A library environment for everyone: Universal design and libraries

Andrea Miller-Nesbitt & Tanja Beck – McGill University
Evidence Based Library and Information Practice Annual Conference
July 16th, 2013
Outline

- Context
- Methods
- Results
- Future work
- Questions
Percentage of undergraduate students who self-identify as having a disability
(Canadian University Survey Consortium, 2011)
McGill context

- 2 campuses
- 11 faculties
- 11 schools
- 12 branch libraries
- 1,636 faculty
- 37,835 students
- 1,311 students registered with the Office for Students with Disabilities
OSD registered students

- Organic impairment 15%
- Pervasive development disorder 1%
- Motor impairment 11%
- Visual impairment 2%
- Multiple impairments 17%
- Learning disability 13%
- Attention deficit disorder 13%
- Mental health disorder 27%
- Hearing impairment 1%
Mental health disorder 27%

Attention Deficit Disorder 13%

Learning disability 13%

Multiple impairments 17%

Organic impairment 15%

Motor impairment 11%

Visual impairment 2%

Hearing impairment 1%

Pervasive develop. disorder 1%

Multiple impairments 17%

Learning disability 13%

Attention Deficit Disorder 13%

Mental health disorder 27%

Hearing impairment 1%

Pervasive develop. disorder 1%
Accessible learning for students with disabilities
McGill University takes the lead implementing Universal Design

BY KAREN SEIDMAN, GAZETTE UNIVERSITIES REPORTER     JANUARY 5, 2013
Universal design

“The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”

(Connell, B., et al., 1997)
7 Principles of Universal Design

1. Equitable use
2. Flexibility in use
3. Simple and intuitive use
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space

(Connell, B., et al., 1997)
Methods

1. Assessment of branch libraries
2. User survey
### Assessment of branches

<table>
<thead>
<tr>
<th></th>
<th>AT’s up to date</th>
<th>AT’s in accessible area</th>
<th>Spirit scanner</th>
<th>Print enlarger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birks</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Education</td>
<td>Yes</td>
<td>Yes, but no privacy</td>
<td>Yes, but inaccessible location</td>
<td>No</td>
</tr>
</tbody>
</table>

- Entrance/stacks clear of obstructions
- Wheelchair accessible
- High contrast directional signs
- Description of study areas
- Adjustable lighting
- Adjustable workstations
- Computer monitor size
- Availability of headphones
- Availability of adaptive technologies
- Accurate floor plans
- Accessibility of teaching room
- Spirit scanner and print enlarger
- Accurate floor plans
- Existence of a Policy

(Burgstahler, S., 2012)
Online Guide

Where to Study?

A guide for students looking to find their optimal study environment at one of the McGill Library branches.

The purpose of this library guide is to provide students with a summary of the study environments of each library branch so you can choose the best place for you to study. No two libraries at McGill have the same purpose, and each was designed to serve a different student population. This guide will, in alphabetical order, describe the various study environments and the resources offered, including adaptive technology (screen readers, print enlargers, document readers, etc.) and available reservations for study carrels.

+ Birks Reading Room
+ Education Library & Curriculum Resources Centre
+ Islamic Studies Library
+ Cybertheque (Basement of Redpath Library)
+ Redpath Library and McLennan (Main Floor)
+ Redpath Library and McLennan (Upper Floors)
+ Life Sciences Library (Level 3 and 4 of McIntyre Medical Building)
Birks Reading Room

Education Library & Curriculum Resources Centre

Location
The Education Library is an excellent place to study in groups or on your own, if noise is not an issue. The E-zone offers more privacy and is quieter than the rest of the library.

- Medium-sized library
- Plenty of open study space for group or individual work
- Can be noisy
- Well-lit, but no individual lamps
- The E-zone has 62 computer work stations
- One adaptive technology workstation with screen readers and print enlargers
- Separate quiet study room with computers at carrels
- Wheelchair accessible through side entrance, then take elevator down one level
- Accessible bathrooms located on the same floor as the library entrance
Methods

1. Assessment of branch libraries
2. User survey
User survey - Design

- Designed survey with the assistance of the manager of student assessment
- 10 questions, mix of multiple choice, 5 point Likert scale and open comment
- Link to online survey sent by email in late September 2012
- Sent 3 email reminders over the course of 1 month
- No incentive offered
Survey sent to all second year and above OSD registered students (N=918)

Response rate was 11% (n=101)

Distribution of respondents by level of study and faculty was representative of OSD registered students
User survey - Population

Level of Study

<table>
<thead>
<tr>
<th>Level of Study</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>21%</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>79%</td>
</tr>
</tbody>
</table>
User survey - Population

Faculty

- Music: 1%
- Medicine: 1%
- Management: 2%
- Education: 3%
- Arts & Science: 3%
- Engineering: 4%
- Continuing Education: 5%
- Law: 6%
- Agricultural & Environmental Sciences: 11%
- Science: 19%
- Arts: 44%
<table>
<thead>
<tr>
<th>Library</th>
<th>Library materials housed</th>
<th>Convenient location</th>
<th>Study environment</th>
<th>Facilities</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birks reading room</td>
<td>17%</td>
<td>17%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Library</td>
<td>17%</td>
<td>33%</td>
<td>83%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Geographic Information Centre</td>
<td>50%</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Humanities and Social Sciences Library</td>
<td>41%</td>
<td>72%</td>
<td>47%</td>
<td>25%</td>
<td>3%</td>
</tr>
<tr>
<td>Islamic Studies Library</td>
<td>33%</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law Library</td>
<td>25%</td>
<td>58%</td>
<td>67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Sciences Library</td>
<td>25%</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MacDonald Campus Library</td>
<td>29%</td>
<td>57%</td>
<td>71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Library</td>
<td>29%</td>
<td>43%</td>
<td>100%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Math and Statistics Library</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Library of Science and Engineering</td>
<td>64%</td>
<td>91%</td>
<td>9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience with Library webpage</td>
<td>Poor/Fair</td>
<td>Good/Excellent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding information about a library</td>
<td>32%</td>
<td>68%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding information for research</td>
<td>35%</td>
<td>65%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of navigation</td>
<td>44%</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding specific information for students with disabilities</td>
<td>66%</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree / disagree</td>
<td>Neutral</td>
<td>Agree/Strongly agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>------------------------------</td>
<td>---------</td>
<td>----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are offered in comfortable and easily-accessible locations</td>
<td>34%</td>
<td>53%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make resources available before or after the session(s)</td>
<td>3%</td>
<td>25%</td>
<td>72%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include varied delivery formats (groups discussion, visual presentation, etc.)</td>
<td>9%</td>
<td>34%</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are easy to understand</td>
<td>38%</td>
<td>63%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Library improvements – Top 10

1. Improvement of privacy-related study space features (66%)
2. Adjustable chairs (49%)
3. Areas for group study for up to 4 students (46%)
4. Adjustable lighting (44%)
5. Adjustable or variable height desks (35%)
6. Ease of use of the library website (34%)
7. Improvement of floor plans (33%)
8. Larger computer monitors (20%)
9. Availability of accessible workstations with adaptive software (18%)
10. Areas for group study for groups of 10 or more (11%)
“As a blind student, I find the library website difficult to navigate. It’s confusing when trying to search for specific titles/information online”

“Any accessibility features...could also be mentioned during workshops / info sessions for all students to hear”

“...a couple of workstations in each area could be designated and left in large print mode”

“Walking to the libraries is not very accessible...too many stairs or have to go around the library to access”

“...the libraries feel very impersonal and it is difficult for OSD students to get the most out of their studying”
Recommendations

1. Branch recommendations
2. Website recommendations
3. Recommendations for staff
4. System-wide recommendations
Branch recommendations

- Humanities and Social Sciences Library
  - Provide elevator access to Cybertheque
  - Soundproof group study rooms

- Schulich Library of Science and Engineering
  - Have adapted workstations on all floors
  - Include location of adapted workstations in floor plan

- Macdonald campus Library
  - Install automatic door to accessible washroom
  - Have 21 inch computer monitors
Website recommendations and recommendations for staff

- **Website**
  - Improve information for students with disabilities on website
  - Update all floor plans highlighting adapted workstations, different study areas, etc.
  - Conduct website usability testing with OSD registered students

- **Staff**
  - Create basic and advanced close-captioned online tutorials
  - Become familiar with adaptive softwares
  - Provide consultations via Skype
System-wide recommendations

- Create set of standard practices regarding service to people with disabilities
- Provide regular training for staff
- Create list of resources for students with disabilities
- Investigate accessibility features of licensed products
• Create short videos highlighting the accessibility features of each branch
• Conduct regular accessibility assessments
• Conduct focus groups to determine further gaps
• Solicit staff input
• Increase collaboration between library, disability, and information technology services
Special thanks to Maximilian Feinsot for his help with the assessment of branches and work on the survey. Thanks also to Lina Di Genova for her help with survey design, distribution and data collection.
Questions? Comments?

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Case, Mary, & al., et. (2012). Report of the ARL joint task force on services to patrons with print disabilities.


