Universal Design: Best Practices for Online Learning

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The Environment

16%
Percentage of online enrolments in Canadian universities

10%
Number of Canadian institutions offering online courses grew (2011-2016)

Number of Canadian institutions offering online courses grew (2011-2016)

Students in higher education with disabilities is on the rise

Legislation is encouraging teaching and learning practices to evolve

Bates et al., 2017, p. 17; Bates et al., 2017, p. 10; McCloy & DeClou, 2013; Accessibility for Ontarians Disabilities Act (AODA)
The Project

eCampusOntario Faculty Supports Project

- OpenEd, University of Guelph was successful in receiving funding from the Ministry of Training, Colleges and Universities
- Task – to conduct a scan of best practices on how content is made accessible using universal design principles

OpenEd Project Team

- Natalie Green, Associate Director, Distance Education
- Richard Gorrie, Associate Director, Educational Technology
- Michelle Ebling, Research Assistant
Universal Design

“.The concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life”.

Universal Design in Education

“...Developing course content, teaching materials and delivery methods to be accessible to and usable by students across the broadest diversity ranges”.

Educational Models

- Universal Instructional Design (UID)
- Universal Design for Learning (UDL)
- Universal Design for Instruction (UDI)

Inclusive Design
### Comparing Models

<table>
<thead>
<tr>
<th>Universal Instructional Design (UID)</th>
<th>Universal Design for Learning (UDL)</th>
<th>Universal Design for Instruction (UDI)</th>
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</thead>
<tbody>
<tr>
<td>• Accessible and fair</td>
<td>• Multiple means of representation</td>
<td>• Equitable use</td>
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<tr>
<td>• Straightforward and consistent</td>
<td>• Multiple means of action and</td>
<td>• Flexibility in use</td>
</tr>
<tr>
<td>• Flexibility in use, participation and presentation</td>
<td>expression</td>
<td>• Simple and intuitive</td>
</tr>
<tr>
<td>• Explicitly presented and readily perceived</td>
<td>• Multiple means of engagement</td>
<td>• Perceptible information</td>
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<tr>
<td>• Supportive learning environment</td>
<td></td>
<td>• Tolerance for error</td>
</tr>
<tr>
<td>• Minimize unnecessary physical effort or requirements</td>
<td></td>
<td>• Low physical effort</td>
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<tr>
<td>• Learning spaces that accommodates both students and instructional methods</td>
<td></td>
<td>• Size and space for approach and use</td>
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<tr>
<td></td>
<td></td>
<td>• A community of learners</td>
</tr>
<tr>
<td></td>
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<td>• Instructional climate</td>
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Site Design

**Design**

In the Design phase, a course blueprint or map of the entire course is created while considering all the components of instruction. It can be helpful to work backwards and think about what learners should be able to do by the end of course, how they will practice what they are learning, and how it will be demonstrated for assessment purposes.

**Learn more** about Universal Design best practices for this phase.

**Development**

The Development or production phase is informed by the course blueprint developed in the Design phase. Instructional materials and resources, such as instructor notes, activities, assessments, and media are created along with the online learning environment in which they will be presented. Decisions on which materials will be created by the course developer are made during this phase.

**Learn more** about Universal Design best practices for this phase.

**Delivery**

In the Delivery phase, the instructor executes the instructional plan, actively instructing the course, monitoring progress and discussions, assessing work, and communicating with learners. During this phase the learning environment is further analyzed to observe learner use and interaction and to check the accessibility and efficacy of the design.

**Learn more** about Universal Design best practices for this phase.

**Evaluation**

Without critical evaluation, courses risk becoming stagnant and dated, imposing barriers to learners looking to engage and utilize online education. Evaluation should occur both in a final review process and during each offering of a course, with evaluations conducted by the learners as well as members of the design team.

**Learn more** about Universal Design best practices for this phase.
Navigation

Syllabus

Syllabi are used to inform learners of the intent of the course, by offering a description of the content and curriculum expectations, describing the evaluation methods and material requirements, and identifying important policies that learners must be aware of.

- Begin with a welcoming statement
- Include an accommodation or accessibility statement
- Establish ground rules

Begin with a welcoming statement

The course syllabus is one of the first things learners encounter and provides an opportunity to establish a welcoming environment.

Associated UD Principles

- UDL – Principle 3: Provide multiple means of engagement; CAST (n.d.-a)
Practice

Throughout Offering

From the initiation of course work to the final days of the offering, it is important to observe learner progress to determine areas of confusion and difficulty, as well as request learner input regarding the comprehensiveness and functionality of the course.

Seek learner feedback

Mid-point evaluations and check-ins with learners provide valuable information to the instructor, course developer, and design team during the delivery of the course. Continually collecting learner feedback helps determine if course outcomes are being met, if any clarification or adjustments are needed, and can indicate barriers and difficulties with the design or content.

Associated UD Principles

Design

Syllabus
- Begin with a welcoming statement
- Include an accommodation or accessibility statement
- Establish ground rules

Learning Outcomes
- Develop clear outcomes

Assessments
- Constructively align assessments with learning outcomes
- Consider if time restrictions are necessary
- Consider using frequent (short) assessments
Development

Assessments
• Give clear directions
• Offer choices
• Provide rubrics
• Allow for ongoing revisions or draft submissions

Activities
• Incorporate discussions
• Encourage use of reflections, journals, blogs
• Offer opportunities for self-assessments and peer-assessments
• Consider using pre-tests
Development

Materials
- Supply materials in multiple modalities
- Select accessible resources
- Choose resources relevant to content, activities and assessments
- Test for accessibility

Layout, Structure, Sequence
- Consider screen size and using multiple pages
- Ensure consistency of navigation and layout
- “Chunk” content
- Ease of use
- Use outlines, checkpoints and summaries
- Make key points stand out
- Define new terms and acronyms, and avoid jargon
Delivery

**Communication**
- Establish a connection with learners
- Be available and approachable
- Be active in discussions
- Post regular class updates
- Be consistent with naming conventions and use inclusive language

**Feedback**
- Offer constructive feedback
- Provide feedback frequently and in a timely manner
Evaluation

Throughout Offering
- Seek learner feedback

Course Completion
- Request final learner evaluations
- Conduct a comprehensive course review
Universal Design – Best Practices for Online Learning
https://OpenEd.uoguelph.ca/UDOnlineLearning

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Thanks!

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