Agenda

• Welcome & Introductions
• Overview of UDL
• UDL Curriculum Design
• UDL Program Design
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Today’s Goals - Yours

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What is Universal Design

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.

An environment should be designed to meet the needs of all people who wish to use it. This is not a special requirement, for the benefit of only a minority of the population. It is a fundamental condition of good design.

If an environment is accessible, usable, convenient and a pleasure to use, everyone benefits. By considering the diverse needs and abilities of all throughout the design process, universal design creates products, services and environments that meet peoples’ needs. Simply put, universal design is good design.

universaldesign.ie
Introduction to Universal Design for Learning
UDL Fundamentals

• “…our educational system is designed around the idea that most people learn the same way and that a ‘fair’ education is an identical one.”

• - Anne Meyer, David H. Rose and David Gordon
Essential for some, useful for all
UDL Guidelines

• UDL guidelines are based on three primary brain networks.
  • Recognition
  • Strategic
  • Affective
• Each network is identified by a principle to guide design, development and delivery.
  • Multiple means of representation
  • Multiple means of action and expression
  • Multiple means of engagement
Each network contains three checkpoints, which emphasize learner diversity.

**Multiple means of representation**
- Options for comprehension
- Options for language, math and symbols
- Options for perception

**Multiple means of action and expression**
- Options for executive functions
- Options for expression and communication
- Options for physical action

**Multiple means of engagement**
- Options for self-regulation
- Options for sustaining effort and persistence
- Options for recruiting interest
### UDL Guidelines Map

#### UDL Guidelines

<table>
<thead>
<tr>
<th>Recognition Networks</th>
<th>Strategic Networks</th>
<th>Affective Networks</th>
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<tbody>
<tr>
<td>The “what” of learning</td>
<td>The “how” of learning</td>
<td>The “why” of learning</td>
</tr>
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<td>Multiple Means of Representation</td>
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*UDL Guidelines Map by Mohawk*
Benefits

While the greatest benefits of universal design implementation are often felt by students with disabilities, there are numerous reasons to implement and/or enhance UDL in curriculum and program design.

Universal Design for Learning can:

- Limit learning barriers for all students.
- Reduce disability-related accommodation needs.
- Offer students an opportunity to more fully demonstrate their knowledge.
- Help your College meet the Accessibility for Ontarians with Disabilities Act (AODA) legislative mandate.
Benefits for All

For Faculty:

• Reduction in the need, and time required, for individual accommodation arrangements.

• Learning elements that improve learning for all students.

• Proactive removal of learning barriers.

For Learners:

• Proactive design to support a broader range of student abilities, needs and backgrounds.

• Easier navigation of course materials and requirements.

• A more equitable learning environment.

• Reduction in the need, and time required, for individual accommodation arrangements.
Initiatives and UDL Implementation

“…when students do require accommodation, particularly if faculty have little advance notice, a temporary solution must be constructed. Such a quick fix solves the immediate problem but leaves thoughtful redesign of the course for another, perhaps ever-deferred, day.”

- S. Burgstahler
Collaboration

“...building a collaborative culture of educators is essential to the effective implementation of UDL.”

- Anne Meyer, David H. Rose and David Gordon
Using UDL to Guide Curriculum Development
“Start Small … Just Start”
Q. What accommodations are most often being requested?
Recognition Networks – the ‘WHAT’ of learning

Multiple Means of Representation

- Learning Plan aligned with in-class and online modules, assignment due dates/dropbox and gradebook
- Assignments and learning builds on prior knowledge and experience across platforms and courses
- Information presented in multiple ways, i.e.: read, watch, attend, online modules – access multiple sources
- Explicit prompts with information chunking

- Online modules introduce terminology that is used throughout the course work and is re-iterated by guests, in readings, videos, etc.
- Embedded links to support further access to information
- Learning Plan, Calendar, and Checklists to link responsibilities

- Students have multiple ways to access information, i.e.: read, watch, attend, online modules
- Students are provided with widget to customize eLearn page and have material read out loud
- All videos are captioned, all PowerPoint, Documents and PDFs are accessible; Modules are interactive & self paced
- Presentations are explicit, not cluttered; include agenda, follow-up, and made available in advance for note-taking
Strategic Networks – the ‘HOW’ of learning

Multiple Means of Action & Expression

- Learning Plan and Checklists are provided to guide goal setting, notes are posted in advance to support note taking
- Guides are provided throughout content to support step-by-step instructions for assignments and tasks
- Captioned videos are provided through links or embedded to allow students to watch and re-watch instructions
- Guest speakers, mentors from community brought in to speak – allows for variety of information in multiple ways

- Assessments can be completed and submitted through video, audio, written, discussions, multimedia, etc.
- Tools provided to support composition and problem solving (i.e., NaturalReader, Grammarly, YouTube, Lynda.com)
- Assessments are built on one another to encourage scaffolding of learning – encourages collaboration with other classes and assignments to promote and highlight unique skills and knowledge.

- Untimed quizzes to allow for differences in response rates; may be a result in physical dexterity or technology to thought processes
- LMS supports accessible navigation feature, as well as well designed and consistent layout to provide alternative access and interaction with materials, assignments, content, etc.
- Linked to accessibility widget to change font size, access screen readers, crowd source note taking, etc.
Affective Networks – the ‘WHY’ of learning

Multiple Means of Engagement

- Complete modules at own pace to increase individual choice and autonomy
- Untimed Quizzes and use of Crowd Sourcing Note Taking
- Reflections can be completed through multiple options: paper (written), video, audio, etc.
- To guide goal-setting and expectations, students have in-advance access to Learning Plans, calendars, rubrics and checklists

- Using calendar and Learning Plan to prompt for due dates
- Modules broken down for explicit tasks and expectations
- Use of checklist to guide expectations

- Opportunities to work individually or in groups to foster collaboration and increase individual choice & autonomy
- Students get choice in assignment topic, utilize and build on work in other classes. Reducing threat/distractions while allowing them to personalize their work. It helps to make assignments appropriate to age/gender/interests
- Students are offered the choice on how they can submit their reflections and discussions – paper/written, audio/podcast, video, multimedia, etc.
Practical Application

“Variability demands corresponding flexibility in the learning context if each student is to find an inviting, appropriately challenging, and supportive experience. A universally designed learning environment is planned around learning goals and the predictable range of variability.”

- Anne Meyer, David H. Rose and David Gordon
Practical Application

While implementing UDL is a dynamic process that is learner driven, there are some key elements to consider and include when designing materials.

Learners are variable.

You cannot plan for every learner variable. However, if you plan to be flexible and provide options, the variable needs of learners will be met.

Set a goal and assess that goal.

Determine the learning goal, then develop the materials to meet that goal.

Give options.

Think about what would stop learning and work to either remove ‘it’ ahead of time, or provide an alternative.

Be explicit.

Navigating content or deciphering materials/assignments negatively impacts reaching the learning goal(s).
To provide options for self-regulation you can:

- Use your learning plan or course homepage to state course requirements and the learner expectations.
  - This includes how you want students to communicate with you, how and when you will provide feedback, etc.
- Develop assessments that require students to reflect on content, or practice, and how they will use the content moving forward.
  - To develop reflection skills check out High Tech Reflection Strategies that Make Learning Stick.
- Give planning instructions for large assignments.
Practical Application

To provide options for sustaining effort and persistence you can:

• Tier assignments.
• Provide rubrics that identify levels of challenge.
  • A = highest level of challenge because…
• Provide options for collaborative tasks.
  • In-class and/or online.
  • Check out [20 Collaborative Learning Tips and Strategies for Teachers](#) and [Cooperative Learning Techniques](#).

Options for sustaining effort and persistence

- Optimize goals, demands, feedback and resources to provide challenge.
- Encourage collaboration and community building.
Practical Application

To provide options for recruiting interest you can:

• Allow learners to choose assignment topics, assessment questions or submission options.
  • Check out the Top 10 UDL Tips for Assessment
• Vary assignments during the course (essays, tests, demonstrations, discussion posts, etc.)
• Explicitly state why the content is important and when it will be used.
• Proactively provide common accommodations.
Using UDL to Guide Program Development
Program Implementation

- Clear, explicit learning outcomes that correlate with each course – in look and expectations – think course mapping
- LMS is explicit in design and features

Consider:
- Crowdsourcing of notes
- Scaffolding assignments
- Capstone course
- Providing options
- Be explicit
“Key to building a UDL culture is securing the necessary resources and agreement to support UDL implementation...”

- Anne Meyer, David H. Rose and David Gordon
External and internal UDL resources can be found on the Universal Design for Learning Resources webpage.
UDL Resources

Centre for Applied Special Technology
National Centre on Universal Design

Universal Design in Higher Education: From Principles to Practice (2nd Ed)
- Edited by Sheryl Burgstahler
- 2015

Universal Design for Learning: Theory and Practice
- Anne Meyer, David Rose and David Gordon
- 2014


