Montreal

Symposium

Proceedings of the Ed-ICT International Network Montreal Symposium: Stakeholder Perspectives

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Ed-ICT International Network

Disabled Students, ICT, Post-Compulsory Education & Employment: In Search of New Solutions
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About the Ed-ICT Network <http://ed-ict.com/>

The focus of the Ed-ICT International Network is to explore the role that information and communication technologies (ICTs)—including computers, assistive technologies, online learning, social networking sites— play or could play as facilitators or barriers for students with disabilities in post-secondary education generally and specifically in relation to social, emotional and educational outcomes.

Funded for three years by the Leverhulme Trust, this International Network is co-organized by Jane Seale – Principal Investigator (The Open University, UK); Catherine Fichten (Dawson College, Canada) Tali Heiman (Open University, Israel); Sheryl Burgstahler (University of Washington, US); and Björn Fisseler (FernUniversität, Germany).

The Network examines the practices that educators and other stakeholders can implement to mediate successful and supportive relationships between learners with disabilities and ICTs.

The Network's objectives are to:

- **Synthesize** and compare the research evidence that is available across the five countries regarding the relationship between students with disabilities, ICTs and post-secondary education;
- **Construct theoretical explanations** for why ICTs have not yet brought about the reductions in discrimination, disadvantage and exclusion that were predicted when equality and discrimination related laws were published across the five countries;
- **Provide new perspectives about potential future solutions** regarding how post-secondary education institutions can better use ICTs to remove the ongoing problems of disadvantage and exclusion of students with disabilities.

In order to meet these objectives the Network will hold five international symposia with five broad themes:

1. Effective models, frameworks
2. Stakeholder perspectives
3. New designs
4. Effective practices
5. New solutions

Montreal Conference: Introduction

The purpose of the bilingual (English-French) Montreal Symposium was to examine how different stakeholders could and should contribute and collaborate to ensure the accessibility of technology in postsecondary institutions to individuals with disabilities. A variety of experts were invited to ensure representation among the key stakeholders such as senior managers, technology specialists, legal experts, service providers, professors, librarians, publishers and students with disabilities.

The principal investigator of the Ed-ICT Network is Jane Seale. The Montréal Conference coordinator was Ed-ICT and Adaptech Research Network member Laura King; she was assisted by Ed-ICT and Adaptech Research Network members Catherine Fichten, Alice Havel, Mary Jorgensen, Alex Lussier, Maegan Harvison, Christine Vo, and volunteer Steve St-Pierre.

Activities included:

- Event kick-off: introduction to theme and aims of the symposium
- Two keynote speakers
- Three panel presentations (international perspectives, Canadian perspectives, and student perspectives)
- Three guided workshops

We sought answers to questions such as:

1. What are the barriers and facilitators to ensuring the accessibility of information and communication technologies (ICTs) to individuals with disabilities in post-secondary education?
2. What are the barriers that prevent different stakeholders from being engaged? What helps engage them?
3. What can different stakeholders do to facilitate accessibility to technology for students with disabilities?
4. Are there stakeholders who have not been traditionally identified and who should be encouraged to get involved?
5. Are you aware of any research that has been done involving stakeholders and the accessibility of technology for students with disabilities? What future steps need to be taken to engage more diverse stakeholders?

Event Kick-Off: Introduction to Theme and Aims of the Symposium

Jane Seale, Principal Investigator, ED-ICT

Jane Seale summarized the goals of the network, the topics of the five Ed-ICT conferences and the goals of the specific theme of the Montréal conference. She also presented a model of stakeholder engagement (see PowerPoint presentation at http://ed-ict.com/wp-content/uploads/2017/05/Ed-ICT_Montreal_Seale.pptx).

She noted that that

➢ Disability and ICT related practice in post-secondary education will not improve unless all stakeholders are engaged;

➢ There are key stakeholders who are not engaged in improving practice because they are either silent or silenced;

➢ One key factor contributing to the silencing of certain stakeholders is lack of disability awareness and negative attitudes toward disability;

➢ Education and training on their own cannot prevent the silencing of stakeholders; we need a range of strategies including advocacy, self-advocacy and participatory/inclusive research and development methods

Stakeholders can include

- ➢ Students
- ➢ Faculty
- ➢ Learning technologists
- ➢ Support staff
- ➢ Staff developers
- ➢ Senior managers
- ➢ Instructional designers
- ➢ Graduate teaching assistants
- ➢ Laboratory technicians
- ➢ E-learning professionals
- ➢ Webmasters
- ➢ Learning technologists
- ➢ Disability support officers
- ➢ Librarians
- ➢ Assistive technologists

Additional silent stakeholders are

- ➢ Stakeholders external to an institution
- ➢ Staff with disabilities within an institution
- ➢ Students with disabilities who do not disclose

She concluded that some of the causes of lack of stakeholder engagement are lack of awareness and knowledge, and negative attitudes about disability

Keynotes

Keynote 1:
Alaina Beaver – University of Colorado Boulder
Creating a Culture of Sustainable Accessibility:
Stakeholders, Models, and Methods of Change

Alaina Beaver began by speaking about the United States' Department of Justice (DOJ) investigation at the University of Colorado Boulder that was initiated by students who were blind who reported the university for having inaccessible digital technologies. For more information about the investigation please see the PowerPoint: http://ed-ict.com/workshops/montreal/programme/ and a related article: https://files.eric.ed.gov/fulltext/EJ1123793.pdf

Overview

- ➢ The accessibility concerns mentioned in the DOJ investigation were addressed using a project management approach
    - o Structure was of great importance
    - o Stakeholders were invited to a project kickoff (where all stakeholders got together and discussed the goals that they wanted to accomplish)
        - ▪ Stakeholders also included external partners with expertise to ensure provision of a digital environment that was accessible to students with disabilities
            - • They exchanged feedback and ideas

- The external partners had either dealt with a DOJ investigation or had excelled in the field of accessibility of digital technologies
  - Effective communication was facilitated among stakeholders
    - One way this was done was to have the same stakeholders have roles on different teams
  - Clear objectives and measurable outcomes were decided before the project started and stakeholders were clearly told to whom they would report their progress
  - Hosted a post-mortem for the project and implemented a roadmap approach. This was the conclusion for the project and informed the community of what steps needed to be taken to ensure sustainability of digital technology accessibility on campus
- Positions that were key to ensuring accessibility of digital technologies
  - Chief digital accessibility officer
  - Representative in governance, policy, and standards
  - Validation, testing, proactive support: new positions within the office of communication and technology

Lessons learned

- Importance of having leadership commitment
- Must maintain transparency and honesty with the Department of Justice and the community in general / key stakeholders
- Importance of active engagement with community members who have disabilities. It is important to remember that it is okay to ask for help and it is ideal to engage stakeholders who want to be actively involved
- Leverage the best third parties for consultation and audits
- Authentic and open communication is essential
- Create a help line that is accessible by phone to report accessibility issues and get assistance

ICT accessibility policy

- Accessibility of digital technologies is a priority and is everyone's responsibility. It has personal implications for all stakeholders who are involved (e.g. staff, faculty, students)
- Put in place a governance structure that ensures sustainability of the digital accessibility policy
- Implement a universal design strategy
  - Focus on support, education and outreach (campus events and promoting the idea that accessibility means having an inclusive learning environment)
- Create an accessibility and usability lab, which does testing on different platforms to ensure accessibility and reliability of digital technologies
- Create measures of validation and verification (or compliance and audit)
  - Allows for the testing of new digital technologies for accessibility and helps to ensure that those that are implemented are truly accessible for all students

Models for change in policy for accessibility of digital technologies

- ➢ Project management approach (discussed above)
- ➢ Peer experts model
  - o Knowledge of the wider accessibility community is of central importance
    - ▪ Perspectives from stakeholders who are not part of the project itself can provide vital feedback
  - o Fosters opportunities for ongoing collaboration and discussions where stakeholders can share what they have learned with regards to the accessibility of digital technology
  - o Uses a proactive approach – stakeholders can become leaders and set an example for others in the field of accessibility
    - ▪ Being able to demonstrate to other stakeholders that one has been successful in ensuring the accessibility of digital technologies is very valuable
- ➢ The use of a combination of the two models for change mentioned above provides an optimal environment for the successful implementation of an accessibility policy that ensures the accessibility of digital technologies

Important characteristics for a successful model for change

- ➢ Clear communication
  - o Essential for establishing and maintaining stakeholder relationships
  - o Stakeholders must recognize that they are all working to achieve one common goal
  - o Stakeholders must be comfortable working together before they can successfully begin working toward this shared goal
  - o Having a formal communication plan is also key
    - ▪ Keeping minutes of meetings
    - ▪ Having the same stakeholders sit in on multiple meetings to facilitate communication
  - o Look at other models that foster clear communication
- ➢ Defined roles and responsibilities
  - o Making sure stakeholders know why and how they are involved
  - o Having some type of get-together at the project kickoff can create a buy-in by the stakeholders
  - o Having schedules and timelines help create and maintain accountability of stakeholders
  - o Defining stakeholders' roles clearly, including specific tasks for which they are responsible, as it helps the stakeholders progress toward the completion of their goals and makes them accountable to the other stakeholders
  - o This allows for the building of trust among stakeholders, thus potentially fostering the relationships among stakeholders

- o Making sure that stakeholders have a clear expectation of each other's commitments to the project
- ➢ Structure that is clear and sustainable
    - o Create a roadmap for accessibility
    - o Set short term goals that are achievable with the resources that are available
    - o Establish sustainable leadership and organization
    - o See improving accessibility of digital technologies as an opportunity for growth, to foster inspiration among potential stakeholders
- ➢ Strategic silo-crossing
    - o Make sure that the same stakeholders have roles on different executive teams
    - o Foster new relationships among stakeholders through empathy and understanding
        - ▪ These relationships ensure that stakeholders will want to work in collaboration with each other
    - o Helps diffuse the 'blame game', as different stakeholders are assigned specific responsibilities and each stakeholder is aware of the other stakeholders' responsibilities

Keynote 2
Jennison Asuncion – Adaptech Research Network
What Can be Learned from Industry for Making Postsecondary Education More Digitally Accessible?

Concepts

➢ The important stakeholders in higher education and industry are similar, but they just have different names or labels:
  - o Student = User
  - o Senior management = Leadership team
  - o Faculty = Training and development

➢ Researchers are pivotal stakeholders in both industry and higher education

➢ Digital vendors in the private sector face the same challenges / barriers with regards to accessibility as individuals in education
  - o Accessibility is a concern in product creation, which is vying for recognition, but security concerns also have to be taken into account

➢ In order to understand these concerns, one needs to "walk in the shoes" of the digital vendors, who are releasing new products at a very rapid rate

➢ There is a 'corporate accessibility continuum' that ranges between:

- o Little to no focus on accessibility to having a team devoted to accessibility
- o Some companies have no formal approach / policy related to accessibility, however they manage to address many of these issues in an informal manner
- o Midsize companies may have a dedicated team to address compliance to accessibility legislation
- o Large companies can even have a chief executive officer in charge of accessibility
- o The speaker, Jennison, directs a team that sits in engineering, within product development, thus allowing close contact with product developers

- ➢ Stakeholders
  - o Students with disabilities: strategically placed, very powerful. Witnessing their struggles using applications is more powerful than legislation
  - o Senior management / leadership: they own the purse strings, if they focus on accessibility others will listen
  - o Faculty: stakeholders with the greatest opportunity, in part due to their own diversity
  - o Procurement: huge potential ally. Must hold dedicated accessibility sessions and set up a process by which a list of potential vendors is narrowed down, accessibility issues are addressed with the remaining vendors, and then accessibility should be stated in the contract. Price will still be a primary determinant in the deal, but this at least brings accessibility to the forefront

- ➢ Accessibility issues
  - o No technology is completely accessible
  - o Technology Access – a collection of post-secondary institutions and technical companies with a common goal to ensure that students have basic information on accessibility when they graduate and pursue a career in product development
  - o International Association of Accessibility Professionals (IAAP) - offers certification in product development
  - o WCAG 2.0 - Guideline of what constitutes an accessible website, will be releasing some more guidelines or industry standard updates in 2018

Take-home messages

- o ICTs (Information and communication technologies) have to be accessible for everyone if we believe in the notion of digital literacy for all
- o Students need to be literate from a digital perspective and they need to be familiar with their assistive technology
- o It is important for all students to have access to the same materials
- o Education needs to be made more accessible in certain fields where students with disabilities are underrepresented
- o It is important to get feedback about accessibility from the users of technology

Panels

Panel 1: Moderated by Jane Seale

International Panel: International perspectives on engaging stakeholders (Sheryl Burgstahler, United States; Catherine Fichten, Canada; Björn Fisseler, Germany; Dana Kaspi-Tsahor, Israel; Chetz Colwell, United Kingdom)

Challenges faced in engaging stakeholders

- ➤ United States
  - o This panel member took an interesting approach and looked at how each group of stakeholders could be inhibitors and promoters of accessibility. Please see the PowerPoint at http://ed-ict.com/workshops/montreal/programme/

- ➢ *Canada* (PowerPoint available at http://ed-ict.com/workshops/montreal/programme/)
    - o There is no legal requirement to ensure the accessibility of technology at the postsecondary level; therefore there is no one to report to or to pressure stakeholders to get involved
    - o Needs buy-in at the top – accessibility has to be important to senior management at postsecondary institutions
    - o Need to be proactive rather than retroactive with regards to ensuring accessibility
- ➢ *Germany* (PowerPoint available at http://ed-ict.com/workshops/montreal/programme/)
    - o Lack of knowledge about accessibility, disability, or about website accessibility
    - o Lack of knowledge about the state-of-the art technology available in the area
    - o Lack of knowledge about the number of students with disabilities
    - o Inaction by postsecondary management with respect to existing legislation about website accessibility
    - o Staff members demand more money, resources or personnel before they say they are able to ensure accessibility to technology
    - o Staff members say that ensuring the accessibility of technology is not their responsibility or part of their job
    - o Other staff members say that there are not enough students with certain types of disabilities to justify the need to provide certain accommodations
- ➢ *Israel* (PowerPoint available at http://ed-ict.com/workshops/montreal/programme/)
    - o Lack of knowledge and awareness
    - o Lack of empathy
    - o Fear of compromising academic standards
    - o Most notably: budget limitations – the institution has to pay for everything, there are no other funding organizations
- ➢ *United Kingdom* (PowerPoint available at http://ed-ict.com/workshops/montreal/programme/)
    - o Admitting that everyone has a responsibility
    - o Distance: geographical and hierarchical/structural
    - o Issues with tutor (not the same as academic staff) employment contracts

Stakeholders that you find difficult to engage

- ➢ *Canada*
    - o Senior management
    - o IT specialists and webmasters
    - o Government
    - o Librarians
    - o Parents
    - o Rehabilitation centers
    - o Distance education specialists
    - o Textbook publishers
    - o Students who do not register with disability services

- ➢ *Germany*
  - o Senior management
  - o Staff members and students
  - o Middle management
- ➢ *United Kingdom*
  - o Senior management
  - o Academic staff

Strategies used to engage stakeholders

- ➢ Germany
  - o Bottom-up strategy – providing basic information and participating in annual conferences
  - o What does not work = management that wants quick solutions
- ➢ Israel
  - o Get approval from the president of the university
  - o Get a legal advisor engaged
  - o Get the board members (e.g. the Dean of Students, Dean of Academic Studies, and the Director General) engaged
  - o Form an accessibility committee
  - o Distribute the accessible service regulations (e.g. sending regulations by email or publishing them in an online newsletter) to all faculty and staff
  - o Raise staff awareness through:
    - ▪ Seminars
    - ▪ Online newsletters
    - ▪ Guidelines for the accessibility of lectures
- ➢ United Kingdom
  - o Create an accessibility group – workshops used to unite stakeholders who are willing to engage in ensuring the accessibility of technology and spread awareness
  - o Develop an accessibility policy
  - o Create a survey for staff about their perception of accessibility of technology
  - o Sharing information like Global Accessibility Awareness Day (GAAD) (http://www.globalaccessibilityawarenessday.org/)

Stakeholders with whom educational institutions are presently working with regarding students with disabilities and accessibility to technology

- ➢ *Canada*
  - o Faculty
  - o Students
  - o Disability service providers
  - o Access technologists (only in large institutions)

- o Learning specialists
- o Others called in when needed
- ➤ *Germany*
    - o Three staff members of ICT services who provide documents to students who are blind or have visual impairments
    - o One university representative for students with disabilities
        - ▪ Liaison between students with disabilities and faculty and management
- ➤ *Israel*
    - o Minister of Justice - Commission for Equal Rights of Persons with Disabilities
    - o Minister of Labor, Welfare and Health
    - o Committee of the Knesset (Education & Welfare and Health)
    - o National Insurance Institute (Department of Vocational Rehabilitation)
    - o Ministry of Defense (Department of Rehabilitation)
    - o Non-profit organizations (e.g. "Access Israel")
    - o Accessibility services expert
    - o Buildings, infrastructure and environment accessibility expert
    - o Administration
- ➤ United Kingdom
    - o Students
        - ▪ Lab built on campus to have students test the website accessibility. Students are consulted and have representation
    - o School accessibility coordinators
    - o Disabled student services
    - o Website content developers
    - o Librarians
    - o Procurement staff

Panel 2: Moderated by Laura King

Canadian Stakeholder Perspectives (Roch Ducharme, Pedagogical Counsellor; Sandra Earl, Technical Product Manager; Anne Jarry, Faculty; Andrea Miller-Nesbitt, Librarian; Frank Smith, Coordinator of a Non-Profit Organization)

Barriers for students with disabilities accessing technology

- ➢ Pedagogical counsellor
  - o Lack of government funding for providing computers for students with disabilities
  - o Funding is also a barrier when it comes to assessment; students need a diagnosis to receive services, but the assessment costs between $1000 and $1500
  - o Compatibility between Mac and Windows
    - ▪ Most students who consult the professional for help have a Mac but the postsecondary institution uses a Windows operating system. Therefore, for exams students have to use Windows, which means we are asking them to be proficient with both operating systems
- ➢ Technical product manager at a software company
  - o Accessibility concerns associated with online formats
    - ▪ Many new applications used by developers are semi open (there are some limitations in terms of how modifiable it is and how it can be used by the user)
    - ▪ We need to be diligent as a community to make sure that we unify our practices to help ensure accessibility of technology
- ➢ Faculty
  - o The file format in which technology is provided
- ➢ Librarian
  - o Libraries need to make a greater effort to have 'electronic formats' of course materials and books available
    - ▪ Textbooks are a problem because publishers are not always willing to sell their electronic formats to libraries
- ➢ Coordinator of a non-profit organization
  - o Access to technology
  - o The incompatibility between the platforms on which technology is used
  - o All students with disabilities have individual needs and the same technology does not work well for all of them

Facilitators for students with disabilities accessing technology

- ➢ Pedagogical counsellor
  - o Creation of a community of practice
  - o Key facilitators will be faculty members
  - o The use of Antidote, a valuable grammar and language software
  - o E-learning is an interesting facilitator from which many lessons can be learned
  - o Universal design approach is ideal because of the growing number of students with disabilities on campus who are not registered with the accessibility center to receive accommodations
- ➢ Technical product manager at a software company
  - o Alignment / agreement in international policy
- ➢ Faculty
  - o The fact that faculty is getting older is forcing companies like Apple and Microsoft to invest in accessibility
- ➢ Librarian
  - o Many digital libraries / eLibraries exist
  - o Many library collections are available in an accessible format
    - ▪ Canada recently signed the Marrakesh Treaty: a copyright treaty that stipulates that countries agree to make all copyright paper material available in accessible formats for visually impaired persons when requested
- ➢ Coordinator of a non-profit organization
  - o Professors are becoming more savvy about technology and accessibility
  - o We need to think about other legislation that exists that could become a potential facilitator
    - ▪ The Canadian government has made a commitment to creating a Federal Disability Act
  - o Non-governmental organizations can also play a role as potential facilitators
    - ▪ Help highlight the issues that the government should address with regards to accessibility

In your position, what could you / your colleagues do to make technology more accessible for students with disabilities?

- ➢ Technical product manager at a software company
  - o Coordinate procurement processes among stakeholder groups
  - o The more pressure that colleges / universities can put on vendors, the greater emphasis vendors will place on accessibility
- ➢ Faculty
  - o Improvements in the accessibility of course packs
    - ▪ There have been some improvements achieved in this area already (e.g. glasses that read text out loud)

- ➢ Librarian
  - o Need to better educate the users of technology, especially faculty
  - o Librarians could put pressure on the vendors and publishers to make materials that are kept in libraries more accessible
    - ▪ However, librarians can only put so much pressure on the vendors or publishers because they have to respect faculty requests
  - o There needs to be a person whose job mandate is dedicated to accessibility in the library itself
    - ▪ This is important as librarians are not necessarily trained or knowledgeable about accessibility
- ➢ Coordinator of a non-profit organization
  - o Meet with disability service providers
    - ▪ Address issues of copyright and funding
      - • There needs to be more support for student funding programs

Is there anything that your institution / organization can do to help you stay involved, or become more involved, as a stakeholder?

- ➢ Pedagogical counsellor
  - o Facilitate communication between IT staff and faculty
  - o Get the word out that assistive technology exists and is available to the students
  - o The government has provided postsecondary institutions with money to buy assistive technology, but it is still difficult for students to use some of these assistive technologies. This is because institutions can only lend them the software and applications, but cannot actually lend computers
  - o Having accessibility policies would be of great benefit (even if the policies just defined what accessibility meant)
- ➢ Faculty
  - o Facilitate communication between faculty in different departments
    - ▪ Helps make faculty in all departments aware of what assistive technology is available to students
- ➢ Coordinator of a non-profit organization
  - o As an organization we are making sure that the voices of students with disabilities are heard
    - ▪ We want to provide an opportunity for students with disabilities to communicate effectively with many different stakeholders (i.e. government officials and disability service providers)
  - o The needs-related model should be used as opposed to the medical model, for example the case in Ontario where a student fought to have the right to have access to disability services without having to disclose specific information about their mental illness

Questions:

Have you heard of any creative way to put course packs online?

- ➢ Pedagogical counsellor
  - o Efforts have been made to achieve this at the grassroots level, but top-down support is needed
    - ▪ We need an institution-wide policy to ensure that faculty make their course packs available online
      - • This is needed because in Canada we do not have an equivalent of the Americans with Disabilities Act. Therefore, publishers are not required by law to make course packs available online
  - o A country-wide policy requiring that course packs be made available online is required
- ➢ Coordinator of a non-profit organization
  - o Whose legal jurisdiction is this?
  - o Creating policy on the online availability of course packs should be a federal responsibility (e.g. the minister of social development, education minister in the provinces), but associations that represent important stakeholder groups, such as faculty, might also need to have a say in this
- ➢ Technical product manager at a software company
  - o A solution to difficulties with making course packs available online is to use open source educational resources

Panel 3: Moderated by Alice Havel

Student Panel – Student Perspectives on Access to Technology (Natalie Martiniello, Shamron Spence, Laurence Rousseau, Xavier Lecourtois, Steve St-Pierre, Alexa Carle-Hébert)

What barriers have you encountered in using technology effectively?

➢ Lack of time
  o To learn how to use technology

➢ Financing
  o Government financing is not sufficient – we are in the era of mobile applications, the type of applications that colleges cannot lend or provide to students. Therefore, funding should be provided directly to students to allow them to have access to these mobile devices and applications
  o Students who are struggling financially may not be able to afford the technology or software they need during the semester
  o Some technology is very expensive

- ➢ Lack of knowledge
    - o About what technologies are available
    - o The first time the students use software on their own, they do not know how to use it properly due to lack of training
    - o The way students with disabilities are perceived is more disabling than the disability itself – people need to be better informed about what it means to be a student with a disability, including their strengths and abilities
    - o Experts do not always understand the perspective of students with disabilities – the users whom they are supposed to be helping
- ➢ Technology not being accessible
    - o Difficulty accessing computers at the academic institution – usually students end up using a computer lab at the college / university that has limited hours because they cannot get the software required for their courses on their own computers
    - o Software and some of its features are not accessible on all hardware and platforms, for example iPads, which may be the only platform that the student is able to use
    - o Lack of adapted transport does not allow the student to stay late to work in computer labs at the college / university – resulting in restricted physical access to technologies on campus
- ➢ Compatibility between different operating systems
    - o Compatibility problems between Mac OS X and Windows

Who (their role, not their name) and what has helped you access and use technology?

- ➢ Student himself/herself
    - o The student tested a lot of software and applications and realized how much these technologies could help them
    - o When the student learned about a new technology, they would look on YouTube or Google to see how the technology worked and if that technology would work well for them
- ➢ Parents
    - o The student's parents show them the new technology as it becomes available

    - o The student's parents advocated for them until they were old enough to advocate for themselves– the parents made sure that the student had access to braille and assistive technology and showed them that assistive technology is a toolbox and that you need to use the right technology in a strategic way
- ➢ Access technologist at the university
    - o Showed the student what technology was available
    - o Scanned textbooks
    - o Disadvantage = you only learn to use the technology that they know is available, even if there may be a better alternative available

- ➢ Community and peers
  - o Great source of information - can sometimes learn about more effective ways to use technology
- ➢ Librarian and lab technician
  - o Gave the student access to the resources in the library, giving the student the advanced preparation that is essential to their academic success – they helped the student even though it was not part of their job description
- ➢ Professors
- ➢ Student accessibility center

Who should be involved in making technology accessible and usable for students with disabilities?

- ➢ Professors
  - o Professors should be more involved because they know the content of their courses. Therefore, they are in the best position to know what technology would be ideal to use within the pedagogical framework of their courses
- ➢ Researchers
  - o We need to bridge the gap between research and practice. We need to think about how to enable researchers, users, and developers to work together effectively to build accessibility into software, applications, and technology in the initial design stage
- ➢ Librarians specializing in accessibility
  - o Responsible for making documents accessible
  - o Having a librarian who is assigned this role would be very beneficial for colleges and universities
- ➢ Students
  - o Teach other students how to use technology. Students who have used the same technology teaching other students is ideal because they can explain how to use the technology from a users' perspective and in less technical terms than a professor or assistive technologist
- ➢ Roles that need to be filled by unspecified individuals
  - o Providing training on how to use technology

What would it take to make technology accessible at your educational institution?

- ➢ Creating an accessibility zone
  - o Available to students and professors
  - o Open and safe environment that allows students and professors to receive support, including practical workshops, and to exchange ideas and come up with solutions to accessibility problems together

- o Have people available to show students how to use technology – these individuals must be users of the technology themselves
- ➢ When making changes, make sure that they are improvements and that potential user-difficulties that may be encountered are taken into account
- ➢ Making computer labs accessible for people with motor impairments of the upper limbs
  - o Have other alternatives available, such as iPads and tablets
  - o Make sure that computer labs are designed in such a way that students in a wheelchair can sit at a desk (e.g. make sure the tables are tall enough)
- ➢ Having more computers available in the computer labs at colleges and universities
  - o Helps students who do not have their own laptop or cannot get the software required for their laptop
- ➢ Faculty could have a deadline by which their course content needs to be finalized
  - o Hard to obtain material in an accessible format if professor changes this at the last minute
- ➢ National database for scanned content
  - o A cross university initiative – collaboration is essential
  - o To find more ways to make course material accessible, including textbooks

World Café (led by Jane Seale)

Statement: Students with Disabilities Should be Taught Self-Advocacy Skills

Common themes:

1) In an ideal society there should be no need for this!

- ➤ There should be no need to do so. Students with disabilities should not be singled out; they should have the right to choose not to disclose their disability
- ➤ If there is no benefit to using self-advocacy in a situation no one should be forced to disclose

2) Self-advocacy is an important skill for all students, not just students with disabilities

- ➤ Self-advocacy is one of the most important skills for anyone
- ➤ Self-advocacy is good for everyone

3) Institutions should not rely on students self-advocating

- ➤ Self-advocacy does not replace good practices and support

4) Yes, self-advocacy should be taught to students with disabilities

- ➢ Self-advocacy helps if the student has specific technology needs
- ➢ Students with disabilities cannot always rely on others to advocate for them. Additionally, the students themselves are the ones who best know their needs, so they are often the most effective advocates for their own needs

Related discussion – How much to encourage self-disclosure of a disability and self-advocacy

- ➢ Not all students want to disclose their disability
- ➢ But, if students with disabilities do not disclose their disability, they cannot get the resources they need to resolve accessibility issues that they encounter, raise accessibility concerns, and get the attention of important stakeholders
  - o This is important to do because the path toward equal access for individuals with disabilities is not yet paved

Statement: It is not possible to engage with students with disabilities who choose not to disclose their access needs

Common themes:

1) Universal design, design for diversity

- ➢ Universal design for learning can remove the need for self-disclosure of disability or accommodation of specific needs
- ➢ Universal design means "engaging" in design – we don't need the student to disclose

2) Self-advocacy may still be necessary

- ➢ Universal design is a great goal, but it does not guarantee accessibility for all students, so students may have to disclose their disability to ensure that their accessibility needs are met
- ➢ Universal design does not guarantee accessibility- some students may need 'customization' to meet their accessibility needs and if students do not disclose their disability they may not get what they require

3) It is certain that students who do not disclose their disability cannot be helped

Statement: All stakeholders are equal, but some are more equal than others

Common themes:

1) Power imbalance

- ➢ Some stakeholders (faculty) are too powerful; whereas some (students and service providers) could use a boost

- Governments and senior administrators control money and have more power
- Some stakeholders need to have a stronger voice (i.e. students and faculty)
- Senior managers are the most powerful stakeholders
- Power imbalances
    - Staff more than students
    - Administrators more than staff

2) Equal vs. Equitable?

- Equal = All students get the exact same thing
- Equitable = All students get what they need
- The difference between these two concepts can confuse stakeholders and can lead to ridiculous outcomes (e.g. if a student is deaf, the teacher turns off the sound for the video so that none of the students in the class hear any sound during the video at all, this is equal NOT equitable)

3) Rights and responsibilities

- When we talk about equality the concepts of rights and responsibilities are also related
    - With rights come responsibilities
- Someone must be held accountable for the decisions taken regarding accessibility (e.g. service managers introducing products are responsible for any of the related accessibility concerns)
- Not all stakeholders have equal accountability

4) Students with disabilities should be one of the most powerful stakeholders

- Power should go to the students with disabilities – their voice should be stronger than any other stakeholder
- What we would like to happen is that students with disabilities become the most powerful stakeholders

Statement: Distributed ownership of the accessibility mission is a pipe-dream

Common theme: Accessibility has to be a shared responsibility

- Shared responsibility can be achieved, but there is still work to be done and people have to be willing to do the work
- Ownership of accessibility goals can be shared, but it also requires accountability, compliance and enforcement
- An accessibility committee with representatives from different groups of stakeholders
- Different stakeholders will take ownership of different responsibilities. The stakeholders have to be cooperative and communicate effectively
- Ownership can be distributed, but not among all possible stakeholders simultaneously. Need to add one group of stakeholders at a time

➢ This will only be a pipe-dream if stakeholders cannot work together and there is no senior management support

Two concerns reported about shared / distributed ownership of the accessibility mission

➢ If many stakeholders share the responsibility for accessibility who will take a leadership role? Who will be held accountable?
➢ It might be realistic in some educational institutions, but not in all of them

Statement: There is too much red-tape (bureaucracy) that universities have that stops technology companies from meaningfully engaging with students with disabilities

Common theme:

1) This sounds like a poor excuse

➢ Poor excuse! Find other ways to engage with students with disabilities
➢ Sounds like technology companies trying to make excuses for not making their products accessible by design. Furthermore, there is always a way to obtain feedback from students with disabilities
➢ No, software companies do not need to involve college / universities to talk to students. Accessibility should be part of the design and development of their products
➢ Accessibility should be a feature, not an extra, so red-tape should not be a problem

2) What does 'meaningfully engaging' mean?

➢ Who defines 'meaningfully engaging'?
➢ 'Engaging with'- does that mean listening to feedback from students with disabilities?
➢ Not sure what is meant by 'meaningfully engaging' with students with disabilities

Statement: We need to stop complaining about how unresponsive some of our stakeholders are and instead try to empathize with them and walk in their shoes

Common themes:

1) Empathy is important and may have many benefits

➢ Empathy may improve results / engagement
➢ The reality of stakeholders at one university is not necessarily the reality of those at other universities. We need to take into account the needs of the stakeholders
➢ Empathy means thinking about how we can offer better support to the stakeholders
➢ Recognize the needs of stakeholders

2) Empathy is not always enough

➢ Empathy can only go so far
➢ Empathy does not always bring about change, depends on who the stakeholder is

3) Complaining is not constructive

➢ Complaining does not help bring solutions forward
➢ Instead of complaining we need to engage stakeholders, but we cannot be complacent

Statement: How to engage senior management?

➢ Have senior management representatives actually sit with students with disabilities and watch them try to register for courses online or engage in other course related tasks (this could help senior management realize the accessibility barriers that students with disabilities have to overcome)
➢ Emphasize that the institution has already shown leadership in the area of accessibility, that showing leadership in this area is beneficial for the institution and that the institution needs to continue to try to become even more accessible
➢ Support good relationships with managers and support staff
➢ Mandate that the institution must have an accessibility office or designated position
➢ Make sure to sell the goal of pursuing accessibility as being beneficial:
  o Make teaching practices current and inclusive (universal design)
  o Argue that accessibility will be beneficial for many different groups of students (e.g. second language learners, students with disabilities)
  o Making pedagogical materials, websites, and resources at the postsecondary institution accessible will make the college exemplary in its practices
  o Emphasize that the institution already has the resources to achieve its accessibility goals

Summary

With a total of 45 participants, 13 international (United Kingdom, Germany, Israel, United States) and 32 Canadian, our conference represented many of the important stakeholder voices.

Stakeholders present included:

- Students with disabilities
- Disability service providers
- Faculty
- Faculty with disabilities
- Distance education faculty
- Access technologists
- Campus information technology staff
- Senior institutional managers
- Researchers
- Professionals responsible for faculty / staff development
- Representatives of community organizations
- Education lawyers
- Librarians

The following major activities were held:

- An event kick-off introducing the theme and aims of the symposium
- Two keynote speakers
- Three panel presentations
    - International perspectives
    - Canadian perspectives
    - Student perspectives
- Three guided workshops

Kick-off

Jane Seale noted that disability and ICT related practice in post-secondary education will not improve unless all stakeholders are engaged. She provided a model of stakeholder engagement and noted that there are key stakeholders who are not engaged in improving practice because they are either silenced or silent. She then discussed the symposium activities to come in the interest of using stakeholder perspectives to ensure campus digital accessibility.

Keynotes

Overall, it was agreed that making postsecondary education digitally accessible requires the collaboration of many stakeholders working in hierarchical teams and accountable to senior

management. In fact, buy-in and the leadership of senior management were seen as the key to initiating campus-wide changes.

Many individuals in the postsecondary community were seen as being important stakeholders; first and foremost were students with disabilities, access technologists and those responsible for services for students with disabilities. However, it was noted that individuals from numerous campus-wide groupings that provide services to the entire institution, such as the chief technology officer, procurement and purchasing staff, the academic dean and the manager of the audio-visual department, were also important stakeholders. It was also highlighted that once changes are effected, a monitoring body needs to be put in place to ensure that those changes continue to be implemented. Clear communication, a set of tasks and timelines, and specific roles for stakeholders were also seen as important.

Details and specifics related to the kick-off, the keynotes, the panels and the workshops are too numerous to summarize here. These are available in the above sections of the proceedings.

International Panel

The diverse perspectives of the international panel revealed that the five counties represented were in different stages of development. The United States has a series of legal digital accessibility requirements for postsecondary education and a "watchdog" which monitors and acts on complaints from powerful lobbies of people with disabilities. The Canadian perspective is quite different, with no laws and few guidelines and only a human rights tribunal to hear access complaints. Relatively few postsecondary institutions have serious involvement of senior management or of the campus community. Germany also has no enforcement of policies requiring digital accessibility and there is a dearth of knowledge about accessibility, disability, and digital accessibility. Faculty and other postsecondary staff generally do not see accessibility as part of their job. In the United Kingdom, too, senior management is difficult to engage and faculty and staff often do not see digital accessibility as part of their mandate. In addition, employment contracts can limit stakeholder engagement. Israel is now in the process of developing legislation, but there is limited knowledge and awareness. In addition, there are budget problems, and a fear of compromising academic standards.

Canadian Panel

Canadian panel participants were asked about barriers faced by students with disabilities in accessing technology. Issues raised included lack of government funding, cost of assessments required for eligibility for services for students with disabilities, obtaining digital textbooks for the library, problems related to compatibility between Windows and Mac platforms, and difficulties related to the format in which digital texts are provided. Facilitators included a community of practice, the adoption of a universal design perspective, international agreements regarding policies governing digital products, and participation on Canada-wide panels related to issues the government should address. To make technology more accessible to students with disabilities, recommendations ranged from the coordination of procurement policies through to the need for faculty to put pressure on vendors of digital products, including textbook publishers, to address issues related to copyright.

Student Panel

The student panel was asked to discuss barriers encountered using technology effectively. Topics noted were lack of time needed to learn to use technology, government funding, types of software not available on the platform the student is able to use, compatibility between Mac and Windows platforms, lack of knowledge about available technologies, and difficulties attaining accessible technology at the educational institution because of restricted hours. As for what helped familiarize students with access technology, they indicated that they were self-taught, that they got information through Google and YouTube, and that parents, peers and postsecondary access technologists were helpful. Faculty, librarians and the campus center that provides services for students with disabilities were also mentioned. As for suggestions about what would make technology more available at their educational institutions, students noted that having computer work stations that are accessible to wheelchair users, having computers with access technologies in the postsecondary institution's labs, faculty posting their course outlines well before the start of classes to enable students to get alternate format textbooks, and having a national database for scanned content would be helpful.

Symposium Participants

The following individuals participated in the symposium.

Stephanie Adler
Université de Montréal
Canada

Jennison Asuncion
Adaptech Research Network
The United States of America

Alaina Beaver
University of Colorado Boulder
The United States of America

Leanne Bennett
Dawson College
Canada

Nancy Bergeron
Fédération des cégeps
Canada

Sheryl Burgstahler
University of Washington
The United States of America

Alexa Carle-Hébert
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The Open University, UK
United Kingdom

Dan Comden
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The United States of America

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