Charting the Landscape of Accessible Education for Post-secondary Students with Disabilities

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Abstract

This article presents the results of research examining the impact of the Accessibility for Ontarians with Disabilities Act (AODA) on educational accessibility at one university in Ontario, Canada. A longitudinal, qualitative study was conducted to explore how students with and without disabilities, instructors, staff members and administrators perceived the relative accessibility of teaching and learning on campus before, during, and after the implementation of one portion of the AODA legislation. In the first phase of this research, several factors affecting educational accessibility at the study university were noted, including knowledge, attitudes, pedagogical choices, disciplinary features, and institutional practices and characteristics. Participants raised many of these issues in the later phases reported here, although some preliminary changes in awareness and institutional practices are also described. Based on these minimal developments, and on participants' expressed perceptions of the AODA, we conclude that the legislation has had limited impact on the accessibility of teaching and learning on campus to date. Implications of the findings, potentially applicable in many contexts beyond the Ontario setting where the research was conducted, as well as next steps and recommendations for further research are discussed.

Keywords

Accessibility; Inclusion; Students with disabilities; Disability legislation; Teaching and learning; Accessibility for Ontarians with Disabilities Act (AODA)

Acknowledgements

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Introduction

Ontario's government recognized the importance of creating an inclusive and accessible environment through the creation of the Accessibility for Ontarians with Disabilities Act (AODA, 2005). The AODA intends to create universal access for persons with disabilities by removing barriers to full participation in society, including workplaces and educational institutions (Government of Ontario 2014). The legislation takes a relatively broad (albeit medicalized) definition of disability, including physical, sensory, mental health, developmental, learning, and invisible or episodic impairment under its mantle (Government of Ontario 2005). The Act created five standards for accessibility in the province, with rolling deadlines for each standard to be met.

Several of these standards are pertinent for post-secondary institutions. The customer service standard, which came into effect in 2008, created a series of regulations pertaining to the accessible provision of goods and services (Government of Ontario 2007). The Integrated Accessibility Standards Regulation, enacted in 2011, combines the standards for Information and Communications, Employment, Transportation, and the Design of Public Spaces. The

Information and Communications portion of this regulation includes many requirements relevant to colleges and universities, such as removing barriers to access in conveying or distributing information. The standard also requires all educational institutions to provide training to educators on accessible course design and delivery, and stipulates that this training was to be in place by January 1, 2013.

At McMaster University – the location of the research discussed in this article – the McMaster Accessibility Council (MAC) is responsible for implementing the AODA and ensuring compliance with its standards. While a recent MAC report (2013) describes significant progress in a number of areas (including the development of a campus accessibility plan and provision of online customer service training to a broad number of students, faculty and staff), it also acknowledges "training for educators has proven to be more challenging" (p.10). In order to meet compliance requirements, the university notified instructors about the availability of an "Educators' Accessible Resource Kit" developed by the Council of Ontario Universities. There is little information available, however, about the impact of this training, or of other aspects of the legislation, on actual teaching and learning practices. The present study sought to increase understanding of this issue by examining participants' perceptions and experiences of educational accessibility at McMaster during and after the initial implementation of the AODA information and communications standard.

Despite a growing body of literature addressing the ongoing disablement of students with disabilities in higher education (e.g., Healey, Bradley, Fuller, and Hall 2006) and describing strategies for inclusive teaching (e.g., Burgstahler and Cory 2009), there is still a gap in examining whether accessibility is enhanced in colleges and universities in response to disability legislation (Kovacs Burns and Gordon 2010; Kernohan 2008). Studies that do exist in this area

(e.g., Tinklin, Riddell, and Wilson 2005) primarily address American and UK legislation rather than Canadian (Kovacs Burns and Gordon 2010). While there are certainly overlaps in the spirit of the relevant laws, the Canadian context is significantly different insofar as the legislation is created at a provincial, rather than a federal, level. The few articles on the AODA that do exist have examined specific aspects of the legislation, such as its effect on libraries or graduate student accommodations (Hill 2011; Oud 2012). Analyzing the AODA's impact at a post-secondary institution is important given the increasing numbers of students with disabilities enrolled in tertiary education across the province (Holmes and Silverstein 2011). Moreover, an analysis of the successes and failures of the AODA is useful in informing other provinces or countries that may want to enact similar legislation. Although our study was conducted in one Ontario university, our findings related to evaluating the impact of accessibility legislation and fostering educational accessibility more broadly could be of great value to other post-secondary institutions.

Moreover, this study is unique because of the scope of the participants. In recent years, many papers have been written about the experiences of specific groups in terms of accessibility in higher education, such as students who stammer or who identify as experiencing dyslexia or learning disabilities (Mortimore 2013; Butler 2013; Williams 2012). With some exceptions (e.g., McCloy and DeClou 2013), few recent publications consider educational accessibility for a broad range of students identified/identifying as disabled in Canadian institutions. Likewise, in spite of a growing sense that a complete picture of higher education accessibility must include the perspectives of students with and without disabilities (Madriaga et al. 2010), instructors (Cook, Rumrill, and Tankersley 2009), and administrators and staff (Riddell et al. 2007), few Canadian studies have addressed the experiences of this diverse group of stakeholders. By

including and analyzing the perceptions of actors in diverse institutional roles in this research, we are able to understand educational accessibility from a range of social positions and vantage points. Tracking the perceptions of this diverse group over time also enables comparison of the state of accessibility before, during, and after the implementation of the new AODA standard. To our knowledge, there have been no longitudinal studies of the impact of Ontario disability legislation at post-secondary institutions to date.

In the first phase of the research project described here (Marquis et al. 2012), we addressed the status of accessibility in teaching and learning practices at McMaster based on interviews with members of a diverse campus community (including disabled students) prior to the implementation of the integrated AODA standard. This paper will report on the subsequent phases of this project to examine how the university environment has and/or has not responded to the implementation of the legislation over time.

Methods and Approach

In this research, we use the social model of disability as a broad analytic frame to examine the impact of the AODA on "the real concerns of disablement" for disabled post-secondary students (Goodley 2014, p.7). The exclusions and disadvantages disabled students experience are understood by the social model to be "avoidable restrictions" (Thomas 2014, p.11). As such, in this research we do not focus on students' impairments, but instead attend to the impact of the AODA legislation on the role of the material environment as well as the social/relational and cultural/attitudinal environments of the university in enabling/disabling post-secondary students identified/identifying as disabled.

Participants and Data Collection

A key aspect of our research was the diversity of participants involved, including both disabled and non-disabled students, instructors, administrators, and staff.[1] Insofar as the study was intended to develop an in-depth understanding and analysis of individuals' experiences of educational accessibility at one university over time, we employed a longitudinal case study methodology (Pearson, Albon and Hubball 2015), taking the institution as our case. In line with our focus on participants' perceptions and experiences, we took a qualitative approach to data collection (Mack, Woodsong, MacQueen, Guest, and Namey 2005), gathering information from multiple interviews and participant journals. The research extended over three phases between 2011 and 2013, as indicated in Table 1. Phase 1 took place before the implementation of the AODA Integrated Standard, Phase 2 just prior to the deadline for compliance (and thus during the implementation period), and Phase 3 after the compliance deadline had passed. Following ethics clearance from the McMaster Research Ethics Board, participants were recruited through advertisements on university bulletin boards and email listservs, inviting participation in all relevant phases of the project (Phases 1-3 for students with disabilities and Phases 1 and 3 for all other groups).

Table 1: Research Design

Phase 1 (Spring 2011 and Spring 2012)	Phase 2 (Fall 2012)	Phase 3 (Spring 2013)
Methods: One-on-one interviews **Participants** (38): All participant groups	**Methods:** Individual journaling **Participants** (6): Students with disabilities	**Methods** One-on-one interviews **Participants** (22): All participant groups

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[1] We recognize that some of the faculty, staff and administrators may also have identified as disabled, although none of them did so during research interactions.

In the first and third phases of the research, one-on-one, semi-structured interviews were used because of the personal nature of the topics discussed (Mack et al. 2005). Interview guides were developed based on the literature and considering important domains for the study. Questions, pre-tested by project assistants and refined as necessary, asked about issues ranging from participants' perception of the AODA to factors they believed fostered or prevented educational accessibility at McMaster. Apart from one email interview (phase 1) and one phone interview (phase 3), which were conducted in alternate formats due to scheduling difficulties, interviews were conducted in person, in campus offices.

The perceptions and experiences of disabled students were of particular importance in this study. During the second phase of the project, participating students with disabilities were invited to engage in journaling just prior to the deadline for providing training for educators under the AODA. Participants were asked to complete 1 journal entry a week for 10 weeks. They were given prompts for each entry, but were also encouraged to write about other issues if they preferred. Journaling was selected since it can be a particularly fruitful means of capturing students' narratives (Elliot 2005), and because it allowed ongoing, in depth reflection over a period of time – in this case, the AODA Integrated Accessibility Standards Regulation implementation period.

Some participants were lost over the course of the research, including significant attrition among the disabled student participants. This attrition could be reflective of the increased pressures these students face, as they may have dropped out because of the time commitment. Given that messages to at least one participant's email address bounced back, some students with disabilities who participated in Phase 1 may have also left the university by the time of Phase 3. Another possible reason for the decline is that the 6 students who participated in the phase 2

journaling may have felt that an additional interview would be redundant. At least 2 participants

indicated that this was the case for them. In total, 7 students with disabilities participated in

Phase 2 and/or 3 and are represented in the data presented here.[2]

Table 2: Participant breakdown

Demographic Factor	n Participants by Phase		
A. Participant Category/Role	Phase 1	Phase 2	Phase 3
Administrators	4	n/a	4
Manager	1	n/a	1
Director/Assistant Director	2	n/a	2
Associate Dean	1	n/a	1
Instructors	7	n/a	5
Staff	9	n/a	6
Teaching/Instructional Assistant	2	n/a	2
Education/Research Coordinator	4	n/a	2
Advisor	2	n/a	1
Student Records Supervisor	1	n/a	1
Students with disabilities	12	6	3
Undergraduate	9	4	2
Graduate	3	2	1
Students without disabilities	4	n/a	4

[2] Notwithstanding the attrition, participating students were diverse in terms of disability labels, including physical, sensory, learning, psychiatric and cognitive disabilities. In addition, three of the participating students identified with two different disability labels.

Undergraduate	3	n/a	3
Graduate	1	n/a	1
Dual position: Staff and Student without disabilities	2	n/a	0
Teaching Assistant and Graduate Student	2	n/a	0

Data Analysis

Interviews were transcribed verbatim for the purposes of analysis. Research assistants coded both Phase 2 journals and Phase 3 transcripts using constant comparison—a common form of inductive qualitative analysis in which ideas within a data source (e.g., an interview) are extracted and compared with others found within the same or other sources (Merriam 2009). Transcripts and journals were scrutinized first in an open coding phase, wherein ideas relevant to the research question were highlighted and given an initial descriptive label. These initial codes were then condensed, combined and abstracted as appropriate, resulting in a structure that outlined the key categories in the data. This structure was discussed and refined further by the research team, and the prevalence of the categories within each of the participant groups was considered. The code structure was also compared with findings from Phase 1 and revised slightly to highlight areas of similarity or difference across the three phases. Finally, we returned to the transcripts and journals to check that the developed code tree was consistent with the data.

Results

In the first phase of the research (Marquis et al. 2012), participants identified a complex interplay of factors as barriers and facilitators to access, including: knowledge, institutional practices and

characteristics, pedagogical choices, disciplinary features, and attitudes. These same areas were also highlighted in the code tree for subsequent phases of the study, and cut across all participant groups (unless otherwise indicated). While change in complex organizations such as universities takes time (Ginsberg and Bernstein 2011), it would be reasonable to expect some perceived shifts in one or more of these areas if the AODA has had a prominent impact on participants' experiences of educational accessibility. Thus, these same themes will be the focus here. In addition, given our interest in whether the AODA is influencing experiences of educational accessibility at McMaster, we also highlight another prominent theme in the data: participants' specific perceptions of the legislation's impact. To complement the previous article focusing on Phase 1 and permit close examination of perceived change over time, all data presented here are drawn from Phases 2 and 3 of the study.

Knowledge

Participants' perspectives on the impact of the AODA on awareness of accessibility issues were mixed. Some perceived an increased awareness of accessibility amongst members of the university community since the Phase 1 interviews, suggesting that people on campus have become more conscious of accessibility needs, existing types of accommodations, and the rights and responsibilities of students, faculty and institutions under the AODA. One staff participant, for instance, said:

> I am more aware of the needs of students and visitors to my department […] Mostly physically, the physical needs that people [have …], but awareness does make me realize where accessibility issues exist, especially with intellectual disabilities or even economic disadvantage.

In spite of this perceived increase in awareness, several participants also noted that knowledge barriers still exist in many areas. A lack of knowledge about impairments and accommodating

them was often cited, as were uncertainties about how to realize principles of accessible teaching

in practice:

> I do put the burden on [students with disabilities] to identify to me, not only tell me you
> have some challenge, but then tell me what I can do to accommodate that challenge,
> because sometimes I don't really know. (Instructor)

Interestingly, one participant posited a potential connection between the perceived increase in

awareness and some of the knowledge barriers simultaneously expressed in the data, suggesting

that "with the increased awareness came increased confusion too" (Staff). With this in mind,

enhanced consciousness of disability might be seen as a promising, if uncertain, first step toward

addressing knowledge barriers, since it increases how much individuals are aware of what they

do not know. Conversely, a student with a disability suggested a more substantial gap between

awareness and true knowledge, writing in a journal, "I believe there is ample effort being made

to raise *awareness* of disability impacts on learning, but little can be done to make the general

public *understand* disabilities" (emphasis in original). While an encouraging development, then,

the increased awareness evinced in these data may not be sufficient to facilitate educational

accessibility completely.

Institutional Practices and Characteristics

Organizational characteristics, processes and procedures emerged as a central theme in the

present data, as in Phase 1. Issues with campus accommodations were again frequently raised,

for instance, with participants underlining both pros and cons of this system. By and large,

participants in all categories suggested that the formal accommodations process works in many

ways, helping students to navigate existing barriers. Nonetheless, many participants – including

several students with disabilities – continued to highlight challenges in the system, ranging from

reliance on formal diagnoses and generic categorizations of student needs, to time delays related

to under resourcing at the accessibility services office:

> I still have yet to meet with my coordinator … the closest date I could get is November
> 14th. I find it hard to talk about my concerns to anyone else, so not being able to see them
> to discuss my issues can be difficult although they are phenomenal with email. Last year
> when I got stuck, within four hours she had talked to my professors and booked my tests.
> Regardless, I do wish I could get more in person time with her. (Student with a disability)

Such reliance on the accommodation system might also suggest that there has been little

movement toward proactive educational accessibility that would make formal accommodations

less necessary.

Communication between individuals and departments on campus was also again raised as

a significant issue relating to educational accessibility. However, while participants still pointed

to breakdowns in institutional communication creating barriers to access, the balance here was

skewed more towards examples of effective communication than in Phase 1. Many participants –

particularly instructors, staff, and administrators – discussed examples of students, faculty and

staff sharing information and working together effectively, and one instructor claimed expressly

that "there has been a lot more communication" about accessibility since the first phase of this

research. Significantly, a few participants pointed to the recent or ongoing development of new

groups on campus (such as a staff/faculty community of practice) that work to enhance

communication and facilitate accessibility in the process. That progress in this area was

communicated more strongly by participants other than students identifying as disabled warrants

attention.

Pedagogical Choices

As in Phase 1, participants suggested that instructors on campus deployed a range of pedagogical strategies, some inhibiting and others enabling access. For example, the didactic lecture format, described by participants as an inaccessible teaching practice, is still used widely on campus. In contrast, some participants shared examples of instructors deploying a variety of strategies in addition to lecturing to facilitate learning for diverse student groups. Providing materials online, including class notes and lecture recordings, was positioned (frequently, though not exclusively, by students) as an accessible strategy used by some instructors. Participants noted that this practice allowed students with and without disabilities to review material at their own pace, and to make up for classes they might miss due to health problems or physical environmental barriers. Nonetheless, a few participants indicated that disagreements about this practice continue to exist on campus, as some instructors do not put materials online due to concerns about intellectual property or a belief, stated by one student without a disability, that when you podcast, "most people don't go to class".

An interesting problem raised in Phase 1 and emphasized subsequently is the potential tension between effective and accessible teaching strategies. One disabled student suggested pedagogical research rarely considers accessibility, for example, noting that instructors who walk around the class to engage students make it more difficult to read lips or hear. Similarly, while several participants positioned participatory and/or collaborative activities as effective means of helping students learn, some students with disabilities suggested that these same strategies could create compelling barriers:

> One of the biggest teaching strategies I have an issue with is group work. Even in a room of twenty, when twenty people all split into groups and start talking, I can never hear clearly anything that is going on. It is like a wall of sound that can't be parsed and ends up just being meaningless noise.

> For someone like myself who gets tired really easily, […] I think [mandatory participation] is ineffective. […]

This conflict between accessibility and reportedly effective teaching strategies is particularly relevant given the increasing focus on teaching and learning innovation at many higher education institutions in Ontario. The ongoing presence of this concern in the data suggests little substantial change in participants' experiences of teaching and learning since the first phase of the research. It also speaks to a broader failure to acknowledge the ableist norms that inform teaching and learning innovation.

Disciplinary Features and Norms

Minimal change was observed in participants' comments about relationships between disciplines and accessibility. As in Phase 1, several people (across all participant groups) suggested that some disciplines are difficult to make accessible due to features, practices and/or epistemologies common to those fields. Some positioned the visual components of subjects ranging from anatomy and computer science to marketing and art history as barriers to accessibility for people with visual impairments, while one instructor suggested the required competencies attached to professional degrees left little "wiggle room" for accommodations. Participants also claimed that certain disciplines are conducive to fostering accessibility. For instance, staff members and an instructor indicated that the research foci or educational backgrounds of some people on campus made them more attuned to issues of inclusion than others, while a student without a disability argued that the emphasis on multiple perspectives in some fields made those disciplines more accessible than others more focused on facts.

A small number of participants stressed that typical pedagogical methods employed in different disciplinary contexts made teaching and learning more or less accessible in those areas. According to one student identifying with disability, for instance,

> The way [courses in psychology] are designed, their course design, it really fits well for what my accommodations and my disability needs. So that's mainly why I went into psychology. […] I can't handle three hour labs … So that's why I didn't go into the hard core sciences.

Such persistent connections between disciplinary features and accessibility underline the importance of further examining the impact of the AODA within different academic fields.

Attitudes

As in Phase 1, attitudes were one of the most discussed factors in the present data, pointing toward little change over the research period. Beliefs that accessibility and accommodations can compromise the integrity of the educational experience continue to disable students, as does a sense that some students manipulate the accommodation system. The data also suggested an enduring and widespread belief that accommodations provide unfair advantages to those receiving them. One disabled student noted that accommodations "are there to put people on a level playing field, and I think a lot of people say that, but some profs don't really actually understand that, and don't think it's true". Others (in all participant groups) expressed opposing beliefs, suggesting that attention to accessibility can enhance teaching and learning, or pointing out that many students do not misuse the accommodation system. Some participants also acknowledged that accommodations work towards equitable access rather than undue advantage, though the previous student comment raises questions about whether such assertions translate to deeply felt, widespread beliefs.

The present data also indicated that many members of the university community continue to hold negative attitudes about disability itself, viewing persons with disabilities as inferior, strange or 'Other'. As one student with a disability noted:

> If I were to make public the label(s) that my (ex)psychiatrist gave me once upon a time […] I think that would mean something to my colleagues. I don't, however, think that I would want the things they might associate with those labels attached to me. I don't want my colleagues thinking of me as unpredictable, possibly violent/dangerous, and possibly incapable of reasoned thought and decision-making. When I used the label "bipolar" in the past, people acted as though those were the things they could expect from me.

In some cases, such attitudes were connected to a sense of stigma that can further disable students with disabilities:

> I tend to keep my accommodations a secret. This is a secret I keep from friends, family, coworkers … even my father. I do this because I have heard comments made by individuals in my life in general about individuals with disability and not a single one has ever been positive. I have to lie sometimes to explain where I am during an exam or midterm since I write in a special room. The stigma is heavy and the weight is a huge burden upon my shoulders … As a learner I think my experience is sometimes hindered because I feel as if I am living a double life. (Student with a disability)

This feeling of having to hide one's disability – based on the experience of negative reactions from others – suggests the increasing awareness reported above has not yet translated into widespread perceived attitudinal change, even though some participants did suggest there had been positive change in attitudes since the Phase 1 interviews. The fact that beliefs about disabilities, like other attitudes described here, largely resonated with those described in the first phase of the research indicates many disabling attitudes are deep-seated and resistant to change. For students, the consequent discriminatory practices do not appear to have been significantly lessened by the AODA legislation.

Perception of the AODA's impact

Overall, participants expressed mixed opinions about the AODA legislation and its effect on teaching and learning at the institution. While some suggested that the AODA had raised accessibility awareness on campus, many expressed uncertainty or reported seeing no real impact. In both Phases 2 and 3, most participating students with disabilities suggested they saw no substantial changes as a result of the legislation:

> Graduate classes, as far as I know, have not changed their formatting, and as it stands, they involve sitting in a room for three hours, talking with your colleagues (at least in my department). If that is not a style of learning that works for you, you are essentially screwed if you want to go to grad school.

Moreover, participants from all other groups reported doubts about the effects of the legislation during Phase 3 interviews. When asked about the impact of the Integrated Accessibility Standard, a staff member said, "I don't think it has [affected teaching and learning], because I have never heard of it, or seen it, or noticed a change".

Some participants expressed a belief that the legislation's impact would become more apparent over time. A student with a disability, for instance, suggested the Act "will eventually do what it intended to do," despite expressing frustration that "it's moving too slowly". Many people expressed doubts that the legislation ever could exert a substantial impact on actual practice, given its structure and enforcement model. "It is like most government legislation," one instructor said. "It is lofty and ambitious and probably not fully implementable". Similarly, an administrator noted,

> …the requirements for accessible teaching – the only obligation on the part of the university is to provide information for professors. We have no obligation under the legislation to make sure that, one, you heard it, or, two, that you are employing it.

Significantly, many participants suggested that the Act's potential was minimized by limited and ineffective communication and training. The online training modules connected to the AODA Customer Service standard, for example, were criticized widely. At the same time, few participants seemed to be aware that *any* training was available in relation to the Integrated Accessibility Standard, or indicated understanding of what that standard entailed. A staff member noted the standard had not affected their work "because there hasn't been any apparent training around it". Others suggested they had not heard about this stage of the legislation or restricted their comments about training to the customer service modules. These findings corroborate the concern, expressed by the administrator above, that the training provided to date under the Integrated Accessibility Standard is not reaching educators on campus, let alone influencing their practice in demonstrable ways.

Discussion

It is important to address the limitations of our research. The small sample size and short time frame make it difficult to extrapolate generalizations or determine causality (Poole, Van De Ven and Dooley 2000). Several biases relate to our means of gathering data, through interviews and journals. For instance, participants may have responded based on how they wanted to be perceived and they may have been more likely to discuss events or views that reinforce patterns for which they expect or wish to find evidence (Poole, Van de Ven and Dooley 2000). Our focus on perceptions means we did not assess teaching and learning directly, and cannot be sure that participants' claims are accurate representations of anything more than their own experiences and beliefs. As discussed, there was also a significant drop-off in the number of students with disabilities from Phase 1 to Phase 3, resulting in this group's underrepresentation in recent data.

Nonetheless, the longitudinal nature of our research allowed us to begin to fill a significant gap in the literature by gathering rich data charting the experiences of a diverse group of participants over a reasonable time period. Phase 2 journaling decreased the total interval between data collection for some participants which is advantageous because shorter intervals allow researchers to gain more understanding of how change is occurring and decreases recall bias (Poole, Van de Ven and Dooley 2000).

Thus, despite the study's limitations, there are several interesting findings. Most significantly, the data make clear that participants perceive little change in the accessibility of teaching and learning at McMaster since the implementation of the AODA Integrated Standard. Critically, all students with disabilities who participated in the research continue to report multiple disabling barriers that work against full participation in the university environment. Most of the barriers and facilitators reported in the first research phase were reaffirmed subsequently, and several participants stated they had seen little visible change on campus. The most notable exception was a perceived increase in the awareness of accessibility issues at the institution, which some attributed in part to the legislation and its reverberations. The implementation of the AODA has also seemingly occurred concurrently with a shift towards enhanced institutional communication about accessibility, suggesting a potential correlation between the two. Nevertheless, most study participants expressed a complete lack of awareness of the Integrated Accessibility Standard and its mandated educator training, drastically undercutting potential claims of the legislation's impact to date.

This lack of significant change resonates with broader debates about how best to confront and transform disabling social structures. Reflecting on the value of the social model of disability, Barnes (2012, p.7) cautioned that:

the apparent acceptance of social model inspired thinking within political and policy circles …has yet to be translated into meaningful and enforceable practical policies and practices. Although most nation states now have some form of anti-discrimination legislation to outlaw the various forms of institutional discrimination against disabled people, progress is painfully slow.

What else, then, is required to achieve meaningful progress towards accessible and enabling educational environments? Here, we identify three related strategies that complement the formal mechanisms of AODA implementation. The first of these involves the need for 'organizing from below' within educational institutions. While change, particularly in complex, decentralized organizations such as colleges and universities, takes time (Ginsberg and Bernstein 2011), time may not be the only factor militating against this change. Research on organizational change emphasizes that 'top-down' measures (such as legislation) rarely lead to meaningful shifts in teaching and learning cultures (Mårtensson, Roxå and Olsson 2011; Henderson, Beach and Finkelstein 2011). Instead, this literature underlines that significant and lasting cultural change within academic contexts must be 'owned' by academics themselves, a finding which suggests the AODA's impact on teaching and learning will always be superficial unless faculty and staff are actively organized and engaged in the practical design and implementation of change. This engagement should include efforts that involve disabled students, but must not—as happens too often—rely primarily on disabled students to do the work (Olkin, 2002; Hibbs and Pothier, 2006). Such a strategy is consistent with Imrie's (2014) argument that a mix of actions is required to supplant institutionalized forms of exclusion and inequity, with formal legislation supplemented by small and large-scale change strategies engaging members of the institution in enhancing educational accessibility.

Along these lines, Kezar, Bertram Gallant, and Lester (2011) describe several "grassroots leadership tactics" that faculty and staff can use to create change in higher education institutions,

including creating discussion series and reading groups to encourage dialogue, and marshalling

evidence to develop a persuasive narrative for transformation. Several of these strategies might

be relevant to moving academic communities towards greater educational accessibility. Indeed,

the data reported here could constitute a first step towards deploying the latter. Regardless of the

specific approach, the key point is that strategies must be developed to organize and engage

members of the campus community in identifying and discussing existing barriers, and working

toward change. Our findings also highlight the importance of meaningful professional

development, since many participants expressed a need for such education while criticizing, or

missing entirely, the training provided by the institution in related to the AODA legislation. In

light of these considerations, a proposal is being developed for training pertaining to accessible

teaching and learning, which synthesizes our research findings with existing academic

development literature (Marquis et al. in press). Similar plans for meaningful professional

development and knowledge translation should be a priority at all institutions.

A second strategy concerns the need for a sustained critique of the ableist norms that

continue to structure disciplinary practices. Since academic fields exert a considerable influence

on the thinking and practices of their members (Fanghanel 2013; Mårtensson, Roxå and Olsson

2011), change efforts must take disciplinary contexts and cultures into consideration. As Trowler

(2008) has shown, disciplines and departments create powerful "teaching and learning regimes"

that govern the expectations for and practices of their teaching and learning. These teaching and

learning regimes are important to consider given our repeated finding that participants

understood the features and practices of some disciplines as more in tune with considerations of

accessibility than others. If disciplinary cultures are central factors guiding teaching and learning

decisions, it is unlikely that meaningful progress towards accessibility will be entertained in the

absence of sustained conversations that begin to unpack and critically assess the features of different disciplines. On the one hand, if the features of disciplines overlap with considerations of accessibility, highlighting this congruence and emphasizing how inclusive teaching aligns with disciplinary priorities may facilitate movement towards integrating such teaching strategies into the departmental culture. On the other hand, the contention that some disciplines may be simply 'unsuitable' for disabled students requires further critical interrogation, highlighting the disabling and exclusionary nature of taken-for-granted academic practice in some departments, as well as the potential for other more inclusive and enabling forms of instruction (Hall, Healey and Harrison 2002).

Critical attention to the pervasiveness of ableist norms is also needed at the level of the institution as a whole. Concurrent with the implementation of the AODA legislation, McMaster has been undergoing a visioning process designed, amongst other things, to improve teaching and learning and enhance the student experience (Deane 2011; Forward with Integrity Advisory Group 2012). In one sense, this changing institutional climate focussed on student-oriented teaching and learning could be conducive to accessibility. However, our data suggest there is also a potential conflict between accessibility for students with disabilities and commonly discussed 'best' practices for teaching and learning. This reflects a broader and pervasive tendency towards what van Hoven and Elzinga (2009, p.134) describe as "undifferentiated thinking" about the needs and capacities of a diverse body of disabled and non-disabled students. Further research and dialogue are required to consider how to retain the benefits of innovative teaching and learning strategies such as group work and participatory learning while at the same time making them more widely accessible. More fundamentally, there is a need to ensure that innovation is explicitly tied to inclusivity.

Third, and consistent with the materialist underpinnings of the social model, we draw

attention to the importance of adequate resources to make accessibility practically achievable.

This is true with respect to the formal accommodation system. Our data point to the stresses and

strains that characterize the current system, and the ways in which these work to frustrate and

constrain the academic trajectories of students with disability. More generally, there is a need for

institutional commitments to fund and support efforts to enhance accessibility. We recognize that

this will not be easy to achieve given that universities tend not to be proactive when it comes to

disability (Barnes 2014), with only a minimal response given to issues of equity and access for

disabled people (Imrie 2014). This is especially true in the current era of austerity and spending

cuts. However, we are also concerned that efforts to encourage accessibility and accommodation

in the absence of adequate institutional supports risks constructing disability as yet another

'problem' downloaded to individual units and instructors. Under these conditions, it becomes

extremely difficult to confront the deep-seated and disabling attitudes reported here. These

attitudes continue to work against access and equity across institutions, and perpetrate additional

harms against disabled students who, internalizing this disablism, feel they have little choice but

to hide their need for accommodation (Withers, 2012).

Conclusion

This research begins to fill a distinct gap by considering the relative impact of the AODA

legislation on educational accessibility over time. While participants reported preliminary shifts

in awareness and in some practices (e.g., enhancements in institutional communication in

particular), other, deep-seated factors (such as disciplinary norms and attitudes) unsurprisingly

remained resistant to change. In order to facilitate more meaningful transformation, grassroots

change strategies, along with attention to the relationships between accessibility and institutional and disciplinary priorities, should be explored. In addition, future research and change initiatives might also consider the connections between disability legislation and Human Rights legislation more broadly.

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