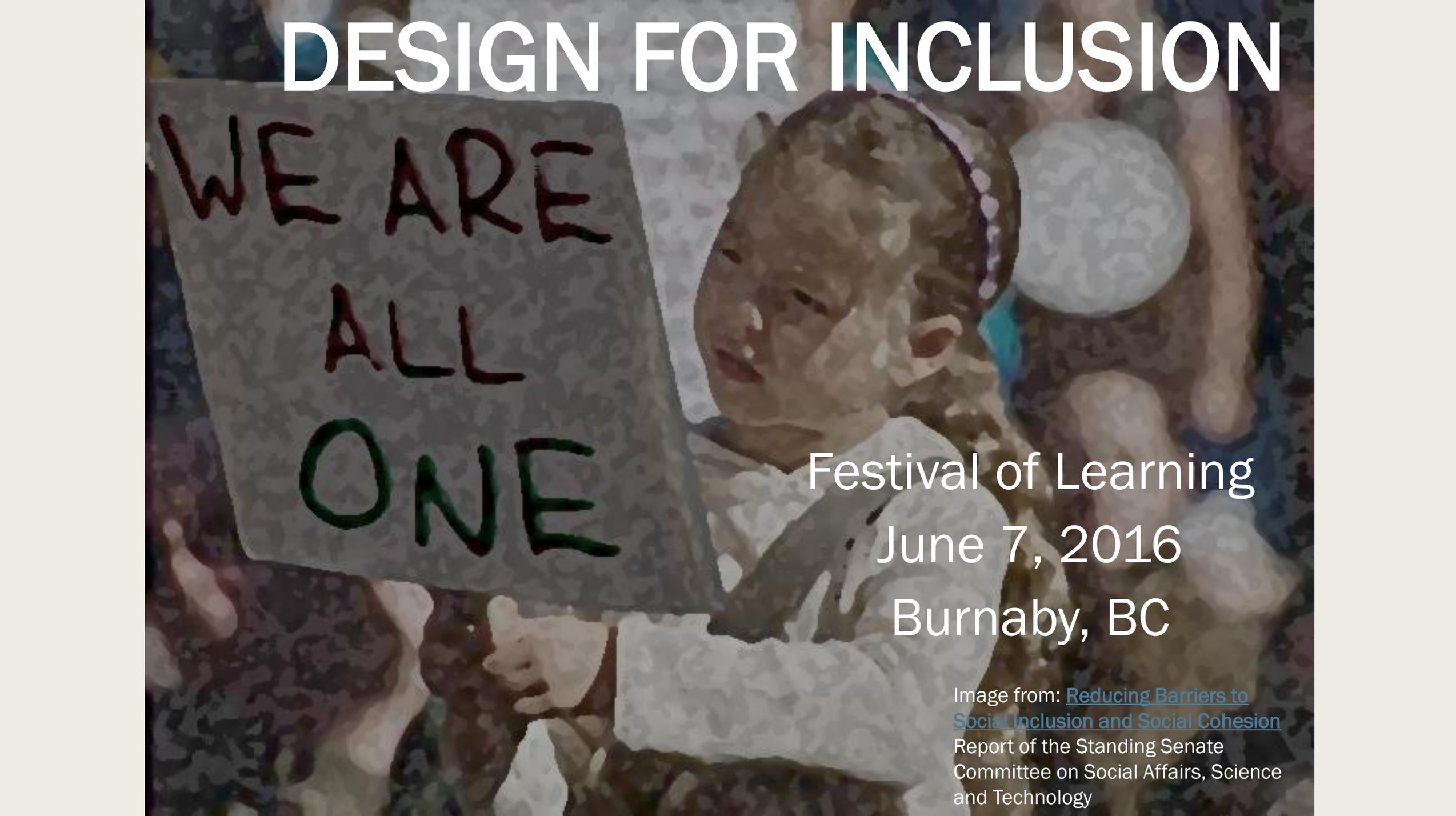


DESIGN FOR INCLUSION

A young child with dark hair, wearing a white long-sleeved shirt and a purple headband, is holding a large, dark grey sign. The sign has the words "WE ARE ALL ONE" written on it in large, hand-drawn letters. The child is looking down at the sign. The background is a blurred crowd of people, suggesting a festival or public event.

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

[Creative Commons Attribution license \(reuse allowed\)](#)

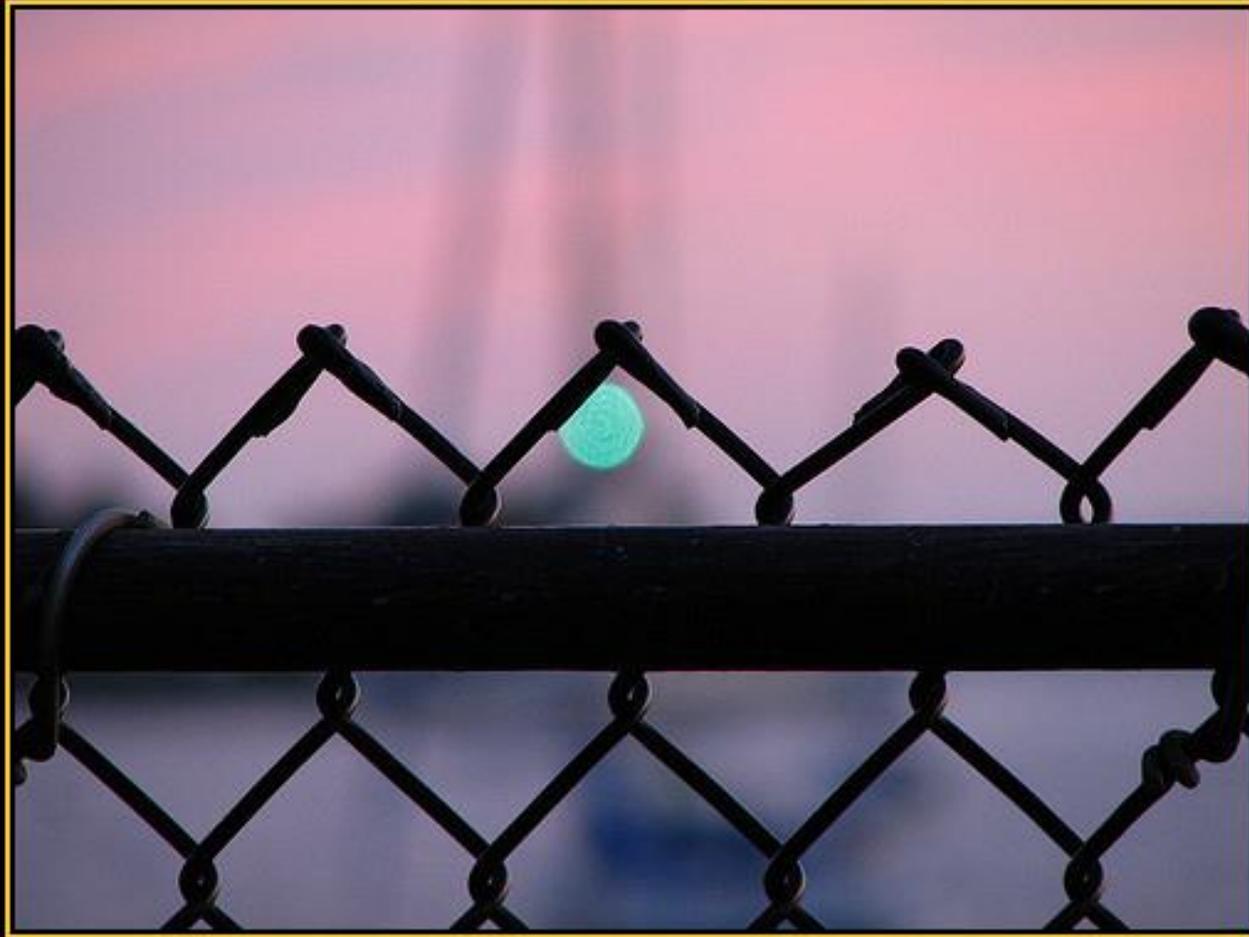
Inclusion is a choice, not a technique

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.

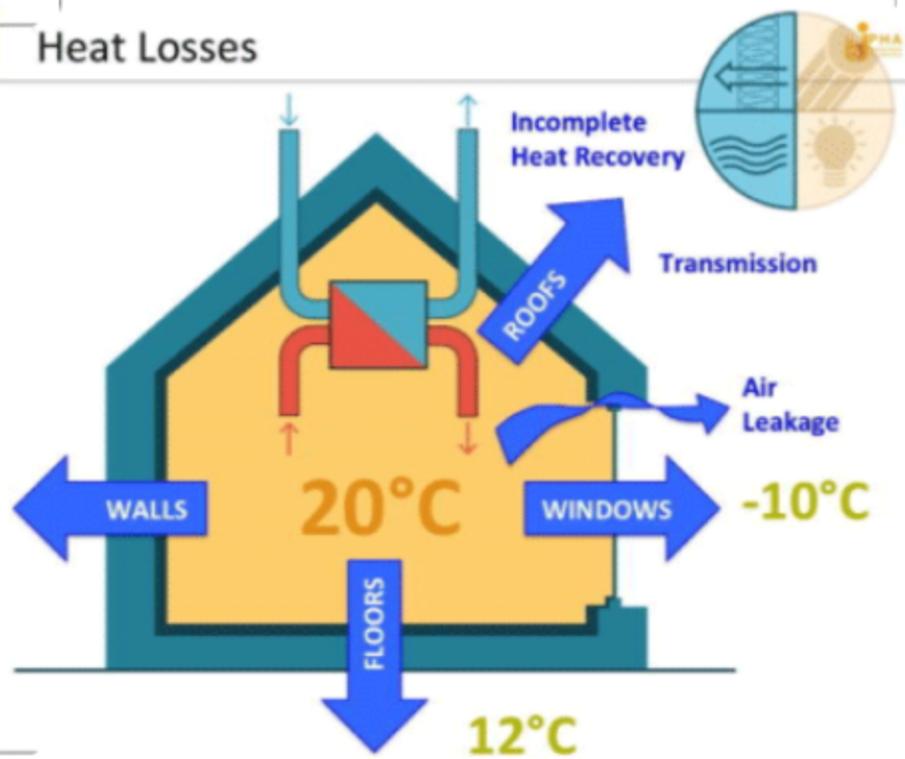
Barrier-free Learning by [Elizabeth Lloyd](#) Attribution 2.0 Generic (CC BY 2.0)

Design expresses an intention





Heat Losses



The image shows heat losses through walls, floors, windows, roof of building. Includes air leakage, transmission losses and incomplete heat recovery.

Math skills quiz (0% - self test) Test	UPCOMING	- /23
Elevator Pitch (10%) Assignment	UPCOMING	- /10
Term Project (30%) Assignment	UPCOMING	- /100
Final Exam Test	May 16, 2016 12:43 PM GRADED	96.00 /119

ASSESSMENT DETAILS

Item Name Final Exam
 Aggregation Average of attempts
 Points Possible 119

ATTEMPTS

Date Created	Date Last Submitted or Edited	Calculated Grade
May 16, 2016 12:34 PM	May 16, 2016 12:40 PM	96

[Icon Legend](#)

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....



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)

CAREER
UNION CENTRE
STUDENTS
COUNSELLING
STUDENT
NEW OFFICE

SERVICES
DISABILITIES
LEARNING
AID FINANCIAL

levels food
Lighting
quality comfort
Projector environments zoom
Online placement
Classroom
Sound
Furniture



College Service Playlist



00:14 / 01:16



 Kaltura



Angela Katsamakos

01:16



Dave Seaweed Reboot Video

03:45



Diana Christie Reboot Video

02:48



Kim Paris Reboot Video

02:15

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 **smilies**, 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.

Web Content Accessibility Guidelines

Benefits people with:

blindness and low vision

limited movement

deafness and hearing loss

speech disabilities

learning disabilities

photosensitivity

cognitive limitations

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

screen
access design
videos Preview
readers images
Student Consider
captioning transcripts
templates
Style Explain browser/web
issues Tagging
call-outs Video
mode Closed
Use

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

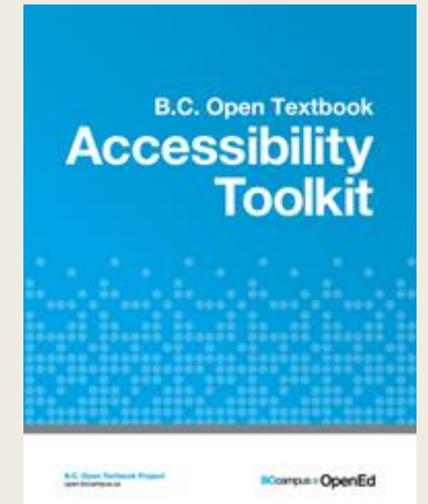
Adapted from [10 Tips for Implementing Universal Design for Learning](#)
McGill University Office for Students with Disabilities

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](#)

www.contrastchecker.com

Source: BC Open Textbook Accessibility Toolkit.



marziarh. (2012). Robson Square. <https://www.flickr.com/photos/maziarh/7216119402/> CC BY-NC-ND 2.0

Douglas College Online Learning Designers

Hope Miller millerh@douglascollege.ca

Mikki Herbold herboldm@douglascollege.ca

Steven Bishop bishops@douglascollege.ca

[@ATS_Douglas](#)

#design4inclusion



Educational Resources
Academic Technology Services

