GPRC

Universal Design for Learning:

Creating Accessible Learning Environments

Universal Design for Learning: Creating Accessible Learning Environments

A collaborative project between GPRC Student Services and the GPRC Educational Technologies Centre.

Writers: Anna Gillis and Bernie Matlock

Editor: Jean Nordin

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Creating Connections to knowledge, experience, and community one life at a time[1]

What is UDL?

Briefly, Universal Design for Learning, or UDL, is a framework that can reshape education by ensuring that course concepts educationally accommodates the greatest variety of individuals, regardless of learning style, physical or sensory abilities. UDL principles make education more inclusive and effective by removing the barriers from the learning process. There are three key principles of UDL:

1. Multiple means of **representation**,
2. Multiple means of **expression**
3. Multiple means of **engagement**[2]

GPRC has adopted the [eCampusAlberta Essential Quality Standards](#) (EQS) for online curriculum creation. Each EQS is intended to support GPRC's commitment to high standards of learning excellence. UDL is an *important* EQS as it contributes to the efficiency and effectiveness of a learner's educational experience.[3]

What you can do:

Apply UDL key principles to your face-to-face and online courses.

1. Provide multiple means of representation – provide various ways of acquiring information and knowledge.
   - Provide multiple examples.
   - Highlight critical features.
   - Provide multiple media and formats.
   - Support background context (Recognition Learning)

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[1] [GPRC Mission Statement.](#)

[2] Rose, D., Meyer, A., & Hitchcock, C. (2005). *The universally designed classroom: Accessible curriculum and digital technologies*. Cambridge: Harvard Education Press.

[3] For more information on eCampus and the Essential Quality Standards, see http://www.ecampusalberta.ca/

2. Provide multiple means of expression - offer learners alternatives for demonstrating what they know.
   - Provide flexible models of skilled performance.
   - Provide opportunities to practice with supports.
   - Provide ongoing, relevant feedback.
   - Offer flexible opportunities for demonstrating skill.

3. Provide multiple means of engagement - tap into learners' interests, challenge them appropriately, and motivate them to learn.
   - Offer choices of learning context.
   - Offer choices of content and tools.
   - Offer adjustable levels of challenge.
   - Offer multiple ways to be successful.[4]

The UDL Classroom Environment:

Grande Prairie Regional College provides accessible facilities and a supportive learning environment within the limits of available resources and with due regard to the rights of other members of the College community.[5]

Support services:
- Tutor
- Academic Strategist
- Readers/Scribes
- Interpreting
- Exam Accommodations
- Note-takers
- Alternate Format
- Adaptive Technology (training included)
  - Kurzweil reading software, Mac/PC version
  - Intel Reader
  - Livescribe Pen
  - Ipod
  - Ipad
  - Read and Write Gold – Mac/PC version

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[4] Rose, D. & Meyer, A. (2006). *A practical reader in universal design for learning*. Cambridge: Harvard Education Press.
[5] GPRC Students with Disabilities Policy.

- JAWS – Job Access With Speech
- Zoomtext – Magnifier/Reader
- Dragon Naturally Speaking – Voice Recognition Software Mac/PC version
- Inspiration- Mind mapping software
- Word Q/Speak Q – Word prediction/Voice Recognition
- Digital Recorders
- The Classmate Reader – Auditory/Visual Feedback
- Amigo Portable CCTV (closed circuit television)

Accessible Facilities

GPRC is accessible to students with physical disabilities and is continuously working towards removing any barriers. The following is a list of some of the accessibility features on campus:

Doors
- Several automated entrance doors, including exterior main entrances and Library & Media Services

Elevators
- Two elevators for student use as well as an elevator within Library & Media Services. Check Options, Elevators to see locations on the Interactive Map at our **website: www.gprc.ab.ca/about/maps**

Accessible Parking
- Near main entrances in several designated locations including Lot A, B, C, F, G and H.

*Addition information and a map are available in the Parking Guide produced by Campus Operations.

Student Residence
-2-3 person units/wheelchair accessible.

*Contact Housing for more details (539-2802) and remember to apply early.

Washroom facilities

- Accessible washrooms are available in several locations throughout the college.

For additional information and support, contact the [Disability Resource Coordinator in Student Services](#).

The UDL Online Environment:

Providing multiple means of representation, expression, and engagement are key to learner success in any learning environment. In addition, there are three key online learning characteristics: simplicity, interactivity, and accessibility.

1. **Simplicity**
   - Remember e-mail – e-mail as a primary form of communication is effective, efficient, and uncomplicated.
   - Beware of techies – do not include technology tools that are complicated and unnecessary.
   - Modularize – Do not use multiple layers of links. Keep content simply organized.
2. **Interactivity**
   - Engage students by ensuring there is meaningful two-way communication between participants in the learning experience. There are four types of interaction:
     1. Student-to-student
     2. Student-to-instructor
     3. Student-to-content
     4. Student-to-management/feedback
3. **Accessible**
   - Online courses are only accessible if learners with disabilities are able to obtain the course content and able to communicate with the instructor and student colleagues. The following are ways in which designers can ensure that their course is accessible:
     1. Make the course design a team project.
     2. Online courses should be designed for universal access.
     3. Provide redundant communication modes (audio and visual content).
     4. Understand the challenges of students with disabilities.

5. Have a system to deal with specific learning challenges.
6. Understand adaptive technologies. [6]

GPRC's Educational Technologies Centre can assist in ensuring that your online course is universally designed. Instructors are encouraged to ensure that they communicate with their students to identify any need for specialized supports. Advising and guiding on funding and availability of technologies and supports for students with disabilities is provided by the GPRC Disability Services.

Recommended Resources:

Books:
Burgstahler, S. & Cory, R. (2008). Universal design in higher education: From principles to practice. Boston: Harvard Education Press.

Rose, D. & Meyer, A. (2006). *A practical reader in universal design for learning*. Cambridge: Harvard Education Press.

Rose, D., Meyer, A., & Hitchcock, C. (2005). *The universally designed classroom: Accessible curriculum and digital technologies*. Cambridge: Harvard Education Press.

Documents:
Government of Alberta (2010). Duty to accommodate students with disabilities in post-secondary educational institutions. Government of Alberta. Retrieved February 22, 2012 from http://www.albertahumanrights.ab.ca/Bull_Duty_to_accom_students.pdf.

Norquest College (2008). Accessibility to E-Learning for Persons with Disabilities: Strategies, Guidelines, and Standards. *eCampusAlberta*. Retrieved February 22, 2012 from http://www.ecampusalberta.ca/sites/default/files/pdf/AcssToELrng%20Final%20for%20web_0.pdf

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[6] Kinash, K. & Paszuk, A. (2007). *Accessible education for blind learners: Kindergarten through postsecondary*. Charlotte, North Carolina: Information Age Publishing.

Websites:
Accessibility checkers. The following tools can be used to determine how accessible a web page is: WAVE – http://wave.webaim.org, W3C – http://validator.w3.org, ATRC –http://achecker.ca/checker/index.php.

Centre for Applied Special Technology (CAST). CAST provides a plethora of information and resources that improve access to the curriculum by students with disabilities: http://www.cast.org.

Microsoft Accessibility. Explanation of the accessibility features included in Microsoft products:
http://www.microsoft.com/enable/education/default.aspx.

Online Accessibility. This website offers tutorials on designing accessible websites and software: http://www.umich.edu/~webacces/home.html.

PASS IT (Pedagogy and Student Services for Institutional Transformation). PASS IT offers information on how to make postsecondary student services, courses, and classrooms, accessible to students with disabilities: http://cehd.umn.edu/passit/about.html.