6 | 13.33% | 8 |
| A few times a | 44.26% | 27 | 18.33% | 11 |
| week | 44.20% | 21 | 10.33% | 11 |
| Once a week | 13.11% | 8 | 13.33% | 8 |
| Every other week | 9.84% | 6 | 18.33% | 11 |
| Once a month | 16.39% | 10 | 20.00% | 12 |
| Never | 6.56% | 4 | 16.67% | 10 |

| Other (please | | |
|---------------|---|---|
| specify) | 3 | 6 |

7. Do you access the library's online information at the library or from offsite (e.g. home, café, other area of campus)?

| Answer choices | Ontario Responses | | r choices Ontario Responses Quebec responses | | onses |
|----------------|-------------------|----|--|----|-------|
| Library | 10.94% | 7 | 11.48% | 7 | |
| Offsite | 28.13% | 18 | 27.87% | 17 | |
| Both | 60.94% | 39 | 60.66% | 37 | |

8. Is accessibility a factor in your decision to access the library's online information from the library or offsite?

| Answer choices | Ontario Responses | | Quebec responses | |
|----------------|-------------------|----|------------------|----|
| Yes | 29.69% | 19 | 38.71% | 24 |
| No | 50.00% | 32 | 40.32% | 25 |
| Unsure | 20.31% | 13 | 20.97% | 13 |

9. What are your main reasons for using the library? Check all that apply.

| Answer choices | Ontario Resp | onses Quebec re | | sponses | |
|------------------|--------------|-----------------|--------|---------|--|
| To find and use | 73.44% | 47 | 68.75% | 44 | |
| books/journals | 73.44% | 47 | 00.73% | 44 | |
| To access course | | | | | |
| reserves | 35.94% | 23 | 48.44% | 31 | |
| To use research | | | | | |
| guides | 32.81% | 21 | 17.19% | 11 | |

| To use special collections (e.g. atlas materials, | | | | |
|---|--------|----|--------|----|
| archives) | 15.63% | 10 | 14.06% | 9 |
| Study space | 70.31% | 45 | 79.69% | 51 |
| To access computers | 21.88% | 14 | 31.25% | 20 |
| To print | 46.88% | 30 | 50.00% | 32 |
| Workshops (e.g. research skills) | 14.06% | 9 | 9.38% | 6 |
| To meet with friends | 35.94% | 23 | 25.00% | 16 |
| To use adaptive technologies | 9.38% | 6 | 10.94% | 7 |
| Other (please specify) | | 3 | | 2 |

Accessibility

10. Do you use adaptive technology/ies to access the library's website or catalogue? (If no, skip to question 17).

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|----|--------------|------|
| Yes | 8.77% | 5 | 10.91% | 6 |
| No | 91.23% | 52 | 89.09% | 49 |

11. If yes, what type of adaptive technology do you use? (e.g. screen reader, oversize keyboard, etc.) [TEXT BOX] 12. Do you use your own versions of these adaptive technologies or ones provided by the library?

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|----|--------------|------|
| My own | 18.75% | 3 | 29.41% | 5 |
| Library's | 0.00% | 0 | 11.76% | 2 |
| Both | 18.75% | 3 | 5.88% | 1 |
| Neither | 62.50% | 10 | 52.94% | 9 |

13. In your perspective, have you been able to make adequate use of the library's online resources by using these technologies?

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|---|--------------|------|
| Yes | 60.00% | 9 | 53.33% | 8 |
| No | 6.67% | 1 | 20.00% | 3 |
| Unsure | 33.33% | 5 | 26.67% | 4 |

14. Is there an adaptive technology that would make the website or catalogue easier to access? If yes, please specify if possible.

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|----|--------------|------|
| Yes | 12.50% | 2 | 21.43% | 3 |
| No | 25.00% | 4 | 28.57% | 4 |
| Unsure | 62.50% | 10 | 50.00% | 7 |

15. Do you use other accommodations to access the library services (e.g. prolonged loan periods)?

| Answer choices Ontario Responses | Quebec responses |
|----------------------------------|------------------|
|----------------------------------|------------------|

| Yes | 18.75% | 3 | 5.17% | 3 |
|--------|--------|----|--------|----|
| No | 75.00% | 12 | 81.03% | 47 |
| Unsure | 6.25% | 1 | 13.79% | 8 |

- 16. What accommodations do you use in accessing the library's services? [TEXT BOX]
- 17. In your view and experience, have library staff been helpful in supporting your information needs? If you feel comfortable, please provide any details and/or examples.

| Answer choices | Ontario Responses | | Quebec responses | |
|----------------|-------------------|----|------------------|----|
| Yes | 73.68% | 42 | 68.42% | 39 |
| No | 10.53% | 6 | 14.04% | 8 |
| Unsure | 15.79% | 9 | 17.54% | 10 |

18. In your view, do library staff members understand how your disability may affect your requirements? If you feel comfortable, please provide any details and/or examples.

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|----|--------------|------|
| Yes | 13.56% | 8 | 5.26% | 3 |
| No | 30.51% | 18 | 26.32% | 15 |
| Unsure | 32.20% | 19 | 29.82% | 17 |
| N/A | 23.73% | 14 | 38.60% | 22 |

19. Have you been comfortable expressing your needs to library staff?

| Answer choices | Ontario Responses | Quebec responses |
|----------------|-------------------|------------------|
|----------------|-------------------|------------------|

| Yes | 42.37% | 25 | 34.48% | 20 |
|--------|--------|----|--------|----|
| No | 27.12% | 16 | 25.86% | 15 |
| Unsure | 15.25% | 9 | 10.34% | 6 |
| N/A | 15.25% | 9 | 29.31% | 17 |

20. Have you (or disability support services on your behalf) informed library staff members of your disability or accommodation needs?

| Answer choices | Ontario Responses | | Quebec respo | nses |
|----------------|-------------------|----|--------------|------|
| Yes | 20.34% | 12 | 8.62% | 5 |
| No | 61.02% | 36 | 62.07% | 36 |
| Unsure | 11.86% | 7 | 17.24% | 10 |
| N/A | 6.78% | 4 | 12.07% | 7 |

21. If yes, has this been a positive, negative or neutral experience? If you feel comfortable, please provide any details. [TEXT BOX]

Improvements

- 22. Are there ways that the library and its staff could better support your information needs? Please specify what these are if possible (e.g. understanding your disability specifically, getting materials in a different format such as large text or braille, allowing prolonger borrowing periods, etc.). [TEXT BOX]
- 23. Do you have any further comments on the topic of accessibility in academic libraries that you would like to share at this time? [TEXT BOX]

Appendix J Student recruitment poster



PARTICIPANTS NEEDED FOR RESEARCH ON LIBRARY ACCESSIBILITY FOR STUDENTS WITH DISABILITIES

Principle Investigator

Dr. Heather Hill Associate Professor Faculty of Information & Media Studies University of Western Ontario

Co-investigator

Claire Burrows LIS PhD Candidate Faculty of Information & Media Studies University of Western Ontario

We are looking for volunteers who are registered with *[Disability Support Services]* or otherwise identify as being disabled/ having a disability to take part in a study on the accessibility of academic libraries.

If you are interested and agree to participate you would be asked to: participate in your choice of a one-on-one or focus group interview and answer questions about your experiences using library services for your university studies. Your participation would involve one (1) interview session. One-on-one interviews will last approximately 60-90 minutes long. Focus group interviews will last approximately 90-150 minutes.

Snacks will be provided during the interview sessions.

For more information about this study, or to volunteer for this study, please contact: **Claire Burrows**

[email]

Appendix K Student interview recruitment email



Email Script for Recruitment

Subject Line: Invitation to participate in research study on library accessibility for students with disabilities

Hello,

You are being invited to participate in a study that we, Dr. Heather Hill (Principle Investigator), Claire Burrows (PhD Candidate; co-investigator), and Dr. Lynne McKechnie (co-investigator) are conducting. You are being contacted as you are registered with [Disability Support Services]. Briefly, the study involves participating in a one-on-one or focus group interview and answering questions that relate to your experiences using academic library services. You will be given the choice of which type of interview you would like to participate in. The one-on-one interviews will take approximately 60-90 minutes (1-1.5 hours), and focus groups will last approximately 90-150 minutes (1.5-2.5 hours). You will be provided with snacks during this time.

Further details of the study can be found in the Letter of Information attached to this email. If you would like more information on this study, please contact the researchers at the contact information given below.

Thank you, Dr. Heather Hill Associate Professor Faculty of Information and Media Studies University of Western Ontario [email] [phone]

Co-investigator:

Claire Burrows PhD Candidate, Faculty of Information and Media Studies University of Western Ontario [email] Dr. Lynne McKechnie Professor Faculty of Information and Media Studies University of Western Ontario [email]

Appendix L Student interview letter of information and consent



Letter of Information and Consent

Project Title: Disability theory and accessibility in Canadian academic libraries

Document Title: Letter of Information and Consent - Student Interview

Principal Investigator: Dr. Heather Hill, Associate Professor, Faculty of Information and Media Studies, University of Western Ontario

Additional Research Staff: Claire Burrows, PhD Candidate, Faculty of Information and Media Studies, University of Western Ontario

Dr. Lynne McKechnie, Professor, Faculty of Information and Media Studies, University of Western Ontario

1. Invitation to Participate

You are being invited to participate in this research study focused on accessibility in academic libraries because you are registered with Disability Support Services at your university or self-identify as being disabled/having a disability.

2. Why is this study being done?

The purpose of this study is to develop an understanding of accessibility at academic libraries in Canada. Policies and practices will be examined, as well as how students experience the services.

3. How long will you be in this study?

It is expected that you will be in the study for 1 day. There will be 1 study visit during your participation in the study and this visit will take approximately 1-1.5 hours.

4. What are the study procedures?

If you agree to participate you will be asked to meet for a one-on-one interview. Questions pertain to your experiences accessing library services at your academic institution. The interview will be audio recorded.

5. What are the risks and harms of participating in this study? There are no known or anticipated risks or discomforts associated with participating in this study.

6. What are the benefits of participating in this study?

You may not directly benefit from participating in this study, but information gathered may provide benefits to society as a whole, which include contributing to ongoing conversations about improving services for students with disabilities at academic libraries in Canada. This process may also contribute to the ongoing development of library policies to meet the Accessibility for Ontarians with Disabilities Act.

7. Can participants choose to leave the study?

If you decide to withdraw from the study, you have the right to request withdrawal of information collected about you. If you wish to have your information removed please let the researcher know.

8. How will participants' information be kept confidential?

All data collected will remain confidential and accessible only to the investigators of this study. If the results are published, your name will not be used. While we will do our best to protect your information there is no guarantee that we will be able to do so. Representatives of The University of Western Ontario Non-Medical Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

9. Are participants compensated to be in this study? You will be provided with snacks during the time of your participation in

this study.

10. What are the rights of participants?

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. If you choose not to participate or to leave the study at any time it will have no effect on your academic standing.

We will give you new information that is learned during the study that might affect your decision to stay in the study.

You do not waive any legal right by signing this consent form

11. Whom do participants contact for questions?

If you have questions about this research study, please contact Dr. Heather Hill (principle investigator) at <u>hhill6@uwo.ca</u>, Claire Burrows (coinvestigator) at <u>cburrow5@uwo.ca</u>, or Dr.Lynne McKechnie (coinvestigator) at <u>emckech1@uwo.ca</u>.

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) 661-3036, email: <u>ethics@uwo.ca</u>.

12. Consent

A consent form is found at the end of this letter.

This letter is yours to keep for future reference.



Consent Form

Project Title: Disability theory and accessibility in Canadian academic libraries

Document Title: Letter of Information and Consent – Student Interview

Principal Investigator: Dr. Heather Hill, Associate Professor, Faculty of Information and Media Studies, University of Western Ontario

Additional Research Staff: Claire Burrows, PhD Candidate, Faculty of Information and Media Studies, University of Western Ontario

Dr. Lynne McKechnie, Professor, Faculty of Information and Media Studies, University of Western Ontario

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

I agree to be audio recorded in this research.



I consent to the use of unidentified quotes obtained during the study in the dissemination of this research.



Participant's Name (please print):

Participant's Signature:

Date:

My signature means that I have explained the study to the participant named above. I have answered all questions.

Person Obtaining Informed Consent (please print):

Signature:

Date:

Appendix M Student semi-structured interview schedule

Project Title: Disability theory and accessibility in Canadian academic libraries

Instrument attachment: Student semi-structured interview schedule

Introduction

Thank you for agreeing to participate in this study on the accessibility of academic libraries in Canada. It's expected that this interview will take approximately 60-90 minutes (for individual interview) [90-150 minutes for focus group interviews] to complete. The interview will be audio recorded. It's important that you know before we begin that you have the right to refuse to answer any questions, as well as to withdraw from the study at any time. Before we begin the interview itself, do you have any questions about the study?

Background

Can you tell me a bit about your studies (year, degree, program)?

How often do you use library services?

What library services do you use most often (website catalogue, course reserves,

library space?)

How often do you physically visit the library?

Is there one library you use most regularly?

Why do you use this/these library/ies?

What's your primary purpose(s) for going to the library? (e.g. seeing friends,

picking up books, study space, printing or computer use, etc.).

Use of library resources

Have you ever been to any workshops put on by the library (research skills, etc.)?

If yes, what type(s) of workshop(s)?

Did you feel that you could participate fully?

Have you ever spoken with any of the library staff? (Clarify whether this is people at the front desk or through an appointment with reference staff).

Were your questions or problems resolved through this interaction?

Have you used the chat with a librarian feature on the website?

Was this useful in helping you fulfill your information needs?

Are you aware that there are library accommodations available? If so, what ones

do you know about (e.g. prolonger borrowing periods, alternate formats)?

Are you aware that there's a library accessibility webpage?

If so, how did you find out about it?

If so, have you looked at it, and was the information relevant/helpful to you?

If not, do you think it's something that could have information useful to you?

Do you use any library-related accommodations (prolonged borrowing periods, alternate formats)?

Accessibility and obstacles

What has been your experiences accessing resources at the library been?

Have you had any problems? If so, can you tell me about it?

What has your experience accessing the physical library or the library website been?

Was it easy to find and navigate within?

Have you had any problems? Can you describe these?

In your experience, how have your interactions with library staff been?

What was their attitude or reaction towards your needs? Did you notice anything?

If you have any library-related accommodations, are these organized through disability support services?

What has your experience being in accessing these accommodations at the library?

Did you find that librarians were familiar with the accommodation policies? Were they aware of what to do?

Were you ever asked why you have accommodations or anything like that?

Improvements and conclusion

Do you have any thoughts on what the library could provide to support you in your academic information needs? (Academic information needs may relate to preparing for class, class participation, completing coursework and exams.) Is there anything else you would like to tell me about accessibility in the library?

Thank you for taking the time to participate in this interview.

Appendix N Support information for students

Project Title: Disability theory and accessibility in Canadian academic libraries

Instrument attachment: Support for students at [university name]

The following resources can provide support for disabled individuals pursuing higher education in Canada.

Council of Canadians with Disabilities (CCD)

CCD is a national organisation dedicated to helping individuals with varying disabilities and "working for an inclusive and accessible Canada" (CCD, 2016). One of their remits is "doing Charter-based, tesxct-case litigation to bring about disability-positive public policies in education, employment, health care and transportation" (CCD, 2016).

More information about this organisation is available at the following website: http://www.ccdonline.ca/

National Educational Association of Disabled Students (NEADS)

NEADS is a national organization with "the mandate to support full access to education and employment for post-secondary students and graduates with disabilities across Canada" (NEADS, 2016). They are active in a variety of areas and needs, but specifically focus on student experience, financial support and employment post-graduation. More information about this organisation is available at the following website:

http://www.neads.ca/

[Disability Support Services at University]

[Disability Support Services] arranges a variety of accommodations to make classes, exams, and other academic activities more accessible. More information is available at the following website: [link removed]

Mental Health Services

A variety of mental health and psychological services are available at [university name]. Details for mental wellbeing can be found at the following website: [link removed]. Details for available psychological services can be found at: [link removed]

Appendix O Library audit

Physical access to building

- Ramp (if stairs are present)
- Clear, easy to read signposting
- Unobstructed and well lit access paths to the entrance
- Smooth, non-slip surface at entrance
- Railings on sides of ramp
- Obstacles in different colours

Within the building

- Automatic door (or button)
- Door wide enough for wheelchair
- Space big enough for wheelchair to turn around in front of door
- Security checkpoints wide enough for wheelchair or other mobility aids
- Accessible water fountains
- Elevators
 - $\circ \quad \text{Well lit} \\$
 - Signs/buttons in braille
 - o Buttons reachable from wheelchair
- Clear signage
- Pictogram signs
- Fire alarm visible and audible
- Well lit space throughout building
- Wheelchair refuge point
- Emergency evacuation chair
- Non-slip floors
- Toilets
 - $\circ \quad \text{Accessible toilet on each floor} \\$
 - Clear signs, pictogram
 - Door wide enough for wheelchair
 - o Room for wheelchair to pull up next to toilet seat
 - \circ $\;$ Toilet with handles and flushing lever reachable for persons in wheelchairs
 - o Alarm button reachable for people using wheelchairs
 - Sink and mirror at the appropriate height

Stacks

- Aisles unobstructed
- Aisles wide enough
- Aisles well lit
- Clearly signposted
 - Height of signs
- Labeled ends of shelf bays
- Signage
 - Non-reflective materials for signs
 - Upper and lower case
 - Pictogram signs
 - Colours used
 - Character height of at least 15mm on signs
 - Eye level
 - Colour contrast
 - o Braille
- Shelves reachable from wheelchair

Study spaces

- Reading and computer tables of varying heights throughout the library
- Chairs with sturdy armrests
- Room to maneuver with wheelchair
- Silent study areas

Circulation & Reference desk

- Adjustable desk (or desks of various heights)
- Induction loop system for hearing impaired persons
- Chairs available for rest
- Accessible self-service circulation stations

Disability Support Service in the library

- A centrally located department with talking books and other materials for persons with reading disabilities
- A colored (yellow for visibility) tactile line leading to this special department
- Clear signs
- Comfortable seating area with bright reading light
- A tape recorder, CD player, DAISY (Digital Audio Information System) player 1) and other equipment to complement the audiovisual collection

- Magnifying glass, illuminated magnifier, electronic reader or closed-circuit television (CCTV)
- Computers with screen adapters and software designed for persons with reading and cognitive disabilities

Media formats

- Talking books, talking newspapers, and talking periodicals
- Large print books
- Braille books
- Video/DVD books with subtitles and/or sign language
- E-books

Computers

- Designated computer workstations adapted for patrons in wheelchairs
- Adaptive keyboards or keyboard overlays for users with motor impairments
- Designated computers equipped with screen-reading programs, enlargement, and synthetic speech
- Designated computers equipped with spelling, and other instructional software suitable for persons with dyslexia
- Technical support for computers (on-site, if possible)
- Off-white paper available for printing

Other

- Library guides in alternative formats
- Publicity of disability services
- Services by phone, email, online
- Prolonged borrowing times
- Book fetching service
- Borrowing reference materials
- Photocopying/scanning services

Emergent items

Appendix P Library audit Ontario

Physical access to building

- Ramp (if stairs are present)
 - \circ $\,$ Outdoor ramp one direction round about way
- Clear, easy to read signposting
- Unobstructed and well lit access paths to the entrance
 - Seems so; stairs from some directions; round about ways
- Smooth, non-slip surface at entrance
 - o Concrete
- Railings on sides of ramp
- Obstacles in different colours
 - **No**

Within the building

.

• Automatic door (or button)

Yes

- Door wide enough for wheelchair
 - o Yes
- Space big enough for wheelchair to turn around in front of door
 - o Yes
- Security checkpoints wide enough for wheelchair or other mobility aids
 - Yes (regular size wheelchair)
- Accessible water fountains
 - 40.5 inches high, 13 inches wide
- Elevators
 - Well lit Yes not motion sensor
 - Signs/buttons in braille Yes
 - o Buttons reachable from wheelchair Yes
- Clear signage
 - Clear, often at high height (e.g. maps)
- Pictogram signs
 - o Varies
- Fire alarm visible and audible
 - No visible, only audible
 - Well lit space throughout building
 - o Varies
- Wheelchair refuge point
 - \circ Not clear

- Emergency evacuation chair
 - o No
- Non-slip floors
- Toilets
 - Accessible toilet on each floor not labelled as accessible except on doors (e.g. navigation on bottom floor)
 - Clear signs, pictogram yes
 - Door wide enough for wheelchair yes; locking mechanisms vary
 - Room for wheelchair to pull up next to toilet seat varies (accessible washroom yes)
 - \circ ~ Toilet with handles and flushing lever reachable for persons in wheelchairs no
 - \circ Alarm button reachable for people using wheelchairs mostly no
 - Sink and mirror at the appropriate height varies; paper towel dispenser with garbage can below

Stacks

- Aisles unobstructed
 - Not always (stools, chairs)
- Aisles wide enough
 - 30 ¾ 34 ¾ inches
 - Stools less than 17-18 inches
- Aisles well lit
 - o Sensor motion lights; flickery
- Clearly signposted
 - Height of signs
- Labelled ends of shelf bays
 - At top of shelving
 - **78 ½ cm high**
- Signage
 - Non-reflective materials for signs yes
 - Upper and lower case handwritten
 - Pictogram signs no
 - Colours used no
 - Character height of at least 15mm on signs just over an inch 3x5.5cm cards
 - Eye level no
 - Colour contrast black and white mostly;
 - Braille no
- Shelves reachable from wheelchair
 - Varies between 5-7 shelves high
 - Top shelf 195 cm
 - Bottom shelf 9 ½ cm

Study spaces

- Reading and computer tables of varying heights throughout the library
 - Varies
 - o 27.5 in clearance most tables
 - Plugs along walls tripping hazard to plug in on centre desks
 - U-bar tables less than 8 inches between cushion and table clearance
- Chairs with sturdy armrests
 - o Varies
 - Some chairs lean back
 - Some heavy
 - o 3-4 chairs at group desks; 27.75 in clearance
- Room to maneuver with wheelchair
 - Mostly yes, some spaces (group rooms) unlikely
- Silent study areas

Circulation & Reference desk

- Adjustable desk (or desks of various heights)
 - $\circ \quad \text{At back} \quad$
- Induction loop system for hearing impaired persons
 - Not evident
- Chairs available for rest

Disability Support Service in the library

- A centrally located department with talking books and other materials for persons with reading disabilities
 - Access lab; otherwise no
- A colored (yellow for visibility) tactile line leading to this special department
 - o No
 - Maps highlight bathrooms
- Clear signs
 - o N/A
- Comfortable seating area with bright reading light
 - o Variable seating; adjustable lighting
- A tape recorder, CD player, DAISY (Digital Audio Information System) player 1) and other equipment to complement the audiovisual collection
 - o Not evident

- Magnifying glass, illuminated magnifier, electronic reader or closed-circuit television (CCTV)
 - Some; access lab, DSS rooms
- Computers with screen adapters and software designed for persons with reading and cognitive disabilities
 - o Access lab

Media formats

•

- Talking books, talking newspapers, and talking periodicals

 Not evident
 - Large print books
 - No section
- Braille books
 - No; upon request
- Video/DVD books with subtitles and/or sign language
- E-books
 - o Varies

Computers

- Designated computer workstations adapted for patrons in wheelchairs
- Adaptive keyboards or keyboard overlays for users with motor impairments

 Access lab
- Designated computers equipped with screen-reading programs, enlargement, and synthetic speech
 - o One
- Designated computers equipped with spelling, and other instructional software suitable for persons with dyslexia
- Technical support for computers (on-site, if possible)
 - o Information not available
- Off-white paper available for printing
 - o Not evident

Other

- Library guides in alternative formats
 - o Not evident
- Publicity of disability services
 - Signage on doors
- Services by phone, email, online
 - o Yes

- Prolonged borrowing times
 - o No info
- Book fetching service
 - Online retrieval; separate library
 - Contact service desk
- Borrowing reference materials
 - $\circ \quad \text{No info}$
- Photocopying/scanning services
 - Yes; signage at photocopy stations behind printers
 - o Contact service desk

Emergent items

- DSS rooms
 - Round knobs
 - o 28.75in clearance
 - o Key locks
 - Most desks not adjustable
 - Chairs like elsewhere

Appendix Q Library audit Québec

Physical access to building

- Ramp (if stairs are present)
 - o N/A
 - Elevator one to floor
- Clear, easy to read signposting
 - o Elevator not clearly marked
 - o Library entrance clear
- Unobstructed and well lit access paths to the entrance
 - o Indoors yes
- Smooth, non-slip surface at entrance
 - o Yes
- Railings on sides of ramp
 - o n/a
- Obstacles in different colours
 - Varies; pillars, tables and chairs, etc.

Within the building

- Automatic door (or button)
 - Yes various entrances, multiple auto doors
 - $\circ \quad \text{Buttons hard to find inside} \\$
- Door wide enough for wheelchair

o Yes

- Space big enough for wheelchair to turn around in front of door
 - o Yes
- Security checkpoints wide enough for wheelchair or other mobility aids
 - o Yes
- Accessible water fountains
 - o Some
 - Most fountains no (39-43 in); one lower (not changed)
- Elevators
 - Well lit yes
 - Signs/buttons in braille yes
 - Buttons reachable from wheelchair yes
- Clear signage
- Pictogram signs
- Fire alarm visible and audible
- Well lit space throughout building
 - o Yes

- Wheelchair refuge point
 - Not evident
- Emergency evacuation chair
 - Not evident
- Non-slip floors
 - Yes, carpet
- Toilets
 - Accessible toilet on each floor accessible but no barrier free; no auto doors; locking mechanisms vary
 - Clear signs, pictogram yes
 - Door wide enough for wheelchair average size yes
 - o Room for wheelchair to pull up next to toilet seat Yes
 - Toilet with handles and flushing lever reachable for persons in wheelchairs varies
 - Alarm button reachable for people using wheelchairs no
 - Sink and mirror at the appropriate height varies some with lower sink and angled mirror
 - Double doors
 - Lips to get through for some doors

Stacks

- Aisles unobstructed
 - Mostly yes
 - Stools, ladders ladders heavy
- Aisles wide enough
 - o **39 inches**
 - 23 inches with stool
 - o 32.5 inches; pillar 26.5 inches
- Aisles well lit
 - o Yes
- Clearly signposted
 - Height of signs 52-57 inch high
 - Labeled ends of shelf bays
 - o Yes
- Signage

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- Non-reflective materials for signs yes; some signage on windows
- Upper and lower case varies
- Pictogram signs no
- Colours used no
- \circ Character height of at least 15mm on signs yes
- \circ Eye level yes
- \circ Colour contrast windows no

- o Braille no
- Shelves reachable from wheelchair
 - \circ Varies
 - 45 ft long no turn around room; some 72 ft

Study spaces

- Reading and computer tables of varying heights throughout the library

 Yes
- Chairs with sturdy armrests
 - Yes and no (varies)
- Room to maneuver with wheelchair
 - o Yes
- Silent study areas
 - o Quiet, silent, etc.

Circulation & Reference desk

- Adjustable desk (or desks of various heights)
 - o Yes
- Induction loop system for hearing impaired persons
- Chairs available for rest
 - o No
- Accessible self-service circulation stations
 - o One height

Disability Support Service in the library

- A centrally located department with talking books and other materials for persons with reading disabilities
 - 0 **No**
- A colored (yellow for visibility) tactile line leading to this special department
 - o N/A
- Clear signs

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o N/A

- Comfortable seating area with bright reading light
 - \circ $\;$ Regular chair at accessible station; no height adjust $\;$
 - o Table
- A tape recorder, CD player, DAISY (Digital Audio Information System) player 1) and other equipment to complement the audiovisual collection
 - $\circ \quad \text{Not evident} \quad$

- Magnifying glass, illuminated magnifier, electronic reader or closed-circuit television (CCTV)
 - SmartView accessible station
- Computers with screen adapters and software designed for persons with reading and cognitive disabilities
 - o JAWS, Claroread on all PCs

Media formats

- Talking books, talking newspapers, and talking periodicals
 - Not specific
- Large print books
 - 0 **No**
- Braille books
 - **No**
- Video/DVD books with subtitles and/or sign language
- E-books
 - Yes browsable?

Computers

- Designated computer workstations adapted for patrons in wheelchairs
 - Not adjustable 28 inch table clearance
- Adaptive keyboards or keyboard overlays for users with motor impairments
 - Yellow oversize keyboard; double monitor
- Designated computers equipped with screen-reading programs, enlargement, and synthetic speech
 - Smartview magnification
- Designated computers equipped with spelling, and other instructional software suitable for persons with dyslexia
 - JAWS, etc. on all public PCs
- Technical support for computers (on-site, if possible)
 - o Not evident
- Off-white paper available for printing
 - o Not evident

Other

- Library guides in alternative formats
 - o Not in alternative format

- Publicity of disability services
 - o Brochures
- Services by phone, email, online
 - o Yes
- Prolonged borrowing times
 - o Yes
- Book fetching service
 - o Not evident
- Borrowing reference materials yes
- Photocopying/scanning services
 - 0 **No**

Emergent items

- Scanning station
 - Table 35 in high; touch screen at 38-40 inch high on angle
- OPAC station
 - o 34inch high table
- Photocopy stations
 - Card swipe at front of one (access station)
 - Photocopy still at height of 40in
- Express workstations
 - o 2 at lower height
- Reading rooms
 - o Some up or down several steps

Curriculum Vitae

| Name: | Claire Burrows |
|---|---|
| Post-secondary Education and Degrees: | Mount Allison University Sackville, New Brunswick, Canada 2003-2007 B.A. |
| | University of Sheffield Sheffield, United Kingdom 2011-2012 M.Sc. |
| | The University of Western Ontario London, Ontario, Canada 2014-2019 Ph.D. |
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