High Quality Online Courses

# High Quality Online Courses

How to Improve Course Design & Delivery for your Post-Secondary Learners

UNIVERSITY OF WATERLOO; QUEEN'S UNIVERSITY; UNIVERSITY OF TORONTO; AND CONESTOGA COLLEGE



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# About this course – Start here!

# Territorial acknowledgement

The authors of this course humbly acknowledge that we have co-created this learning material across the traditional lands of many Indigenous Peoples, including the Anishinaabe, Haudenosaunee, Huron-Wendat, the Seneca, the Mississauga's of the Credit, Neutral, and Ojibway/Chippewa peoples. Many Métis, Inuit, and First Nations from across Turtle Island also call these lands home today. We express gratitude to those that reside here and honour those Indigenous Peoples who have lived here in the past and continue to do so today.

We hope to bring you a learning experience that helps you situate your own profession with your learners and where you teach.

# Course goal and learning outcomes



The goal of this course is to enable you to **apply principles of quality design to your online course**, whether you're creating a new online course, revising an existing online or remote course, or facilitating your first-ever online course. Your own goals in taking this course will determine the outcomes you take away, but successful completion of the entire course will enable you to

- recognize and implement key features of quality in learner-centred online course design;
- develop a set of **learning outcomes** for your online course that are explicit, measurable, and align with your content, activities, and assessments;
- create a varied assessment scheme that scaffolds and supports the learning outcomes of the course and promotes academic integrity;
- incorporate principles of **equity, diversity, and inclusion (EDI)** into your course design for the benefit of all learners;
- apply principles of **Universal Design for Learning (UDL) and accessibility** into your course design to ensure a more equitable learning experience;
- **structure and present your online content** in ways that facilitate student learning and foster a sense of community;
- employ effective facilitation strategies when delivering your online course; and
- create a plan for **revising your course** at the end of the course offering.

# A note about the intended audience

This course is designed for educators in **postsecondary education (PSE)**. Tips and examples will be grounded in this context. However, many principles and examples translate readily to a K-12 or professional development context.

# **Course overview**



This course consists of four modules. The modules are organized according to the typical stages of development of an online course. These modules can be completed sequentially or as standalone modules, allowing you to begin at whatever development stage/module aligns best with your goals. Each module includes **strategies, design templates, practical examples, and applied activities** that help you **actively build/revise/facilitate your own online course** as you progress through the content. If you are looking for guidance on completing course design, development, or delivery tasks for your own course, the right column in the visual below provides a list of the activities associated with each module. If you'd like to preview these activities, click on the "i" icon to navigate directly to the activity you'd like to complete for your course.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=21#h5p-15</u>

Credit: University of Waterloo | Image Description (PDF)

# Your goals and pathway

We recognize that the learning goals and needs of our audience are diverse. Below, we offer some further ways to navigate this course to enable you to meet your goals most efficiently.

# If your goal is to find examples to spur your own creativity

If you're primarily interested in looking at examples that demonstrate strategies you can use to design, build, or deliver your online course, we've made these easy for you to locate. Simply click on the "**Module examples, strategies, and templates**" page, located in the Table of Contents (left navigation panel) for each of the four modules. The page provides direct links to the examples, strategies, and templates provided throughout the module.

Within each module, you will find examples of both

# Quality Essentials

- Essential content and examples are the backbone of each module, and will provide you with the **essential ingredients of a quality online course**.
- Essential examples are labelled "Essential" and are accompanied by an "apple" icon.

# Quality Advanced

- More advanced content and examples are peppered throughout each module, for those seeking a **deeper dive into particular topics**.
- Advanced examples are labelled "Advanced" and are accompanied by an "apple pie" icon.

**Essential vs. Advanced**: These distinctions do not imply a difference in quality. We have been very deliberate in our selection of imagery here: an apple pie isn't inherently superior to an apple in terms of quality. Similarly, content, examples, and activities labelled Advanced in the course are not superior to those labelled Essential. Advanced items may be more complex, may require more time to implement, or may explore a particular principle in greater depth or breadth.

# Example of how it works

# How we did this in this module

We have designed the entire course to be an example of the strategies and principles we've highlighted throughout. We've been careful about practicing evidence-based approaches in each module with outcomes that align with each module's content and activities, which strive to engage and meet the needs of our learners. Our goal in doing this is to give you a picture of what a high-quality online course can look like. We make these design choices explicit in the **"How we did this in this course/module"** sections throughout the course.

# If your goal is to learn how to address specific instructional challenges

If you've experienced challenges as an online instructor, or have had your learners express their challenges with online learning to you, the following activity directs you to module content and activities designed to help mitigate those challenges. If you are not intending to work through this entire resource, the interactive will help you home in on the most relevant sections for your needs.

# Finding the content you need

These interactives list several common challenges facing online learners and instructors. Select all that apply to you and your learners, then click "Check" to receive feedback that will link you to some of the chapters of this resource that you may be most interested in.



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# If your goal is to acquire a credential in designing and developing high-quality online courses

If you're interested in completing this course in its entirety, and would like to acquire a credential for it, this may be an option for you, depending on your institution. We have created a version of this course that can be plugged into an institutional Learning Management System (LMS), allowing an institution to offer a facilitated offering with a certificate of completion. This LMS version is available through the <u>eCampusOntario Open</u> Library. Contact your institution's teaching and learning centre to see whether this is possible at your institution.

# If you're interested in exploring the relevant research literature

We have included "**Why this matters**" sections throughout the course, which provide brief summaries of what the research literature says about the principles we introduce in each module. For those who want to take deeper dives into the research literature, we've referenced some of the key literature in the "Resources for further study" and "Bibliography" sections in each module.

# Navigating this course

There are three ways to navigate through the content of this course:

- 1. Click the **Contents** bar in the navigation panel to navigate between sections.
- 2. Use the **Module Overview** page for quick links to the sections within a module.
- 3. Use the **Previous/Next** links in the footer at the very bottom of the screen to go back and forth through the content



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# Accessibility statement

We developed this course with a commitment to accessibility and usability for all learners.

The accessibility of this course was assessed by the Centre for Extended Learning, University of Waterloo. This review was based on the WCAG 2.0 Guidelines at success criteria Level AA. The course authors have addressed all known accessibility issues to the best of their abilities.

The following known accessibility issues persist and may cause difficulties for some persons with disabilities:

- 1. Links provided in accordions do not have an icon to indicate that they open in a new tab.
- 2. **Previous** and **Next** page buttons are difficult to find and the use of orange text over a dark purple background is not optimal.

These issues were not resolved because they are both limitations of Pressbooks.

# About the course authors and development team

We are a team of instructional designers and educational developers who have brought our combined years of experience in online learning to the design and development of this course. Although we come from a variety of personal and professional backgrounds, we recognize that we do not (and cannot) encompass every experience. As a result, we have sought to incorporate equity, diversity and inclusion (EDI) principles into all the concepts and approaches we highlight throughout the course in order to acknowledge the diversity of our students, instructors, and educational support staff in the online learning environment (see the next section for more on EDI principles).

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# Equity, diversity, and inclusion (EDI): Your instructional "way of seeing"

"A way of seeing is also a way of not seeing."

Burke, K. (1935). Permanence and change: An anatomy of purpose. Muriwai Books.

# Introducing EDI principles



(Koch, 2021)

Now that you've spent some time thinking about your goals as a learner, we'd like you to take a moment to reflect on **who you are as an instructor.** We all have a "way of seeing" that is rooted in our own experiences and background, and we bring unconscious biases to our work as instructors. By becoming aware of these experiences and thinking about how our unconscious biases affect our teaching and interactions with learners, we can take steps to use more inclusive language and teaching approaches, encourage more empathetic communication, and promote vocabulary and terminology that respects and values the diversity of the Canadian and global community.

It is important to note that **terminology and definitions are always evolving** as society grapples with these complex ideas, so we encourage you to approach this as a life-long learning pursuit toward more inclusive teaching.

# Some key terms for equity, diversity, and inclusion

Equity, diversity, and inclusion (EDI) are common terms used today to frame an intentionally comprehensive approach to a particular goal. In our context, it is equity, diversity, and inclusion in online learning.

Click the terms to reveal how we view each of them in the context of this course and your learning.



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# Our use of EDII as an acronym

This course focuses on providing guidance for creating quality online learning experiences and while we are focusing on key instructional design principles, part of this includes EDI approaches. Given the Canadian context of this course and that we cannot dedicate significant time to any one topic, we will only be able to provide a few examples of how to Indigenize your course, and will not be providing guidance on decolonizing course design and materials. However, we highly recommend searching the <u>eCampus Ontario Open Library</u> catalogue to locate specific courses and resources for authentic and non-culturally appropriating approaches to decolonization and Indigenization of learning and teaching. We still recognize the importance of incorporating Indigenous knowledge systems and teaching/learning approaches so we will often use the EDII terminology when discussing EDI concepts to explicitly acknowledge the work that remains to be done in the Canadian educational system.

# How we've incorporated EDII perspectives into this course

# An EDII perspective on [topic]

Look for the "**An EDII perspective on [topic]**" call-out boxes (such as this one!) interpolated throughout the course. These are designed to signal EDII content and offer EDII insights on the topic under discussion.

# Reflection

Take a moment to reflect on yourself as an instructor in your field and also as an instructor in the online space. Before you begin to design your course, think about these questions:

- How do your assumptions and personal history influence your approach to teaching online? For instance:
  - How do you bring your identity to the classroom (e.g., first language, race, gender, ethnicity, socioeconomic status, nationality), either inherently or purposefully?
  - Have you always been able to study full-time, without the distractions of part-time jobs or family responsibilities?
  - Do you have prior experience being an online learner yourself?
- What has your access to technology been like?

For instance:

• Have you had consistent access to the internet? Has cost been a factor?

- What is your process for getting comfortable with new technologies, or do you avoid them?
- · What do you consider your primary role as an online instructor?
- Have you ever considered why you teach the content that you do?
  - For instance:
    - Is it mandated by your profession? The government?
    - Are there types of knowledge that you inherently see as more important? Why is that?
    - Is there space for different perspectives in your course?
- $\cdot\,\,$  How might the above considerations influence the way you approach teaching online?

# Power, privilege, & intersectionality:

Click the titles to learn about additional concepts to keep in mind as you work through this course.



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Click the titles for simple strategies and prompts for critical self-reflection that can interrupt unconscious biases.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=32#h5p-3</u>

# Resources for further study

If you wish to further reflect on the potential privileges and oppressions of your own identity, we recommend the following privilege/oppression diagram provided by the <u>Intertwine Charter</u>. It is helpful in proposing examples of actions that avoid discrimination and in proactively adopting an intersectional approach.

You may also find the below glossaries useful for becoming more comfortable with certain EDI-related terminology. It is okay to feel unsure about proper usage; as long as you are humble and open to asking questions and receiving answers, most people are happy to clarify what a term means to them and how it should be used.

- EDI style guide: Faculty of Health Sciences, Queen's University
- Equity & inclusion glossary of terms, University of British Columbia
- Indigenous terminology guide, University of Waterloo [PDF]
- What is decolonization? What is Indigenization? Queen's University

# MODULE 1: CREATE YOUR QUALITY ONLINE COURSE BLUEPRINT

# 1.1 Module overview



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=293#oembed-1</u>

#### Transcript (PDF)| Video length ~ 1 min.

Welcome to Module 1! This module begins at the **conception and planning stage** of course development and invites you to consider the learning needs and experiences of your learners as foundational to planning and designing your quality online course.

You will be asked to think about the following key questions:

- Why have your learners chosen to learn online?
- · What will they need in order to succeed in your course?
- · What challenges might they need to overcome with online learning?
- What can you do to facilitate their learning?



Caption: The structure of this course is shown, with the four modules mapped to the three stages of online course development. *Module 1: Create your quality online course blueprint* pertains to the Conceive and Plan stage.

Credit: University of Waterloo | Image Description (PDF)

# Module learning outcomes

Module 1 presents opportunities for you to **reflect on your learners** and on your **learning goals** for them, so that by the end of the module, you should be able to

- recognize quality in online learning as centred on learners and facilitating learning;
- identify the characteristics of your online learners, including their **situational context** and **prior knowledge**, and adapt your course design plan accordingly;
- develop **learning outcomes** for your course that provide a clear destination for your learners (i.e., that are explicit and assessed); and
- reflect on ways to cultivate a sense of inclusion and belonging to a learning community that are authentic to you and your course.

# Key terms

The following is a list of key terms that you might find useful to review prior to working through the content of this module:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hgoc/?p=293#h5p-16</u>

# Sections in this module

You can jump to any of the sections in this module by clicking the links below or using the left-side navigation menu.

- 1.2 Module examples, strategies, and templates
- **<u>1.3 Introduction What is quality in online learning?</u>**
- **1.4** The Nine Events of Instruction framework
- 1.5 Using backward design (Event 2)

1.6 Writing effective learning outcomes (Event 2)

- 1.7 Learning about your learners (Event 3)
- 1.8 Summary: Learner-centred design & the Nine Events of Instruction
- **1.9** Module resources for further study
- **1.10** Bibliography

# Activities in this module

The module activities are **designed to help you begin to plan your quality online course**. For ease of use, clicking the provided links will allow you to jump directly to the location of the course where the activity is located.

- <u>Module-level alignment chart</u>: An alignment chart mapping your learning outcomes to your assessments and topics.
- <u>Course-level alignment chart</u>: An alignment chart mapping your module learning outcomes to your course learning outcomes.
- <u>Who are my learners?</u> A worksheet in which you (a) identify the types of learners in your course (focusing on their situational context) and (b) consider the implications of these characteristics for the design of your course.
- What do my learners already know? A diagnostic assessment to surface learners' prior knowledge and/ or misconceptions they may be bringing to the course.

# 1.2 Module examples, strategies, and templates

If you are primarily interested in exploring concrete examples of quality design principles, consider jumping directly to the examples, strategies, and templates included throughout this module. These are drawn from real courses and instructors across disciplines and learning contexts.

# Examples

#### 1.4 The Nine Events of Instruction framework

• A (meta)example of how Gagné's framework works

#### 1.5 Using backward design (Event 2)

- Examples of how to write measurable learning outcomes
- Examples of how backward design works

#### 1.7 Learning about your learners (Event 3)

- Examples of how "adapting design to the needs of learners" could work
- Examples of how "stimulating recall of prior knowledge, identifying misconceptions" could work

# Strategies

#### 1.5 Using backward design (Event 2)

<u>Strategies for "making course design transparent"</u>

# **Templates**

#### 1.5 Using backward design (Event 2)

- Module-Level Alignment Chart
- <u>Course-Level Alignment Chart</u>

# 1.3 Introduction – What is quality in online learning?

# Perspectives on quality

How do we define quality in online learning? A good starting point is to think about how learners experience their learning online. What things do they appreciate about online learning? What things challenge or trip them up? The *Student Voices* video presents a chorus of student voices offering perspectives on what matters to them in online learning environments and why.

# Student voices

Researchers at the University of Waterloo surveyed over 800 undergraduate students about what they liked, didn't like, hoped for, and expected from their online courses, and conducted over 100 hours of interviews and user-testing with some of these students. The following video presents a sampling of what they shared (Troop et al., 2020).



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=303#oembed-1</u>

# <u>Transcript</u> (PDF) | Video length ~ 2 mins. Summary of key points:

Online learners LIKE

- flexibility (but can be challenged by self-regulation);
- a mix of media (text, images, video, interactions);
- $\cdot$  well-structured, easy-to-find content and assignments;
- content presented in short(er) segments; and
- · connections with instructors and peers.



Caption: Learner-centred course design takes learners into account in the creation of content, interactions, and assessments. Credit: University of Waterloo

As mentioned above, our starting point for defining quality in online learning is grounded in the **experiences and learning needs of our learners**. We call this a **learner-centred** approach to course design rather than a content-centred approach.

Let's explore this concept in more detail.

### What is learner-centred design?

Learner-centred design places learners and their ability to learn at the centre of the course design process. In learner-centred design, the focus is on designing a course in a way that **effectively supports and facilitates learning**. As such, it is firmly grounded in evidence-based principles from the cognitive and learning sciences that have been shown to facilitate learning and help learners be successful in achieving the learning outcomes set out for them.

And there is plenty of evidence to draw from—teaching and learning in all its forms (including online teaching and learning) has been the subject of much academic study. For those of us who have the time and inclination to peruse some of this research, we've referenced some of the most seminal and often-cited literature in Module 1 **Resources for Further Study** section, including several evidence-based approaches to course design. For our purposes in this course, we will use Robert Gagné's **Nine Events of Instruction** as a framework that provides a learner-centred foundation to guide our course-design work.

#### Who is Robert Gagné?

Robert Mills Gagné was a professor of psychology and educational psychology who conceptualized the Nine Events of Instruction framework. To learn more about Gagné, read his <u>biography</u>.

While course design frameworks such as the *Nine Events* are a useful way to efficiently and effectively design your high-quality online course, no framework is complete on its own. An important aspect of learner-centred design that we will highlight throughout this course is <u>Universal Design for Learning (UDL)</u>. UDL provides a set of research-based principles to ensure that we appropriately address the learner diversity in our courses and minimize barriers to learning, ensuring that "all learners can access and participate in meaningful, challenging

learning opportunities" (CAST, 2018). The Module 1 <u>Resources for Further Study</u> section provides more information about UDL, and later in the module, we'll be looking at some UDL-inspired examples of how to adapt course design to the needs of our learners.

#### Key take-away:

When considering quality in online courses, think about your learners and their experiences when learning online. Focusing on the quality of the learning experience you are creating for them is an evidence-based way to help them be successful.

#### Key questions:

- Why have your learners chosen to learn online?
- What will they need in order to succeed in your course?
- What challenges might they need to overcome with online learning?
- What can you do to facilitate their learning?

The rest of this module will provide guidance in answering these questions.

# 1.4 The Nine Events of Instruction framework

By defining quality in online learning as **centred on learners** and on **facilitating learning**, this introductory module sets the stage for our approach to the rest of the course. We start this module by introducing an evidence-based framework that outlines **the necessary conditions for learning** (Gagné's Nine Events of Instruction), and we will loosely follow this framework as we work through the various stages of course design and development.

# Transparent teaching moment: Why a framework?

Research tells us that when learners are exposed to a new field of knowledge, it can be a challenge for them to conceptualize how the various elements of the field are connected. Learners often experience new fields of knowledge as a series of isolated facts or formulas to master, causing them to miss the bigger picture, which plays an important role in structuring and scaffolding the information, making it more meaningful and memorable. Frameworks and schemas provide an organizational structure in which to fit new knowledge, allowing learning to occur more efficiently and effectively (Ambrose et al., 2010; Bransford et al., 1999).

**Gagné's Nine Events is one such framework/schema**. It sets out nine research-based "conditions" required for effective learning, which maps well onto the process-based way we've organized this course. The framework is simply a useful way for you to efficiently and effectively design your high-quality online course. (We will speak more about schemas and organizational frameworks in Module 3.3 <u>Structuring Your Course</u>.)

**Important note!** You'll notice that we cover the events in a slightly different order than originally conceived by Gagné. The reason for this is that Gagné organized these events based on the flow of classroom instruction. We've adapted the framework for an online context, which requires a bit of shuffling—for example, **Event 1: Gain attention** is part of content development, which we cover in Module 3.4 <u>Gaining Learner Attention</u>.

The following diagram describes Gagné's Nine Events of Instruction. Click on the plus sign associated with each of the nine events to reveal the conditions for effective learning.



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Credit: University of Waterloo | Image Description (PDF)

# A (meta)example of how Gagné's framework works

# How we did this in this module

We've been very deliberate about modelling the principles we highlight in this course. Throughout the course, we will draw your attention to how we've implemented particular principles in these "How we did this" sections. For example, click through the diagram to see how we applied Gagné's first three events in this module.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=5#h5p-5

Credit: University of Waterloo | Image Description (PDF)

As you head into the **conception and planning stage** of your online course, refer to the example above of how we've applied some of Gagné's principles in this module to guide you. We recommend that you start working with two of Gagné's conditions for effective learning:

- · Event 2: Inform learners of the objective
  - Learners need to know what is expected of them.
- · Event 3: Stimulate recall of prior learning
  - Learners need to activate prior learning, and any misconceptions that may interfere with learning need to be surfaced.

We'll address these two events next.

# 1.5 Using backward design (Event 2)

In Gagné's Nine Events of Instruction framework, **Event 2** is about informing learners of the learning destination. In a quality online course, we start by letting learners know where they're headed, i.e., what will they be expected to know, value, or do by the end of the course? We call this process **backward design**.



Caption: In Gagné's Nine Events framework, Event 2 focuses on informing learners of the objective. Credit: University of Waterloo

# What is backward design?

Backward design is like a road trip—it helps us to answer the following questions:

- Where are we going?
- How will we get there?
- How will we know when we have arrived?

Backward course design starts at the end of the course by defining the **learning outcomes** we expect of our learners. Once we've decided what we want our learners to know, value, and be able to do by the end of the course (the instructional destination), we next determine the **assessment evidence** that will indicate whether learners have arrived at the desired destination. What kinds of assessments will we use to measure our learners' progress toward the outcomes?

And lastly, we work out the **learning experiences** (activities and content) that will prepare our learners to achieve the outcomes and complete the assessments successfully. This is called **alignment**. In a well-aligned course, every element should support/ align with the achievement of the learning outcomes: the content, the learning activities, and the assessments.



Caption: A visualization of the backward design approach. Credit: University of Waterloo

# Why backward design matters

Backward design is important for both learners and instructors. **For learners**, it clarifies course expectations, i.e., what you expect that they should know and be able to do by the end of the course. This kind of transparency can help to guide the way they approach their learning in the course (Kolomitro & Gee, 2015), and increases their motivation to engage in course activities (Darby & Lang, 2019). As Nilson and Goodson (2018) explain, it's important to explain to learners why

... you designed, organized, and developed the course the way you did.... Students do not assume that everything you do is well considered, or for their own good ... and they have no idea of the research behind your choices. In fact, their perceptions of course quality and utility have an impact on their motivation and entire online experience. (p. 114)

For instructors, backward design helps to ensure that appropriate learning activities and content are selected, i.e., that they effectively support and prepare learners for the assessments, setting them up for success and mitigating any potential concerns about "busy work" and unclear connections between assessments and content.

Once we've done this crucial work, it is important to make it **transparent to our learners**, who might not otherwise understand why we're asking them to engage in certain course activities. Showing them the relevance of what we're asking them to do will increase their motivation to engage in course activities and promote their understanding of how to learn.

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# Strategies for "making course design transparent"

"Transparent teaching methods help students understand **how** and **why** they are learning course content in particular ways" (Winkelmes, 2014).

If you are interested in further exploring transparent teaching methods, take a look at the list of **instructor-created examples** of <u>Transparent Methods</u> from the <u>Transparency in Teaching and Learning Project</u>. This site will help you to generate ideas for providing explicit information to students about the teaching and learning practices you use in your course.

# Examples of how backward design works

A useful way to ensure that your course is well-aligned is to complete an alignment chart (also known as a course map). An alignment chart lists the course and module learning outcomes and the associated assessments, content topics, and activities as they align to those learning outcomes. Module learning outcomes should align with course learning outcomes.

	Example of a module-level alignment chart				
Week	Module Number	Topics/ Concepts	Learning Outcome(s)	Bloom's Taxonomy Level	Activities and/or Assessments (e.g., quiz, written assignment, discussion)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Below we've provided some examples of **alignment charts**, at both the module and course levels, across several disciplines.

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### Module-level alignment charts

- **Example 1**: <u>English Literature course</u> (PDF); Credit: Kate Lawson, Department of English Language and Literature, University of Waterloo.
- **Example 2**: Intro to Statistics course (PDF); Credit: Marie Lippens, WatSPEED, University of Waterloo (adapted from OpenIntro Stats).

- **Example 3**: <u>Psychology Basic Processes of Behaviour</u> (PDF); Credit: Domenica De Pasquale, School of Interdisciplinary Studies, Conestoga College.
- Example 4: <u>Capstone II Organizational Consulting Project</u> (PDF); Credit: Dubravka Bright, School of Business, Conestoga College.

# Course-level alignment chart

In this final example, **course learning outcomes** are mapped onto **course activities**, and learner-centred language is used to set an inviting and accessible tone.

 Example 5: <u>Cultural Identities – Truth-Reconciliation-Story</u> (PDF); Credit: James Skidmore, Department of Germanic and Slavic Studies, University of Waterloo.

# A (meta)example of how a course-level alignment chart could work

### How we did this in this course

Your module learning outcomes should align with your course learning outcomes. Take a look at the <u>Course-Level Alignment Chart</u> (PDF) we created for this course to see how we aligned our module learning outcomes with our course learning outcomes.

Credit: Laura Shannon, Queen's University

# Activity: Module-level alignment chart

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 2**: Develop a set of learning outcomes for your online course that are explicit, assessable, and measurable.

#### Instructions

Equipped with the above examples to guide you, create your own module-level alignment chart/course map.

**Option 1:** Download the <u>Module-Level Alignment Chart</u> (DOCX) to create a Word version to complete offline. **Option 2:** Complete the activity inline below. If you wish to save your inline results, be sure to download your

work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on. Please note, this activity is intended for your own reflection and learning. **Your responses are private and are** 

### deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=686#h5p-14</u>

# Activity: Course-level alignment chart

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 2**: Develop a set of learning outcomes for your online course that are explicit, assessable, and measurable.

#### Instructions

Now that you've created your module-level outcomes, you'll want to make sure that they align with your course-level outcomes. A good way to do this is to **complete a Course-Level Alignment Chart**.

Option 1: Download the <u>Course-Level Alignment Chart</u> (DOCX) to create a Word version to complete offline. Option 2: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your

work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on. Please note, this activity is intended for your own reflection and learning. **Your responses are private and are** 

deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=686#h5p-33</u>

# 1.6 Writing effective learning outcomes (Event 2)

Backward design starts with defining the learning outcomes, which state what learners should be able to do to demonstrate their learning. Well-written outcomes avoid vague words like "understand" and "know" (which require interpretation) by spelling out for learners how you and your discipline measure understanding and knowing.

Learning outcomes should be

- phrased as actions (using verbs);
- clearly stated and measurable (since you will be assessing them);
- written from a learner perspective (address your learners directly);
- $\cdot$  available at the course and module levels; and
- connected to overall program competencies.

Bloom's Taxonomy is a useful resource to reference as you craft your learning outcomes: It classifies instructional objectives into hierarchical categories across three domains (cognitive, affective, and psychomotor), ranging from the less to the more complex. In order for learners to achieve the higher-order skills, they first need to perform at the lower levels. This taxonomy can help guide your thinking about the types and depth of skills and knowledge you'd like your learners to demonstrate at the end of your course and the assessment types that would be appropriate to evaluate these.

### What's in a verb?

When crafting your learning outcomes, it's important to use verbs that depict learners' **observable behaviour**. This will help you design appropriate assessments. Bloom's Taxonomy provides a handy list of **measurable verbs** for each skill level, which you can use as prompts or to guide your design thinking.

Click on the different skill levels for some basic guidance. To better view the actionable verbs, select the expand button on the top right of the image.

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An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1397#h5p-6</u>

(Credit: Grantham, 2021; used under CC BY-SA 4.0 license) | Image Description (PDF)

Take a look at the learning outcomes in the chart below. This chart outlines examples of how to turn vague learning outcomes into measurable, more concrete learning outcomes that can be clearly assessed.

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# Examples of how to write measurable learning outcomes

Vague Learning Outcome	Measurable Outcome
<b>Learn how</b> to solve basic mechanical engineering problems.	<b>Apply</b> mathematical approaches to solve basic mechanical engineering problems.
Know the areas and function of the brain.	<b>Identify</b> the areas of the human brain and describe the function of each.
<b>Understand</b> the principles of essay writing.	<b>Identify</b> the principles of essay writing and <b>apply</b> them to your essay.
<b>Be familiar</b> with various psychological theories and their applications.	<b>Describe</b> the foundations of psychological theories covered in the course and their applications.
<b>Solidify</b> understanding of urban geography and how it helps us understand climate change.	<b>Discuss</b> foundational principles of urban geography and how they can be applied to help us understand climate change.

As you consider the outcomes you want your learners to achieve at the end of your course, don't limit your thinking strictly to content-related outcomes. Are there particular skills, values, ways of disciplinary thinking and/or problem-solving that would be appropriate for the course? For example, in a psychology course, rather than simply having learners memorize theory, are there ways in which they can apply the theory to a real-world context? Or could the skills of argument analysis, evaluating evidence, and critical reading be an explicit outcome that students gain in the course? As Gagné and Merrill (2000) explain,

... placing student learning outcomes in the context of real-world problems gives purpose and meaning to knowledge and skills. (p. 129)

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# How to build critical thinking outcomes into your course

If you're interested in exploring ways to incorporate critical thinking outcomes into your course, take a look at the following resources:

- <u>"Going Below the Surface: Depth Structure and Transfer in Critical Thinking"</u> by Helen Lee Bouygues from <u>The Learning Scientists</u>.
- Cross-disciplinary guides on "How to Teach Critical Thinking" from the Reboot Foundation.

For more information about how to write learning outcomes, check out the *Learning Outcomes* section of Module 1 <u>Resources for Further Study.</u>

# An EDII perspective on learning outcomes

If you're interested in exploring an EDII approach that attempts to move beyond a hierarchical "content knowledge and application" approach to learning outcomes, there is an additional model we can recommend. This model encompasses more of the "human dimensions" of learning, including the **Taxonomy of Significant Learning** (Fink, 2013) on top of Bloom's Taxonomy, and integrates the **Haudenosaunee Four Directions Teaching** represented in the Medicine Wheel visual to promote a more holistic approach to teaching and learning.
For more information, and examples, visit the <u>Incorporating a Holistic Framework for Online Curriculum</u> <u>Development</u> interactive tool. You'll be able to export your initial ideas for creating new learning outcomes using this holistic framework.

Please note that your responses are private and are deleted when you refresh or navigate away from the interaction so ensure to click the **Export** tab at the bottom of the left-hand navigation before moving on.

# 1.7 Learning about your learners (Event 3)

Your learners are a diverse array of people with unique backgrounds, contexts, and goals in taking your course. **Event 3** of Gagné's framework reminds us that it is useful to understand **what your learners know and don't know** as they enter your course. We suggest that it is also useful to step back from a strict disciplinary lens and consider their **contexts and goals** more broadly, as these have implications for how you design your course.



Caption: In Gagné's Nine Events framework, Event 3 focuses on stimulating recall of prior learning. Credit: University of Waterloo

#### Why learning about your learners matters

**From a cognitive perspective**, knowing something about your learners' **prior knowledge** helps to ensure that you are building from a solid disciplinary foundation, establishes that your learners have valid prerequisite knowledge, and surfaces any misconceptions that may interfere with their learning. Early interventions to address conceptual gaps are one way to provide the kind of **learning guidance** that Gagné describes in **Event 5** of his framework.



Caption: In Gagné's Nine Events framework, Event 5 focuses on providing learning guidance. Credit: University of Waterloo

**From a situational and affective perspective**: knowing something about your learners' **goals and contexts** ensures that learners will be able to and motivated to participate meaningfully in your course. Below are some questions to consider with implications for course design:

Questions to consider	Implications for course design
Why did your learners chose to learn online? Was it their first choice, or was it the only option they felt would work for them?	This may have implications for scheduling synchronous events (if flexibility is important) and can inform your approach to building community and your plans to be available to support, encourage, and motivate your learners.
Are your learners geographically dispersed? What percentage are international students? How many are adult learners/ study part-time?	This may have implications for scheduling synchronous events for written communication if English is not a first language and for cultural expectations of teaching and learning.
Will some of your learners be participating from countries that block certain websites?	This may impact your choice of online content or resources you require of your students. Wikipedia maintains an up-to-date <u>list of websites blocked</u> <u>by mainland China</u> and similar lists for other countries.
Are your learners seeking professional accreditation?	This may have implications for the types of activities, assessments, and content you include in the course.
Are there two or more distinct audiences (e.g., from different programs/fields of study)?	What can you do to meet the needs of both?
How and why will your learners use what they learn in your course?	This can provide insight into the types of activities and assessments you design.

# An EDII perspective: Learner diversity in Canadian postsecondary education (PSE)

... Canadian PSE has ... had to adapt itself to better meet the needs of mature students, part-time students, commuter students and distance/online learners.

(Cantiller, 2019)

Learner diversity is receiving increasing attention in Canadian PSE as institutions recognize the need to support the inclusion and success of under-represented (equity-deserving) groups, including

- women (in certain disciplines),
- first-generation students,
- students with lower socioeconomic status,
- students with disabilities,
- Indigenous learners, and
- adult learners seeking to upgrade skills or change careers.

Diversity in Canadian PSE is further fuelled by a strong international recruitment strategy across the sector, which at the same time is driving the need to "globalize" or "internationalize" the campus and curricula. This movement inherently incorporates EDII principles for the effective attainment of its goals.

For more information, see

- "Canadian Post-Secondary Education: Student Diversity and Access Over the Past 50 Years" by Dan Cantiller (article).
- "<u>Removing Barriers to Online Learning Through a Teaching and Learning Lens</u>" by ABLE Research Consultants and sponsored by BCcampus (PDF).

While we'll be exploring ways to create an inclusive environment in your online course more fully in upcoming modules, we encourage you to review the following resource, which provides ideas for building inclusivity into your course at the planning stage of course design. The **Inclusive and Responsive Teaching** resource created by

Queen's University offers strategies to think about as you plan your course and the examples following extend on this by demonstrating how these strategies can be put into practice and act as a springboard for your own ideas.

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#### Inclusive and responsive teaching module

Includes ideas for creating inclusivity in

- your syllabus;
- the selection and presentation of content; and
- group work and other forms of student participation.

Credit: Queen's University, Faculty of Health Sciences. Used under CC-BY-NC 4.0 license.

# Examples of how "adapting design to needs of learners" could work

We offer some examples below of ways to find out about your learners' contexts and how you might use this information to inform course design decisions.

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## Example 1: Using a survey to find out about my learners

Instructors at Queen's University have the option to administer a "<u>precourse survey</u>" to students at the beginning of term to surface background information about learners in the course and to get a sense of the general level of knowledge that they have prior to starting the course.

Credit: Arts and Science Online, Queen's University

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## Example 2: My learners are from two different programs

Nadine Ibrahim teaches a course on engineering and sustainable development, which typically includes 2ndyear students in civil engineering who take the course as a core requirement, but also attracts 4th-year students from management engineering who take it as a technical elective. As she explains, "the class is almost split in their motivation for taking the course, and in their appetite for discussion-based questions around sustainability vs calculation-based questions." In the video below, Dr. Ibrahim describes how she addressed the learning needs of, and created community across, both groups. In the <u>Notes</u> PDF, she provides examples of how she included opportunities for both qualitative and quantitative learning in a typical module and a typical assessment.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=689#oembed-1</u>

#### Notes (PDF) | Transcript (PDF) | Video length ~ 2 mins.

Credit: Dr. Nadine Ibrahim, Department of Civil and Environmental Engineering, University of Waterloo

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# Example 3: Many of my learners are adults

Shawna Kay Williams-Pinnock teaches second-language and literacy courses primarily to adult learners from a cross-section of socio-cultural backgrounds. Read about some of the strategies she uses to meet the needs of her adult learners in "Adult Learners Need More Instructional Support."

#### Highlights of the strategies used:

- language supports/scaffolding such as sentence starters and prompts to guide writing;
- **modelling** what she expects of her learners, including exemplars of the types of writing they will produce in the course, and "thinking out loud" to make disciplinary thinking visible and reproducible;
- phased/scaffolded assignments with Socratic feedback on drafts;
- detailed rubrics and marking schemes; and
- opportunities for **live consultations** on submitted assessments to clarify feedback and enable learners to make meaningful revisions.

Credit: Shawna Kay Williams-Pinnock, Mico University College in Jamaica

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# Example 4: My learners will use the skills they learn in a particular context

#### Simulating a business environment to teach business communication skills

Dorothy Hadfield and Bruce Dadey teach a business communication course, primarily targeted to business and accounting students. Having carefully considered how their learners will use the knowledge they gain in the course, they chose to predicate the course on a business simulation, where students don the personas of prospective interns in a fictitious company, Living4Learning (L4L). In the second week of term, students "apply" to three of L4L's departments and are "hired" (by TAs) into one of these. From that point in the course onward, all of their writing takes place within the context of that department, communicating with another L4L department, simulating real-world business communication.

Credit: Dr. Dorothy Hadfield and Dr. Bruce Dadey, Department of English Language and Literature, University of Waterloo

# Example 5: Some of my learners have learning challenges

The Field Placement – Community Integration Through Co-operative Education Program course is a part of a two-year program that supports students with learning challenges (including those on the autistic spectrum, those with Down's Syndrome, physical or motor disabilities, and vision or hearing impairments) to learn academic and vocational skills. This course provides the opportunity for students to prepare and participate in work placements in the community.

#### Highlights of the course design strategies used:

- simple, calming colours (rather than bright ones) with appropriate colour contrast;
- simple, linear, and consistent layouts, which feature an easily readable font size and adequate white space, especially around clickable or interactive elements (important for learners with physical or motor impairments);
- meaning is conveyed using a combination of colour, shapes, and text (vs. with colour alone);
- descriptive text is used for links (e.g., "attach files" rather than "click here");
- information is provided in more than one format (e.g., audio or video). Audio or video resources are always accompanied by transcripts and text alternatives;
- learners are not forced to try to remember things from previous pages. Reminders and prompts are provided throughout the course, and enough time for learners to complete an action is provided; and
- learners are able to check their answers on assessments before they submit them.

Design choices in this course were driven by the needs of the intended audience to ensure that they had equitable access to content through multiple formats and an optimized-user experience design; however, these strategies can be equally applied in any course to make a more inclusive learning environment for everyone.

Credit: Sarah Daly and Chris Hussey, Community Integration Through Co-operative Education, Conestoga College

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# Example 6: My learners are in applied/ professional programs

#### "Real world" spotlight moments

Throughout the course, be explicit about identifying how the learning outcomes or concepts covered in the course connect to learners' future careers/professions in "the real world." Carefully select these "spotlight moments" to show how learners' investments in learning now will pay off in their future professional lives. There are a few ways to do this:

• For each major unit of content, invite a current professional in the field to **record a short audio or video clip discussing their day-to-day work** or how a concept translates to their regular work; if possible, filming in the workplace is always appreciated by learners!

- Use a spotlight moment to introduce learners to **emerging technologies, trends in the field, and/or industry "lingo"** without necessarily covering topics in depth. Provide learners with enough information to allow them to research the topic further themselves, according to their own interests and goals.
- Are there **core skills or competencies** that learners should be developing as part of the course or to be successful in their future professions? Use spotlight moments to highlight connections between course content and skill/competency development. This idea will be further explored in Module 2 when assessments are discussed.
- **Perspectives from experts in the field**: Does the field struggle to recruit learners into a career path after graduation? Consider creating short video vignettes where specialists in the field discuss their role and work to broaden learners' understanding of the types of careers they could pursue after graduation. Often learners don't have opportunities to discuss this aspect of the field with their instructors, owing to large class sizes or (potentially) to the limited career experience of their instructors outside of academia.

Credit: Jenny Stodola, Professional Development and Educational Scholarship, Faculty of Health Sciences, Queen's University

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# Example 7: My learners are upper-year/advanced

#### The "make them do the work!" strategy

If your learners are more advanced and have a strong foundation of knowledge before entering your course, think about how much content you actually need to provide them. For example, providing learners with a few contextualized articles/resources and curated content to provide a strong foundation for the course topic could allow you to spend more time allowing the learners to cocreate, individually or in groups, content that could be shared with the class at regular intervals during the term or as a final project at the end of term.

Credit: Jenny Stodola, Professional Development and Educational Scholarship, Faculty of Health Sciences, Queen's University

#### "Make them do the work!" - Podcast edition

In his graduate seminar on online teaching and learning, Professor James Skidmore designed an assignment that had learners first research and develop expertise on a topic of their choosing (from a curated list) and then be interviewed on the topic in a live webinar podcast format. In this version of the strategy, learners are positioned as the "experts" on their selected topics and are interviewed by their instructor in front of a live audience of their classmates. Here is an example of one such podcast, where Professor Skidmore interviews a student (McLennon Wilson) on the subject of synchronous vs. asynchronous online learning:

 Skidmore, J.M. (Host). (2021).<u>615webinar – Wilson – Synchronous vs. Asynchronous [Audio podcast</u> <u>episode]</u>.In *GER615 Audios*. https://soundcloud.com/james-m-skidmore/sets/ger615-audios/s-8C803chWj78 <u>Transcript</u> (PDF) | Podcast length ~ 37 mins.

Credit: Dr. James Skidmore, Department of Germanic & Slavic Studies, University of Waterloo

# Activity: Who are my learners?

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 1**: Recognize and implement key features of quality in learner-centred online course design.

#### Instructions

Complete the **Situational Factors Worksheet** to reflect on the types of learners you expect in your course. **Option 1**: Download the <u>Situational Factors Worksheet.docx</u> to create a Word version to complete offline. **Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your

work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.

As you work through the prompts, think about how you might make room for your learners to "see themselves" in and really connect with your course. What can you do to ensure that they can participate fully and meaningfully? We will look at strategies for **inclusive design** in Module 2. For now, use the worksheet and the examples provided above to begin to think about design decisions that allow all your learners to be successful in your course.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=689#h5p-17</u>

# Examples of how "stimulating recall of prior knowledge, identifying misconceptions" could work

Faulty mental models interfere with learning because, as "prior knowledge," they cannot accommodate the correct content.

(Nilson & Goodson, 2018, p. 140).

Below we've included examples of ways to approach diagnostic assessments to assess your learners' prior knowledge and experience, and to surface potential misconceptions.

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#### Example 8:

A quick and informal way to ascertain whether learners' knowledge of a foundational concept is valid, and to surface potential misconceptions: a one-question multiple-select quiz embedded at the beginning of a content page on Evolutionary Psychology (PSYCH 101). Feedback is automatic.

# HOW DOES EVOLUTION WORK?



Caption: Screenshot of a diagnostic assessment on human evolution.

Credit: Dr. Paul Wehr, Department of Psychology, University of Waterloo | Image Description (PDF)

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#### Example 9:

A series of "test your knowledge" self-assessment quizzes prior to each content module to ensure that learners have the prior knowledge they need to succeed in the course. Quizzes are made available on a module overview page, just after the learning outcomes. If learners' self-assessed knowledge is insufficient, they are directed to "refresher" modules to establish that they have appropriate and valid prior knowledge, ensuring that they are able to succeed in the course. Learners can also directly access refresher modules without completing the diagnostic assessment. This strategy is particularly useful in courses where learners come from a variety of disciplinary backgrounds.

# Test for Module 3

Please choose the correct answer for each of the following questions.

#### 1. The disturbance of function or pathological change in one or several nerves is:

- O a. Neuritis
- O b. Neuralgia
- O c. Neuropathy
- O d. Noxious Stimulus

#### 2. Increased responsiveness of nociceptive neurons to their normal input:

- o a. Sensitization
- O b. Pain threshold
- o c. Hypoalgesia
- O d. Hyperpathia

#### 3. Which fibre is responsible for carrying non-noxious sensory information?

- o a. C fibre
- o b. Aō fibre
- o c. Aβ fibre
- od. O fibre

# 4. The area of the thalamus responsible for receiving information about pain is also the area that receives normal sensory stimuli information.

- o a. True
- o b. False

Caption: Screenshot of a diagnostic assessment on chronic pain.

Credit: Opioids Course for Interdisciplinary Health Teams – Dr. Feng Chang, School of Pharmacy, and Centre for Extended Learning, University of Waterloo | Image Description

**Quality Essential** 

## Example 10:

Learners create concept maps of course concepts at key points in the course. As a visual representation of your learners' knowledge and understanding, a concept map can identify errors and gaps in learners' developing understanding and ensure that they are building on solid disciplinary knowledge structures:

Having students create concept maps can provide you with insights into how they organize and represent knowledge. This can be a useful strategy for assessing both the knowledge students have coming into a program or course and their developing knowledge of course material. (Eberly Centre, Carnegie Mellon University, as cited in Darby & Lang)

Be sure to provide feedback to your learners on what they told you about what they know. Point out areas where their understanding is strong, identify the most common misunderstandings, and address these in some way (for example, via a live session or an announcement).

We will be taking a closer look at concept maps in Module 3.

Credit: Darby & Lang, 2019, p. 189.

## Connections to Event 5: Provide learning guidance

While our focus in this module has been on **Events 2** and **3** of Gagné's framework, it is important to note the connections they have to **Event 5**: **Provide learning guidance**. Stimulating recall of prior knowledge and identifying learner misconceptions are both ways of providing your learners with guidance to help them succeed.

Here are a few examples of ways to provide learning guidance at the start of the course:

- A precourse survey can be used to determine which course topics might benefit from a diagnostic assessment at the outset of the course/module/unit; once knowledge gaps are identified, these can be addressed via a short video or course announcement.
- If your learners are new to postsecondary education, you can mitigate potential missteps by proactively reaching out to them and offering suggestions about how they should approach their learning in the course, either via a course announcement or a course intro video. <u>Getting Ready to Learn Online</u> (a self-paced online module) might be a useful resource in this vein too.

# Activity: What do my learners already know?

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO)** 1: Recognize and implement key features of quality in learner-centred online course design.

#### Instructions

Design a diagnostic assessment to surface your learners' prior knowledge and/or misconceptions they may be bringing to the course. Questions to think about as you design your assessment:

- What foundational concepts do learners need in order to succeed in your course?
- What are some common misconceptions?
- What bottleneck concepts do students typically struggle with?

• How will you provide feedback?

Option 1: Download the What Do My Learners Already Know Worksheet.docx to complete offline.

**Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



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# 1.8 Summary: Learner-centred design and the Nine Events of Instruction

As you plan your course, think about what your learners need in order to learn successfully. Gagné's **Nine Events of Instruction** provides a useful starting place for thinking about creating the conditions for successful learning in your course. Here's how we've applied this framework so far in this course:



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Credit: University of Waterloo | Image Description (PDF)

# Module summary activity: Reflect and plan

## **Reflect on your learning**

We've given you a lot to take in!

Take a moment to **reflect**: What are you already doing to incorporate Gagné's Events 2 & 3 into your own teaching practice?

#### Think about: Your learning outcomes

- Are your learning outcomes clearly defined for your learners?
- Do your assessments adequately measure your learners' progress toward the achievement of the outcomes?
- Do your content and learning activities support the achievement of the learning outcomes?

#### Your learners

- How might their situational context and reasons for studying online impact the way they experience your course?
- What prior learning are they bringing to your course? Are there gaps or misconceptions that you need to address?

#### Plan next steps

What steps do you need to take to ensure that you are setting your learners up for success in your course?

#### Congratulations on completing Module 1 of this course!

Select **Next** in the footer at the very bottom of the screen to navigate to the **Resources for Further Study** section, which offers deeper dives into particular topics addressed in the module, or continue to <u>Module 2</u>!

# 1.9 Resources for further study

For those interested in learning more about particular topics in Module 1, we've included links to further resources below. Resources are organized by topic. To view longer summaries of particular resources, select the "Click for resource description" tab.

# Adult learning principles

Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development* (6th ed.). Elsevier.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-12</u>

# Instructional design

## Taxonomy of significant learning

Fink, L. D. (2003). Creating significant learning experiences. Jossey-Bass.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-18

## Nine events of instruction

Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Wadsworth/Thomson Learning.

This is an updated version of Gagné's 1974 classic, which grounds instructional design in research-based principles of learning, and in which he introduces the **Nine Events of Instruction**. Includes two new chapters on online learning and technology.

# **Backward design**

McTighe, J., & Wiggins, G. (2014). *Improve curriculum, assessment, and instruction by using the Understanding* by Design framework. ASCD. https://www.jaymctighe.com/wp-content/uploads/2011/04/UbD-White-Paper-June-20141.pdf



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-20</u>

# Learner-centred design

## The learning paradigm

Barr, R. B., & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change*, *27*(6), 13–26.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-21</u>

# Seven principles for good practice in undergrad education

Chickering, A. W., & Gamson, Z. F. (1987, March). <u>Seven principles for good practice in undergraduate education</u>. *AAHE Bulletin*, *39*(7), 3–7. https://www.aahea.org/articles/sevenprinciples1987.htm



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-22</u>

## Implementing the seven principles with technology

Chickering, A. W., & Ehrmann, S. C. (1996). <u>Implementing the seven principles: Technology as lever.</u> AAHE Bulletin, 49(2), 3–6. https://www.aahea.org/articles/sevenprinciples.htm



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-23</u>

# Learning outcomes

# Developing effective learning outcomes

Kolomitro, K., & Gee, K. (2015, May). <u>Developing effective learning outcomes: A practical guide.</u> Centre of Teaching and Learning at Queen's University. Used under CC BY-NC-SA 4.0 license.

This resource offers guidance on how to write effective learning outcomes and align them with assessments and instruction. Includes the lived experience of one of the authors who describes how updating her outcomes and aligning them with assessments and instruction improved student learning in one of her courses.

#### Bloom's taxonomy

Wikipedia. (2021, November 2). <u>Bloom's taxonomy</u>. https://en.wikipedia.org/wiki/Bloom%27s\_taxonomy A succinct overview of Bloom's Taxonomy of Educational Objectives, a framework for categorizing educational goals.

## **Degree-level expectations**

Queen's Printer for Ontario. (2018, December 14). <u>Ontario qualifications framework (OQF)</u>. Ontario Ministry of Colleges and Universities. http://www.tcu.gov.on.ca/pepg/programs/oqf/



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-30</u>

# Online course standard rubrics

We would be remiss not to mention some of the online course standards rubrics developed by educational institutions and accrediting agencies, which provide sets of often overlapping standards by which online courses can be evaluated and improved. Two of the most common ones that we'll highlight here are as follows:

# Online Course Quality Review (OSCQR) rubric, SUNY

Online Learning Consortium, Inc. (n.d.). <u>SUNY Online Course Quality Review Rubric (OSCQR)</u>. The OSCQR Rubric. https://oscqr.suny.edu/. Used under CC BY 4.0 license.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-35</u>

# Quality Matters (QM) rubric

Quality Matters. (2021). <u>Specific Review Standards from the QM Higher Education Rubric, Sixth Edition</u>. https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-31</u>

# The science of learning

#### How learning works

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching.* Jossey-Bass.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-24

#### How people learn

Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *How people learn: Brain, mind, experience, and school.* National Academy Press.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-25</u>

# How to improve student learning

Persellin, D. C. & Daniels, M. B. (2014). A concise guide to improving student learning: Six evidence-based principles and how to apply them. Stylus Publishing.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-26</u>

# The learning scientists

<u>The Learning Scientists</u> is a blog that presents the results of educational research in a highly readable form. The blog is authored by cognitive psychological scientists interested in promoting the science of learning, whose goal is "to make scientific research on learning more accessible to students, teachers, and other educators."

# Universal Design for Learning (UDL)

CAST, Inc. (2021). <u>About Universal Design for Learning</u>. https://www.cast.org/impact/universal-design-for-learning-udl



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=421#h5p-34

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- The summary of Ambrose et al., *How learning works: Seven research-based principles for smart teaching* in Module 1.9 is derived from the original by eCampusOntario, <u>Ontario Extend</u>, <u>Teacher for Learning Module</u>, <u>How Learning Works</u>. Licensed under a <u>CC BY-NC-SA 4.0 International License</u>, except where otherwise noted. The original has been adapted through modification of text, images, and headings. This derivative work is licensed under <u>CC BY-NC-SA 4.0 International</u>.

# MODULE 2: QUALITY ACTIVITIES AND ASSESSMENTS

# 2.1 Module overview



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=964#oembed-1</u>

#### Transcript (PDF)| Video length ~ 2 min.

Welcome to Module 2! This module begins at the **designing and developing** stage of course development. While online learning shares many of the fundamental design principles of effective activities, assessments, and interactions used in other learning contexts, it is worth considering the **unique set of teaching and learning conditions** that the online environment generates.

Interactions between **instructors**, **course content**, and **learners** in online courses are influenced by physical and social distances, familiar and unfamiliar types of teaching technologies, and cognitive, affective, and motivational challenges as well as opportunities.

As you work through this module, you will be asked to think about the following key questions:

- Do my activities and assessments help learners develop core skills and competencies that align with my course learning outcomes?
- · Have I structured my activities and assessments to help to build academic integrity?
- Are my assessments authentic, reflecting discipline-specific, real-world problems and challenges?
- · Do my activities and assessments follow the principles of universal design for learning?
- Do my activities and assessments help to foster learner engagement and build community in the course?



Caption: The structure of this course is shown, with the four modules mapped to the three stages of online course development. Module 2 Quality Activities and Assessments pertains to the Design and Develop stage. Credit: University of Waterloo | Image Description (PDF)

## Module learning outcomes

By the end of the module, you should be able to

- · create formative and summative assessments that align with your intended learning outcomes,
- design **meaningful interactions** into your course (instructor–learner and learner–learner) that foster a sense of belonging to a learning community,
- adopt strategies to encourage **academic integrity**, and
- effectively communicate expectations for and provide **feedback on learner performance**.

#### Key terms

The following is an alphabetical list of key terms that you might find useful to review prior to working through the content of this module:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=964#h5p-50</u>

# Sections in this module

2.2 Module examples, strategies, and templates

- 2.3 Introduction: Creating quality interactions, activities, and assessments
- 2.4 Eliciting learner performance (Event 6)
- 2.5 Providing feedback/feedforward and assessing performance (Events 7 & 8)
- 2.6 Building community through activities and assessments
- 2.7 Summary: Creating quality interactions, activities, and assessments
- **2.8** Module resources for further study
- 2.9 Bibliography

#### Activities in this module

The module activities are designed to help you **create quality activities**, **assessments**, **and interactions**. For ease of use, clicking the provided links will allow you to jump directly to the location of the course where the activity is located.

- <u>Academic-integrity checklist</u>: Use a checklist to identify strategies to increase academic integrity (AI) in your course.
- <u>Scaffolded assessment scheme</u>: Use principles of backward design to **create a varied**, scaffolded assessment scheme aligned with learning outcomes.
- <u>Assessment outline</u>: Create an assessment with a clear, concise set of instructions using a template provided.
- Grading criteria: Create grading criteria for an assessment using a rubric template.

# 2.2 Module examples, strategies, and templates

If you are primarily interested in examples of quality design principles, consider jumping directly to the examples, strategies, and templates included throughout this module. These are drawn from real courses and instructors across disciplines and learning contexts.

# Examples

#### 2.4 Eliciting learner performance (Event 6)

- Examples of how scaffolding could work
- <u>A (meta)example of authentic assessment</u>
- Examples of how authentic assessment could work

#### 2.5 Providing feedback/feedforward and assessing performance (Events 7 & 8)

- Examples of how online feedback and grading could work
- Examples of how deadlines, due dates, and late policies could work

#### 2.6 Building community through activities & assessments

- Examples of building community through learner-instructor interaction
- Examples of building community through learner-learner interactions

#### 2.7 Resources for further study

<u>Assignments across disciplines</u>

## Strategies

#### 2.3 Introduction: Creating quality interactions, activities, and assessments

- Strategies for designing activities and assignments that promote academic integrity
- <u>Strategies to promote academic integrity in online tests</u>

#### 2.4 Eliciting learner performance (Event 6)

- Strategies for choosing activities and assessments that develop specific skills
- Quick tips for more accessible assessments
- <u>Strategies for scaffolding</u>

• Strategies for authentic assessment

#### 2.5 Providing feedback/feedforward and assessing performance (Events 7 & 8)

Strategies for grading and providing feedback online

#### 2.6 Building community through activities & assessments

- Strategies for building community through learner-instructor interaction
- <u>Strategies for building community through learner-learner interaction</u>
- Strategies for planning your discussion-based activities
- Strategies for moderating and encouraging discussion once activities begin

#### **Templates**

- <u>Academic-Integrity Checklist</u>
- <u>Scaffolded Assessment Scheme</u>
- <u>Assessment Outline</u>
- Grading Criteria
- <u>Activity/Assessment Purpose Statement</u> (DOCX)

# 2.3 Introduction: Creating quality interactions, activities, and assessments

# Designing effective online assessments

Activities and assessments in online learning benefit from **deliberate planning** and **close integration** with your **course material** and **learning outcomes**. Fortunately, online platforms offer a variety of methods to deploy activities and assessments at scale, including peer evaluation, discussion forums, and automated marking for some formats, such as quizzes.

Effective assessment design in online courses is

- · learner-centred and linked to the course learning outcomes,
- continuous and distributed throughout the course, and
- · offers a variety of ways to demonstrate knowledge.

Within this module, you will find strategies to **engage with your learners** in meaningful ways using a variety of interactive assessment ideas. This module also includes example assessment and grading criteria templates that you are welcome to adapt for your own courses.

It can be helpful to think about the design of activities and assessments, and providing effective feedback, as events within Gagné's **Nine Events of Instruction** framework. Gagné's framework reminds us of the important role activities, assessments, and effective feedback play in creating the necessary conditions for learning.

Later in this module, we use **Gagné's framework** to structure our approach through the following three events:

- Event 6: Eliciting Performance
- Event 7: Providing Feedback
- Event 8: Assessing Performance

# Designing learner-centred activities and assessments

As you begin to develop your online activities, assessments, and opportunities for learner feedback, consider the below following strategies:

#### Make clear connections

Be intentional about your teaching methods by providing **explicit linkages** between your assessments, course content, and course learning outcomes. **Backward design** principles, as described in <u>Module 1.5 Using</u> <u>Backward Design (Event 2)</u>, are a helpful tool in developing assessments.

Consider what you want learners to take away from your course (your course learning outcomes) and devise assessments to help them learn what they need to do to achieve those course outcomes. In addition, provide low-stakes assessments throughout the course that allow learners to assess their progress, and be sure to explain to them how completing the activities and assessments will help them achieve the outcomes.

#### Communicate

Credit: University of Waterloo

Be open, explicit, and **transparent** with learners about why assignments, activities, and units are happening the way they are, so that learners are not left to make assumptions.

#### How-to tip: Include a purpose statement

Include a **purpose statement** in your assessment description. Remember, learners want to know why they are doing an activity. You could also explicitly identify how an activity or assessment will help build a skill or knowledge area that learners can use beyond the course. Below, we provide some purpose statement templates and worked examples, which you can adapt for your own assessments.

Quality Essential

#### Purpose statement templates

#### Template 1:

The purpose of this activity is for you to apply \_\_\_ [the topics] to produce \_\_\_\_ [the assessment] in the context of \_\_\_ [the theme/real-world scenario].

#### Template 2:

In this assessment, you will build your skills in communicating concepts to different audiences: \_\_\_\_ [e.g., content experts], \_\_\_\_ [e.g., peers], and/or \_\_\_\_ [e.g., general public].

#### Template 3:

Here's what I want you to do: [Explain the activity/assessment.]

*Here's why I want you to do it:* [Explain the reason the activity/assessment will contribute to learners' success in the course and afterward.]

*Here's how to do it:* [Provide detailed instructions, rubrics, and exemplars to help learners clearly understand expectations.]

(Barber et al., 2020, p. 101; Darby & Lang, 2019, p. 17)

Assessment Purpose Statement Worksheet (DOCX)



#### Worked examples

**Example 1a:** The purpose of this activity is for you to apply theories of personality to a written case analysis and interpretation within a psychotherapy clinic setting.

**Example 1b:** The purpose of this activity is for you to apply your knowledge of the US civil rights movement by presenting a group research project to a tour group visiting a US history museum travelling exhibit.

**Example 2:** In this assessment, you will build your skills in communicating concepts to different audiences: your instructor [content expert], a partner or group members [peers], and a nonspecialist audience [general public].

#### Example 3:

Here's what I want you to do: A redesign project for a tech start-up company

Here's why I want you to do it: This project will give you the opportunity to apply your knowledge of product design principles to a real-world problem, providing valuable experience that you will use and build on in your future career.

(Barber et al., 2020, pp. 101, 200; Darby & Lang, 2019, p. 17)

#### Limit new technologies

Online learning often involves **new learning**: learners have to **familiarize themselves** with new learning management systems, webinar platforms, and other educational tools or technologies that are part of the course. To decrease your learners' **cognitive load**, try to limit the number of new tools and technologies, or create opportunities for learners to practice with these technologies in a low-stakes activity. For more information on cognitive load, see Module 3.5 <u>Presenting the Content</u>.

When you do introduce new tools, be sure that you select those that solve an instructional problem you've identified, and that align with your learning outcomes. The following rubric is a resource that you may find helpful to evaluate potential tools and ensure you're making the right choice for your course learning outcomes: An interactive rubric for evaluating eLearning tools.

## Universal Design for Learning (UDL) perspective

Focus on tools that add to the learning experience, are easy to use, do not cost learners more money, and come with robust documentation support on how to use the technology. More information about Universal Design for Learning (UDL) is found in Module 3.5 <u>Presenting the Content</u>.

#### Think ahead: Be mindful of learner workload

When considering your assessment strategy for your course, it is important to consider **learner workload**. Use the <u>Wake Forest University Workload Estimator</u> to calculate the time you expect learners to devote to weekly readings, content review and study, activities, and assessments. Is the workload in line with other courses at the same level in your discipline/at your institution?

#### Scaffold assessments

Scaffolding involves **breaking up large assignments** and/or content into **smaller tasks**. Scaffolding helps learners develop the skills and knowledge needed to succeed in the course, and it can also help mitigate academic-integrity issues. As you have seen in other modules of the course, we share real examples of activities and assessments that instructors have used and tested in their own courses, and many of the assessment examples provided in this module use **scaffolding** to support learning.

# Follow best practices for Universal Design for Learning (UDL)

Create assessments and activities with **accessibility** in mind to ensure that learners have **equitable access** to course content.

- A course website is an important tool not only for keeping course material organized, but for providing learners with access to important course communications, weekly readings, assessments, and more. To ensure learners can **easily access all material**, check that your assignment information has clear, concise, and informative headings, and is ordered in a logical fashion.
- Remember that not all learners have access to a reliable internet connection, the same technology (they may be working with shared computers, or may not have microphones or webcams) or a quiet study space.
- Remember that learners may be in **different time zones**, so if you are assigning quizzes or tests, the best practice is to allow a 12- or 24-hour completion window.
- For synchronous classes, consider policies and practices around camera use; see the <u>Camera use in Zoom</u> resource for helpful information.

## Be flexible: Provide options

All learners benefit from **flexible engagement** and **assessment opportunities**. Consider providing learners with different options for how they can engage **with each other** (e.g., voice recordings, discussion boards, synchronous discussions) and **with course content** (e.g., lectures recorded as podcasts, which allow learners to move away from their computer screens; have shorter recorded lectures or break up lectures into smaller chunks).

# Designing assessments that encourage academic integrity

In this section, we will outline strategies and approaches that can help address academic integrity.

Many instructors, and indeed many learners, have valid concerns about academic integrity in online teaching and learning. There are a variety of strategies you can use to set your learners up for success in your course. Let's first discuss the reasons why a breach in academic integrity may occur.

There is no single cause of academic misconduct. We know that **pressures of high-stakes** and **high-stress** 

situations can lead to cheating behaviours, but other contributing factors include a lack of confidence, poor academic skills, a genuine misunderstanding, or just a bad decision.

Rather than focus on punitive measures, there are **strategies** you can use when designing and delivering your course that can help to mitigate possible academic integrity offences. For example, when learners feel connected to a course, and supported by their instructors and institution, they are less likely to cheat. It is also important to build community with your learners and have open and honest conversations about academic integrity early on in your course.

The following video is a good example of how to broach the topic of academic integrity from an educational perspective with learners, with a view to reducing unintentional academic-integrity violations, which can often account for a large percentage of problems.



<u>|</u>

One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2014#oembed-1</u>

Transcript for <u>Academic Integrity (Linda Carson, Continuing Lecturer at UWaterloo)</u> available on YouTube. | Video length ~ 5 mins.

(UW Office of Academic Integrity, 2021)

# Strategies for designing activities and assessments that promote academic integrity

An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2014#h5p-66</u>

## Strategies to promote academic integrity in online tests

When tests and exams represent the most appropriate assessment approach, there are ways to design them with academic integrity in mind. Many of the strategies and principles you can use to ensure activities promote academic integrity apply as well to tests and exams, including the following:

Question Type/ Weighting	Strategy to Promote Academic Integrity
Information-recall/ memorization questions	Develop problems and questions that <b>focus on mastery and critical thinking,</b> rather than information recall/memorization. For example, ask learners how they would explain a concept to a learner at a lower level.
Multiple-choice and true/false questions	Consider replacing multiple-choice or true-and-false questions <b>with two short-answer questions</b> (Harrison, 2020), or allow for study notes in open-book exams.
Concept-based questions	Use <b>application-based questions</b> and <b>assessments</b> or smaller assessments like weekly quizzes (rather than a midterm or final exam) to lower the stakes for your learners.
Weighting	Incorporate a " <b>drop the lowest</b> " grading policy to further reduce the stakes. One by-product of this is that the stakes are so low it's not worth cheating (Rettinger, n.d.).

The technical elements of your online test can also help to prevent cheating behaviours. Consider the following:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2014#h5p-67</u>

Writing quality multiple-choice questions takes more consideration than one would think, and if done well, it can produce an **effective and engaging** method for assessment with reduced chance of academic misconduct. For tips on creating quality multiple-choice tests, see the <u>University of Waterloo's Resource on Designing</u> <u>Multiple-Choice Questions</u>.

## Activity: Academic-integrity checklist

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 3**: Create a **varied assessment scheme** that scaffolds and supports the learning outcomes of the course and promotes academic integrity.

#### Instructions

For this activity, complete the academic integrity checklist to ensure your activities and assessments are designed with academic integrity in mind.

Option 1: Download the Academic Integrity Checklist Worksheet (DOCX) to complete offline.

**Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2014#h5p-68</u>

#### Key take-away:

When designing activities and assessments for your online course, **take a learner-centred approach**: Think about how you can keep your learners connected to each other and the content, and maximize strategies to

increase academic integrity. Intentional teaching strategies and universal design, together with clear communication, are essential for any online course.

#### Key questions:

- Do my assessments help learners develop core skills and competencies that align with my course learning outcomes?
- Do my assessments follow the principles of universal design?
- Do my assessments, activities, and interactions help to foster learner engagement and build community in the course?

The rest of this module will provide guidance in answering these questions.

# 2.4 Eliciting learner performance (Event6)

Gagné's Events 6, 7, and 8 highlight important principles about learner-centred assessment. **Event 6** is about giving your learners the opportunity to practice newly acquired skills and self-assess their understanding of new concepts.



Caption: In Gagné's Nine Events of Instruction framework, Event 6 focuses on eliciting performance from your learners. Credit: University of Waterloo | Image Description (PDF)

Closely related in practice, **Event 7** asks you to think about how you can provide timely and relevant feedback to learners, to help them identify gaps in their knowledge and understanding, and keep them on track. Providing feedback will be discussed in detail in <u>Section 2.5</u>, alongside **Event 8**, assessing performance.



Caption: In Gagné's Nine Events of Instruction framework, Event 7 focuses on providing feedback and Event 8 focuses on assessing performance. Credit: University of Waterloo | <u>Image Description</u> (PDF)

# Use a variety of assessment types

Online teaching provides opportunities to introduce new types of assessments into your course. Tools like discussion boards and course chats, which allow for synchronous and asynchronous engagement, help to **build a learning community** in the course. **Active learning**, where learners are engaged in the learning process to think critically about course content, leads to greater understanding. Providing **options for assessment**, which

offer learners agency over how they want to be assessed and allow them to tap into their own goals and interests, has been shown to increase learner engagement and persistence (Nilson & Goodson, 2018) and is an important part of Universal Design for Learning (UDL). These strategies all reflect a learner-centred approach to teaching and learning, which helps to build **learner investment** in the course.

# Provide multiple means of action and expression

As CAST describes, "Learners differ in the ways that they can navigate a learning environment and express what they know." To account for these differences, they recommend providing learners with **options for action and expression** (CAST, 2018). When thinking about assessments, consider

- providing ample opportunities for students to seek and receive feedback (see <u>2.5 Providing feedback/</u><u>feedforward and assessing performance</u>),
- building transparent rubrics and grading frameworks (see <u>2.5 Providing feedback/feedforward and</u> assessing performance),
- inviting activity and assessment submission through multiple means, and
- providing scaffolds to help learners practice and gain knowledge (see <u>Use Scaffolded Assessments</u> in this section).

Examples of each of these strategies and more are available on CAST's UDL Guidelines site on the <u>Provide</u> <u>Multiple Means of Action & Expression page.</u>

For more ideas about how to increase the accessibility of assessments, see **An EDII Perspective: Quick Tips** for More Accessible Assessments below.

## An EDII perspective: Quick tips for more accessible assessments

- Offer a variety of assessment types: This provides opportunities for learners to use a range of skills, tap into their own goals and interests, and demonstrate learning in different ways.
- Focus on small lower-stakes assignments rather than one large high-stakes assignment: This reduces learner anxiety and provides multiple opportunities for learners to demonstrate their learning over time rather than at one finite point (during which time they may have competing responsibilities).
- Use built-in accessibility features in Word and PowerPoint to improve the accessibility of your assignment documents (or course content):
  - See: Creating Accessible Documents in Word
  - See: PowerPoint Accessibility
  - See: Word and PowerPoint Accessibility Checklist
- Make the "hidden curriculum" explicit: There may be many behaviours, attitudes, and approaches you are
  expecting learners to take in their assessments. Instead of assuming the learners already "know" these
  expectations, provide clear assignment instructions that outline the expectations and criteria for success;
  use rubrics, checklists, and if appropriate, provide a model/exemplar assignment for learners to reference.
- **Provide learners with the choice to submit their assignment in various formats** (e.g., text, audio recording, video recording) to accommodate different ways of learning and expressing knowledge.

## Strategies for choosing activities and assessments that develop specific
# skills

A useful approach for determining **which types of assessment** to include in your course is to **think about the skills you want your learners to develop** by the end of your course. Be sure to choose assessments that are a good match for the skills outlined in your learning outcomes (Barber et al., 2020). The following table lists skill areas and example assessments that would be appropriate for assessing those skills:

Skill	Summative assessment
Communication	Essay, oral presentation, podcast, blog/vlog, article, report, advocacy piece (presentation, visual, essay, report, etc.)
Creative abilities	Work of art, performance, model, writing, storytelling
Critical thinking and problem-solving	Text analysis, evaluation of sources, critical literature review, finding a solution to a novel scenario, case study
Inquiry and analysis	Research summary, lab/experimental findings, deconstructing and analyzing an existing method/product/object/idea using course concepts, case study
Personal development	Learning, professional, or reflection portfolio; self-disclosed summary of learning in the course; reflexive analysis
Quantitative reasoning	Problem set, data presentation, data analysis
Teamwork	Team education campaign, written dialogue, peer review form, team report on a simulation experience
Technical skill	Design project, prototype, algorithm

**Note:** Examples of skill areas and summative assessments adapted from *The New Roadmap for Creating Online Courses* by C. R. Barber, J. K. McCollum, and W. L. Maboudian, 2020, p. 80. Copyright 2020 by Cambridge University Press.

In addition to ensuring that your assessments are effective at evaluating skills targeted in your learning outcomes, think about whether they are at the **appropriate level** of cognition for your course. **Bloom's taxonomy** includes the following levels of cognitive domain assessment:

- high levels of comprehension: These questions typically ask learners to evaluate (make judgements based on evidence found) or create (compile information to create new solutions).
- **mid levels of comprehension**: These questions typically ask learners to apply and/or analyze items/scenarios.
- **basic comprehension**: These questions typically ask learners to be able to identify, describe, or translate knowledge (compare, classify, etc.).



# Connection to prior learning

Refer to <u>Module 1.6 Writing Effective Learning Outcomes</u> for more ideas <sup>(</sup>from Bloom's taxonomy about the types and depth of skills and

Credit: University of Waterloo

knowledge you might ask your learners to demonstrate at the end of your course; these will inform your choices about what types of assessments are appropriate for measuring those skills.

Next, we turn our attention to a key strategy in designing learner-centred activities and assessments: **scaffolding**.

# Use scaffolded assessments

Scaffolding activities and assessments involves **breaking up complicated tasks** and content into more **manageable parts** of gradually increasing complexity, with feedback provided at each step.

# Why scaffolding matters

Scaffolding engages learners at **deeper levels** of learning (Sotiriadou et al., 2020; Clark and Graves, 2005) and helps to **reduce their anxiety** about higher-stakes assessments. Learners benefit from instructor feedback at each stage of the assignment or task, helping them better understand expectations, while instructors can see what part of the process might be challenging for learners and adjust accordingly. By breaking down tasks into discrete parts, scaffolding





helps to lower the stakes of an assessment—which is one way to reduce cheating behaviours.

# Strategies for scaffolding

Consider how smaller assessments (or components of the final assignment) may be incorporated into your grading scheme so that learners can receive and respond to feedback throughout the course. For example:

# Scaffolding research papers

If your final assessment is a research paper or longer report, you can scaffold it using staged activities and assessments to help learners develop the skills they need to improve their writing skills.

- You might begin with a **topic selection** and **bibliography assignment**, which asks learners to define their topic.
- A **critical review assignment** builds on the previous assignment by having learners engage with a scholarly article or book on their proposed topic.
- Finally, the final paper allows learners to **strengthen their academic writing skills** and demonstrate what they've learned from the first two assignments.
- In addition to scaffolded assessments, **low-stakes activities**, like exploratory writing, can help learners get comfortable with writing and revising.

# Scaffolding final exams

If your final assessment is an end-of-term exam, scaffold other lower-stakes activities, like weekly quizzes,

practice tests, and midterm exams. Low- to moderate-stake activities can help learners develop effective strategies for studying and test-taking, such as note-taking and time management.

Where testing technologies are concerned, scaffolding testing also acclimatizes learners to the exam-taking procedure and identifies any technical issues.

Scaffolding also allows you to model the format or types of questions learners might expect to see in a final exam. While the relative difficulty of questions may be more challenging or complex for final exams, learners will become familiar with the approach during low- to moderate-stake activities.

# Examples of how scaffolding could work

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# Example 1: Scaffolded group assignment – A climate change plan for real-world community

For this Geography and Environmental Management group assignment, students prepare a climate change plan for a real-world community that does not yet have a plan in place through a scaffolded process.

#### Stages include

- team contract,
- selection of case study community,
- outline of proposal and references,
- proposal and references, and
- presentation and discussion

#### Climate Change Plan Assignment Example (PDF)

Credit: Dr. Mark Seasons, School of Planning, University of Waterloo

**Quality Essential** 

# Example 2: Scaffolded capstone project – Biodiversity & conservation science

#### From the Assignments Across Disciplines assignment repository:

This assignment was created as a capstone project for a course that focuses on biodiversity and conservation science. Specifically, the paper spotlights a threatened species in its ecosystem, evaluating the threats the species faces and the conservation efforts proposed or in place.

Throughout the course, students engage a number of **debates** about both sides of a conservation issue and articulate arguments in defense of one side or the other in small groups. After a semester of practice building arguments, the final paper includes this sense of **presenting evidence** to support one's position. The assignment invites students to choose a species that has been federally proposed for a change in its conservation status. Students then not only profile the species and its ecosystem but also argue on behalf or against the proposed change in status. Built into this assignment is a **rough draft writing workshop** in which students participate in creating a concept map for their papers and in the peer review process.

This assignment gives students flexibility in choosing a species that piques their interest. The scaffolding of

the assignment through the semester helps students structure their work on the assignment over time and allows them to get feedback and experience critiquing each other's work.

#### Scaffolded Final Paper

Credit: Professor Shelby Riskin, Department of Ecology & Evolutionary Biology, University of Toronto

# Activity: Scaffolded assessment scheme

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 1**: Recognize and implement key features of quality in learner-centred online course design; **CLO 3**: Create a varied assessment scheme that scaffolds and supports the learning outcomes of the course and promotes academic integrity; and **CLO 5**: Apply principles of Universal Design for Learning (UDL) and accessibility into your course design to ensure a more equitable learning experience.

#### Instructions

Using **principles of backward design**, and equipped with the examples in this module to guide you, create your own varied, **scaffolded assessment scheme**, aligned with your **course learning outcomes**. Use the guiding questions to think about your scaffolded assessment scheme and how they relate to your course.

Option 1: Download the Scaffolded Assessment Scheme Worksheet (DOCX) to complete offline.

**Option 2:** Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2016#h5p-69</u>

# Use authentic assessments

Authentic assessments resemble real-life, application-based tasks. This assessment method is often contrasted with traditional assessments like tests, which may not have real-life application. Authentic assessments ask learners to apply discipline-specific skills and knowledge to solve real-world scenarios and/or case studies involving higher-order thinking skills, judgement, and innovation.

## Why authentic assessment matters

Authentic assessments have emerged alongside other career-focused learning, like work placements, in an effort to "improve graduate employability" (James & Casidy, 2018; Sotiriadou et al., 2020). As Sotiriadou et al. (2020) note, "university educators have responded by placing a bigger focus on authentic learning activities and authentic assessment, so that students develop the skills and practices that they will need in their future careers."

By requiring that learners "do" the subject, authentic assessments not only assess learning, but also help learners to improve their understanding of course content and their skills in applying what they've learned.

When considering your assessments, think of ways to build in application-based assignments. Research shows that learners respond well to authentic assessments, and these types of assignments tend to decrease academic misconduct in courses (Sotiriadou et al., 2020; Way et al., 2020).

## Academic integrity and authentic assessment

Authentic-assessment design can minimize opportunities to cheat. Unlike traditional tests that require memorization and recall, authentic assessments ask learners to integrate various concepts learned in the course to "construct unique responses" to problems they will encounter in their future careers, and these unique responses are more difficult to contract out to a third party or find online (Sotiriadou et al., 2020; Ellis et al., 2020).

# A (meta)example of authentic assessment

# How we did this in this course

One of the goals in the activities we have created for this course is to make sure that you are **actively building your own online course as you complete this one**—the activities we have provided are intended to be applied to your course directly, allowing you to both build your skills **and** come away with specific and useful take-aways for your own course.

# Strategies for authentic assessment

Design authentic assessments by using application-based questions, case studies, and industry-specific scenarios. Consider the following:

- real-world scenarios / problem-solving
  - provide learners with real-world problems where they need to demonstrate mastery of course principles and concepts in solving the issue presented (e.g., "How would you solve...", "Propose a solution to...", "Indicate how you would design...");
  - provide learners with assessments linked to the "external world" (Villarroel et al., 2019, p. 44), including allowing for open-book tests, collaborative answers for complex tests, and assessments that simulate realistic professional environments.
- response requirements
  - direct learners to provide their solution and indicate the concepts/principles they used to formulate their solutions (i.e., "why" they are proposing the solution).
- build varying levels of difficulty
  - obtain a more accurate representation of the different levels of mastery amongst your learners by including questions with varying levels of complexity. Including questions at different levels for the various learning outcomes of your course will help ensure your assessment provides the most accurate

evaluation possible.

# Examples of how authentic assessment could work

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# Example 3: Advocating for the arts

Dr. Colleen Renihan is interested in affect-related questions pertaining to learning and specifically in exploring the benefits but also the ethics of asking learners to express or perform personal investment. To inspire, engage, and motivate her learners, and to achieve her course goal of promoting learner agency and advocacy for the arts, she challenged them to compose an impassioned monologue or COVID-19–inspired performance as though they "were making an impassioned plea to someone in power."

In the following video, Dr. Renihan explains and reflects on many of the scaffolding elements that made up the course design and assessment structure to ensure learner success.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2016#oembed-1</u>

Transcript for <u>Showcase 2021: The ethics of prompting passion</u> is available on YouTube. | Video length ~ 10 mins. (Centre for Teaching & Learning, Queen's University, 2021)

Quality Essential

# Example 4: Authentic assessment in mathematics

Dr. Giuseppe Zurlo brings the teaching of applied math to life by using stories (Mechanics Tales) describing how a concept was born, evolved, and can be used to clarify and inform real-world problem-solving.

Read more about his approach in his summary document <u>Authentic Assessment Example in Mathematics</u> (.DOCX) hosted on <u>Kay Sambell and Sally Brown: Covid-19 Assessment Collection</u>.

Credit: Dr. Giuseppe Zurlo, National University of Galway, Ireland

Quality Essential

# Example 5: Ethical arguments in a real-world context

In this third-year Creative Expression & Society course, learners write an essay on a recent piece of news related to ethical choices made by an enterprise, including start-up companies, nonprofits, arts institutions, community-outreach organizations, and social-activism organizations. In their essay, learners must either explain why the enterprise's choices (course of action) were ethical or not. Learners should use both course

readings and at least four other sources (such as information on what others did in similar real-world situations) to justify their arguments.

#### • Moral Difficulties in the Enterprise

Credit: Emanuel Istrate, Victoria College, University of Toronto

Quality Advanced

# Example 6: E-book project on sustainable cities for the future

In the COVID-19 era virtual offerings of a sustainability course, there were many chances to create new learning opportunities not only from the course content but also from the world around us, the media and news, and from each other. Learners in the Spring 2020 offering of CIVE230: Engineering and Sustainable Development were tasked with making a contribution to sustainability efforts. Their efforts were compiled in an e-book *The Sustainability Contribution Project*, which showcases their ideas that cover all course topics as they apply to cities around the world. This activity encouraged learners to explore sustainable cities, infrastructure, solutions, and technologies globally to generate an enriched learning experience and create an opportunity for peer-topeer learning. Together, they cocreated an e-book, which serves as a contribution by the class for the class, and for the wider engineering education and sustainability community. In Spring 2021 students created another e-book for the course with a slightly different focus named "Connecting Sustainability Cities for the Future". These e-books are hosted on the **OER Commons**:

- <u>The Sustainability Contribution Project</u> (Spring 2020)
- <u>Connecting Sustainable Cities for the Future</u> (Spring 2021)

The e-books are also hosted by Civil and Environmental Engineering, University of Waterloo:

- The Sustainability Contribution Project (2020) (PDF)
- <u>Connecting Sustainable Cities for the Future (2021)</u> (PDF)

In the video below, Dr. Ibrahim describes the e-book project, and discusses the pedagogical, motivational, and community-building benefits of it for both learners and the instructional team. In the <u>Notes</u> PDF, she shares the template she provided to learners to guide them as they created their part of the e-book. The <u>e-book project</u> <u>instructions and template</u> (DOCX) is also available in Word format.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2016#oembed-2</u>

#### Notes (PDF) | Transcript (PDF) | Video length ~ 2 mins.

Credit: Dr. Nadine Ibrahim, Department of Civil & Environmental Engineering, University of Waterloo

# An EDII perspective: Authentic assessment as part of Universal Design for

# Learning

A well-designed authentic assessment activates the core principles of Universal Design for Learning (UDL).

An authentic assessment provides **multiple means of engagement**. When learners have the opportunity to activate their prior knowledge, leverage their cultural capital or lived experience in the context of an assessment, they are likely to be more motivated and find creative ways to engage. The contextual learning provided by authentic assessment can allow learners to apply a critical/academic lens to "nascent" knowledge they already have or consider a perspective or concept they have not yet thought much about. This flexibility then can easily extend into **multiple means of action and expression** of these ideas, and by allowing for different types of assessment products (or even if the product is the same for everyone), there will be **multiple means of representation** of the final product because everyone's starting point will be different.

These differences in final products can also be the springboard for further learner-learner interactions, knowledge building, and integration of various related concepts. These approaches create a more engaged classroom, but also a more equitable one as accommodations due to disability can naturally emerge from such a flexible formatting, allowing everyone equal access and participation in the learning community.

For more learning about UDL and assessment, visit the UDL and Assessment resource.

## Activity: Assessment outline

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 3**: Create a varied assessment scheme that scaffolds and supports the learning outcomes of the course and promotes academic integrity and **CLO 5**: Apply principles of Universal Design for Learning (UDL) and accessibility into your course design to ensure a more equitable learning experience.

#### Instructions

For this activity, you will create an assessment using the template provided. This template can be applied to any assessment. However, drawing upon the content discussing authentic assessment in this module, you may wish to think of an activity or assessment that you could use in your course that follows these practices.

Option 1: Download the Assessment Outline Worksheet (DOCX) to complete offline.

**Option 2:** Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=2016#h5p-71

#### Key take-aways:

- Use a **variety of assessment types and submission options** to provide learners with multiple means of action and expression.
- Build assignments and assessments that use **scaffolding**, breaking up complicated tasks and content into smaller parts of increasing complexity.

• Consider creating **authentic assessments** for your course, which ask learners to apply discipline-specific skills and knowledge to solve real-world scenarios and/or case studies.

# 2.5 Providing feedback/feedforward and assessing performance (Events 7 & 8)

Gagné's Event 7: Provide Feedback and Event 8: Assess Performance encourage instructors to give learners a variety of ways to demonstrate their understanding and achievement of learning outcomes. Effective assessment in online courses is

- · distributed throughout the course,
- linked to learning outcomes, and
- offers learners many chances and methods to demonstrate their learning.

Scaffolded assignments can help you assess a learner's performance toward an outcome by illustrating their progress.



Caption: In Gagné's Nine Events of Instruction framework, Event 7 focuses on providing feedback and Event 8 focuses on assessing performance.

Credit: University of Waterloo | Image Description (PDF)

# Strategies for grading and providing feedback online

Assessment without timely feedback contributes little to learning. (Chickering & Gamson, 1987, p. 4)

Research has shown that providing effective feedback and feedforward can produce greater learning and helps students gauge whether or not they are meeting the course learning outcomes (Concordia University, 2021). By encouraging learners to reflect on their performance, and to course-correct when necessary, meaningful feedback can enhance critical thinking, reflective practice, and help learners and instructors build trust (Rottman & Rabidoux, 2017).

#### Effective feedback is

#### actionable

Provide concrete and specific feedback with actionable items learners can apply when completing their next assignment.

# intelligible

Ensure that your feedback is easily understood and be careful not to overwhelm learners—too much feedback can be counterproductive, so concentrate on key elements of performance (Wiggins, 2012).

# timely and ongoing

Actionable and intelligible feedback allows learners to implement changes on drafts or future assignments. Timely and ongoing feedback is equally important and helps learners move forward with their learning (Rottman & Rabidoux, 2017). Learners benefit from opportunities to adjust their performance in order to meet criteria for success (Wiggins, 2012). Learners who do not receive feedback at regular intervals may flounder, especially in an online course where opportunities for peer-to-peer and learner-to-instructor engagement may be limited (Center for Academic Innovation, University of Michigan, 2020).

#### consistent

Connect feedback to learning outcomes and clearly outline criteria for success in assignment instructions and rubrics (Wiggins, 2012; Center for Academic Innovation, University of Michigan, 2020).

Providing feedback is **especially** important in online courses, because "sometimes the only perceived interaction a learner may have with an instructor is through feedback" (Center for Academic Innovation, University of Michigan, 2020). Providing feedback helps to **build connections** between instructors and learners, **encourages learner engagement**, and **fosters online learning communities** (Centre for Teaching and Learning, Concordia University/Université Concordia, 2021).

You might also consider the feedback you provide as a dialogue with your learners. Offer your perspective on how their work connects to the course goals and have them engage in metacognitive reflection about their learning and how they can take their learning forward to the next task/assessment. This reflection can also be submitted as a follow-up assignment.



("discussion" icon by Berkah Icon, from the Noun Project. Used under CC BY 3.0 license.)

# An EDII perspective: Feedback formats

Most instructors are used to providing written feedback as it is the most common feedback provided in "handin" assessments.

In an online course, instructors can easily provide written (i.e., annotate the document directly or produce summary feedback), verbal, or video feedback. Audio or video feedback may be quicker to record than typing up comments, and allows learners to hear your tone better (<u>Center for Academic Innovation, University of Michigan, 2020</u>).

Feedback through audio or video can be particularly helpful when working with Englishlanguage learners, international students, or with assessments where learners are asked to be particularly vulnerable, such as through creative writing, performance, or reflexive practice. By using audio or video for feedback, you can then convey your appreciation of their contribution and the difficult work they put in to complete the assignment. The multiple

means of producing feedback may also help you provide feedback to learners with accommodations (e.g., due to disability) in a format that they can more easily access.

Regardless of the medium, pay special attention to how you structure your feedback given that tone can sometimes be difficult to detect (especially in written formats). A common approach is the "sandwich" method: opening with positive feedback, followed by the core constructive pieces, and ending again on a positive note. Feedback can also be offered in one-on-one meetings or peer-feedback elements can be integrated into assignments and activities (<u>Center for Academic Innovation, University of Michigan, 2020</u>).

# Examples of how online feedback and grading could work

Quality Advanced

# Example 1: Using peer feedback to improve work prior to formal assessment

An advantage of an online course is that there are many ways assignments can be shared among peers, even without third-party tools. A simple approach using only the learning management system (LMS) could be to scaffold an assessment with peer review. Place learners into small group discussion forums where they can submit the first draft of their assignment. Peers in this small group can use a formal rubric to help the original authors improve their work.

Ensure that the goal of these types of exercises are clear. Learners should not be asked to evaluate each other's work in the same way you would, as they generally feel ill-equipped to do so. Instead, ask them to analyze or react to their peers' work, i.e.,

to find the thesis statement, the evidence, and the main conclusion, or to identify the 'strongest sentence,' a particularly persuasive piece of evidence, and [anything] that the reviewer had to read more than once to understand.

(Nilson & Goodson, 2018, p. 150)

This kind of feedback helps peer authors to recognize the areas in the work that may not have been clearly communicated. The reviewing peer might also be evaluated using a second rubric, which focuses on

- the clarity of their feedback,
- $\cdot$  whether the feedback uses course-appropriate language and terms, and
- whether it demonstrates an approach that is intended to help the original author improve their work.

This type of exercise helps build professionalism and communication skills as well as improve the quality of the final product across the class.

Tips:





- If you intend learners to formally evaluate their peers using a rubric and generate a "grade," then it is
  recommended that they submit this grade privately to the instructor, while keeping the summary of
  written feedback public to the small group and/or the individual learner. In this way, you prevent
  learner-learner tensions or pressures to "give high marks," and as an instructor you can ensure the "grade"
  is aligned with the written feedback produced.
- Similar approaches can be used with third-party peer-evaluation tools. These technologies can be more or less intuitive to use, so evaluate functionality closely to ensure it effectively meets your needs. A familiar "low-tech" solution using the LMS is more helpful to learners than a confusing or disorienting third-party application experience.

Here is an example of a rubric to evaluate peer reviewers and their ability to provide constructive written feedback (approximately 250 words) to a narrated PowerPoint presentation summarizing a journal article prepared by a peer.

• Rubric to evaluate peer reviews of a presentation

Credit: Dr. Prameet Sheth, Department of Biomedical and Molecular Sciences, Queen's University

Quality Essential

## Example 2: VALUE rubrics

The VALUE Rubrics are a great resource for creating rubrics that assess intellectual and practical skills. You will want to ensure that your rubrics are well aligned with your learning outcomes and of course the expectations you outline in the assignment instructions.

VALUE Rubrics

# Activity: Grading criteria

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 3**: Create a varied assessment scheme that scaffolds and supports the learning outcomes of the course and promotes academic integrity and **CLO 5**: Apply principles of Universal Design for Learning (UDL) and accessibility into your course design to ensure a more equitable learning experience.

#### Instructions

For this activity, you will create grading criteria for an assessment using a template. A sample rubric has been provided to help you structure your grading criteria. The sample rubric includes grading criteria, weighting, and levels of achievement (excellent, good, developing, marginal, and does not meet criteria/no submission). Note: points values are optional. You may instead wish to assign a holistic grade based on the overall level of achievement.

The nature of this activity does not lend itself to a usable in-line option; as a result, this activity can only be completed via the Word document download.

Download the Grading Criteria Worksheet (DOCX) to complete offline.

# Due dates, deadlines, and late policies

## Deadlines and weighting

Instructors should **clearly identify** assignment deadlines, assignment weight, term test dates, and the time frame for returning learner work. Deciding on your individual policies surrounding extended and late work is an important step in your syllabus and course design.

#### Extensions

There are a number of considerations when developing an extension and late penalty policy. First, institutions and units will have their own guidelines and/or accepted practices for extensions and late policies, so be sure to check with your home department. With institutional policies in mind, set due dates, deadlines, and late penalties with **flexibility and fairness in mind**.

#### Flexible deadlines

A learner-centred approach, with built-in flexible deadlines and less punitive late penalties, acknowledges that **not all learners learn and work at the same pace**.

Instructors and teaching assistants also have to think about their own workload: multiple extension requests can be overwhelming, and flexible deadlines might be difficult for a teaching team (and for learners!) to manage. **There is no one policy** that will work for every

course and it is important to **explore various strategies** to determine what will work best for your course and teaching team.

#### Late policies

A clear extension/late penalty policy appropriate to the course, **communicated to learners** on the syllabus and **consistently applied**, is strongly recommended.

# Strategies for setting due dates, deadlines, and late policies

There are different approaches to flexible deadlines, depending on class size, assignment type, disciplinary norms, and instructor preference. Below are a few strategies faculty have implemented in their courses—this is by no means an exhaustive or prescriptive list.

An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2018#h5p-51</u>

# Examples of how deadlines, due dates, and late policies could work

Quality Essential







# Example 3: "Oops Tokens" to communicate care/empathy

"Oops tokens" are a "get out of jail free" card for late assignments; you can offer students one or more per course, as described by Darby & Lang (2019):

Students turn in a token for a no-questions-asked deadline extension, the opportunity to revise and resubmit an assignment or otherwise make up for an unexpected challenge or honest mistake.

Credit: Nilson, 2015, as cited in Darby & Lang, 2019, pp. 98–99.

Quality Essential

# Example 4: Grace periods for deadlines

Some instructors provide a permanent grace period for all assessments in the course. For example: "Assignments handed in within 48 hours of the stated deadline will not lose marks. After 48 hours, 10-percent grade deductions will be applied per day."

Other instructors may frame a similar policy with a more pragmatic reasoning applied. For example: "Late assignments will be accepted without penalty up to the point that I start grading. I have set aside my Thursday afternoons to grade this semester. If you submit after this time, a 10 percent per day–penalty will apply."

Credit: Jenny Stodola, Professional Development and Educational Scholarship, Faculty of Health Sciences, Queen's University

Quality Advanced

# Example 5: Building in an assessment window and using LMS features to minimize administrative work

Imagine you have a series of short formative quizzes which are completed throughout the course. There are eight quizzes, but in total only account for 10 percent of the grade (low stakes). How could you set yourself up for success and minimize the amount of minding you have to do in relation to this assessment?

- To accommodate the class which may be dispersed across time zones, **you set a 24-hour window** to complete the quiz.
- You create a **bank of questions** for which the quiz pulls questions from for each learner, thereby increasing the academic integrity of the assignment.
- The quiz is designed to be **automatically graded**, or perhaps there is only one question from a set that needs to be manually graded. This reduces the grading workload for you (and the TAs).
- Even if the quiz can be entirely automatically graded, instead of releasing the grades to the learner the moment they finish the quiz, you **set the grades to release sometime the following week.** This allows you time to sort out any learners who may have legitimate reasons for not being able to complete the quiz during the window (e.g., they may be sick) and still have all grades released at once (i.e., you are not left managing outstanding grades). This also promotes academic integrity as learners who complete the assessment early in the window cannot inform later learners of the correct responses.

Credit: Jenny Stodola, Professional Development and Educational Scholarship, Faculty of Health Sciences, Queen's University

# An EDII perspective on due dates and accommodations

While deadlines are important to help guide learners in their self-directed learning in an online course, regardless of your late policy, you should explicitly note in your syllabus the **disability and accessibility accommodations statement** (or variation of) that your institution has prepared. Prior to beginning their postsecondary education, it is possible that some learners may not have considered that they may need or qualify for an accommodation in the form of adjusted deadlines. Even for learners who already know they will require an accommodation, this offers an equitable way to provide learners with important information and models responsibility for one's own learning and self-advocacy.

For example, Equity Services at Queen's University offers the following statement:

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Wellness Services (SWS) and register as early as possible. For more information, including important deadlines, please visit the Student Wellness website at <a href="https://www.queensu.ca/studentwellness/accessibility-services">https://www.queensu.ca/studentwellness/accessibility-services</a>."

(Accessibility Hub, Queen's University, n.d.)

Instructors at the University of Toronto are encouraged to add the following accessibility statement to their syllabus:

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach me and/or the Accessibility Services Office as soon as possible. The Accessibility Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let them and me know your needs, the quicker we can assist you in achieving your learning goals in this course."

(Centre for Teaching Support & Innovation, University of Toronto, n.d.)

#### Key take-aways:

- Enhance critical thinking and reflective practice in your course by providing feedback to your learners that is **actionable**, **intelligible**, **timely and ongoing**, **and meaningful**.
- Take a **learner-centred** approach to setting due dates and deadlines, embracing **flexibility** when possible and clearly identifying assignment deadlines, assignment weight, term test dates, and the time frame for returning learner work.

# 2.6 Building community through activities & assessments

# Why learning communities matter

Designing activities and assessments that create a learning community can help to build learner investment in your course. Learners are more committed to and enthusiastic about a course when they feel connected to their instructor and to course content.

#### What learners have to say...

The professor extended some grace when I missed something on a deadline. After that it felt like, okay, yeah, I don't want to screw up on the guy again. I'm going to try and do well... because [the instructor] is engaged and enthusiastic about it, and I actually am interested.

(Troop et al., 2020)

#### What learners have to say...

[I]nteraction is good because you always learn from dealing with other people—not just dealing with other people, but content, if they see it differently or have different questions than you do.

(Troop et al., 2020)

#### What learners have to say...

I felt like there wasn't enough communication, thus easy to fall behind in the course. (Troop et al., 2020)

The evidence on this is quite clear: When it comes to success in online learning, the presence of a learning community, and the quality of the interactions within that community, matter to learner success—perhaps even the most (Moore, 1989; Anderson, 2003; Xu & Smith, 2013; Jaggars & Xu, 2016). Well-designed learner interactions **with content, peers, and instructors can help learners feel part of a community** and can work to mitigate feelings of isolation that sometimes surface in online courses, which can ultimately lead to decreased learner engagement and success.

# How to create community in your online course

Xu and Smith (2013) examined 500,000 courses taken by over 40,000 college students in Washington State, investigating how well students succeeded in the online environment in terms of their ability to persist and earn strong grades, relative to their ability to do so in face-to-face courses. They found that the primary factor that predicted better student grades in online courses was the **amount of interaction between the instructor and the learner**.

Encouraging learners to get to know one another is essential for cultivating a **learning community**. Learners will have plenty of time during the course to talk about content and potentially work on projects together. **In the early weeks of your course**, the most important task is to help learners feel engaged with the course as a community in a social space, **creating social presence between them in the course**. This sense of support and connection has an immensely beneficial



("online teaching" icon by ProSymbols, from the Noun Project. Used under CC BY 3.0 license.)

impact, which will help facilitate learning through the rest of the course (Garrison, 2010). While learners tend to report that content-based social interactions are the most helpful for their learning, they nonetheless indicate the importance of social and emotional connections online for success (Yukselturk & Top, 2006). In the following sections, we explore how to create community through learner–instructor and learner–learner interactions.

# Strategies for building community through learner-instructor interaction

One of the most **important** tasks that an online instructor can do in the **early** weeks of a course is to **set a positive tone for learning** (which we discuss in detail in Module 4). The following anecdote from an instructor reflecting on his undergraduate experience is quite illuminating in this regard.

When I was an undergraduate electrical engineering student, my co-students and I were notified that a new professional engineer professor who scored 100 on a very difficult national exam was coming to our university. He was a retired theoretical NASA scientist-engineer, and we began to quake in our shoes. We looked at one another and wondered who might be the first casualty of his exponential tutelage. Yet, when we first were in his lectures and mathematical prowess, it was as if we were sitting in the presence of a trusted and wise teacher-mentor. He was friendly, cordial, open, approachable, funny, a theoretical applied-mathematical-engineering genius, and he had a resilient-personalized attitude of caring for us as struggling-to-be-engineers. In other words, he initialed his own motivation towards us, which in turn stimulated us to learn because we believed without any doubt that he truly cared for our success—and he went the extra self-motivational mile to validate his pay-it-forward success for each one of us, time-and-time again.

(Scott & McCurty, 2021)



Credit: insta\_photos/iStock/Getty Images (Copyrighted image. Do not copy, modify, or redistribute.)

Activities and assessments that promote engagement should be meaningful and intentional, otherwise they can be perceived as busy work that learners find burdensome, rather than helping to create a sense of community in the course.

Consider that **"engagement"** and **"participation"** are not necessarily the same thing, and engagement does not always have to be assessed. In this respect, identifying "engagement" in an online course, as in an in-person course, requires careful consideration. If your course is synchronous, or has synchronous elements, be **especially mindful** of how you are asking learners to participate.

In her flow chart for camera use in online classrooms, Dr. Lindsay Masland (2021) reminds us that

seeing a person's face is just one way to get to know them. There are many ways to incorporate sharing, support, and belongingness into your classroom that don't rely on sight or cameras.

Masland recommends **using the built-in features of whatever platform you are using**, such as the chat, a reactions feature, polls, and other types of real-time feedback. Similarly, the analytics systems of modern learning content management systems can be helpful, but should be viewed as limited indicators of engagement. Page views is not a meaningful measure of engagement, for example; it may just be a reflection of whether a learner normally views documents online or offline. As well, a learner who checks a discussion board briefly each day for new content may be as engaged as another learner who reads the discussion board over for an extended period weekly.

In the sense that online affordances, modes of communication, and media contexts vary as widely as learning styles and study habits, providing a variety of learning activities and soliciting feedback from the class

frequently on their preferred modes of learning is an important way to manage class interaction online while promoting 21st century literacies involving computer-mediated environments.

# Examples of building community through learner-instructor interaction

Quality Essential

# Example 1: "First connection" activity

Professor Nadine Ibrahim included an Easter egg at the end of her syllabus, offering this invitation to her learners:

If you've read this syllabus to the end, well done and thank you. Let me know that you've read the syllabus by sending me a picture of your favourite city to my email.

This allowed learners to explore the syllabus and look up her contact information so that they became familiar with her email address; she then followed up with each learner who took up her invitation, personally welcoming them to the course.

Credit: Dr Nadine Ibrahim, Department of Civil & Environmental Engineering, University of Waterloo

# Strategies for building community through learner–learner interaction

Techniques and tools that extend classroom discussions are invaluable for fostering a deeper engagement with course material, and help to establish a learning community. Learner engagement can occur in a variety of ways in an online course. Formal and informal conversations that happen on webinar systems, discussion boards, in online chats, and through group work allow learners to construct knowledge collaboratively while revealing gaps in knowledge to be addressed by the instructor. Learners can collaborate on a shared digital platform, which allows for persistent content, provides a response mechanism for both learners and instructors, and gives learners the ability interact asynchronously as well as synchronously.

If you are teaching online-synchronous, consider adding asynchronous discussion, which enables participation for those with bandwidth issues, time constraints, and other barriers to synchronous participation. More on perspectives and strategies for effective interactions to support course community appears later in this module.

Consider this three-stage model when incorporating group discussion in your course (adapted from <u>Khan et</u> <u>al., 2017</u> (PDF) and <u>Dixon, 2014</u>):

#### Preassessment

Find out what learners already know about the subject to determine an appropriate level for the discussion. Polls, a low-stakes quiz, or surveys can work well in online, in-person, and dual-delivery courses.

# Connection to prior learning

Refer to <u>Module 1.7 Learning About Your Learners</u> for examples of approaches to diagnostic assessment and other strategies to learn about your learners.

## Relevance

How will the discussion contribute to achieving learning outcomes? How does it fit with other course elements that precede or follow it?

#### Assessment

Will the discussion be assessed? If so, clearly define what is expected of learners and consider using a rubric. If the discussion will not be assessed, how will the discussion contribute to learners' preparation for future assessment?

Learners may communicate with each other informally during synchronous instructional time, as well as outside of the classroom. As an instructor, you may also require more formal learner-to-learner interaction. It is helpful to provide learners with guidelines for appropriate behaviour when interacting with their colleagues. A <u>course agreement</u>, code of conduct, and/or "netiquette" guide should be outlined in the syllabus and reviewed with your class in the first weeks of term. It is also useful to review your university's established code of behaviour around appropriate use of IT systems.

# Strategies for planning your discussion-based activities

Whether the discussion activity or assessment is undertaken synchronously (e.g., in breakout rooms) or asynchronously (e.g., on a discussion board), follow the same principles of intentional assignment and assessment design outlined above. Make sure to the following:

#### provide clear, detailed instructions

- Explain whether or not the discussion is graded. If yes, how will students be assessed? What are the criteria for success?
- Outline the rules of engagement, including guidelines on responding to other students.
- $\cdot$  be mindful of time and workload
  - For discussion boards, stagger due dates of the responses and posts, and consider whether limiting the post/response window would help ease student and instructor workload. For example, the discussion board remains open and active for three days rather than the full week.
  - Have a clear sense of how much time you expect students to devote to discussion boards. Are the expectations for time commitment reasonable, especially if students are not graded on their contributions?
- $\cdot$  connect your synchronous and asynchronous discussions
  - Connect your synchronous and asynchronous discussions to course content and learning goals. How does the discussion contribute to learning?

# Strategies for moderating and encouraging discussion, once activities begin

Once the discussion is live, there are strategies you can employ to encourage meaningful and sustained discussion. Some examples are as follows:

- **Create open-ended questions**, which are "discussable" (i.e., where learners discuss, debate, persuade, share their perspectives) and foster deeper engagement with course concepts and material. Avoid posing questions that solicit basic facts or questions where there is an obvious yes or no response, which limit discussion.
- Ask clarifying questions that encourage students to think about what they know and don't know. For example, "why do you think that?" or "what is your reasoning here?"
- Include questions which ask for evidence and justification. These types of questions are uniquely suited for online discussion forums since content, including images, video, and external links can be embedded, excerpted, or shared with groups.
  - In quantitative subjects, debating the merits of a range of approaches to a problem can serve as motivation for debate for seemingly "closed" questions.
  - In some disciplines, questions that **probe motivation and purpose** are effective in stimulating debate and peer communication, which can be coupled with scenarios or case studies.

As the instructor, you can participate in the discussion and offer feedback, guidance, and resources but **don't overwhelm students**. You also **do not need to respond to every post**; instead, the timeliness and quality of your responses are more important than the quantity (Wise, et al., 2013).

# Examples of building community through learner-learner interactions

Quality Essential

# Example 2: Discussion activity templates

The University of Waterloo Centre for Extended Learning has compiled a series of discussion activity examples and templates that guide instructors in planning effective online discussions.

<u>Remote Teaching: Seminars and Discussion-Based Courses</u>

Credit: University of Waterloo Centre for Extended Learning

This resource from the Taylor Institute for Teaching & Learning at the University of Calgary provides a useful template for planning online discussion board activities:

Online Discussion Board Worksheet

Credit: Taylor Institute for Teaching & Learning, University of Calgary

Quality Essential

# Example 3: Community-building activities

OCAD University has developed a tool kit to support faculty in their online course delivery. Starting on page 72 of the linked resource, the tool kit describes several easy-to-implement, quick, and frequent community-building activities. The authors recommend building in a "right to pass" when using these strategies to build trust and community between students.

#### • Teaching Art & Design Online: A Toolkit for Faculty

Credit: Faculty & Curriculum Development Centre, OCAD University

Quality Advanced

## Example 4: The appreciative close

In this article for *Faculty Focus*, Shawn Vecellio describes the community-building technique of the appreciative close, wherein learners are given time and space to acknowledge each other's contributions to the class community.

As Vecellio notes, "[s]tudents report that:

- The practice gives students the opportunity to reflect upon and share their appreciations in ways that will positively shape the classroom culture, lead to a deeper sense of investment in learning and engagement and help them feel seen and valued.
- When students can recognize the differences between their peers in class and acknowledge those differences as gifts to be shared, we'll know we have created a safe space for learning.
- A public statement goes a long way toward showing appreciation to someone. It [also helps] in creating a greater sense of community in the classroom. Our class has grown to be more comfortable and honest with each other as a whole, which has made our discussion much more fruitful.
- Leaving space for affirmations gives us an opportunity to build community in our class and lowers the barrier between the teacher and students in the sense that students are also appreciated for what they bring to class" (Vecellio, 2021).

#### The Appreciative Close: A Strategy for Creating a Classroom Community

Credit: Shawn Vecellio, Faculty Focus

# An EDII perspective on building community

Building a community online can be a challenge due to the lack of physical proximity and temporal lag in communication. However, if you take the time to get to know your learners and encourage them to share a bit about their motivation for taking the course, and perhaps about themselves, you can begin to foster a sense of belonging and community in your online course. As well, intentional communication with learners helps instructors become more attuned to the hidden dynamics of the course and be more deliberate in your asks for assessments, in your guidance of course discussions, and your debriefs of concepts.

In order to build community, support all of our learners, and help each individual feel a sense of

belonging, we must begin to increase our awareness of the ways that cultural contexts influence online student behaviours and levels of engagement . . . what we tend to do is ignore cultural differences in our online classes. That's a mistake, however, because it leads to marginalizing whole populations of our students, even if unintentionally."

(Darby, 2019, pp. 93-4)

There can be many hidden cultural elements in a learner group:

- · language (monolingualism, bilingualism, unbalanced bilingualism, language loss),
- perceptions of instructor-learner relationship (e.g., instructor as purveyor of knowledge rather than guide or facilitator),
- amount of wait time/reflection time before asking a question or answering a question,
- attitude toward asking questions—questions to highlight ignorance rather than guide learner,
- avoidance of standing out publicly,
- preference for activities that are cooperative rather than competitive,
- value for an independent self versus interdependent self, and
- interpersonal time versus clock time, among others.

By adopting the strategies outlined in this module, and this course, you can create a well-designed learning environment that clearly outlines the expectations for each individual learner and their interactions with peers in a way that will help them grow within your community and increase their respect and appreciation for others.

#### Key take-aways:

- Providing learners with meaningful feedback and quality interactions can help to keep learners engaged and invested.
- Through learner–instructor interactions, particularly early in the course, you can set a positive tone for learning.
- Giving learners the opportunity to interact with other learners can be invaluable for fostering deep engagement and building course community.

# 2.7 Summary: Creating quality interactions, activities, & assessments

As you structure your course and develop your content, think about what your learners need in order to learn successfully. Gagné's **Nine Events of Instruction** provides a useful framework for creating the conditions for successful learning in your course. Click on the plus sign associated with each of the Nine Events to reveal how we 've applied this framework in this module.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=2022#h5p-52

Credit: University of Waterloo | Image Description (PDF)

# Module summary activity: Reflect and plan

# **Reflect on your learning**

Take a moment to reflect: What are you already doing to incorporate Gagné's Events 6, 7, and 8 into your own teaching practice?

#### Think about: Eliciting learner performance

- Do your activities and assessments help learners develop core skills and competencies that align with course learning outcomes?
- Do your activities and assessments set up learners for success by using principles like universal design, scaffolding, and/or authentic assessment?
- · Are your activities and assessments designed with academic integrity in mind?

#### Providing feedback/feedforward and assessment

• Do your activities and assessments provide learners with opportunities to receive meaningful feedback/ feedforward?

#### **Building community**

• Do your activities and assessments help to create quality interactions between instructors and learners, and learners engaged and invested?

# Plan next steps

What steps do you need to take to ensure that you are designing quality activities, assessments, and interactions in your course?

#### Congratulations on completing Module 2 of this course!

Select **Next** in the footer at the very bottom of the screen to navigate to the **Resources for Further Study** section, which offers deeper dives into particular topics addressed in the module, or continue to <u>Module</u> <u>3</u>!

# 2.8 Resources for further study

For those interested in learning more about particular topics in Module 2, we've included links to further resources below. Resources are organized by topic. To view longer summaries of particular resources, select the "Click for resource description" tab.

# Assessment databases

# Assignments across disciplines

<u>Assignments Across Disciplines</u> is an open-access educational resource (OER) of peer-reviewed assignments and a related community of practice created by Professor Andrea Williams of the University of Toronto.

# Internet resources for higher education outcomes assessment

Internet Resources for Higher Education Outcomes Assessment is "an open learning space that curates content for faculty and assessment professionals through housed resources and tools for student learning outcomes, teaching and learning, program review, and accreditation."

# Journal of academic writing assignments

<u>Prompt: A Journal of Academic Writing Assignments</u> publishes peer-reviewed writing assignments.

# Kay Sambell and Sally Brown: COVID-19 assessment collection

Kay Sambell and Salley Brown have developed <u>a series of assignment collections</u> from the COVID-19 pandemic shift to remote teaching. These assignment examples are geared toward online instruction and available for download via several collections.

# Assessing learning

# Inclusive assessment

Oxford Brookes University has provided this useful guide to support inclusive teaching, with a focus on <u>Inclusive</u> <u>Assessment</u>.

# Nine principles of good practice for assessing student learning

Read more at <u>9 Principles of Good Practice for the Assessment of Student Learning</u>.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/haoc/?p=2024#h5p-72

# **Online assessment**

The University of Calgary's Guide to <u>Online Assessment in Higher Education</u> (PDF) provides a good overview of the benefits and challenges of online assessment, as well as some principles of and strategies for creating effective online assessments.

# Queen's University Teaching Toolkit

Queen's University has developed an extensive <u>Teaching Toolkit</u>, which addresses issues of assessment, building inclusive community, and academic integrity, among other key online teaching issues.

# Teaching, learning, and assessment across the disciplines: ICE stories

<u>Teaching, Learning, and Assessment Across Disciplines: ICE Stories</u> is a collection of instructor accounts of the ways the ICE (ideas, connections, and extensions) model has influenced their thinking, teaching, and learners.

# **Reflection Toolkit**

The University of Edinburgh has developed a <u>Reflection Toolkit</u> designed to help instructors reflect on their own teaching as well as encourage reflection in learners.

# Feedback

# Seven principles of good feedback practice

Read more at <u>Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good</u> <u>Feedback Practice</u>.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=2024#h5p-73</u>

# What feedback literate teachers do

<u>What Feedback Literate Teachers Do: An Empirically-Derived Competency Framework</u> presents an evidencebased overview of the competencies required of university teachers to design and enact effective feedback.

# Academic integrity

The Integrity Matters Mobile Application, made possible by an eCampus Research and Innovation grant, is designed to enhance student academic integrity knowledge. The app gives students an overview of the values of honesty, trust, respect, fairness, responsibility, and courage promoted by the International Center for Academic Integrity (ICAI) and gives students the opportunity to apply these values to common scenarios students face. It is also available as an open educational resource: Undergraduate Academic Integrity Module.

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The definition of the key term *Asynchronous* is derived from original in <u>Fostering Engagement</u>: Facilitating <u>Online Courses in Higher Education</u>, <u>Unit 4a</u> by K. E. Wilson and D. Opperwall and the Centre for Extended Learning, which is licensed under a <u>CC BY-NC-SA 4.0 International License</u>, except where otherwise noted. The derivative work has been adapted through modification of text and headings and retains the <u>CC BY-NC-SA International 4.0 license</u>.

# MODULE 3: QUALITY COURSE STRUCTURE AND CONTENT

# 3.1 Module overview



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#### Transcript (PDF)| Video length ~ 2 min.

Welcome to Module 3! In this module, we continue the design and development work we started in Module 2 (where we focused on activity and assessment design). Here, we turn our attention to **course structure** and

#### content design and development.

You will be asked to think about the following key questions:

- Have I structured my course in a way that makes learning materials and assessments easy to find?
- Are modules and topics clearly labelled and organized?
- · Are activities and assessments well-paced across the term?
- · Does the course include opportunities for learners to practice working with content?
- Is content presented in ways that avoid cognitive overload and that help learners select, organize, and integrate new knowledge with prior learning?
- · Are learning materials accessible to all learners?
- Have I included strategies to enhance motivation, retention, and transfer?
- Have I made use of relevant open educational resources (OERs)?



Caption: The structure of this course is shown, with the 4 modules mapped to the 3 stages of online course development. Module 3: Quality course structure and content pertains to the Design and Develop stage. Credit: University of Waterloo | Image Description

# Module learning outcomes

By the end of the module, you should be able to

- structure your course in a way that is clear and easy to navigate;
- present content in ways that facilitate and motivate learning;
- implement principles of equity, inclusivity, and accessibility into your course design; and
- use open educational resources (OERs) as part of your content delivery strategy.

## Key terms

The following is a list of key terms that you might find useful to review prior to working through the module content:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1215#h5p-74</u>
# Sections in this module

You can jump to any of the sections in this module by clicking the links below or using the left-side navigation menu.

- **3.2** Module examples, strategies, and templates
- 3.3 Structuring your course
- 3.4 Gaining learner attention (Event 1)
- 3.5 Presenting the content (Event 4)
- 3.6 Enhancing retention and transfer (Event 9)
- 3.7 Using open educational resources (OERs)
- 3.8 Summary: Learner-centred course structure and content
- **3.9** Resources for further study
- 3.10 Bibliography

# Activities in this module

The module activities are designed to help you **structure your online course and begin to design your content**. For ease of use, clicking the provided links will allow you to jump directly to the location of the course where the activity is located.

- <u>Create a course schedule</u>: Provide an overview of the topics, learning activities, assessments, and due dates for each week of the course.
- <u>Create a module overview page</u>: Orient learners to what is expected of them in that module or week.
- <u>Attend to this topic!</u> Create a list of strategies to capture your learners' attention for each module in your course.
- <u>Create an online-content storyboard</u>: Develop a storyboard for one topic in your course.
- <u>Curate a list of open educational resources (OERs)</u>: Assemble a list of OERs to use for some (or all) of your online content.

# 3.2 Module examples, strategies, and templates

If you are primarily interested in examples of quality design principles, consider jumping directly to the examples, strategies, and templates included throughout this module. These are drawn from real courses and instructors across disciplines and learning contexts.

# Examples

#### 3.3 Structuring your course

- Examples of how course schedules could work
- A (meta)example of how to make content structure visible with a module overview page
- Examples of how LMS templates work
- Examples of how organizational visuals could work

#### 3.4 Gaining learner attention (Event 1)

• Examples of how gaining attention could work

#### 3.5 Presenting the content (Event 4)

- An example of how the multimedia principle works
- Examples of how designing content with UXDL principles could work
- A (meta)example of how to provide multiple means of representation
- Examples of how providing multiple means of engagement could work

#### 3.6 Enhancing retention and transfer (Event 9)

• Examples of how enhancing retention and transfer could work

#### 3.7 Using open educational resources (OERs)

• <u>A (meta)example of a CC-licensed open educational resource</u>

# Strategies

#### 3.3 Structuring your course

• How to create a coherent course structure for your learners

#### 3.4 Gaining learner attention (Event 1)

• <u>Strategies to focus your learners' attention on a topic</u>

#### 3.5 Presenting the content (Event 4)

- <u>Content design strategies to avoid cognitive overload and help learners select, organize, and integrate</u> <u>information</u>
- <u>Strategies for synchronous sessions</u>
- Strategies for designing accessible online content
- <u>Strategies for increasing engagement and motivation</u>
- <u>Strategies for organizing and formatting accessible course content</u>

#### 3.6 Enhancing retention and transfer (Event 9)

• <u>Strategies to enhance retention and transfer</u>

# Templates

- <u>Course Schedule template</u>(DOCX)
- <u>Assessment Planning Table template(DOCX)</u>
- <u>Module Overview template</u>(DOCX)
- LMS templates

# 3.3 Structuring your course

# Introduction to online course structure

In online course design, structure matters—a lot. There are two levels of structure we need to consider when designing an online course: **the overarching structure** of the course and **the structure of individual modules**, **units, or weekly topics**. (Please note that we will be using "modules" as the weekly organizational unit in this course, but your institution's choice of nomenclature might be different.)

At the course level, structure is typically conveyed via

- a **course outline and/or course schedule**, which provides an overview of topics, learning activities, assessments, and due dates; and
- the **navigation structure** in the learning management system (LMS) or other system that is used to deliver the course.

At the module/content level, structure is typically conveyed via

- a **module overview page**, or other representation of the overall module content, which provides an overview of the topics, links to content, learning activities, and assessments pertinent to that module; and
- **concept maps** and **organizational visuals**, which convey how concepts are related to each other, and provide learners with important information about content structure both between and within modules.

We will consider all of these ways to structure your course and modules in this section.

# Why structure matters

## Why making course structure visible is important

For instructors, mapping out your course (for example, in a course schedule) is a great way to determine the length of topics, when to schedule assessments, and when feedback should be provided to learners (i.e., ideally prior to when subsequent assessments are due). It helps to make your organization of topics, and the relevance of associated assessments, visible to your learners.

For learners, a clear course structure helps them understand what to expect in the course, and what is expected of them every week. This helps to reduce their anxiety and allows them to better organize and manage their time. Good structure also increases findability, which is important to online learners.

#### What learners have to say...

I liked that all the assignments were well-organized in a clean section that was easy to find with their respective units and dates listed, so I didn't have to write that down myself ... I really hated when I had to search and hunt for information.

(Troop et al., 2020)



Credit: FluxFactory/iStock/Getty Images (Copyrighted image. Do not copy, modify, or redistribute.)

# Why making content structure visible is important

As described in Module 1.4 <u>The Nine Events of Instruction framework</u>, it can be challenging for learners who are new to a field of study to conceptualize how the various elements of that field are connected. Research has shown that novice learners often experience new fields of knowledge as a series of isolated facts or formulas to master, and don't have the background knowledge to perceive the structure of the discipline. Without this kind of knowledge structure, it is difficult for them to process, comprehend, and retain new information (Ambrose et al., 2010; Bransford et al., 1999).

Making the structure of a field of knowledge explicit can help by providing a framework or schema into which learners can fit new knowledge, so that "new material is integrated not into an aggregate of facts and terms but into a pre-existing organization of learned knowledge" (Nilson & Goodson, 2018, p. 41). An effective way of doing this is to create a concept map or other organizational visual indicating how course topics are connected to each other.



Caption: Making the structure of a field of knowledge explicit helps learners fit new knowledge into preexisting disciplinary structures, which helps them retain it better and connect it to prior knowledge. Credit: University of Waterloo | Image Description (PDF)

# How to create a coherent course structure for your learners

# Start with backward design

In Module 1.5 <u>Using backward design</u>, we introduced the concept of backward design, which provides an excellent starting point to a coherent, well-structured course. Taking the time at the planning stage of course design to think carefully about your course learning outcomes and to align these with your content, activities, and assessments will go a long way toward creating a clear and well-organized course.

# Create an organizational visual outlining the course structure

Organizational visuals like concept maps can help you to **sequence your content** into **logical** and **meaningfully related sections/modules**. They are also an excellent way to make the structure of your course visible to your learners, which can help them visualize the relationships between topics and **provide them with a "big picture" view** of how knowledge is structured in your discipline. Your modules may map directly onto the number of weeks in your course (so that Module 1 occurs in week 1, etc.), or your modules may span across several weeks. Use the structure that makes the most sense for your course, and make sure it is presented to learners clearly.

# A (meta)example of how to make course structure visible with an organizational visual

# How we did this in this course

One of the ways we signalled the structure of this course was through the course pathways organizational visual in the <u>About This Course – Start Here!</u> section. The visual presents a high-level overview of the course structure, which is organized according to the stages of development of an online course (left column). The visual also includes an interactive element (right column), which provides information about the things learners will create for their own course in each module, so that they can navigate directly to the course development task they're currently working on and need assistance with.



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/haoc/?p=3002#h5p-15

Caption: The course pathways organizational visual in High-Quality Online Courses helps orient learners to the structure of the course.

Credit: University of Waterloo | Image Description (PDF)

Quality Advanced

# Example of how to make course structure visible with an organizational visual

In a fourth-year undergraduate course, learners are presented with complex neuroscience information, which many have likely never encountered before. To help guide these learners, the course instructor created a simple visual flow chart-type "map" of the course in PowerPoint, showing how all the concepts across the course will be developed and connected. This type of visual is sufficient on its own, but the instructor also chose to record a screen capture where she elaborates on how all these ideas will be connected. Watch the video to see this strategy in action.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3002#oembed-1</u>

#### Transcript | Video length ~ 5:30 mins.

Credit: Dr Susan Boehnke, Centre for Neuroscience Studies, Queen's University

# Create clear module titles

Learners benefit from descriptive module titles that make the weekly content focus visible. Titles like **Week 3** or **Module 3** convey nothing about the topic covered in that week/module. The following example is much better—it aids findability and tells learners exactly what to expect in the module.

How we did this in this module

# Module 3: Quality course structure and content

Caption: The Module 3 title in *High Quality Online Courses* clearly describes the content focus. Credit: University of Waterloo

# Create a course schedule

A course schedule is an indispensable planning tool for learners, providing an overview of topics, learning activities, assessments, and due dates for each week of the course.

#### Key questions:

- Are the module names meaningful?
- Have you listed the subtopics you will address in each module?
- · Are the subtopics sufficiently segmented?
- Have you added learning activities (including readings) and due dates/weightings for work due?
- Are the workload expectations reasonable for learners?
- Are activities and assessments well-paced? Is the grading well-distributed across term, with sufficient time to provide learners with feedback before they progress to their next assessment?
- Do assessment deadlines and weightings adhere to any institutional policies?
- If you plan to use synchronous sessions in your course, are they scheduled strategically to address common sticky points/bottleneck concepts, assessment Q&As or debriefs, or exam reviews?

You may find it useful to use an **assessment planning table** like the one below to get a sense of how frequently your assessments occur across the weeks of the course. Remember that assessments aren't required every week—depending on your outcomes, you may choose a few (scaffolded) major assessments rather than weekly lower-stakes assessments (see Module 2.4 <u>Eliciting Learner Performance</u> to learn about scaffolded assessments). The assessment schedule should be manageable for you, your TAs (if applicable), and for your learners.

Assessment	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Weight (%)
Example: quiz		2%		2%		2%		2%		2%			2% x 5 = 10%
Example: discussion	0% (ungraded practice)		10%		10%						10%		10% x 3 = 30%
Example: reflection										5%			5%
Example: instructor check-in/oral assessment							5%						5%
Example: presentation (2-stage pre-work + final submission)						10 %			10%			30%	10% + 10% + 30% = 50%
Total													100%

Caption: Example of a completed assessment planning table.

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# Examples of how course schedules could work

Below, we've provided a few examples of course schedules across various instructional contexts.

- Example 1: GNED 1026, <u>Health Psychology Course Schedule.</u> Credit: Laura Shannon, Loyalist College
- **Example 2:** GPHY 227, <u>Cities: Geography, Planning, and Urban Life Course Schedule.</u> Credit: Dan Cohen, and Betsy Donald, Queen's University
- **Example 3:** DEI 616, <u>Multimedia Storytelling Course Schedule</u>. Credit: Dr Daniel Harley, Stratford School of Interaction Design and Business, University of Waterloo

# Activity: Create a course schedule

#### Learning outcomes:

This activity is directly aligned with **Course Learning Outcome (CLO) 6**: Structure and present your online content and assessments in ways that facilitate student learning and foster a sense of community.

#### Instructions:

Equipped with the above examples to guide you, and building on the "<u>Module-Level Alignment Chart</u>" activity in Module 1, create a **course schedule** for your online course. You may use the <u>Course Schedule template</u> (DOCX) we've created for you, or a version that you've adapted for your own context.

Download the **Course Schedule Template.docx** worksheet to create a Word version to complete offline. **An in-line version has not been made available** for this activity, since the table format doesn't translate well to the tool used for in-line interactions.

For planning purposes, you may find it helpful to create an assessment planning table first. If so, we've provided an <u>Assessment Planning Table template</u> (DOCX) for you to use or modify to suit your context.

# How to create a coherent module structure for your learners

# Create Module Overview/Weekly Introduction pages

Module Overview/Weekly Introduction pages are a good way to orient learners to what is expected of them in any given module or week. A Module Overview/Weekly Introduction page should include the following elements:

# A short introduction

Provide a brief overview of the topic, make connections to prior learning, capture your learners' attention/pique their curiosity, and establish relevance. See Module 3.4 <u>Gaining Learner Attention</u> and Module 3.5 <u>Strategies for</u> <u>Increasing Engagement and Motivation</u> for more information.

# Module learning outcomes

See Module 1.6 <u>Writing Effective Learning Outcomes</u> for more information about why module learning outcomes matter and how to write them.

# A diagnostic assessment

If relevant, include a link to a diagnostic assessment to surface misconceptions or gaps in your learners' understanding. See Module 1.7 <u>Learning About Your Learners</u> for more information about creating diagnostic assessments.

## Key terms

Making key terms available at the start of a new topic of study is a pre-training technique designed to reduce cognitive overload by offloading some of the cognitive processing learners have to engage with in the content, to the pre-training episode. See Module 3.5 <u>Presenting the Content</u> below for more information about pretraining and other strategies to avoid cognitive overload in your presentation of content.

## Links to weekly resources, activities, and assessments

Last but not least, the findability of course materials is greatly improved when your Module Overview/Weekly Introduction pages include links to the following:

- segmented **topic/content sections** for that module;
- an overview or list of the **activities** (including readings) that learners are expected to complete that week;

- an overview or list of **assessments** that learners are expected to complete that week, together with a link to the **course schedule**, which outlines due dates; and
- supplementary resources related to the module topic.

# A (meta)example of how to make content structure visible with a Module Overview page

## How we did this in this course

We created **Module Overview** pages for each module in this course, which include a short introduction to the module, an organizational visual to remind learners of how the course is organized, the module learning outcomes, a list of key terms, and quick links to the module sections and activities:

- Module 1 Overview page
- Module 2 Overview page
- Module 3 Overview page
- Module 4 Overview page

# Activity: Create a Module Overview page

#### Learning outcomes:

This activity is directly aligned with **Course Learning Outcome (CLO) 6**: Structure and present your online content and assessments in ways that facilitate student learning and foster a sense of community.

#### Instructions:

Equipped with the above examples to guide you, create a **Module Overview** page for one module, using the <u>Module Overview template</u> (DOCX) we've created for you, or a version that you've adapted for your own context.

Option 1: Download the Module Overview Template.docx to create a Word version to complete offline.

**Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.

An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3002#h5p-85</u>

# Use learning management system (LMS) templates

Many postsecondary institutions have created online course templates, available through the institution's LMS, which are easy for instructors to access and adapt for their courses. Where available, these are a simple and

effective way to structure and organize your course, as they often include templates for **course schedules** and **Module Overview/Weekly Introduction pages**, so that you don't have to start from scratch.

When applied across all online courses at an institution, these templates provide a **consistent and familiar navigation experience** for learners. As Jakob Nielsen explains in his "Law of Internet User Experience," familiarity is an important aspect of good user experience:

Users [or, in our context, online learners] spend most of their time on other [course] sites. This means that users prefer your site to work the same way as all the other sites they already know. **Design for patterns for which users are accustomed**."

(Nielsen, n.d.))

When we "design for patterns for which users are accustomed," we **reduce cognitive load** for our learners, as they're not spending valuable processing time trying to figure out the course structure, or the LMS interface, or locating where things are in the course. Instead, they can focus on their learning. (To learn more about cognitive load, see Module 3.5 <u>Presenting the Content.</u>) As much as possible, we want to ensure that the experience of navigating an online course is intuitive for learners; when it isn't, this can become a source of frustration and interfere with learning. For more information about designing intuitive online courses, take a look at the <u>UXDL</u> <u>Honeycomb: How Do We Create Intuitive (Findable and Usable) Learning Experiences?</u>



Credit: Wavebreakmedia/iStock/Getty Images Plus (Copyrighted image. Do not copy, modify, or redistribute.)

Where available, LMS templates often include the following adaptable pages:

- · Module Overview/Weekly Introduction pages,
- basic HTML-content pages with prestyled headings and subheadings,
- Course Outline/Syllabus page,

- Course Schedule page,
- various Activity or Assignment pages with instructions,
- Course and University Policies page, and
- Required Readings page (if applicable or not otherwise included on a content page).

Below, we've curated a partial list of LMS templates available on common LMS vendor sites, and at some Ontario PSE institutions. Check to see whether your institution has LMS templates available to help you structure your course!

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# Examples of how LMS templates work

- Brightspace: Brightspace HTML Template (version 3.0)
- Canvas: Humboldt State University: Designing Your Course with Modules and Pages
- Moodle: Moodle Course Templates
- Queen's University, Brightspace: Create a Course
- Trent University, Blackboard: <u>Blackboard Faculty Template</u>
- University of Toronto, Canvas: Example Remote/Online Course Template University of Toronto
- University of Waterloo, Brightspace: Online Course Templates

# Create an organizational visual outlining the content structure

Much like course-level organizational visuals, **module-level organizational visuals** are a useful **planning tool** for you and make the relationships between concepts within a module transparent to learners. This helps them better **retain new knowledge** and **connect it to prior knowledge**. As Nilson and Goodson (2018) explain,

Students learn new material better and can remember it longer when they receive it in an organized structure or when they organize and structure it themselves (if they are ready to do so). In fact, the only way people remember anything long term is in a coherent, logically organized structure based on patterns and relationships among interconnected parts" (p. 81).

As Nilson and Goodson suggest, **having your learners create concept maps** of the content in a module is also a good way to help them learn the structure of the discipline (e.g., as an assessment or other learning exercise). If they're not quite ready to do this, Darby and Lang (2019) suggest providing your learners with a partially completed concept map or other structure document such as a note outline (p. 189). Take a look at Darby's <u>Skeletal Outline Example</u> (PDF), posted on the Association of College and University Educators' Online <u>Teaching</u> <u>Toolkit site</u>, as an example of this approach.

# Connection to prior learning

In Module 1.7 Learning About Your Learners, we learned that asking your learners to create concept maps that they share with you and/or their peers in low-stakes assessments or ungraded course discussions at various points throughout your course is also a good way to gain insight into their developing understanding of the course material, and to surface any gaps or errors that you might subsequently usefully address.

Below we provide some examples of organizational visuals across a variety of disciplines and course contexts.

# Examples of how organizational visuals could work

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# Example 4: Organizational visual from an introductory psychology course

The following example of an organizational visual from a module on Freudian and Humanist Theory helps learners visualize how personality theories and theorists relate to one another.



Credit: Dr. Paul Wehr, Department of Psychology and the Centre for Extended Learning, University of Waterloo | Image Description (PDF)

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## Example 5: Using key terms to present a course's organizational structure

In a second-year introduction to immunology course, learners are presented with the same grid of key terms at the start and end of each module, with the terms pertinent to each module highlighted. This provides learners with a bird's eye overview of the entire course's key terminology, while contextualizing where each module's terms fit into the bigger conceptual framework of the course.

Learners are encouraged to use these focused terminology lists to create their own study aids to ensure they understand and do not miss any concepts in preparing for their final exam. This helps them to build their study skills, which is a key outcome in the course, given that the course topic is often overwhelming for first-time learners.

# Concept Map: List of Immunology Terminology



Credit: Dr. Prameet Sheth, Queen's University | Image Description (PDF)

# An EDII perspective: How course & module structure enhance accessibility

This section has emphasized the importance of creating a clear course and module structure, not only as a way to help instructors stay organized, but also **to set clear expectations, enhance findability, and provide comprehension support for learners**, all of which are vital to ensuring an equitable learning experience. Consider a learner who

- is the first in their family to attend a postsecondary institution: Research shows that first-generation students have a steeper learning curve in terms of acclimatizing in this new environment, in addition to navigating their course(s), which may be organized in different ways. A clear course structure can help alleviate one potential source of stress;
- uses assistive technology, such as a screen reader, to support their learning: They will appreciate a wellorganized learning space so they can quickly find and identify where important information is located;

- has an accessibility accommodation (e.g., mental health challenges): From day one of the course, they can understand the course and assessment expectations and work to organize their workload and schedule to enable them to appropriately manage their personal situation. With this plan in place, and no unexpected events occurring during the semester, they may not end up reaching out to you to implement elements of their accommodation (e.g., requesting an extension for an assignment submission); and
- is taking a course that is not in their first language: A clear course page and module outline will help reduce additional, often unnecessary, barriers to understanding and help them prioritize their learning approach.

As you can see, a well-organized learning environment can do a lot to reduce barriers and create an inclusive learning space, no matter the background of the learner. Courses designed for accessibility benefit all learners. Conversely, anecdotally, the authors of this resource have known learners to drop online courses for the sole reason that it was extremely difficult and frustrating for them to find the information they needed, such as due dates and assignment requirements/descriptions or the content to cover in a particular week!

# 3.4 Gaining learner attention (Event 1)

#### What learners have to say...

... it's very easy to get bored and distracted [in an online course]. And I mean I'm at my computer. I could go to anything and read it. I have my phone sitting here, I could just wander off. [If I'm] at home, I could go for a snack.

(Troop et al., 2020)

This quotation explains, in a very frank and authentic way, why it's important to think about gaining your learners' attention in online courses. Distractions abound when studying online, and even the most determined of learners can find their attention wandering. As Gagné indicates in his <u>Nine Events framework</u>, focusing your learners' attention on the topic of study is the first step to engaging them in learning.



Caption: In Gagné's Nine Events of Instruction framework, Event 1 focuses on gaining your learners' attention. Credit: University of Waterloo | <u>Image Description</u>

Capturing learners' attention doesn't necessarily require resource-intensive strategies (e.g., a video), although it can. Consider the learner quote that introduced this section—did it capture your attention? It took less than a minute to locate and paste into place. Simple strategies can often be quite as effective as more complex ones.

# Strategies to focus your learners' attention on a topic

Some ways to gain learners' attention include

- · a thoughtful or provocative quotation,
- a question or reflective prompt,
- a statistic,
- · a short description of a relevant real-world event,
- a short narrative,
- an image,
- a (very) short video, or
- demonstrating enthusiasm for the value of your subject.

# Examples of how gaining attention could work

Below we've provided some examples of ways to capture learners' attention, arranged from the less to the more complex.

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# Example 1: Present a thoughtful or provocative quotation

The following quotation from the UDL guidelines on recruiting learner interest presents a bold and attentiongrabbing claim to introduce the guideline:

Information that is not attended to, that does not engage learners' cognition, is in fact inaccessible. It is inaccessible both in the moment and in the future, because relevant information goes unnoticed and unprocessed."

#### (<u>Cast, 2018</u>)

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# Example 2: Present a question or reflective prompt

In the following example from an introductory Italian language course, learners are asked to identify the nouns from a list of Italian words to show what they already know about the topic at the start of the module on nouns. Feedback is provided automatically.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3069</u>

Credit: Dr. Roberta Cauchi-Santoro & Dr. Andrea Privitera, Department of Italian and French Studies, St. Jerome's University in the University of Waterloo

Quality Essential

# Example 3: Present a statistic

In the following example from a sociology course, a statistic capturing future projections of an aging population aims to capture the attention of learners and highlights that the 80+ demographic are the fastest growing age group in Canada.



Credit: Katelyn Dunn, Interdisciplinary Studies, Conestoga College | Image Description (PDF)

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# Example 4: Present a short narrative

In the following short narrative (presented in the form of a simple audio recording overlaying an image), the instructor provides an explanation of why a particular image, that does not appear to be immediately connected with the topic of study, was chosen as a visual representation of the course.

This narrative was posted as an announcement in the LMS and is used as a strategy to focus learners' attention on a new perspective that the instructor wanted to emphasize in this part of the course (i.e., the entire complex health care system), which differed from the perspective they had been introduced to in their prerequisite course (i.e., individuals on a health care team). Narrative is great at capturing attention (who doesn't like a good story?) and, in this case, helps learners to consider different and broader perspectives while also signalling that every component in the course (including something as small as a cover image) has a purpose, which is appreciated by learners.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3069#oembed-1</u>

#### Transcript | Video length ~ 3 mins.

Credit: Dr. Rosemary Brander, 2019, Advanced Interprofessional Approaches in Healthcare (IDIS 480), Bachelor of Health Sciences, Department of Biomedical and Molecular Sciences, Queen's University

Quality Essential

# Example 5: Present an image with emotional impact

In the following example from a Shakespeare course, an emotionally charged image is paired with a quotation at the start of a module on *Romeo and Juliet*, introducing learners to a theme that will be discussed later in the module.



Credit: Dr. Ted McGee, Department of English Language and Literature, and the Centre for Extended Learning, University of Waterloo

Quality Advanced

# Example 6: Present a short video

In the following example from an introductory psychology course, a provocative question is used at the start of a short video to capture learners' attention on the topic of evolutionary explanations for behaviour. Surprise is also an effective way to capture learners' attention.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hgoc/?p=3069#oembed-2</u>

Transcript for <u>PSYCH 101: Would you have sex with a stranger?</u> available on YouTube | Video length ~ 2 mins.

Credit: Dr. Paul Wehr, Department of Psychology, and the Centre for Extended Learning, University of Waterloo

## Important note about content warnings

In our eagerness to gain our learners' attention, we need to be careful not to overdo it and shock them with potentially disturbing or explicit visuals, videos, or other media elements that are not pertinent to the learning

outcomes. If there is a good reason to include these kinds of elements in your course, be sure to include a content warning so that learners know what to expect. Content warnings are not intended to censure or omit challenging material from a course, but to forewarn learners of potentially sensitive topics, giving them autonomy over their learning, as well as signalling that instructors respect their well-being. If unsettling topics occur throughout your course, you might want to consider including a content warning in your syllabus such as the one provided below.

#### Example content warning

As part of our weekly lectures, readings, and classroom discussions, we will engage with topics that may be unsettling or triggering for you or your classmates.

I am committed to treating these topics with sensitivity and respect, and ask all students to do the same. If you have any concerns about any aspect of the course, weekly topics, or required readings, please reach out to me directly and we can discuss how to engage in the course while protecting your own health and well-being.

Credit: Dr. Alexandra Logue, University of Toronto

# An EDII perspective on gaining learner attention

Here are a few EDII-informed strategies for gaining learner attention:

- Highlight a perspective or marginalized view that is not usually heard in typical discourse of the topic: This could be as simple as a quote from a prominent figure in the discipline (who could be from the academic, workplace, or community sectors) and/or who is from an under-represented demographic (e.g., Black, Indigenous, person of colour, person with a disability, from the Global South, etc.).
- Present "common misconceptions" or "stereotypical" facts about a concept or topic and ask learners to critically evaluate or reflect deeply on the information and how it relates to them, their current thinking, or what they've learned (or are about to learn) in the course. Getting learners to think differently and critically about the information they receive (i.e., what is considered normative knowledge and their relationship to it), and to understand that they "don't know everything" before diving deeply into the module content can help make learners more receptive to learning.

A note of caution: this approach must be undertaken with care in order not to unintentionally create harm! It can be easy to perpetuate harmful perspectives or stereotypes or to engage in tokenism or microaggressions—to avoid this, be sure to consult with allies, colleagues, or educational support staff who can help you to create a learning environment that promotes curiosity and critical thinking.

# Activity: Attend to this topic!

#### Learning outcomes:

This activity is directly aligned with **Course Learning Outcome (CLO) 1**: Recognize and implement key features of quality in learner-centred online course design and **CLO 6**: Structure and present your online content and assessments in ways that facilitate student learning and foster a sense of community.

Instructions:

Equipped with the above examples to spur your creativity, we've provided a place for you to document your initial ideas about how to capture your learners' attention at the outset of each module/topic.

Option 1: Download the <u>Attend To This Topic! Worksheet</u> [DOCX] to create a Word version to complete offline. Option 2: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3069#h5p-86</u>

# 3.5 Presenting the content (Event 4)

# Select content that supports learning outcomes

Although content is often the first thing we think about when we approach course design, Gagné placed it fourth in his sequential framework, notably **after** defining learning outcomes(/objectives) and activating prior learning.



Caption: In Gagné's Nine Events of Instruction framework, Event 4 focuses on presenting the content. Credit: University of Waterloo | <u>Image Description</u>

This reminds us that content should **serve learning outcomes and build on prior learning**. Content should equip learners with the resources and information they need to develop the skills identified in the learning outcomes (Barber et al., 2020) and to build on their prior learning.

# Connection to prior learning

Module 1.5 describes how <u>Using backward design</u> ensures that course learning activities (including content), help learners successfully achieve the course learning outcomes.

In addition to supporting the course learning outcomes and building on prior learning, content should also be designed to facilitate learning. The **User Experience Design for Learning (UXDL) framework** provides guidance on how to do this.

# Use the UXDL framework to design learner-centred content

The <u>User Experience Design for Learning (UXDL) Honeycomb</u> is a content design framework developed by the Centre for Extended Learning at the University of Waterloo to provide guidance on how to create quality online content that facilitates learning. The framework was inspired by Peter Morville's User Experience (UX) Honeycomb (available on Semantic Studio's <u>User Experience Design</u> page) and adapted for a teaching and learning context with permission from the author.

Each cell in the UXDL framework is grounded in psychological research in cognition and learning and presents evidence-based principles for creating online content that is <u>useful</u>, <u>desirable</u>, <u>accessible</u>, <u>credible</u>, and <u>intuitive</u> (i.e., findable and usable), together with numerous examples of how to implement the principles presented.

#### Who is Peter Morville?

Peter Morville is a pioneer in the fields of information architecture and user experience. Read <u>Peter Morville's</u> <u>biography</u> to learn more about him.



Caption: The UXDL framework provides guidance on how to create online learning experiences that are

useful, desirable, accessible, credible, findable, and usable for learners.

Credit:  $\ensuremath{\mathbb{C}}$  Peter Morville, adapted by the University of Waterloo with permission

We encourage you to explore the <u>UXDL Honeycomb site</u> in its entirety, but for the purposes of this course, we will focus on creating online content that is **useful** and **accessible**.

# Design useful online content

In Module 2.6 <u>Building Community Through Activities & Assessments</u>, we looked at ways to engage learners with their peers and with you as their instructor. Here, we turn our attention to ways to engage learners effectively with online content. The useful cell of the UXDL honeycomb provides guidance on how to design online content that is **useful for learning**.

# Why the design of online content matters

As described by educational psychologist John Sweller (1988), the ability of humans to process information in working memory is extremely limited; if the information exceeds our ability to process it, **cognitive overload** occurs, which impedes learning.

Presenting information in ways that **avoid cognitive overload** is therefore an important goal when designing online content. But it's only the first step.

In order for meaningful learning to occur, cognitive psychologist Richard Mayer (2009) explains that online content should further be designed to facilitate the cognitive processes of

#### Who is John Sweller?

John Sweller is an educational psychologist who formulated **cognitive load theory** (CLT). Read the biography of John Sweller to learn more about him.



selecting relevant information,



organizing it into a coherent framework, and



# integrating it with prior knowledge.

Caption: In order for meaningful learning to occur, learners should be able to select relevant information, organize it into a coherent framework, and integrate it with prior knowledge.

Credit: University of Waterloo, UXDL Honeycomb, <u>How Do We Create Useful Online Learning Experiences?</u> | <u>Image Description</u>

According to Mayer's **cognitive theory of multimedia learning**, when learners select, organize, and integrate information, they are better able construct meaning and retain knowledge (Mayer, 2009). For more information about Mayer's cognitive theory of multimedia learning, see the <u>How Do We Create Useful Online Learning</u> <u>Experiences?</u> page of the UXDL Honeycomb site.

Below we present some simple strategies for designing online content in ways that avoid **cognitive overload** and **help learners effectively select, organize, and integrate information**. Who is Dishard Mayor?

#### Who is Richard Mayer?

Richard Mayer is a cognitive psychologist who developed the **cognitive theory of multimedia learning**. Read <u>Richard Mayer's biography</u> to learn more about him.

# Content design strategies to avoid cognitive overload and help learners select, organize, and integrate information

# Minimize distraction

To minimize distraction

- get right to the point, leaving out unnecessary words, sounds, and pictures (the <u>coherence</u> principle);
- point out important information (the <u>signalling</u> principle);
- avoid duplicating narration with on-screen text (the <u>redundancy</u> principle); and
- place images and related text close together (the <u>spatial contiguity</u> principle) and have them appear at the same time (the <u>temporal contiguity</u> principle).

## Help learners process new material

Cognitive overload can also occur when essential material is complex, or when learners are novices. To help learners process complex (and essential) material more efficiently

- break content into shorter segments (the segmenting principle),
- introduce key terms and concepts first (the <u>pretraining</u> principle), and
- pair narration with images, not text (the modality principle).

Why is segmenting important? Nilson and Goodson (2018) explain that

[s]egmented chunks reduce complexity, prevent students from feeling overwhelmed, and make the content easier to grasp, even if the amount of information remains the same" (p. 42).

# Help learners construct a model/schema

To help learners organize and integrate information with relevant prior knowledge,

- use a mix of media: pair words with images rather than using words alone, and when selecting images, focus mainly on organizational and other visuals that are conducive to learning (the <u>multimedia</u> principle);
- use a conversational style (the personalization & voice principles); and
- use human demonstration when it supports the learning task (the <u>image</u> principle).

Video tip: video can be resource-intensive to produce, so start small. A good entry point is to use video to explain or demonstrate concepts that learners typically find challenging (instructional bottlenecks) or are cognitively complex. Keep video segments short: no more than five or six minutes. These videos can simply present you explaining/demonstrating a concept, or can provide a voice-over screen capture of a concept map you created, or can explain an image.

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#### An example of how the multimedia principle works

The following video, from the University of Pittsburgh's Centre for Teaching and Learning does a good job of both describing Mayer's principles of multimedia design and using the principles in the design and creation of the video.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3085#oembed-1</u>

Transcript for <u>Mayer's Principles of Multimedia Design</u> is available on YouTube. | Video length ~ 9 mins.

# Provide worked examples and opportunities for retrieval practice

Worked examples (demonstrating how to arrive at solutions to problems) **reduce cognitive load** by **making problem-solving techniques visible** (Ayres, 2015). As learners progress, this scaffolding can gradually fade to partially worked examples and finally to open-ended questions.

Retrieval practice (i.e., assessing learners, or providing opportunities for them to test themselves) helps leaners retain new knowledge longer, and transfer it to new contexts better (Roediger & Butler, 2010). Interpolating opportunities for retrieval practice throughout content has also been shown to help learners sustain their attention to learning material, reduce mind wandering, and increase note-taking activities (Szpunar et al., 2013).

# Examples of how designing content with UXDL principles could work

The <u>How Do We Create Useful Online Learning Experiences?</u> page of the UXDL Honeycomb site provides examples of each of the principles outlined above. In addition to these discrete examples, below we offer examples of **online modules designed with UXDL principles**.

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# Example 1: The scientific method module

The Scientific Method module is an open resource describing how the scientific method works by using global climate change as an example. It uses the following UXDL principles to help learners select, organize, and integrate relevant information:

- **multimedia**: the resource includes a combination of text, images, video, and interaction, which helps learners to attend to and stay focused on the material but also to learn it efficiently, as they organize and integrate the visual and verbal representations and actively engage in meaning-making;
- coherence: content is well-structured and uses lots of white space; images do a great job of depicting spatial relationships and are used to enhance understanding or otherwise contribute to the experience of reading the text;
- **segmenting**: text-based content is broken into easily readable chunks with images, video, and interactions interspersed throughout to aid understanding; and
- **signalling**: done with icons and call-out boxes.

#### The Scientific Method

Credit: Dr. Keith Delaney, Faculty of Earth and Environmental Sciences, and Centre for Extended Learning, University of Waterloo

#### Quality Advanced

#### Example 2: Introduction to experimental uncertainty for physics lab courses

Introduction to experimental uncertainty is a series of open modules designed to prepare learners for physics lab courses. They use the following UXDL principles to help learners select, organize, and integrate relevant information:

- **multimedia**: organizational visuals paired with text help learners construct a schema of the concepts introduced, actively engaging them in meaning-making
- **coherence**: content is well-structured and uses lots of white space; images are used to depict spatial relationships, and to signal and segment content
- **segmenting**: text-based content is broken into easily readable chunks with images interspersed to aid understanding
- **signalling**: done here with definition call-out boxes, bolding, and images
- **retrieval practice**: learners have the opportunity to get feedback on their learning through "Test your understanding" concept-check questions

#### Introduction to Experimental Uncertainty

Credit: Dr. Meg Ward, Department of Physics and Astronomy, and Centre for Extended Learning, University of Waterloo

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# Strategies for synchronous sessions

If you are using live sessions, these can create an opportunity to use strategies like helping learners process new material, constructing models and schemas, and providing worked examples, all in real time. For instance, consider working through a problem together with the students, inviting questions along the way. Or have students help construct a model of the course content together. Or simply invite students to identify their greatest points of confusion with course concepts, using their feedback to help clarify the muddiest points in the course in real time.

Keep in mind that highly structured live sessions will help reduce distractions for students. Focus on having a clear plan for your time and sharing your plan with your students.

Synchronous sessions are also a great way to build community and create social presence in your course. For more information about how to design synchronous sessions for these purposes effectively, see <u>Using</u> <u>Synchronous Sessions</u> in Module 4.5 <u>Fostering Social Presence During Term</u>.

# Activity: Create an online content storyboard for one topic

#### Learning outcomes:

This activity is directly aligned with **Course Learning Outcome (CLO) 6**: Structure and present your online content and assessments in ways that facilitate student learning and foster a sense of community.

#### Instructions:

Build on the <u>Attend to This Topic!</u> activity in section 3.4 by designing a content storyboard for one of your course topics.

#### What is an online content storyboard?

The term **storyboard** comes from the film industry where storyboards are used as planning tools to visualize film sequences using a series of still images. In an online learning context, a storyboard is a document that presents your plan for how a topic will be presented in your course, including the on-screen text and how it will be segmented with headings, visuals, video, audio and/or other interactive elements.

Start with your text, and clearly indicate where you will add

- gain-attention elements (quotes, visuals, video, etc.) to introduce the topic;
- headings and subheadings (if using Word, use **Styles** to format heading levels);
- signalling elements (e.g., bolding, definition/key concept call-out boxes, etc.);
- video or audio components, including alternative/accessible options; and
- activities (e.g., concept-check questions, reflections, discussions, etc.).

You may use any tool you are comfortable with to create your storyboard, including Word (and equivalents), PowerPoint (and equivalents), or other programs/applications with which you are familiar.

Download the <u>Content Storyboard</u> [DOCX] to create a Word version to complete offline. Please note that this activity doesn't have an in-line counterpart.

# Design accessible online content

The Accessible cell of the UXDL honeycomb provides guidance on how to design online content that is

**accessible for learning**. Accessibility is a primary consideration when designing online content, because learning is a nonstarter if learners are not able to access it.

As highlighted in Module 1.3 <u>What is Quality in Online Learning?</u>, an important starting place when designing learner-centred courses is to recognize that **our learners are diverse**, with **various needs, goals, and constraints**. To ensure that we address this diversity in ways that minimize barriers to learning, we create **flexible paths to learning**, paths that give every learner meaningful opportunities to learn. That's the essence of the <u>Universal Design for Learning (UDL) guidelines</u>: UDL provides a research-based framework to help us design learning experiences that provide meaningful **content, activity, and assessment options** for learners.

Below, we focus on UDL strategies that provide learners with meaningful options for online content.

# Strategies for designing accessible online content

# Provide multiple means of representation

In other words, we need to present content and information in different ways.

This includes

- providing options for displaying information, including alternatives for audio and visual presentations (e.g., captions and transcripts);
- providing options for language, mathematical expressions and symbols, including using examples, summary visuals, and clarifications of vocabulary, symbols, and syntax; and
- providing options for comprehension, including
  - stimulating recall of prior knowledge (see 1.7 Learning About Your Learners );
  - signalling important information (see <u>Design</u> <u>Useful Online Content</u> above); and



("Social" icon by Akbar azis; "exam" icon by Loritas Medina; "Visual Assets" by Melvin; "Audio" icon by Alice Design; "font size" icon by Gregor Cresnar; and "computer screen" icon by Sunan, from the Noun Project. Used under CC BY 3.0 license.)

• enhancing transfer (see Enhancing Retention and Transfer below).

**Examples** of each of these strategies are available on CAST's UDL Guidelines site, on the <u>Provide Multiple Means</u> of <u>Representation page</u>.

# A (meta)example of how to provide multiple means of representation

## How we did this in this module

#### In this module, we

 provided options for displaying information, including transcripts for all video content and descriptive and alt text for visuals (e.g., see the image description for the <u>Course Pathways Organizational visual</u>);

- provided summary visuals for core concepts as an option for comprehension (e.g., the visual, "Making the structure of a field of knowledge explicit helps learners retain new knowledge and connect it to prior knowledge" in Module 3.3 <u>Structuring Your Course</u>);
- provided clarification of vocabulary in the Key terms section of the Module Overview page;
- stimulated recall of prior knowledge with "connection to prior learning" call-outs throughout the module; and
- **enhanced transfer** by presenting information in an organized structure (using the Nine Events framework), offering examples across disciplines and contexts and including opportunities for learners to apply their learning to their own course throughout the module.

# Provide multiple means of engagement

In section 3.4 above, we looked at ways of <u>gaining</u> <u>learners' attention</u>. Here, we consider ways of **sustaining learners' attention**. In other words, how do we **motivate** learners to persist and **stay engaged** in their learning throughout their online course?

Below, we briefly explore the UDL guidelines for

- recruiting interest,
- sustaining effort and persistence, and
- $\cdot$  self-regulation.



("choice" icon by Nithinan Tatah, from the Noun Project. Used under CC BY 3.0 license.)

# Strategies for increasing engagement and motivation

#### **Ensure alignment**

As mentioned previously, a good starting point in keeping learners engaged in their learning is to ensure that course content, learning activities, and assessments align with course learning outcomes.

#### Connection to prior learning

Module 1.5 describes how <u>using backward design</u> ensures that learning activities and assessments are aligned with course learning outcomes.

Be sure to remind learners that what they're doing is contributing toward the overarching goal of the course. Showing them the relevance of what they're doing will increase their motivation to continue to engage in course activities.

#### Design authentic learning activities

Provide opportunities for learners to apply their learning to real-world scenarios and toward solving real-world problems, or other meaningful practical applications.

#### Connection to prior learning

See **Examples of How Authentic Assessment Could Work** in Module 2.4 <u>Eliciting Learner Performance</u> for some ideas of how to do this.

#### Provide options for how to achieve learning outcomes

Allow learners to **choose** how they will demonstrate their learning, including offering multiple topics and formats for activities and assessments.

#### Connection to prior learning

Connection to prior learning See **Example Online Activities and Assessments** in Module 2.4 <u>Eliciting Learner</u> <u>Performance</u> for examples of various types of assessment.

#### Provide opportunities for self-assessment and reflection

Self-assessment helps learners **recognize** when **they are making progress toward learning goals**, which can be highly motivating. Providing opportunities for learners to reflect metacognitively on their developing understanding, including which concepts they've mastered, which still need to be learned, and the effectiveness of their approach to learning, **boosts both motivation and performance** (Barber et al., 2020).

#### Be an engaged instructor

Your **active teaching presence** in the course plays a significant role in **learner persistence**. When learners sense that you care about their learning, they are more likely to want to persist (Robb & Sutton, 2014, as cited by Nilson & Goodson, 2018, p. 111). For ideas of how to increase your teaching presence, take a look at Module 4.4 <u>Building</u> <u>Teaching Presence During Term.</u>

#### Create a learning community

Providing **meaningful opportunities** for learners to engage with course content, their peers, and their instructors helps learners to feel part of a community, which increases their motivation to persist in online learning.

#### Connection to prior learning

For ideas of how to build community in online courses, take a look at Module 2.6 <u>Building Community Through</u> <u>Activities and Assessments.</u>

**Examples** of each of these strategies are also available on CAST's UDL Guidelines site, on the <u>Provide Multiple</u> <u>Means of Engagement page.</u>

# Examples of how providing multiple means of engagement could work

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# Example 1: Options for authentic learning

In his Shakespeare courses, Dr. Ted McGee presents opportunities and options for his learners to engage in the kinds of authentic activities practiced by theatre and literary professionals—directors and editors—that allow them to explore (a) how Shakespeare's plays speak to audiences today and (b) how to solve textual problems in early manuscripts.

In the Director's Chair activities allow learners to don the persona of director as they make (and defend) staging decisions that allow them to explore the plays in light of contemporary issues relevant to audiences today.

At the Editor's Desk activities invite learners to play the role of someone preparing a trustworthy edition of a play, deciding (with evidence) which early version of the text should be followed, and how to deal with issues that seem problematic, incomplete, or nonsensical in the only early text that survives.

For each of these activities, learners choose to work on four out of the seven plays covered in the course.

Credit: Dr. Ted McGee, Department of English Language and Literature, University of Waterloo

Quality Essential

#### Example 2: Options for engaged teaching

#### Nudge students who are falling behind

Send targeted, personalized messages to learners who are falling behind, offering suggestions for what they can do to make up lost ground in the course. (See Module 4.4 <u>Building Teaching Presence During Term</u> for more options in this vein.)

(Darby & Lang, 2019, p. 150)

Quality Advanced

#### Example 3: Options for self-regulation

#### Learning contract activity

A learning contract is a strategy designed to give learners ownership over their learning, which helps to foster self-regulation. Learners are prompted to reflect on how they learn and are asked to establish clear goals and timelines for achieving their goals. Instructors contribute a list of expectations to which learners must agree.

See <u>Self-Directed Learning: Learning Contracts</u> from the Centre for Teaching Excellence at the University of Waterloo for information about how to use this strategy, including a learning contract template and completed sample contract.

Credit: Centre for Teaching Excellence, University of Waterloo

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#### Example 4: Options for sustaining effort and persistence in a blended course

In a blended course (or online course with synchronous elements), reflection questions are provided periodically throughout each module of online content. Learners select a question to respond to at the end of each module and compose a short 1–2 paragraph reflection on a theme that piques their interest, which they submit online prior to a live/face-to-face session. During a subsequent synchronous session, these reflection questions can be utilized in different ways to engage learners. For example, instructors can choose specific questions from the reflections for small topic-based group discussion, or additional questions can be posed that build on the ideas from the original reflection questions. Overall the reflection questions provide learners with the opportunity to think through their ideas on the module topic before the live session.

These strategies encourage learners to persist and stay engaged in their learning, provides the opportunity to think through their ideas on the module topic before the live session, to explore particular interests with peers, and gives instructors insights into learners' evolving understanding of course content while also allowing them to pivot the direction or facilitation approach of synchronous sessions in response to learners' needs and interests (while still achieving the intended learning outcomes). This approach works equally well with professional and novice learners.

Credit: Dr. Peggy DeJong and Dr. Amber Hastings-Truelove, HPE 806: Indigenous Health Professions Education, Master of Health Professions Education, Queen's University

# An EDII perspective: Understanding the AODA

While UDL is designed to improve learning for everyone, we have a particular ethical and legal responsibility to ensure that learners with disabilities have equitable access to our learning spaces. **The Accessibility for Ontarians with Disabilities Act (AODA)** is a law enacted in 2005 by the Legislative Assembly of Ontario to ensure full accessibility for Ontarians with physical and mental disabilities to all public establishments by 2025 (see <u>What is the AODA?</u> for more information).

The purpose of the AODA is to develop, implement, and enforce accessibility standards or rules so that all Ontarians will benefit from accessible services, programs, spaces, and employment. **The standards help organizations to prevent or remove barriers that limit the things people with disabilities can do, the places they can go, and the attitudes of service providers toward them**."

(Thomson, 2018)

The AODA Postsecondary Education Standards Development Committee propose a number of recommendations for decreasing barriers and ensuring publicly funded postsecondary education is more accessible to people with disabilities. Many areas are covered, but highlighted themes include reducing barriers to accessible online learning and addressing accommodations through a UDL approach.

Refer to the <u>AODA Education Standards</u> site for more information, and if you are interested in exploring the recommendations directly, read the Postsecondary Education Standards Development Committee's initial report: <u>Development of Proposed PSE Standards – 2021 Initial Recommendations Report.docx</u>.
# An EDII perspective: Understanding the difference between accessibility and accommodation

It is likely that if we do not experience a visible or hidden disability, then we might think that the terms **accessibility** and **accommodation** are interchangeable terms, but this is incorrect.

# Definitions

Accessibility "is what we should expect to be ready for us without asking or planning ahead. It can be provided by following an easy to implement set of standards and practices that make 'adaptation' unnecessary. We can benefit from accessibility without announcing or explaining our disabilities" (Pulrang, 2013).

**Accommodation** "is for adaptations that can't be anticipated or standardized. They are different for each individual. Although we should expect there to be a general willingness to accommodate us wherever we go, we can't expect actual, specific accommodations unless and until we ask for them. We do have to announce, and may have to explain our disabilities a bit in order to get accommodations" (Pulrang, 2013).

Accessibility is the baseline of equal service, and accommodation is the second step to take when accessibility alone isn't enough." (Pulrang, 2013)

UDL provides a strong framework for proactively ensuring that a majority of our content and design is accessible, and the need for reactive individual accommodations is reduced.

# Develop accessible online content

It is important to ensure that course content is as accessible as possible when it is created in an online platform.

# Strategies for organizing and formatting accessible course content

Making your content accessible can seem like a daunting task. The following three considerations are a good place to start:

# Universal Design for Learning (UDL)

All learners benefit when you use the principles of Universal Design for Learning in organizing and formatting your content (see <u>Design Accessible Online Content</u> above and <u>Provide Multiple Means of Action and Expression</u> in Module 2.4).

# Consider assistive technologies

Some learners will use **assistive technologies** to access online content. Blind and visually impaired learners may use **screen readers**, while learners who are hearing impaired rely on **live captions and transcripts** (<u>WebAIM</u>).

# Use an accessibility checker

Use an **accessibility checker**: Many applications and learning management systems have built-in accessibility checkers that will flag accessibility problems, such as insufficient colour contrast or incorrectly formatted headings. Microsoft Word, PowerPoint, and Excel come with built-in accessibility checkers, while you can download apps to check the accessibility of Google Slides, for example. It is also possible to make fully accessible PDFs. For websites, you can use <u>WAVE, the Web Accessibility Evaluation Tool</u>.

# Accessible content organization

**Headings**: Headings define the hierarchy of content, and screen readers and other assistive technologies rely on properly formatted headings to navigate a web page or document. Ideally, there should be one h1 per page or document, used for the title of the document/page. For subsections, use h2, h3, h4, and so on to nest content. **Headings should follow logically and should never skip a level** (i.e., do not go from h1 to h3). For example:

- · <h1> Course syllabus </h1>
  - <h2> About this course </h2>
    - <h3> Course description </h3>
    - <h3> Meeting time and location </h3>
    - <h3> Contact information </h3>
  - <h2>Course content </h2>
    - <h3> Required texts </h3>
    - <h3> Weekly topics </h3>

Typically, when composing text in an application (rather than directly coding), the application will have a "heading" section where the h1, h2, h3 formats are prepopulated and it is as easy as selecting the heading to insert it in your body text.

Where possible, arrange text linearly and **avoid using tables to display information**. Screen readers and other assistive technologies struggle to make sense of information presented in tables unless very specifically formatted.

# Accessible font and colour choices

Avoid relying only on bolded text, coloured text, or font changes to indicate important information or emphasis. Screen readers and other assistive technologies do not interpret bolded or coloured text as hierarchical or of greater or lesser importance. Headings should be used to structure content, and any visual cues signalling key information should be accompanied by written cues. When you do use colour, make sure the text and background colours have **strong contrast** and are presented in a legible font and font size. Avoid using busy images or bright patterns as background for your text as it is distracting to the learners' ability to read text and may result in areas of the text with insufficient contrast for readability. If not using a solid-coloured background, consider backgrounds with images or strong colours and patterns only around areas where the text will not be present or use a gradient of appropriate colours or muted images/patterns that have been "blurred out" or out of focus, so the learner can access the text. Sites like <u>Colour</u> <u>Safe</u>, the <u>WebAIM Contrast Checker</u>, and the <u>University of Sussex's Accessible Colour Contrast page</u> can help you make accessible design choices.

Also, be sure to avoid strobing, flickering, and flashing text and animations as they could trigger seizures in learners with photosensitive epilepsy. The Web Content Accessibility Guidelines (WCAG) stipulate that

... if the content flashes more than three times per second, is notably large (a small animating image would not cause a seizure), and has bright contrast in the flashes (especially if the colour red is present), it may cause a seizure and must be avoided" (WebAIM, n.d.-a).

### Accessible links

Ensure links and buttons contain descriptive text (refer to the list of key terms on the <u>Module Overview page</u> for a definition of descriptive text). When naming links, **avoid generic phrases** such as "click here," "here," "more," "more information," "read more," etc. Link names should match the title of the page they're linking to, and links should be visually differentiated from other page content (<u>WebAIM, n.d.-b</u>).

## Accessible multimedia

Videos and audio (live or archived) must have captions and a transcript.

For **live sessions**, some video conferencing applications provide live captioning. This can be more or less accurate based on a number of factors, such as content area (technical or niche language is less likely to be appropriately interpreted) or accents. To increase accessibility, and to accommodate any learners who may have difficulty connecting to a session or cannot otherwise attend, live sessions should be recorded, captions should be edited, and then posted for class access in the LMS or course web page. Note that this may not be an appropriate option if sensitive or personal topics are being discussed to help protect learners who are being vulnerable in a safe space.

For **prerecorded content**, you are not expected to create these captions or transcripts from scratch, though some video conferencing or multimedia recording applications have AI that automatically



("hearing impaired" icon by IcoLabs; "Visually Impaired" by Shocho; and "computer screen" icon by Sunan, from the Noun Project. Used under CC BY 3.0 license.)

generates captions, which you can then proofread before adding to your multimedia file. Some institutions provide enterprise-level media players that can generate captions once multimedia is uploaded or offer automatic captioning services or captioning support, often through accessibility service units or centres for teaching and learning. These services vary, so inquire at your institution. You may also seek to pay a company for captioning and transcription services, and often educational rates are available.

Ensure all **audio and video elements are controllable by the learner**. This means they have, at the very least, the ability to start and stop the video/audio at any time. Most media players also allow the learner to jump forward/backward through the multimedia as needed and change its playback speed.

All these elements provide learners who need more time to perceive the content with **control over their learning experience** and the ability to review or pause material as needed. This assists not only learners with disabilities, but learners whose first language is not the language of instruction and any learner who might be struggling with learning the content. It is also best practice to provide learners with an indication of how long the multimedia will be before they click to play the item. This allows learners to decide whether they have enough time to effectively review and learn the content that will be presented before proceeding (WebAIM, n.d.-b).

Images that convey information that is useful for understanding the content should have associated alternative text (alt text). If an image is just decorative and doesn't convey meaningful information, the alt text can remain empty (refer to <u>Easy Checks – A First Review of Web Accessibility</u> for some beginner tips).



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/hqoc/?p=3085#h5p-83

## An EDII perspective: Working with alt & descriptive text

Note that generating alternative text or descriptive text is a gained skill and takes time to develop. Often, a good approach is to try to put oneself into the shoes of a learner who has never experienced the content before and also may not see the image itself. Consider what elements are most important and key to understanding the concept being presented, and describe them first in a concise way so learners can quickly grasp the key ideas and then work through the details.

Suggested resources for learning alternative text and how to make math accessible can be found through the DIAGRAM Centre, including

- image description resources for helping make images accessible and
- accessible math tools, tips, and training.

Avoid putting text on images unless necessary, so that it remains accessible to a screen reader. Text that is in the main body of your document/web page is called "true text." We've provided some examples below.

Quality Advanced

Example 1: Placing text on an image

If you want to put a quote on an image, it would be better to present the quote as regular text (true text) and put the image beside it, rather than overlay the text as part of the image. If you really needed to include the text as part of this image, then the alternate text for this image would include a description of the image and include the exact quote that was used.

Caption: In this example, the quote is overlaid on the image to create a "picture" element, therefore alternative text for this image would be something like as follows: "Image of horse sleeping with quote 'The willing horse is



always overworked' by Charles Darwin. Credit: Tahira Mursleen, University of Waterloo

#### Example 2: Using captions

You may need to include labels or text descriptors on an image for it to make sense. In this case, you could have a caption that describes the general ideas or concepts described by the image (improving comprehension and accessibility of the image for all

learners) and supplement with either alternate text or descriptive text, which provides a detailed description of all image elements and labels. Avoid including titles and captions as part of the image. In some cases, legends could be inserted into the caption or in the main body text.



Caption: In this example, the quote is part of the main text and is accessible by a screen reader. Therefore, the alternate text for the image would be "Decorative image of a horse sleeping." Credit: Tahira Mursleen, University of Waterloo

# Summary: Creating accessible online content

The "Web Accessibility for Designers" resource from WebAIM provides a nice summary of, and some additional tips for creating accessible online content. Some of these tips are specific to web page design; however, most principles apply across the mediums you might use for content creation, organization, and formatting. For a text version of the image and additional resources, click the infographic, which will take you to the WebAIM website.

# Web Accessibility FOR Designers

# Great web accessibility starts in the design.

# Plan Heading Structure Early

Provide Good Contrast

Ensure all content and design fits into a logical heading structure.

# Ensure Logical Reading Order

The reading order for screen reader users should align with the visual order.

# Good Bad

Abc

AAA

**| ←──→** Abcdefg

Link

Skip

Click

Be especially careful with shades of orange, yellow, and light gray.

Use True Text Instead of Images of Text True text enlarges better, loads faster, and is easier to translate and customize.

Use Adequate Font Size Small text is difficult for all users to see. Ensure text is optimally readable.

Remember Line Length Don't make lines too long or too short.

Make Sure Links are Recognizable Distinguish links from body text using more than just color (e.g., underline).

Design Keyboard Focus Indicators When navigating with the keyboard, the focused item must be visually distinctive.

Design a "Skip to Main Content" Link A keyboard accessible link for users to skip navigation should be at the top of the page.

Ensure Link Text Makes Sense on Its Own Avoid "Click Here" or other ambiguous link

# An EDII perspective on additional accommodations

The benefit of applying the principles discussed so far in this module, including **course and module organization**, **structure**, **visualization**, **and ensuring content is accessible**, is that not only do they improve the learning experience of all learners but they anticipate some of your learners' accommodation needs. Creating accessible content also sets you up for success with learners who require additional accommodation.

Some learners may need course content transformed into another medium, such as Braille. Having your content developed as accessibly as possible ahead of time allows learners to have their material converted to the appropriate format, enabling them to effectively participate in the course. Learners are responsible for notifying accessibility services of their needs, and a staff person is often the one who will reach out to ask for your content so it can be transformed. This process often takes weeks (or months) and providing an accessible Word document of your content can speed up the process significantly.

# 3.6 Enhancing retention and transfer (Event 9)

# What is retention and transfer?

Retention and transfer are key ingredients to meaningful learning. **Retention** refers to the storage of information in long-term memory in such a way that it can be readily retrieved. **Transfer** refers to the ability to use the knowledge or skills learned in one context in a new context, to solve new problems, or to make sense of a new situation or subject matter (Bennett & Rebello, 2012).



Caption: In Gagné's Nine Events of Instruction framework, Event 9 focuses on enhancing retention and transfer.

Credit: University of Waterloo | Image Description

# Strategies to enhance retention and transfer

Nilson and Goodson (2018) provide a useful summary of evidence-based strategies to enhance retention and transfer (pp. 80–1).

Retention and transfer are enhanced when **new material is presented to learners** 

- in an organized structure, or when they organize and structure it themselves (see Module 3.3 <u>Structuring</u> <u>Your Course</u>);
- multiple times in different ways (see <u>Designing Accessible Online Content</u>); and
- in connection with **stories and example** cases.

Retention and transfer are enhanced when learners

- are **emotionally engaged** in learning (see Module 2.6 <u>Building Community Through Activities and</u> <u>Assessments</u>);
- · learn by engaging in an activity (see Module 2.4 Eliciting Learner Performance);
- engage in retrieval practice, i.e., when they are tested or test themselves on new material (see <u>Design</u> <u>Useful Online Content</u>);
- review and engage with new material at spaced intervals (referred to as **spaced or distributive practice**);
- practice elaborative rehearsal, "which means thinking about the meaning and importance of the new material and connecting it to their prior knowledge, beliefs, and mental models" (Nilson & Goodson, p. 80); and
- occasionally review earlier material as they learn new material (referred to as interleaving).

Many of these strategies rely on **providing opportunities for learners to practice working with content**, rather than passively consuming it. Key to these practice-based strategies is **prompt and targeted feedback**, which allows learners to correct misunderstandings and improve their performance.

# Connection to prior learning

Refer to Module 2.5 <u>Providing Feedback/Feedforward and Assessing Performance</u> for more information about effective feedback strategies.

# Examples of how enhancing retention and transfer could work

Quality Essential

# Example 1: Scaffolded concept check questions in a STEM course

<u>Chemistry for Engineers</u> is an open course that uses scaffolded concept-check questions to provide retrieval practice opportunities for learners in a staged way. This strategy makes problem-solving strategies visible, helps learners target specific skill areas that they need to strengthen, and helps them develop confidence for more complex questions.

The two concept-check questions at the end of the <u>Oxidation States module</u> are good examples of how to scaffold these kinds of self-assessment questions.

Credit: Dr. Jason Grove, Department of Chemical Engineering, University of Waterloo.

Quality Essential

# Example 2: Scaffolded concept-check questions in a writing course

<u>Waterloo Writing Works</u> is a series of open modules designed to help learners improve their report-writing skills. The modules offer an overview of key grammatical structures with opportunities for learners to get feedback on their learning through "Try For Yourself" practice exercises. The <u>Waterloo Writing Works: Active Voice</u> module provides a good example of a scaffolded question that guides learners through the process of transforming a sentence from passive to active voice.

Credit: Dr. Jay Dolmage, Department of English Language and Literature, University of Waterloo.

Quality Advanced

### Example 3: Using case studies to organize or present new content

Presenting course concepts through case studies provides learners with opportunities not only to be introduced to new concepts, but also to experience how concepts are applied in practice and to develop problem-solving skills.

Depending on the level of your learner, case studies may be used to introduce a concept and then guide learning in a scaffolded way into new concepts and/or expanded for advanced courses.

#### Here's what this looks like in a third-year pathology course:

Learners are presented with hypothetical patients, which they are asked to view through the eyes of a practicing pathologist and to identify the causes, effects, and ways to diagnose and treat a given disease. Learners are not necessarily asked complicated questions about the patient; rather, the hypothetical patient is used as a framework on which learners can organize and review the content. In other words, they **practice working with content** and **engage in active learning**.

For example, for a particular topic, the hypothetical patient could be incorporated in the following ways:

- Learners are introduced to a hypothetical patient, their lifestyle factors, and any relevant (level-appropriate) symptoms. To test prior learning, learners could be asked what kind of initial test would be appropriate to run on the patient or, even more fundamentally, to review basic anatomy related to the case that they should have learned in prerequisite courses, thus activating prior learning (refer to Module 1.7 Learning About Your Learners).
- After learning details about the disease in question (core content aligned with the learning outcomes), learners may be asked which risk factors of the disease align with those of the patient, or which morphological or functional changes are likely to have occurred in the patient, based on the information they have received about the clinical history.
- Learners may be periodically asked to explain possible genetic events occurring (self-testing of content recently learned) or to hypothesize how family members may or may not be affected by the same pathology (application questions) with answers to these questions being provided right after the questions are posed and as scaffolds to support deeper learning on the topic.
- In some cases, simple narratives of how the hypothetical patient progresses through their health care journey provides an engaging and authentic way to enhance retention, rather than providing the content in an abstract way.

Arguably, the most challenging aspect of this kind of approach is to ensure that material remains levelappropriate and the use of a case-based approach does not distract from the core learning outcomes of the module/course.

**If your learners are more advanced** and already have sufficient foundational knowledge, you could use case studies as the framework for having them elicit important concepts themselves, using an <u>inquiry-based</u> <u>learning</u> approach. In this approach, instructors provide opportunities for learners to discover meaning by posing questions and providing the resources which learners use to make meaning themselves; instructors then follow up with feedback and other forms of guidance at the end of the exercise.

Credit: Dr. Chris Nicol, Queen's University

# 3.7 Using open educational resources (OERs)

# Concerning copyright

When sourcing content for your online course, **you need to be mindful of copyright**—specifically, you need to understand when you can freely use content and when permission from the copyright holder must be obtained. It is generally easier to use/seek permission to use content that will be posted behind a password (e.g., an LMS or other password-protected site). Regardless of copyright status, **resources should always be properly cited**.

Broadly speaking, in the education sector in Canada, **you can use** the following types of content in your online course **without seeking permission** (unless, of course, permission is explicitly stated as required):

- links to legal/legitimately posted content
- content in the public domain
- insubstantial amounts of content
- content copied under a Copyright Act exception (e.g., the Fair Dealing exception)
- materials licensed by your institution's library, according to the terms of the license
- materials with permissible site terms
- content with an open license (such as Creative Commons licenses)

**Take note!** Just because a work is available on the internet does not mean that it is in the public domain or that it is openly licensed. For more information about any of the categories of use listed above, see the <u>Guide for</u> <u>Instructors</u> page on the <u>Copyright at Waterloo</u> site.

# Seeking help with copyright

If you have questions about the copyright status of a particular resource you want to use, a good place to start is with your institutional librarians, who often have expertise in particular disciplinary resources.

In this module, we will explore the last category of copyright-free use: educational resources that use open licenses, such as the <u>Creative Commons</u> (CC) copyright licenses.

# What are Creative Commons licenses?

Creative Commons licenses offer creators "a simple, standardized way to grant copyright permissions to their creative work" (<u>Creative Commons, n.d.</u>). These licenses provide a way for creators to grant users rights to use or adapt their work (provided that they follow the conditions outlined in the license), while still retaining the copyright to their works.

# A (meta)example of a CC-licensed open educational resource

### How we did this in this course

This course is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International</u> <u>license</u> (CC BY-NC-SA 4.0), which means that users can

- share (i.e., copy and redistribute the material in any medium or format) and
- adapt (i.e., remix, transform, and build upon the material)

#### provided that the following usage conditions are met:

- **attribution** (i.e., appropriate credit is given, a link to the license is provided, and an indication of whether changes were made is included);
- noncommercial (i.e., the course may not be used for commercial purposes), and
- **sharealike** (i.e., if the material is remixed, transformed, or built upon, the new contribution must be distributed under the same license as the original).

You will notice, in the reference sections throughout this course that we have indicated where we have adapted material from other CC-licensed resources in order to meet the "attribution" condition associated with the license.

# What are open educational resources? (OERs)

OERs are educational resources to which their creators have assigned an **open license**, (e.g., a Creative Commons license), allowing other educators to **use the material freely**, provided that the conditions outlined in the license are met.

OERs are an increasingly popular choice for online course designers and authors, as they save authors time by allowing them to build on work that has already been created and save learners money when they are used in place of pricey textbooks.

# An EDII perspective on OERs

OERs not only increase the accessibility of postsecondary education to learners from a financial perspective, but they also often provide more functionally accessible forms of course content for learners who require assistive devices or have other forms of learning accommodations.

#### The trick, of course, is finding quality OERs that speak to your learning outcomes.

Thankfully, OERs are flourishing online, with many options for high-quality content across the disciplines. Below, we've curated a partial list, derived in large part from eCampusOntario's <u>Extend, Curator module</u>: <u>Spotlight on Repositories</u>. (The original work is licensed under a <u>CC BY-NC-SA 4.0 International license</u>.)

# Where to find OERs

OERs can be found in OER referatories or OER repositories. A referatory is a website that links out to content hosted elsewhere. Repositories host resources on their own servers. You may find the same OER located both in a referatory and a repository.

#### Referatories

The following referatories provide good starting places for finding OERs:

#### McMaster University's OER by Discipline Guide

A reference list of OERs, mainly focused on open textbooks, organized by subject area and disciplines including Sciences, Social Sciences, Business, Humanities, and Engineering.

#### Mason OER Metafinder (MOM)

Developed by the George Mason University Libraries, the Mason OER Metafinder searches through about 15 sources dedicated specifically to collecting and indexing open educational resources, as well as other sources on the web that include free or public domain resources, such as the Library of Congress.

#### **OASIS** (Openly Available Sources Integrated Search)

Developed by the State University of New York Geneseo Library, OASIS searches open content from over 100 different sources that collect open educational resources. You can filter by subject, type, license, source, and whether a resource is peer-reviewed.

<u>Open Waterloo</u> presents a variety of open-access resources across the disciplines (Arts, Engineering, Environment, Math, Science).

### General repositories

#### **BCCampus OpenEd**

This repository hosts robust open textbook and open course materials collections, licensed under Creative Commons licenses. Resources can be adapted to meet your learning outcomes according to the terms of the CC license. The site also includes an Open Education Self-Publishing Guide to help you prepare to write and publish your own open textbook.

#### Commonwealth of Learning's Open Access Repository (OASIS)

The Commonwealth of Learning is an intergovernmental organization that promotes the development and sharing of open learning materials among Commonwealth member states and institutions. Resources are licensed under Creative Commons BY-SA 4.0 and can be freely downloaded for reuse and adaptation with attribution to COL (with exceptions noted).

#### <u>CORE</u>

Based in the United Kingdom, CORE is committed to aggregating open access research from across the globe. With full text access to over 6 million articles and metadata for an additional 70 million, you can access the latest work from colleagues and leaders in your discipline from around the world.

#### eCampusOntario H5P Studio

The eCampusOntario H5P Studio allows Ontario educators to create, share, and discover over 45 different types of interactive activities, which can be embedded into a learning management system (LMS). Many of the resources carry an open license, and the platform allows you to adapt these resources to better suit your teaching and learning needs.

eCampusOntario Open Library

The eCampusOntario Open Library hosts open educational resources for the postsecondary sector. The library has over 500 resources spanning from textbooks to syllabi. All the resources in the Open Library have an open license.

#### LibreTexts

Started in 2008 at the University of California Davis, LibreTexts is one of the largest and most visited online textbook platforms, hosting 13 library disciplines ranging from chemistry to the workforce to the humanities.

#### **MERLOT**

One of the first and still one of the largest, MERLOT or Multimedia Educational Resources for Learning and Online Teaching, aggregates 19 different types or categories of resources. There is initial vetting by MERLOT volunteers combined with the ability of peers to assess each resource.

#### MIT Open Courseware:

Beginning in 2000, MIT has been committed to contributing its courses and accompanying resources online for free (CC BY-NC-SA). With 2,400 courses in the repository, educators can browse and borrow material relevant to their own courses. Features to note include "Instructor Insights" by MIT lecturers and professors and the newly implemented filter or search by "instructional approach," which allows you to limit your search to resources that promote active learning, model design process, or support reflective practice.

#### **OER Commons**

OER Commons hosts open educational resources of various formats (e.g., activities, lessons, interactions, etc.). You can filter by subject area, educational level, media format/type, and accessibility, to name a few.

#### Public Domain Review:

Founded in 2011, this is an online journal and not-for-profit project dedicated to the exploration of curious and compelling works from the history of art, literature, and ideas. The focus is on works which are now in the public domain, i.e., that vast commons of out-of-copyright material that everyone is free to enjoy, share, and build upon without restriction.

The University of Waterloo also provides lists of OER repositories on the following sites:

- Catalogue of OER sources and
- Open Educational Resources in Canada.

# Discipline-specific repositories

#### Business: MIT Sloan School Teaching Resources Library

Simulations from the Sloan School of Business at MIT are complex but highly engaging and rewarding. These simulations are more suitable as a central component of a course rather than as a supplementary resource.

#### Engineering: Canadian Engineering Education Association OERs

Explore the Canadian Engineering Education Association (CEEA)'s OER Special Interest Group, whose goal is

[t]o support the development, use, and dissemination of open educational resources (OER) for engineering, and provide central place for CEEA-ACEG members to find collaborators for OER projects among other Canadian engineering educators" (CEEA-ACEG, n.d.).

Also, be sure to take a look at their instructor Quick Guides on a variety of topics.

#### English as a Foreign Language (EFL) Open Education Database

This site aggregates 50 comprehensive resources on EFL, dividing its list into specific topics of concern for learners.

#### **Open Culture**

Open Culture brings together high-quality cultural and educational media for the worldwide lifelong learning

community. Its mission is to centralize this content, curate it, and provide access to this high-quality content whenever and wherever users want it.

#### Psychology: The Noba Project

Noba is an open and free online platform that provides a high-quality, flexibly structured psychology resources for instructors and students. Noba has also curated the various modules into a number of "ready-made" textbooks that instructors can use as-is or edit to suit their needs.

# Image repositories

- <u>Creative Commons Search</u>
- Flickr.com
- <u>Unsplash.com</u>
- <u>Pexels.com</u>
- <u>Suggested resources for free images, video, and audio</u> from the University of Waterloo's Centre for Extended Learning.
- <u>Nappy.co</u>
- <u>unDraw</u>
- Raw Pixel Public Domain
- <u>Pixabay</u>

# Activity: Curate a list of open educational resources (OERs) to use

#### Learning outcomes:

This activity is directly aligned with **Course Learning Outcome (CLO) 6**: Structure and present your online content and assessments in ways that facilitate student learning and foster a sense of community.

#### Instructions:

Browse the repositories and referatories referenced in this section, and curate a list of OERs that you can use to deliver some (or all) of your course content. Document your choices below.

Option 1: Download the My OER List [DOCX] worksheet to create a Word version to complete offline.

**Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



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# 3.8 Summary: Learner-centred course structure and content

As you structure your course and develop your content, think about what your learners need in order to learn successfully. Gagné's **Nine Events of Instruction** provides a useful framework for creating the conditions for successful learning in your course. Here's how we've applied this framework in this module:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3234#h5p-75</u>

Credit: University of Waterloo | Image Description (PDF)

# Module summary activity: Reflect and plan

# **Reflect on your learning**

#### We've given you a lot to take in!

Take a moment to **reflect**: What are you already doing to incorporate Gagné's Events 1 (Gain attention), 4 (Present the content), and 9 (Enhance retention and transfer) into your own teaching practice?

### Think about:

#### Your course structure

- Have you structured your course in a way that makes learning materials and assessments easy for learners to find?
- · Are modules and topics clearly labelled and organized?
- · Are activities and assessments well-paced across the term?

#### Your course content

- Does your content align with your course learning outcomes and build on your learners' prior knowledge?
- Have you included strategies to capture your learners' attention, especially when introducing new topics?
- Have you provided opportunities for learners to practice working with content?
- Is the content presented in ways that avoid cognitive overload and help learners select, organize, and integrate new knowledge with prior learning?
- Are learning materials accessible to all learners?
- Have you included strategies to enhance learning retention and transfer?
- · Have you made use of relevant open educational resources (OERs)?

# Plan next steps

What steps do you need to take to ensure that you are setting your learners up for success in your course?

#### Congratulations on completing Module 3 of this course!

Select **Next** in the footer at the very bottom of the screen to navigate to the **Resources for Further Study** section, which offers deeper dives into particular topics addressed in the module, or continue to <u>Module 4</u>!

# 3.9 Resources for further study

For those interested in learning more about particular topics in Module 3, we've included links to further resources below. Resources are organized by topic and arranged in the order in which they appear in the module. To view longer summaries of particular resources, select the "Click for resource description" tab.

# Organizing your course

# Online teaching toolkit, Association of University and College Educators (ACUE)



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-76</u>

# Teaching toolkit: Course organization, Queen's University

Teaching Toolkit: Course Organization, Centre for Teaching and Learning, Queen's University



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-77</u>

# Structuring weekly online content, University of Waterloo

<u>Creating Weekly Introduction Pages</u> is a succinct resource created by the Centre for Extended Learning that includes tips on how to segment content, create weekly introduction pages, curate, and organize content in your learning management system.

# **Presenting content**

# Nine ways to reduce cognitive overload in multimedia learning

Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive overload in multimedia learning. Educational<br/>Psychologist, 38(1), 43–52.<a href="https://faculty.washington.edu/farkas/WDFR/">https://faculty.washington.edu/farkas/WDFR/</a>MayerMoreno9WaysToReduceCognitiveLoad.pdf



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-78</u>

# The cognitive theory of multimedia learning

Mayer, R. (2009). Multimedia learning (2nd ed.). Cambridge University Press.

"How Do We Create Useful Online Learning Experiences?" on the User Experience Design for Learning (UXDL) Honeycomb website provides an overview of Mayer's cognitive theory of multimedia learning, with examples across disciplines illustrating each of the principles highlighted.

Noetel, M., Griffith, S., Delaney, O., Harris, N. R., Sanders, T., Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2021). <u>Multimedia design for learning: An overview of reviews with meta-meta-analysis</u>. *Review of Educational Research*. https://doi.org/10.3102/00346543211052329



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-91</u>

# User Experience Design for Learning (UXDL) research

<u>"The User Experience Design for Learning (UXDL) Framework: The Undergraduate Student Perspective"</u> (Troop et al., 2020) presents results of a validation study on the UXDL framework.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-79</u>

# Using video

Lackmann, S., Léger, P.-M., Charland, P., Aubé, C., & Talbot, J. (2021). <u>The influence of video format on</u> <u>engagement and performance in online learning</u>. *Brain Sciences*, *11*(2), 128. https://doi.org/10.3390/ brainsci11020128



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Wilson, K., Martinez, M., Mills, C., D'Mello, S., Smilek, D., & Risko, E. F. (2018). Instructor presence effect: Liking does not always lead to learning. *Computers & Education*, *122*, 205–220. https://doi.org/10.1016/j.compedu.2018.03.011



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-81</u>

# Storyboarding an online course

The <u>ABC Online Course Design</u> workshop by Western University's Centre for Teaching and Learning and Ryerson University's Centre for Excellence in Teaching and Learning presents a storyboarding process/approach using <u>Trello</u>. Participants map and organize six "learning types" (acquisition, investigation, collaboration, discussion, practice, and production) that they will use in their course. The workshop can be accessed asynchronously and is made available through an <u>Attribution-NonCommercial-ShareAlike 4.0 International</u> license.

# Creating accessible content

The University of British Columbia has created an <u>OER Accessibility Toolkit</u>, which focuses on what is needed to create truly accessible educational resources—ones that are accessible for all students.

The University of Toronto's Ontario Institute for Studies in Education offers an education commons page specifically on <u>accessibility tools and resources</u>, which offers a variety of accessibility checkers, checklists, and testing functionalities that allow you to gauge if your content is accessible. There are also many resources specifically dedicated to creating an accessible website.

The National Centre on Accessible Educational Materials' site, <u>Designing for Accessibility with POUR</u>, provides tutorials on how to make Word, Google, and PDF documents accessible, how to write descriptive text and alt text, how to use built-in accessibility checkers, how to locate or create captions for videos, and more, all guided by a set of four principles that define the qualities of an accessible experience.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hgoc/?p=3240#h5p-84</u>

The University of Waterloo, together with eCampus Ontario, have created a set of <u>Web Accessibility Guidelines</u>, which describe, in plain language, the Accessibility for Ontarians with Disabilities Act (AODA) legislation for accessible websites and web content, which is based on the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 (WCAG 2.0) at Level AA.

Conestoga College have created a very useful Accessibility Checklist for OER Development (DOCX).

# Creating inclusive content

The Centre for Teaching and Learning at Columbia University has produced a <u>Guide for Inclusive Teaching</u> <u>at Columbia</u>, which highlights five inclusive teaching principles derived from research and evidence-based practices, and includes practical, accessible, and usable strategies that instructors can readily adopt into their teaching practice.

## Metacognition

<u>The Big Reveal: Showing Students How Metacognition Works</u> by The Learning Scientists presents an overview of how to improve metacognitive regulation in learners.

# Retention

Bawa, P. (2016, January 5). <u>Retention in online courses: Exploring issues and solutions—a literature review.</u> SAGE Open.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=3240#h5p-82</u>

<u>Retention issues in higher education</u> by S. Brown is a comprehensive list of suggestions for improving retention for postsecondary learners framed as reflective prompts. It also includes an extensive reference list.

<u>8 Great Ways to Enhance Retention [Infographic]</u> highlights key strategies to increase retention, including retrieval practice (e.g., self-assessment), visualizations, feedback, interleaving, and distributed practice.

# Copyright

# Copyright-free media sources

<u>Suggested Sources for Free Images, Video and Audio</u> from the Centre of Extended Learning at the University of Waterloo is a curated list of sites that house freely available resources, including a description of the types of resources available and notes with special usage and copyright considerations.

# **Copyright Guide for Instructors**

Copyright at Waterloo's <u>Guide for Instructors</u> helps instructors understand when they might require copyright permission and when they do not.

# The Copyright Act, Work available through the internet exception

<u>Copyright Act, RSC 1985, c C-42, Work available through the internet</u> explains the **Work Available through the internet** copyright exception.

# Creative Commons, About the licenses

Creative Commons' <u>About the Licenses</u> page describes the various Creative Commons licenses available with links to license deeds and legal codes.

# Fair dealing copying guidelines

<u>Check Before You Copy (PDF)</u> from the University of Waterloo, and the <u>Fair Dealing Guidelines (PDF)</u> from the Council of Ministers of Education, Canada, provide useful summaries of what is permissible to copy under the Fair Dealing Advisory.

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The examples provided in the *Examples of how designing content with UXDL principles could work* section are derived from the original by K.E. Wilson et al., *Humanizing learning: A guide to creating connection, engagement and inclusivity.* (2021). Licensed under a <u>CC BY-NC-SA 4.0 International License</u>, except where otherwise noted. The original has been adapted through modification of text, images, and headings. This derivative work is licensed under CC BY-NC-SA 4.0 International.

The sections An EDII perspective: Understanding the AODA, and An EDII perspective: Understanding the difference between accessibility and accommodation are derived from the original by K. E. Wilson et al., Humanizing learning: A guide to creating connection, engagement and inclusivity. (2021). Licensed under a <u>CC BY-NC-SA 4.0 International License</u>, except where otherwise noted. The original has been adapted through modification of text, images, and headings. This derivative work is licensed under <u>CC BY-NC-SA 4.0 International</u>.

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# MODULE 4: QUALITY FACILITATION AND IMPROVEMENT

# 4.1 Module overview



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1217#oembed-1</u>

#### Transcript (PDF)| Video length ~ 2 min.

Welcome to Module 4! This module focuses on the final stages of the online course life cycle, namely **facilitation** and **improvement**. While designing a high-quality online course is crucial to a great experience for you and your learners, what you do when teaching your course during term and how you improve it after that can be just as impactful as good design.

In the first three modules, we focused on the Nine Events of Instruction framework. For this module, we change gears to focus on the Community of Inquiry framework for online teaching, which we will explain in the coming pages.

In this module, you will be asked to think about the following key questions:

- How can you create a sense of community within an online course?
- How can you support student engagement with course materials and activities during a course offering?
- How will you assess the success of your online course design and plan for changes and improvements?



Caption: The structure of this course is shown, with the four modules mapped to the three stages of online course development. Module 4 Quality Facilitation and Improvement pertains to the Deliver and Revise stage. Credit: University of Waterloo | Image Description (PDF)

# Module learning outcomes

By the end of the module, you should be able to

- identify **facilitation strategies** that you will use to build your presence and foster an inclusive, supportive environment in your online course;
- create opportunities for learners to engage in **meaningful interactions** that foster a sense of belonging to a learning community; and
- create a plan for **iterative improvement** in your online course design and delivery.

# Key terms

The following is a list of key terms that you might find useful to review prior to working through the content of this module:



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1217#h5p-36</u>

# Sections in this module

You can jump to any of the sections in this module by clicking the links below or using the left-side navigation menu.

- 4.2 Module examples, strategies, and templates
- 4.3 Introduction to Community of Inquiry framework
- 4.4 Building teaching presence during term
- 4.5 Fostering social presence during term
- 4.6 Assessing and revising your course
- 4.7 Summary: Facilitating for community
- 4.8 Resources for further study
- 4.9 Bibliography

# Activities in this module

The module activities are designed to help you **create materials that you can use while teaching your online course, and for assessing and revising it after term**. For ease of use, clicking the provided links will allow you to jump directly to the location of the course where the activity is located.

- <u>Create a welcome announcement</u>: A welcome announcement capturing your personality and expertise that you can use in an upcoming course.
- Design a structured synchronous session: A detailed plan for a synchronous session for your course.
- Create a plan for assessing and revising: A detailed plan for assessing your course.
- <u>Create a checklist</u>: A custom document listing online teaching strategies that you plan to use throughout the term.

# 4.2 Module examples, strategies, and templates

If you are primarily interested in exploring concrete examples of quality design principles, consider jumping directly to the examples, strategies, and templates included throughout this module. These are drawn from real courses and instructors across disciplines and learning contexts.

# Examples

#### 4.4 Building teaching presence during term

- Examples of welcome announcements
- Examples of weekly announcements
- Examples of sharing your personality
- Examples of individual communications

#### 4.5 Fostering social presence during term

- Examples of signalling your presence
- Examples of synchronous session plans

#### 4.6 Assessing and revising your course

- Examples of surveys and evaluations
- Examples of using LMS metrics

# Strategies

#### 4.4 Building teaching presence during term

- <u>Welcome announcements</u>
- Weekly announcements
- <u>Sharing your personality</u>
- Individual communications and timely responses
- <u>Reaching out to learners</u>

#### 4.5 Fostering social presence during term

- Signalling your presence
- Balancing your involvement
- <u>Responding to conflict and poor etiquette</u>
- <u>Responding to lack of engagement</u>
- <u>Using synchronous sessions</u>

#### 156 | 4.2 Module examples, strategies, and templates

#### 4.6 Assessing and revising your course

- <u>Surveys and evaluations</u>
- LMS metrics

# Templates

#### 4.6 Assessing and revising your course

• Examples of surveys and evaluations

# 4.3 Introduction to the Community of Inquiry framework

# What is the Community of Inquiry framework?

In 2000, when online higher education was in its infancy, Garrison, Anderson, and Archer published a seminal paper introducing a theoretical model for approaching online courses and discussions called **Community of Inquiry**. Since then, the model has been widely adopted by educators and researchers across the world of online education (Garrison, 2017). The model details three essential types of presence that form the building blocks of a course community— a community of inquiry.

The three presences are

- teaching presence,
- social presence, and
- · cognitive presence.

#### Who is D. Randy Garrison?

D. Randy Garrison is professor emeritus at the University of Calgary. For four decades, Garrison has been one of Canada's leading researchers in the field of distance and online education, with his best known work centring on validating and improving the Community of Inquiry framework, which he helped to develop.



Caption: Community of Inquiry Venn Diagram, with Teaching Presence (Structure/Process), Social Presence, and Cognitive Presence circles. The space where all three circles overlap represents educational experience. The overlap of the social and cognitive presence circles represents supporting discourse. The overlap of the cognitive and teaching presence circles represents selecting content. The overlap of the teaching and social presence circles represents setting the climate. (pfrench, n.d.)

Traditional education models have implicitly centred on educational communities from the very start. Every classroom is a small community of people brought together to explore a subject (**cognitive presence**), learn from an expert (**teaching presence**), and support one another through it all (**social presence**). As the above diagram shows, these three key types of presence overlap one another during the processes whereby course communities **select content**, **support discourse**, and **set a climate** for learning. Moreover, these types of presence are just as important when teaching online as they are in a classroom.

#### Key take-away:

Humans learn best when they learn in a community featuring social, cognitive, and teaching presence.

When facilitating an online course, however, building a sense of community may not come naturally, especially when you are first getting started. It is often important to be **intentional** and **plan** how you will build and contribute to the learning community in the course you are teaching. For this reason, it is helpful to break down the concept of community into the three presences above (teaching, social, and cognitive presence) in order to make sure all three types of presence are available in a given course. Let's review each in more detail below.

### Teaching presence

Ensuring that learners experience your teaching presence is perhaps the most essential goal to keep in mind when teaching your online course. While we often think of "presence" as implying physical proximity to other

people, teaching presence is something that can be created in spite of any distance, and which conversely may not arise automatically even in an in-class course. Rather than a direct effect of physical distance, presence is something experienced (or not) by your learners wherever they are.

When learners are aware that you are **invested in your course** and in their learning, that they can turn to you for **help with their learning**, and that they can **rely on your support**, they experience your **teaching presence**. Learners who experience the presence of their instructor online are much more likely to complete the course and succeed in their learning goals. We will talk about some strategies for creating teaching presence online and provide some real-world examples.

# Social presence

An experience of social presence is key to student success, and is also likely to contribute greatly to your own satisfaction with your online teaching. Social presence is just what it sounds like; it arises when you and your learners experience **an atmosphere of safe and open enquiry and mutual support** in your class, which in turn allows learners to learn from one another and support each other through the challenges of a given course. As with teaching presence, it is absolutely possible to create a sense of social presence in an online course in spite of physical distance—many of the principles and examples in the rest of this module will show you some of the ways you can do so.

# Cognitive presence

Cognitive presence encompasses the many forms of **mental transformation** that learners (and instructors!) undergo as a result of engaging in a learning experience. Expansion of knowledge and skill, shaping of critical perspectives, and construction of meaning and understanding are all types of cognitive presence. Much of what goes into helping learners experience cognitive presence in your course happens during the design phase (discussed in the previous three modules). For these reasons, we will talk a little less about cognitive presence in this module as compared to teaching and social presence.

The three forms of presence identified in the Community of Inquiry framework overlap to create an overall educational experience for your learners. While much of the work of fostering these types of presence is done when designing your course, keep all three of them in mind as you begin teaching during term and ask yourself the following key question:

#### Key question:

How can I actively support each form of presence from the Community of Inquiry framework as my course goes along?

# 4.4 Building teaching presence during term

# What is teaching presence?

As noted in the previous section, **teaching presence** is something experienced by learners when they perceive the impact of your expertise and personal investment in their learning. Teaching presence can be created at any distance, through a wide variety of media, and is something we **build into courses** when designing them and **cultivate actively** when teaching them.

We define teaching presence as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. Teaching presence begins before the course commences as the teacher, acting as instructional designer, plans and prepares the course of studies, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction when required. (Anderson et al., 2001)

# Why teaching presence matters

It is, of course, possible in our age to learn nearly anything you wish on your own time using nothing more than an internet connection and possibly a library. Yet, when we are serious about learning something, most of us are likely to enroll in a course of instruction of some kind to meet our learning goals.



(Garcia, 2020)

In other words, humans tend to seek guidance of some kind when gaining new knowledge and learning new skills. The raw availability of information is not sufficient—we need experts to help us to know what information to focus on and help us put various elements together into greater structures of knowledge and skill. In short, teaching presence matters simply because humans learn best from other humans and not from static documents, videos, and the rest.

# Strategies for building teaching presence



("Idea" icon by ProSymbols, from the Noun Project. Used under CC BY 3.0 license)

## Welcome announcements

First impressions matter, so start off on the right foot by welcoming learners into your course the way you might welcome someone into your classroom or home. You can welcome learners with a typed message or a personalized video distributed through the Announcements function present in most Learning Management Systems (LMSs). Some suggested talking points for a useful **welcome announcement** are listed below.

- **Introduce yourself**. Briefly tell learners a bit about yourself and what you are excited about in the course (content or assessments). Try to keep it short, but consider including a hook of some kind to pique their interest. You can direct them to a page in the course syllabus or an About the Instructor or About the TA page. The more information you provide about yourself, the more likely they are to relate to you. If you have them, encourage your TAs to introduce themselves as well via video or discussion board.
- Show them around. Help learners quickly orient to the organization and layout of the course. Courses may be organized in different ways that are not always intuitive. Provide learners with a quick overview of where they can find critical information in the course (especially the course schedule). If there is a task, activity, or assessment that they must complete in the first week or two (e.g., join groups, introduce themselves in a discussion forum, complete a prelearning quiz, etc.), point that out for them in your welcome message. Remember, many online courses are self-paced, and without explicit direction, some learners may not really dig into course content until week two or three.
- Help them feel at ease. Highlight for your learners how they can get help and support from you. What are you committing to in terms of communication and monitoring? What should they expect in terms of email response wait times? It's helpful to set these expectations early. If you have included details about this elsewhere in your course (e.g., the syllabus or a contact information page), point out that this information can be found there.

This first announcement can really set the tone for the course. And remember your announcement can simply
be made on a smartphone or a normal desktop computer. You don't need to be fancy—in fact, simpler videos can provide a helpful human touch for your learners.

#### Examples of welcome announcements

Quality Essential

#### Example 1: Welcome announcement

A simple welcome announcement for a course on online teaching from Michelle Pacansky-Brock.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1435#oembed-1</u>

Transcript for <u>Welcome to Humanizing Online Teaching and Learning</u> available on YouTube. | Video length ~ 2 mins.

(Pacansky-Brock, 2018)

#### Weekly announcements

Weekly announcements are one of your best platforms for creating teaching presence in your course. Creating at least one fresh announcement each week signals your ongoing engagement and lets learners know you remain invested in the course and their success.

Regular announcements can also be used to create opportunities for direct instruction, for instance by clarifying a point of confusion that has arisen for learners, sharing supplementary materials, or connecting a current topic to events in the news, among other strategies.

Even if there isn't much to say in a given course week, make an announcement anyway. And whatever you share in your announcements, use them as an opportunity to celebrate your learners' success, show empathy with their struggles, and above all signal that you are available if and when they need help on anything big or small.

Quality Essential

#### Example 2: Text-based weekly announcement

Here is a real example of a weekly announcement from an instructor during term.

#### Announcements 🗸

# Weekly Announcements 🗸

Posted Oct 29, 2021 10:49 AM

Dear Medieval Theology students,

Happy Thanksgiving!

While many of us may not be experiencing our usual gathering today due to pandemic restrictions, I hope you are still taking a chance to reflect today on all that we have to be grateful for, even during this difficult year. Without our usual guests, my family's turkey will be smaller this year, but we will feast as we are able. For my part, I am grateful in no small degree for all of you and your presence in this class and in our program. Many of you have sacrificed your preferred learning model to persevere with your studies, and many others continue to carry on with online learning in spite of new challenges and responsibilities. Your efforts are truly remarkable, and I am indeed thankful to God for them and for all of you.

The Week 5 module is open and ready for you to start. Our forum seminar will take place next week. By now you are probably getting a sense of the routine, but if there are any questions or anything is confusing do please let me know.

Finally, forgive me for getting behind on marking the short essays from last week. I had scheduled to do so over this weekend, but my entire family has come down with a cold that has slowed things quite a bit. Our doctor is confident that it is not covid, thankfully, but it does make a lot of things tricky especially at the moment when the children will not be able to attend school for a little while at least. Keep us in your prayers, and thank you for your patience on the essays. For what it's worth at this point, they were all truly excellent!

Enjoy the content this week and post any and all questions and comments in the questions forum!

-Instructor

Show All Announcements

Credit: Daniel Opperwall, Trinity College, University of Toronto | Image Description

#### Example 3: Video weekly announcement

Instead of a text-based weekly announcement, you can try a video announcement like this one from Denise Maduli-Williams.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1435#oembed-2</u>

Transcript for <u>Week2Fall2019</u> available on YouTube. | Video length ~ 1 min. (Maduli-Williams, 2019)

## Sharing your personality

#### What instructors have to say...

"Being personable does not mean you need to get personal." Credit: Prof. James Skidmore, online instructor

#### What learners have to say...

"I like the personalization myself ... takes away a lot of those 'barriers' we get in online courses with our instructors. Puts a person to the name. And those personalities! So much passion for what they do ... it's clear, and motivating. You don't want to disappoint them."

Credit: Julie, online learner

We all have different personalities and teaching styles. Authenticity is important not only for ensuring that you don't spend excessive time editing and sculpting your persona, but also because when interactions online are not authentic, learners see that and appreciate them less. While authenticity is key, we can and should take advantage of one of the benefits of asynchronous interactions with learners, which is that it provides a natural temporal lag that enables us to be more mindful of what we present to learners and how we respond to their inquiries.

Here are two tips for putting your **best online facilitator self** forward, adapted from Errol Craig Sull (2012):

- Establish a friendly and inviting persona on day one of class. You have only one chance to make a first impression, and in the online classroom, this is especially true. Your message on day one can be examined, experienced, and revisited throughout the course. Thus, postings should convey that you care about the class, the learners, and the subject, and that you are looking forward to the course and are eager to help your learners.
- Use your interest in the subject to help build your online teaching personality. You were selected to teach your subject because of your academic and/or professional expertise and interest in the subject, so share it with your learners. Beyond what has been prestocked in your course, you can often add articles, pictures, essays, cartoons, interviews, YouTube (and the like) snippets, and factoids that add richness and

depth to your subject. The learners will immediately know you really are "into" the subject, and your excitement and enthusiasm will spill over.

Remember, you don't need to share private details about your life in order to establish your personality. Keep things light but authentic whenever you can. Consider creating an "About the instructor" or "About the author" page for your course, like the below example from one of the members of our team, where you can share a little bit about yourself. In addition, see some of the example announcements above, which also show instructor presence and personality in a variety of ways.

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#### Example 4: Instructor bio page

#### Kristin Wilson — Course Author

#### Background

I completed my PhD in Cognitive Neuroscience at the University of Toronto, where I taught large undergraduate courses, was involved in training and mentoring TAs, and conducted research on individual differences in attention and memory. I completed a postdoctoral fellowship at the University of Waterloo, studying cognition in online learning environments before I joined the Centre for Extended Learning (CEL) as an Online Learning Consultant (OLC).

#### Current role and interests

I love the creative and collaborative nature of my role as an OLC at CEL, working closely with faculty and graduate students across academic disciplines, finding novel and creative ways to bring their online courses to life for their students. I enjoy drawing on research and what we know about human cognition and learning to optimize online



courses and helping online facilitators find their authentic teaching persona online.

#### Personal

I live in Guelph with my husband, 16-year-old step-daughter, and golden doodle, Kenobi. When not at work, I spend most of my time outdoors (hiking, kayaking, gardening, biking, etc.). I also love practising and sharing mindful movement through yoga. I have been practising yoga for about 20 years and teaching yoga for the past eight years and love that I still feel like a beginner and there is so much to learn and explore.

#### Individual communications and timely responses

Individual communications are another crucial space for signalling your teaching presence to learners. Among the most important things to keep in mind about personal communications is that they should be as timely as possible. Some good rules of thumb are stated below.

Respond to all individual communications within 24 hours when possible.
 Doing so signals your commitment to the course and your learners' success.
 However, if 24 hours is not reasonable in general or in a particular situation, or if you have certain windows where you will not be responding (evenings, weekends, etc.), simply let your learners know when they should expect a response from you and stick with the time frame. Your wellness matters too, and as long as learners know when they should expect to hear back, they are typically flexible about response times.



 For feedback and marking assessments, set learner expectations and follow through. Make sure your timeline is clear to your learners and stick to it. Make sure your timeline is reasonable for your TAs, you (your energy and morale are important too!), and for your learners if they are expected to use

("Date and Time" icon by Lagot Design, from the Noun Project. Used under CC BY 3.0 license)

your feedback for another assessment (e.g., feedback on a draft paper to guide their final draft).

#### Reaching out to learners

All modern LMS providers allow at least some degree of learner-progress tracking. Keeping an eye on how often your learners are checking into the course, and how much progress they are making, is an essential strategy for creating connection with your learners, especially with those who may be falling behind.

Check in on learner progress regularly during term. When you see learners falling behind, or perhaps never even starting the course, reach out with an email or other communication to check in with how they are doing and **how you can help**. Keep in mind that the purpose is not to call out learners for not keeping up, but to offer support to get them through the course. There are countless reasons that learners may fall behind, such as everyday busyness, major life events like a death in the family, difficulty understanding materials, minor or serious mental health concerns, and more. Figuring out what is going on with a given learner is the first step toward helping them catch up.

When sending a message to a learner who has fallen behind, aim to offer them as much **flexibility** as you can without sacrificing your learning outcomes, and be sure to signal your **compassion** for their situation whatever it might be. Often simply knowing that someone cares is enough to get a learner back on track. In other cases, accommodations may be needed in order to assist a learner in catching up. Still, other learners may need substantially more support such as through your campus mental health supports or accessibility services. You do not need to take on the burdens of the learner's situation, but you should be able to readily suggest these institutional resources when learners disclose challenges in keeping up (e.g., by providing direct links to websites or emails). It is important to normalize the seeking of help on the part of students and to allow them to decide if they need additional assistance. While you cannot sacrifice the fundamental learning requirements of your course for a struggling learner, knowing that they have an ally in meeting those requirements has a huge positive impact on reducing course attrition and helping all learners to succeed.

**Quality Essential** 

#### Example 5: Outreach email

Here is a real example of an outreach email from an instructor during term, with personal details redacted to protect privacy.

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	Subject	How are you	doing?												

#### Dear Student,

I just wanted to write a quick note to check in on things with the course. I've noticed that a couple of items from you have come in a touch late, and especially that you haven't made very many response posts during our discussion seminars. At the moment, that's left a couple of gaps in your marks so far, and as you're an excellent student I want to make sure your final marks and so forth don't end up getting hurt by that.

I \*completely\* understand that life is crazy right now for everyone, and I'm aiming to be as flexible as I possibly can about the course this term. So, two quick items on that front:

1) Let me know if there's anything I can do to help with the course at this point, or if anything in particular has been making it more challenging this term. I'm also very happy to meet digitally or have a phone chat if that is useful. If not, that's totally fine also--just whatever is most helpful for you!

2) If possible, I'd like to suggest we make some arrangements to make up for the seminar discussions that you've missed to this point. If you expect it's going to remain challenging to post to the forums, just let me know and we'll figure out a way to make sure the course comes together for you!

Okay, I very much hope this doesn't feel like I'm calling you out. That's not my intention in the least! I really appreciate having you in the course, and I always enjoy your thoughts and submissions. Without a doubt it is a very crazy time these days, and online learning is not ideal for everyone by any stretch, so I want to make sure I'm doing everything I can to help this all go well for you this term.

Instructor

Credit: Daniel Opperwall, Trinity College, University of Toronto | Image Description

## An EDII perspective: Signalling your commitment to diverse perspectives

If you are having difficulty in incorporating diverse perspectives into your formal course content, course announcements are a great place to build a social presence that privileges different voices, perspectives, worldviews, or social issues that may still be emergent in the scholarly literature or have not yet been formally incorporated into the curriculum. Using popular media or grey literature can also help connect a discipline to the "real world" and/or help learners gain a different perspective, which may ultimately help them with their learning in the course or when working on assignments. Below, here are some ideas to stimulate your thinking.

- For a **human resources** course, post a news story discussing how a specific industry is exploring alternate training avenues for new career professionals or how hiring practices are being otherwise disrupted.
- In a **communications** course, post a recent new photograph, political cartoon, or meme and dissect the messaging, stereotypes, and biases that are demonstrated, using your expertise.
- In a **public health** course, highlight a news story or video of a successful intervention conducted with a marginalized group.
- Post a video of a **first-person perspective** account (someone speaking in their own words) or reflection of how a course topic impacts them or their community.
- In a **STEM course**, evaluate how a concept is communicated in popular media and demonstrate how it is important for those in STEM to be able to articulate their work to different audiences (scholarly vs. lay) to ensure nothing is "lost in translation."
- In a **political science course**, post a news item and briefly explore what is or isn't said.

#### Activity: Create a welcome announcement

#### Learning outcomes

This activity is directly aligned with **Course Learning Outcome (CLO) 7**: Employ effective facilitation strategies when delivering your online course.

#### Instructions

For this activity, craft a welcome announcement for use in one of your courses.

**Option 1**: Download the <u>Welcome Announcement Worksheet.docx</u> to complete offline.

**Option 2**: Complete the activity in-line below. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1435#h5p-45</u>

# 4.5 Fostering social presence during term

## What is social presence?

Social presence is the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop interpersonal relationships by way of projecting their individual personalities.

(Garrison, 2009)



("Trust" icon by reynaindra, from the Noun Project. Used under CC BY 3.0 license.)

The above quotation is Garrison's most recent definition of the concept of **social presence** in online courses. Just like teaching presence, social presence (or a lack thereof) is an experience rather than a specific situation. Social presence arises in online courses when everyone involved in the course has a chance to be known to some degree as a unique person with their own personality, and further is able to interact with other such people in the interests of learning together.

#### Why social presence matters



(Bout, 2018)

While online courses may only rarely produce deep and lasting relationships between participants, such deep connections are not necessary for a successful course. Instead, what is crucial is for learners to feel that **they are known and recognized** to at least some degree and that **they know and recognize** others in the course community. This sense of being known, and of interacting with other known people, plays a vital role in learning almost anything because learning is a fundamentally **vulnerable** experience. After all, learning involves an admission that one does not already know what one is intending to learn.

Have you ever been in a room where you were the only person who didn't know something? Think back to what that was like for a moment.

Now compare that type of experience to a situation in which you were among many fellow learners with the same questions as you and seeking to learn the same things as you. In which situation is it easier to learn?

If you picked the second situation, you already have an intuitive sense of the importance of social presence for learning. As Garrison's definition above and your own experience both show, **social presence helps learners to feel secure** instead of vulnerable, allowing them to more easily take the intellectual risks necessary to learn new facts and skills, and to work with new ideas and processes for the first time. While social presence often builds naturally in in-person courses, fostering social presence online requires more deliberate work both for you and the learners in your course. However, when planned for and facilitated effectively, social presence can and does arise in online courses—sometimes even more than in person!

## Strategies for fostering social presence

## Signalling your presence

Encouraging **social presence** in your online courses begins at the level of design. Making sure that your learners will have opportunities to engage with one another in a variety of ways is the most important step you can take to creating social presence in your course. Community building activities from Module 2 can help in building this social presence.

Whether or not you designed your course, there are a few things you'll want to keep in mind about learner-learner interaction and social presence while you are teaching during a course offering.

Discussion forums are like dinner parties, and the instructor is the host. Personally welcoming each student into this new and unfamiliar place and making them feel like they belong in that environment is a necessity to help integrate them socially and academically into the course.

(Hayek, 2012)

As with every aspect of online design and teaching, signalling your presence in the social spaces of your course is crucial for fostering deeper learner–learner interaction and thus humanizing the online course experience for everyone. While social spaces are typically not where most course content is shared in online courses, you still play a crucial role in helping learners to feel welcome and encouraged to participate in every aspect of your online course. Thinking of yourself as a host, as in the quotation above, can be helpful for framing your role in encouraging learner–learner interaction during term.

Your presence and investment in the social life of your course can be signalled in a variety of ways, including the following:

- facilitating discussions actively by sharing prompts and questions as the term progresses;
- **actively posting** in discussions and other forums throughout the term (see the next section for more on how much and how often to post);
- **summarizing** key discussions after the fact, whether inside the discussion itself or through an announcement or other message;
- **participating** in social spaces in your online course, such as general chat forums or course-related social media threads;
- **checking in** on learner interactions, especially group work, to make sure things are going smoothly and to help with any problems that arise; and
- offering virtual office hours, if not every week, then in the weeks preceding large assignment deadlines or midterms/finals. By opening a video conference room for a set amount of time (e.g., one hour), you allow a space for learners to chat with you synchronously and perhaps more informally.

## Examples of fostering social presence

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## Example 1: Socratic prompts

Consider using some of these prompts to help forward conversation in your discussion forums. <u>Online Discussions Socratic Questions (PDF)</u> (Paul, 2006)

Quality Essential

## Example 2: Course announcement

Here is a real world excerpt from a course announcement signalling the instructor's interest in a previous week's forum discussion.

Announcements v

# Course Announcements 🗸

Posted Oct 29, 2021 10:49 AM

Dear students,

Welcome to Week 4 of the course!

To begin, a \*huge\* thanks for the amazing seminar discussion this past week. The quality of the mini-essays and the follow-up engagement was truly remarkable. As promised, I mostly let the conversation flow without me, and dropped in only a couple of times with some extra information on the term "will" in Maximus. However, I was reading along with every post and conversation, and I couldn't have been more delighted. I hope you all felt the same!

Officially the seminar discussion has closed for Unit 1, though the forum itself will remain open if you'd like to make any last comments or responses. Also, if you haven't had a chance to do so yet do please work your way through any unread posts. There is a huge wealth of insight and information in the forum--you won't want to miss it.

-Instructor

Show All Announcements

×

Credit: Daniel Opperwall, Trinity College, University of Toronto | Image description [PDF]

#### Balancing your involvement

How much should you post to discussions and participate in other learner–learner interaction spaces in your course? As with so many things, the answer is seldom simple, and effective presence in social spaces involves striking the right balance given your learner population, the nature of your course, and your own teaching style.

Instructors should jump in quickly when they see [a] discussion in the thread is wrong or getting well off track; otherwise hold back for the first week and let the learners have at it. Coming in too early with comments tends to shut down the discussion.

(Mazzolini & Maddison, 2007)

On the one hand, research shows that **more frequent posting by instructors** in course discussions is correlated to **less frequent posting on the part of learners** (Mazzolini & Maddison, 2007), which may in part be caused by learners feeling they have less to add to certain conversations after the instructor's opinions have been shared.

On the other hand, sheer frequency of posting may not be the only thing to consider regarding the overall impact of various interactions in your course (Mazzolini & Maddison, 2007). For instance,

- sharing accurate information and clearing up learners' confusion as an instructor have obvious positive impacts on learner understanding even if doing so results in less follow-up discussion, and
- instructors who post frequently are rated by learners as more enthusiastic and as displaying greater subject matter expertise (Mazzolini & Maddison, 2007).

Such perceptions on the part of learners can be useful in creating instructor presence in your course. In short, posting too much can stifle conversation in online classes, while posting too little may make you seem distant and allow learner errors to go uncorrected.

As you navigate the tightrope act of how much to involve yourself in discussions and similar spaces, consider the **purpose** of a particular interaction or assignment.

- For discussions that are meant to encourage learners to get to know one another, as well as those that are more seminar or opinion-based, you may wish to have a lighter touch with respect to your immediate presence.
- For discussions that focus more on learning content, especially fact-based materials, it may be worth weighing in more often to keep learners on the right track even if they post less frequently afterward.

## Responding to conflict and poor netiquette



("Conflict" icon by Chintuza and "computer screen" icon by Sunan, from the Noun Project. Used under CC BY 3.0 license.)

Conflict and disagreement are natural in academic discussions and are not necessarily a problem in online courses when navigated carefully. However, when conflict heats up to the point that etiquette breaks down, or begins to monopolize a conversation, it can start to be a problem. Asynchronous discussions in particular can present challenges as learners may read one another's words less generously and with less context than they would have when speaking in-person. When signals like body language and tone of voice are not available, conflicts can escalate quickly.

One of the most important steps you can take to mitigate conflict in your online class to is to make sure your expectations for how learners will treat one another in their discussions are extremely clear. Spell out for your learners what good online etiquette (sometimes called "netiquette" or "ground rules") entails and how you expect them to speak to one another, especially when disagreeing. Consider making netiquette a component of learners' participation or discussion marks to further encourage good discourse.

If problems still arise during the course consider

- contacting the individual learners involved and reminding them of your expectations and requirements;
- **reminding** the class as a whole, in general terms, of your netiquette policies (never call out specific learners for violations of these policies in public, however); or
- **intervening** in a discussion where possible to mediate potential conflict, especially if you perceive a misunderstanding or failure of communication.

In addition, strive to humanize the environment around your course discussions by helping learners get to know each other. If possible, encourage or require learners to post photos of themselves and/or aspects of their lives like pets, family, homes, and communities as much as they are comfortable. Be sure to spend some time breaking the ice at the beginning of your course. And when conflicts do arise, help draw learners back to the mutual recognition of one another as real people with feelings and values of their own. The more human an environment you can create, the less problem conflict you are likely to encounter in online discussions.

## An EDII perspective: Accountable spaces

It is normal to have difficult or challenging academic discussions in postsecondary education; indeed, this is part of the path to education. However, learners are often in a vulnerable position especially when discussing sensitive or controversial topics. When we create an **accountable space**, we allow space to validate students and

their experiences, and are able to engage differently or challenge them to think differently. "Ground rules" (like a social contract) for discussions outline expected behaviours of all learners (and the instructor) and offer avenues for resolution and consequences for poor behaviour. These can either be presented to learners (i.e., through the syllabus) or cocreated. Creating such an accountable learning space creates an inclusive space.

This is not to say we **cannot** have difficult conversations, but rather an examination and explicit conversation of **how we will have difficult conversations and how we will respect different ways of knowing**.

What may be a challenging extension to this idea is that we do not strive to guarantee safe space and a safe space is not for everyone.

What do we mean by that?

We mean that it is important that our entrenched ideas, perceptions, and knowledge (especially harmful, negative, or incorrect dominant views) are unsettled and that there is positive learning and growth; at the same time, we need to take action to ensure marginalized learners are protected. Actively stepping in and addressing problematic behaviours and checking in with learners that you recognize as having been explicitly or implicitly targeted are important ways to model this behaviour.

This approach is often framed in antioppressive or antiracist pedagogy and practice. The principles and actions of these pedagogies serve to create a better learner space for everyone. We have only lightly touched on these ideas in this course; we encourage you to continue learning about these approaches for more inclusive, brave, and accountable spaces.

Presented are three resources to support your learning journey.

- Anti-Racist Pedagogy: From Faculty's Self-Reflection to Organizing Within and Beyond the Classroom
- Leaning In: A Student's Guide to Engaging Constructively With Social Justice Content (PDF)
- The Anti-Racist Discussion Guide (PDF)

#### Responding to lack of engagement



(Piacquadio, 2018)

Shallow responses and lack of engagement are a common problem in asynchronous online course discussions.

Encouraging vigorous participation from all learners is a great way to improve everyone's online course experience.

Once again, the most important step to take to encourage participation is to be extremely clear about **expectations** for participation online. Basics, like the number of posts required and how often learners need to engage are of course essential. But consider digging deeper and providing learners with **further guidance** about what makes an effective and engaging discussion (or other asynchronous) post by providing

- clear rubrics, which can be helpful for letting learners know what you expect;
- detailed descriptions of what makes for good posting and engagement; and
- examples (if possible) of good posts that learners can emulate.

If certain learners nonetheless seem disengaged, are posting very little, and/or are only posting short responses like "I agree," reach out to them to see how you can help them to more fully meet your expectations. A lack of participation can be a sign of many things, including a learner misunderstanding requirements or a learner who has become more broadly disengaged for any number of reasons. With a little help, most learners can get back on track and be a full part of an online course community when they feel fully supported.

## Taking a step back and considering the big picture

As already suggested, there could be many reasons why learners do not engage, or perhaps disengage, with class participation. Many factors pull on learners' attention and ability to be successful in an online course. In Module 1, different dimensions of your learners were explored. Similarly, investigating gaps in learner engagement can be guided by a constellation of connected questions:

- Do learners have all the information (course content AND task instructions) they need to create a robust response?
- Are there elements of the participation requirements that could in fact be a barrier to participation?
- Are there different ways in which learners can express their participation (e.g., asynchronous text or video submissions after a live session) to contribute and demonstrate their knowledge and learning?
- Is there a lack of relevance in the participation ask? In other words, do learners understand why it would be beneficial to participate, or could they connect their learning of the discipline to their lived experience or apply their knowledge to real-life (or simulated) scenarios?
- Is it a time during the course where learners are likely to have competing deadlines for other courses and thus have deprioritized your course?

Finding out the answers to these questions may require you solicit information from learners individually (e.g., over email) or the whole class (e.g., posting a quick anonymous "check-in" survey in course announcements).

Showing empathy toward your learners in trying to determine what may be hindering their (that is, individual or whole class) engagement will often help learners feel acknowledged and heard and you are more likely to get honest feedback. Subsequently making small in-term adjustments in response to this feedback without jeopardizing your course learning outcomes can go a long way for the successful progression of your learning goals.

Assessing and revising your course will be further explored in a later section.

#### Using synchronous sessions



(SHVETS production, 2021)

Live sessions are an increasingly popular aspect of many online courses, and they can be a highly effective tool for creating social presence in your course. Live sessions can give everyone in the course community a chance to see and hear one another in a more complete way, beyond merely text communications. But using live sessions carefully is key to keeping them effective for this purpose.

To maximize their utility for building social presence, think carefully about what you want to do in your sessions. We recommend that live sessions be used primarily for interactive discussions and activities rather than for lecturing, and that they be kept shorter than a typical classroom session.

Moving lecture materials to text or video format and keeping live sessions shorter helps reduce "zoom fatigue," keeps student attention more effectively, and above all helps you leverage live sessions for what they are really best at: building more social presence. For instance, live sessions can be a great way to

- get to know learners and help them get to know each other,
- build rapport with your learners and create social presence within your course,
- answer learner questions and clear up confusion quickly,
- conduct certain types of **discussions**, and
- facilitate certain types of **group work** using breakout rooms.

Think carefully about your goals for a given live session and design it to maximize them. In addition, if you are going to deliver lecture materials and facilitate assignments asynchronously, you may be able to make your live sessions optional, offering even more flexibility for your learners while still allowing those who prefer to have some live time in their courses the chance to learn in a way that works well for them.

#### Examples of how synchronous sessions could work

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#### Example 3: Planning resources

Check out these resources from Boston College and University of Washington, which contain more tips on synchronous sessions and example plans for a synchronous course session.

- Planning an Online Synchronous Session
- Templates for Engaging Synchronous Online Classes

## Activity: Synchronous session plan

#### Learning outcomes

This activity directly aligns with **Course Learning Outcome (CLO) 6**: Structure and present your online content in ways that facilitate student learning and foster a sense of community and **CLO 7**: Employ effective facilitation strategies when delivering your online course.

#### Instructions

Create a specific plan for your next synchronous session (you can skip this activity if you are teaching only asynchronously).

- Begin by briefly **summarizing** the purpose of the live session you are planning. What are you hoping the session will add to your and your learners' experience in the course?
- What learning outcomes will the session help you address?
- What are the **essential components** you want to include in your sessions (such as breakout rooms, discussions, active-learning elements, etc.)?

Next, create an outline of exactly what you would like to do in the session. Be as specific as possible, and designate how much time you expect to take on each portion of your session. You can save the resulting document for your planning purposes. You may also wish to share the document with your learners so that they can make the most of your session together.

**Option 1:** Download the <u>Synchronous Session Plan Worksheet</u> to create a Word version of this activity to complete offline.

**Option 2:** Use the below interactive to complete the activity. If you wish to save your in-line results, be sure to download your work by clicking the **Export** tab at the bottom of the left-hand navigation bar in the activity before moving on.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1437#h5p-46</u>

# 4.6 Assessing and revising your course

#### What happens after you have delivered your online course?



("Revision" icon by Stanislav Levin, from the Noun Project. Used under CC BY 3.0 license.)

Creating a high-quality online course doesn't stop with completing your design and offering the course to learners. Assessing the course itself after it has been offered, and making improvements in light of that assessment, is essential to crafting the best course experience for you and your learners. No matter how carefully you have designed things, **running a course inevitably reveals aspects of your design and layout that can be improved**, especially during its first offer.

Evaluating and revising your course is an easy step to neglect in the quality design process. However, we encourage you to take it just as seriously as the rest of your work on your course. Nothing is perfect the first time—iterative improvements to your online course will help you to create a durable high-quality learning experience as well as identify and develop new pedagogical and design strategies that you can use in future courses. Later in this module, we will help you think through the following key question pertaining evaluation and revision of your course.

#### Key question:

How can I effectively identify areas for improvement in my course design, and how will I implement those improvements?

#### Why assessing and revising matter

As an educator you are no doubt aware that every course is always a work in progress, and that opportunities for improvement, both big and small, present themselves in nearly every term a course is offered. Things are no different with online courses. However, as compared to in-class offerings, online courses may lend themselves to a more systematic approach to improvement. By committing to assessing and improving your course both within and between offers, you ensure the highest quality learning experiences for your learners going forward while also helping to increase your own satisfaction with your courses year over year.

A reflection from an Instructional Designer and Educational Developer at Queen's University:

In my experience helping faculty members and other subject-matter experts develop de novo or redesigned online courses, it usually takes three to five iterations of the course for instructors to feel like their course is 'perfect.' In the first two iterations, be prepared for passionate learner feedback on what works and what doesn't. After that, more detail-oriented learners tend to help point out areas that may

need attention—either indirectly through their questions or in direct communication—in order to be genuinely helpful in improving the learning experience for others. (Jenny Stodola, 2021)

## Strategies for assessing and revising your course

#### Surveys and evaluations

The two most familiar and most important tools for assessing your online course are **surveys** and **evaluations** completed by participants. Chances are that your institution already requires your learners to complete overall course evaluations at the end of term, and you are probably already accustomed to gleaning information from these evaluations for course improvement. In many instances, however, official evaluations may not be specifically designed with online courses in mind. Therefore, while they often provide important feedback, it can be helpful to supplement them to get a more accurate picture of how well your online design and teaching strategies are working.

This is where **surveys** for your online course come in. Nearly all LMS providers allow you to create your own surveys and polls within the system to get additional feedback from your learners. You may wish to survey your learners near the beginning of the term, or at some point in the middle, to see how things are going with the course design, especially if you think there may be things you are able to change on the fly in response to their feedback.

Regardless of whether you use in-term surveys, however, creating at least one end-of-term survey for your learners is highly recommended. For your end-of-term survey consider the following tips to focus on **online-specific** issues and questions, especially those that won't be covered in your official course evaluations.

- Ask about **layout and information design** in the course. Were things easy to find? Was the course intuitive to use?
- Ask about **third party tools** and other course technology if you are using them. Were there any technical problems or tool issues that learners ran into repeatedly? Can you use another tool or strategy, or improve your activity design to help reduce these issues going forward?
- Ask about **discussions and interactions** to get a sense of what learners found valuable and why. Could you use better prompts or design different ways of building social presence in your course?
- Ask about **bottlenecks and problems** that learners ran into with the content. Can some of your materials be made clearer? Can you spend more time during the next offer on certain difficult topics?
- Ask about the **accessibility** of the content, in terms of if they were able to access all the required materials for learning in the course in a format that met their academic accommodation needs. Prompt for details regarding specific challenges or gaps.
- Ask if the course provided a **safe and accountable space** for rigorous academic discussion. Prompt learners for positive experiences and situations that prevented them from full participation or where they may have felt uncomfortable. This can be a flag for further investigation.
- Ask learners if they felt represented in the material and to justify their response. An open-ended question could illuminate areas where learners might feel alienated by the way the content is presented, or opportunities to incorporate more explicit diversity in learning materials (e.g., in content, images, readings, videos, questions posed, assignment task, or outputs).
- Ask **open-ended** questions about what worked and didn't work in the online environment. Give learners a chance to comment on anything that went well or poorly in the online-learning environment. Much of the

most valuable feedback you will receive comes from open-ended question fields.

In addition to text-based surveys, you may wish to consider having individual meetings with learners to get their perspective on the course or even using a **focus group** to get a more complete picture of what might be improved in your next offering. Note, however, that a focus group should only occur after final grades have been submitted.

#### Examples of how evaluations and surveys could work

Quality Essential

#### Example 1: Evaluation questions

For some ideas of good questions and appropriate wording to include in a survey for your course, see this resource from the University of Toronto. Keep in mind you do not have to include every possible question here; instead, select the ones you find most useful for your context.

Examples of Midcourse Evaluation Questions

Quality Essential

#### Example 2: Sample surveys

Here you will find a sample survey that you can adapt and use in your own course. <u>STA303/1002: End of Week 10 Check-In (W21)</u> Credit: Queen's University

Quality Advanced

#### Example 3: Stop, start, continue

Assess your communication strategies throughout the term by asking students what is working and what is not. A simple "<u>Start, Stop, Continue</u>" poll can generate useful feedback while also signalling your responsiveness to student concerns.

Quality Advanced

#### Example 4: Precourse survey

A <u>Precourse Survey</u> can provide you with important information about students' time zones, their available technology (e.g., whether they have access to a mic or webcam), whether they have a reliable internet connection, as well as their familiarity with the subject matter.

## Example 5: Iterative improvement

This presentation discusses in detail one instructor's process of iteratively improving the assessment and rubrics for a specific online course.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1439#oembed-1</u>

Transcript for <u>Showcase 2021</u>: <u>Teaching French On-line to 250+ students</u>: <u>Fair and engaging grading strategies</u> available on YouTube. | Video length ~ 13 mins.

(Centre for Teaching & Learning, Queen's University, 2021)

## LMS metrics

Getting data directly from your LMS can be a helpful way to add objective information and analytics into the process of assessing your online course. Most LMS software today can give you a good picture of how learners are actually using your course. For example, you can usually find out

- which **pages** learners are visiting the most and for how long,
- where learners may be **falling behind** or falling off completely,
- how much learners are actually **participating** in forums and other interactions, and
- whether learners' **grades** provide any information on difficulties they may be having with the course.

Every LMS is different in terms of the type and amount of data you can access. See the examples section below for some more specific information and a deeper dive into how you can use LMS data to help improve your course.

#### Examples of how LMS metrics could work

Quality Essential

#### Example 6: LMS metrics

The below links provide information on what type of data you can collect from each of the four most popular learning management systems on the market today. Please select the LMS that your institution uses to learn.

- Canvas: <u>Using Canvas New Analytics to see how students are doing in your course</u>
- D2L: Monitoring Student Progress

- Moodle: <u>Analytics</u>
- Blackboard: <u>Course Analytics and Student Analytics in Blackboard</u>

Quality Advanced

#### Example 7: Student data

For a deeper dive into the theory and practice of using student data to inform your online teaching, check out this resource.

• Using LMS data to Inform Course Design

#### Activity: Assess and revise

#### Learning outcomes

This activity directly aligns with **Course Learning Outcome (CLO) 8**: Create a plan for revising your course at the end of the course offering.

#### Instructions

Using one of the two options below, start assessing your course for revisions.

- Begin by listing your most important goals for your online course. These should typically include your
  intended learning outcomes, but you are encouraged to go further to add structural goals as well, such as
  creating an easy-to-use learning environment, using a third-party tool effectively, or effectively creating
  teaching and social presence. Take a little time to reflect on these goals and list them one by one.
- Next, rate how well you feel you achieved these goals in your last offer. Consider any student feedback or survey data that you may have received as well as your own perceptions.
- · Finally, reflect on some of the ways you might wish to improve the course next time.

**Option 1:** Download the <u>Assess and Revise Worksheet.docx</u> to create a Word version of this activity to complete offline.

**Option 2:** Use the below interactive. You can save and download your reflection to help you with your course revisions the next time around. To save and download your work, click the **Export** tab at the bottom of the left-hand navigation bar in the activity.

Please note, this activity is intended for your own reflection and learning. Your responses are private and are deleted when you refresh or navigate away from this page.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1439#h5p-47</u>

# 4.7 Summary: Facilitating for community

As you teach your online course, think about how you can help create a sense of presence and community for yourself and your learners during term. The Community of Inquiry framework provides a great jumping-off point for developing your own strategies.



Caption: Community of Inquiry Venn Diagram, with Teaching Presence (Structure/Process), Social Presence, and Cognitive Presence circles. The space where all three circles overlap represents educational experience. The overlap of the social and cognitive presence circles represents supporting discourse. The overlap of the cognitive and teaching presence circles represents selecting content. The overlap of the teaching and social presence circles represents setting the climate. (pfrench, n.d.)

## Module summary activity: Teaching checklist

#### Learning outcomes

This activity aligns directly with **Course Learning Outcome (CLO) 7**: Employ effective facilitation strategies when delivering your course online.

#### Instructions

Using one of the two options below, create a list of strategies you want to use in your own course to help build a sense of community while you are teaching during term.

For each section of this module, jot down ideas for your course pertaining to those subjects. You are encouraged to use the fields to create a concrete checklist of things you want to do the next time you are teaching online. For instance, under "Weekly announcements" you might wish to write things like

• "make a short video announcement every week,"

- $\cdot\;\;$  "tie in course content to something in the news," or
- "be sure to comment on the past week's discussion."

You may also wish to include links drawn from the additional resources on the next page, and anything else you want to remember from this module. If you choose the interactive option and wish to look back at previous pages of this module, remember to open pages in a new tab so you don't lose your work.

When you're finished, export your custom checklist and keep it with you throughout the term. You can use it as a checklist to remind you of key strategies that you learned in this module and want to employ in your teaching.

**Option 1**: Download the <u>Teaching Checklist Worksheet</u> (DOCX) to create a Word version of this activity to complete offline.

**Option 2**: Use the interactive below. To save and download your checklist, click the **Export** tab at the bottom of the left-hand navigation bar. Please note, this activity is intended for your own reflection and learning. **Your responses are private and are deleted when you refresh or navigate away from this page**.



An interactive H5P element has been excluded from this version of the text. You can view it online here: <u>https://ecampusontario.pressbooks.pub/hqoc/?p=1442#h5p-48</u>

#### Congratulations on completing Module 4 of this course!

Select **Next** in the footer at the very bottom of the screen to navigate to the **Resources for Further Study** section, which offers deeper dives into particular topics addressed in the module.

# 4.8 Resources for further study

For those interested in learning more about particular topics in Module 4, we've included links to further resources below. Resources are organized by topic.

# Community of Inquiry framework

#### Facilitating online courses in higher education

<u>Fostering Engagement: Facilitating Online Courses in Higher Education</u> This extensive open educational resource focuses especially on online course facilitation and teaching during a term offer. The resource includes further tips and additional examples that you may wish to explore.

## Creating a teaching presence online

#### **Teaching presence**

Pearson Education (2016). <u>Teaching Presence</u>. This White Paper provides a research-based framework on establishing an effective teaching presence.

## Online teaching tool kit

The Association of College and University Educators' <u>Online Teaching Tool Kit</u> has many practical strategies and examples.

## Preventing teaching burnout

<u>8 Strategies to Prevent Teaching Burnout</u>. Your own well-being matters too! This resource from Flower Darby presents eight helpful strategies for avoiding burnout while teaching online.

# Fostering social presence online

#### Socratic seminars

<u>How to Facilitate Remote Socratic Seminars</u>. Socratic seminar teaching is challenging but also exceptionally rewarding for many online courses. This article provides some strategies for bringing Socratic dialogue into your online class.

## Synchronous learning

<u>Increasing Student Engagement During Synchronous Online Classes</u>. This article contains a number of considerations and strategies for encouraging more student engagement during live sessions online.

## Assessing and revising your course

#### **Reflective review and revision**

Reflective Course Review and Revision: An Overview of a Process to Improve Course Pedagogy and Structure (PDF). This academic paper provides a deep dive into the theory and process of reviewing and revising courses, especially online.

## **Quality scorecard**

<u>OLC Quality Scorecard</u>. The resources from the Online Learning Consortium on this page can be used to conduct an in-depth structured review of a given online course or of an entire curriculum and more. The OSCQR course design review scorecard included on the page is considered the gold standard among review tools of this nature for individual courses.

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# Where do I take my learning from here?

Congratulations on completing this course – you are well on your way to becoming an expert online course author and designer! While we've provided a good foundation for the principles of quality online course design, this course hasn't taken deep dives into many of the topics covered. If you're seeking opportunities to extend your learning in particular areas, we've curated a list of further professional development opportunities below.

## eCampusOntario Open Library courses

#### Assessment:

- Assessment Strategies in Higher Education: Principles, Practices, & E-Applications
- Beyond the Exam: An Alternative Online Assessment Toolkit
- Creating Equitable, Diverse, and Inclusive Assessments in Online and Blended Learning
- Indigenous e-Learning Assessment Strategies
- Rethinking Assessment Strategies for Online Learning: A Short Course for Post-secondary Educators (focus on authentic assessment)

#### Equity, Diversity, Inclusion, Indigenization:

- The Seven Grandfather Teachings and Medicine Wheel as a framework for engaging Indigenous pedagogical approaches in online learning
- Get PHIT (Privilege, Hegemony and Intersectionality Training): Navigating Difficult Discussions
- Universal Design for Learning (UDL) for Inclusion, Diversity, Equity, and Accessibility (IDEA)

#### Humanizing virtual learning experiences:

- Engaging the Online Learner: Strategies for Meaningful and Effective Learning Experiences
- Humanizing Virtual Learning: A Guide to Creating Connection, Engagement, and Inclusivity
- Learning to be Human Together

#### New Online Program Development

+ Creating and Implementing High-Quality, Sustainable Online Programs

#### STEM-focused:

• Digital Fluency to Support Online Post-Secondary Mathematics Instruction

• STEM Education: Design Thinking

## Universal Design for Learning:

- Reducing Barriers to Learning: Inspiring Online Universal Design for Learning Expertise
- Universal Design for Learning (UDL): An Online Post-Secondary Educator Micro-credential for Inclusion, Diversity, Equity and Accessibility (IDEA)

Thank you for making us part of your online course learning journey and good luck as you continue to develop your skills as an online educator!

The High-Quality Online Courses development team

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