DESIGN FOR INCLUSION

Festival of Learning
June 7, 2016
Burnaby, BC

Image from: Reducing Barriers to Social Inclusion and Social Cohesion
Report of the Standing Senate Committee on Social Affairs, Science and Technology
Introductions and Agenda

- Online learning designers:
  - Mikki Herbold
  - Hope Miller
  - Steven Bishop

- Presentation
- Brainstorm Activity
- #design4inclusion
How can we embrace diversity and increase our circle of inclusivity?

Brainstorm strategies to increase inclusivity in your educational sphere of influence

Begin designing for inclusivity
From UDL: Reducing Barriers
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Inclusion is a choice, not a technique

People have diverse abilities and multiple intelligences

Barriers to learning exist for:
- Recent immigrants
- Visible minorities
- Aboriginal peoples
- People with disabilities
- Gender and sexual minorities
- Economic level
- Digital literacy

There are ways to reduce barriers, to design for inclusion
BARRIER-FREE LEARNING

Remove obstacles for all students.

Barrier-free Learning by Elizabeth Lloyd Attribution 2.0 Generic (CC BY 2.0)
Design expresses an intention
The image shows heat losses through walls, floors, windows, roof of building. Includes air leakage, transmission losses and incomplete heat recovery.
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Name</th>
<th>Due Date</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math quiz</td>
<td>0% - self test</td>
<td>UP/COMING</td>
<td></td>
</tr>
<tr>
<td>Assignment</td>
<td>Elevator Pitch (10%)</td>
<td>UP/COMING</td>
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<tr>
<td>Assignment</td>
<td>Term Project (36%)</td>
<td>UP/COMING</td>
<td></td>
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<tr>
<td>Test</td>
<td>Final Exam</td>
<td>May 16, 2016 12:43 PM</td>
<td>96.00</td>
</tr>
</tbody>
</table>

**Assessment Details**

- **Item Name**: Final Exam
- **Aggregation**: Average of attempts
- **Points Possible**: 119

**Attempts**

- **Date Created**: May 16, 2016 12:34 PM
- **Date Last Submitted or Edited**: May 16, 2016 12:40 PM
- **Calculated Grade**: 96
Affordances vs. accommodations

Upfront design for inclusion saves time, energy and money in “renovating and retrofitting” the course, the classroom, the online environment, learning objects, lesson plans....

http://www.morimasahiro-ds.org/open-archives/ CC BY 3.0
Sequence of design

1. Establish the intention (anyone can do this...no barrier)
2. Consider pedagogical and technical elements (involve designers, peer mentors, specialists, end users)
3. Build appropriate content (technical skill/specialists needed)
Themes

General Course Elements
Multiple means of Representation
Multiple means of Engagement
Multiple Means of Expression

Sub-themes:
“Low-Hanging Fruit”
Accommodations
Plus-one solutions
Asynchronous solutions
Feedback and reflective practice
Technical solutions
1. Support services information
2. Comprehensive syllabus
3. Multiple contact means
4. Modal content variety (visual, graphic, verbal, auditory...)
5. Multiple ways of explaining
6. Content accessibility
7. Assignment activity examples
8. Varied instructional methods
9. Natural support systems
10. Alternative activities/assignments
11. Clear, specific feedback
12. Varied demonstration of knowledge
13. Assistive/adaptive technologies
14. Clear rubrics

Adapted from 14 Common Elements of Universal Design for Learning (UDL) in the College Classroom
EnACT/ Merlot
Design for agreement (example)

Classroom agreements

Netiquette

4. It's okay to disagree with someone, but keep the discussion civil.
5. Be polite and respectful to fellow online participants by avoiding
   a) obscene language or sexual conversation
   b) all-caps type, which is perceived as shouting
   c) repeating the same sentence continuously
   d) "flaming" others with emotional or angry messages.
6. To communicate effectively in the online environment,
   a) use smiles, or emoticons, to show tone of voice or emotion :)
   b) use symbols such as asterisks (*) to emphasize words
   c) use acronyms such as "brb" (be right back) or "afk" (away from keyboard).
7. Keep private comments private by using personal e-mail.

"Netiquette by Centre for Learning Technologies
Creative Commons Attribution license (reuse allowed)"
Web Content Accessibility Guidelines

Benefits people with:

- blindness and low vision
- deafness and hearing loss
- learning disabilities
- cognitive limitations
- limited movement
- speech disabilities
- photosensitivity
- combined disabilities

and makes Web content more usable to users in general
**WCAG 2.0 Guidelines**

**Perceivable**
- Provide text alternative for non-text content
- Provide alternatives for time-based media
- Present content in different ways
- Make content easier to see and hear

**Operable**
- Make all functionality available from a keyboard
- Provide users sufficient time to read and use content
- Design non-seizure inducing content
- Provide navigation, find, and orientation functions
**WCAG 2.0 Guidelines**

**Understandable**
- Make text content readable and understandable
- Make web pages appear and operate in predictable ways
- Help users avoid and correct mistakes

**Robust**
- Maximize compatibility with current and future user agents, including assistive technologies
Practical actions

- Consider visual elements in handouts and media:
  - *PPT handouts with readable charts and images [show good and bad example]*

- Consider audio quality in recordings, webinars

- Consider psychomotor realm (breaks, activities)
1. Class notes production
2. Electronic handouts ahead of class
3. Electronic textbook versions
4. Course outline statement welcoming diverse learners
5. Time for review in exam format
6. Assess learning through various students evaluation formats
7. Audio or video recordings
8. Proactive teaching and learning
9. Creative and alternating learning activities
10. Reward engagement and participation

Adapted from 10 Tips for Implementing Universal Design for Learning
McGill University Office for Students with Disabilities
Examples

- Indigenization of curriculum (Brenna Gray, Tanya Joosteema, Dave Seaweed)
- Best Practices in Online Content: Accessibility workshop (Cynthia Ng/JIBC)
- Education Reboot project
- Sandra Polushin UDL workshop/Kwantlen
- Best Practices in Online Content: Accessibility
- UBC inclusion seminar
Resources

- LMS Accessibility details (e.g. Blackboard Learn)
- Web Content Accessibility Guidelines (WCAG 2.0)
- BC Open Textbook Accessibility Toolkit
Resources

Web accessibility wiki:
https://en.m.wikipedia.org/wiki/Web_accessibility

Design for Digital Inclusion website:
https://depts.washington.edu/ddi/index.html
Accessibility Toolkit

Organizing Content
Images
Tables
Weblinks

Multimedia
Formulas
Font size
Colour Contrast

Source: BC Open Textbook Accessibility Toolkit.
Douglas College Online Learning Designers

Hope Miller millerh@douglascollege.ca
Mikki Herbold herboldm@douglascollege.ca
Steven Bishop bishops@douglascollege.ca

@ATS_Douglas
#design4inclusion