Teaching for Learner Diversity: Universal Design for Learning (UDL)

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Frederic Fovet, Tanja Beck

OFFICE FOR STUDENTS WITH DISABILITIES
www.mcgill.ca/osd/ disabilities.students@mcgill.ca
Introduction

- Frederic Fovet: Director of the Office for Students with Disabilities
- Tanja Beck: Access Adviser
- The OSD has the mandate to promote the inclusion of diverse learners and to provide accommodation and support services for students with Disabilities (Undergraduate and Graduate)
- This presentation is not solely about students with Disabilities; the work of the OSD is a mere example of some of the reasons why it is imperative to implement Universal Design into our pedagogical practices.
Learning Objectives

1. Understand the concepts of Universal Design for Learning and applications to educational practice

2. Develop action steps that address the essential question: How can I incorporate UDL into my practice?
Approximately how many students do think are registered currently with the OSD at McGill?

1. 450
2. 850
3. 1400
4. 2050
Of the population registered how many students have what we traditionally consider to be disabilities (sensory, mobility, coordination impairments)?

A. 4%
B. 18%
C. 25%
D. 42%
Which disability represents the largest population of students registered with the OSD?

A. Attention Deficit Disorder
B. Learning Disability
C. Chronic Medical conditions
D. Mental Health
Which category of Disabilities would you feel the most ill equipped to accommodate when you are TAing?

A. Attention Deficit Disorder
B. Learning Disability
C. Medical conditions
D. Mental Health
E. Mobility impairments
F. Visual impairment
Why is a new framework required? Five factors that are forcing change in Disability & Education

- Resource management
- Increase in the complexity of diagnoses
- Sustainability as a criterion for development
- Shift from the medical model to the Social Model
- Appearance of an inclusion imperative in student expectations
Context – Demographics and current trends at McGill OSD

Number of students registered at McGill OSD

- 2004-5
- 2005-6
- 2006-7
- 2007-8
- 2008-9
- 2009-10
- 2010-11
- 2011-12
- 2012-13
Disability categories 2012-13 McGill OSD

- Mental health disorder: 27%
- Chronic impairment: 15%
- Motor impairment: 11%
- Visual impairment: 2%
- Hearing impairment: 1%
- Attention Deficit Disorder: 14%
- Learning disability: 13%
- Multiple impairments: 17%
The Social Model of Disability

- http://www.youtube.com/watch?v=k0HZaPkF6qE

- What are your main thoughts on this video segment?
- What is the most important distinction made?
The social model

- The ‘medical model’ of management of Disabilities is obsolete: diagnosis – labelling – targeted remedial action.
- Students refuse labelling and the stigma that accompanies it.
- The ‘social model’ is more appealing. In this perspective, it is not the individual who is disabled but the environment which is disabling.
- Notion of lack of fit between individual characteristics and environmental expectations.
- Example of AD/HD
Distinctions between the two frameworks

<table>
<thead>
<tr>
<th>Accommodation Approach</th>
<th>Universal Design Approach</th>
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<tbody>
<tr>
<td>Access is a problem for the individual</td>
<td>Access is a problem stemming from the environment</td>
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<tr>
<td>Access is achieved through accommodations and/or retrofitting</td>
<td>The system/environment is designed, to the greatest extent possible, to be usable by all</td>
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<td>Access is retroactive</td>
<td>Access is proactive</td>
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<td>Access is specialized</td>
<td>Access is inclusive</td>
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<tr>
<td>Access is consumable</td>
<td>Access is sustainable</td>
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What types of barriers are experienced by students? Reframing Disability

- Print disabilities – Dyslexia, vision impairment, rheumatoid arthritis

- Attention difficulties - ADD, mental health, medication effects, chronic pain

- Exam timing challenges – ADD, LD, ASD, Mental Health, coordination issues
Brainstorming Activity

Can you think of one tool you have used as a TA in the classroom that has reduced barriers and widened access?
What is Universal Design for Learning?

UDL is a set of principles that gives all students equal opportunity to learn.
What is UD?

- A sustainable, environment-focused framework to manage Disabilities issues
- Practices can disable or enable learners
- Focuses on the conception of delivery and evaluation methods – providing multiple means of representation and engagement
- Is a progressive exploration and transformation
# What is UDL?

<table>
<thead>
<tr>
<th>1. Provide Multiple Means of Representation</th>
<th>2. Provide Multiple Means of Action and Expression</th>
<th>3. Provide Multiple Means of Engagement</th>
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</thead>
<tbody>
<tr>
<td>Offer alternatives for auditory &amp; visual info</td>
<td>Vary methods for response Optimize access to tools and assistive technology</td>
<td>Optimize choice and autonomy Minimize threats and distractions</td>
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<tr>
<td>Clarify vocab, symbols Illustrate through multimedia</td>
<td>Use multiple media for communication</td>
<td>Heighten salience of goals Foster collaboration and community</td>
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<tr>
<td>Supply background info Highlight big ideas Maximize generalization</td>
<td>Support planning &amp; development Allow for monitoring of progress</td>
<td>Promote expectations that optimize motivation Develop self-assessment</td>
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1. Provide Multiple Means of Representation

Use webCT to post Powerpoint slides, notes background info online beforehand Include video, text, podcasts

Access recognition networks in the brain

Allow recording of lectures

Make it easy for students to get digital versions of their coursebooks - this gives access to assistive technologies
Encourage different ways for expression for students: on-line, in class individually or as a group, social network discussion

Access Strategic networks in the brain

2. Provide Multiple Means of Action and Expression

Provide different evaluation options – group presentations, written work, tests, quizzes, online discussion boards

Support and scaffold expressions/evaluations with previous examples, sample questions, describe your expectations
3. Provide Multiple Means of Engagement

Frame the class around an essential question, return to it frequently

Access Affective networks in the brain

Change it up every 20 minutes or so, everyone is different and engages in different ways
Activity

The population of students with disabilities on campus is as varied as diverse.

1. What tools would you use in your classroom to widen access for a student with ADHD?
What was the most important element you considered?

1. Reduction of noise
2. Access to and use of technology
3. Use of stimulant medication
4. Varied pace, frequent transitions and diversified styles of presentation
5. A bland/neutral mode of delivery to avoid distraction
Second Activity

2. What according to you might be the accommodation required for a student with severe dyslexia to be evaluated fairly? Would there be a possibility to create a class environment that would allow the student to take exams with the class?
What was your first priority in adapting the evaluation model?

1. Providing audio support and technological support during exams
2. Providing a separate room for exams
3. Varying the format of evaluation within the exams
4. Providing less traditional forms of evaluation that do not always focus on writing within time constraints
Third activity

3. What barriers do you think might student’s with Mental Health issues experience in a course? What tools can you use to widen access for students with Mental Health?
Reflective Exercise

- Assume you were teaching a class. What UDL tool can easily be integrated into your teaching immediately?

- What tools would you consider to implement in the long term?
Quick survey

Indicate your first concern:

1. Student`s understanding of material
2. Management of emotions in class
3. Attendance
4. Interaction with peers
5. Interaction with instructors
Some research leads on possible implementation tools for UD

- Instant Messenger and live platform use in class: Nicholson, 2002; Jeong, 2002; Harmon, 2007; Barak, Lipson & Lerman, 2006; Driver, 2002
- Providing class notes on web platforms: Bonwell & Eison, 1991; Kiewra, 1985
- Clickers: Johnson, 2004; Jackson & Trees, 2003; Duncan, 2006; Bugeja, 2008
- Recording lectures: Zahn, Barquero & Schwan, 2004; Shephard, 2004; Phelps & Tidmarsh, 2005; Fox, 2006
- Mixed format evaluation: Kaliski & Barry, 2010; Hendrickson, Melican & Patterson, 2008; Cannella, Ciancimino & López Campos, 2010; Bergman, 2005
Yes, but…

- My class size is too huge for implementation Universal Design!
- It’s too time consuming to change my evaluation format!
- How can I achieve an effective implementation of UD if my department doesn’t believe in it?
- The students would rather go to the OSD!
- I prefer a tailored approach to my students’ needs.
Mainstream outcomes

UD also echoes theory on multiple intelligence (Martin, 1995; Fogarty & Stoehr, 1995).

Teachers who devise UD strategies are likely to be more creative and versatile. The quality of teaching increases proportionately with the diversity of the class (Zigmond & Baker, 1990; Pennsylvania Department of Education, 1992; Wang, 1996). UD echoes differentiated teaching theory

A functioning diverse classroom offers a model that has more social validity for all students (Baker, Wang & Walberg, 1994; Cole & Meyer, 1991).
UD implementation: A process

- This transformation is not achieved overnight
- It is a process rather than an end result. It is a path to investigate progressively.
- The OSD is developing:
  - one-on-one assistance for the implementation of tools
  - a bank of online resources
  - podcasts
  - a support and exchange network for practitioners.
Questions & Discussion

To contact us at the OSD:
Frederic Fovet – frederic.fovet@mcgill.ca
Tanja Beck – tanja.beck@mcgill.ca