Designing Quality Tech-Enabled Learning Experiences

DESIGNING QUALITY TECH-ENABLED LEARNING EXPERIENCES

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Let's start building quality Technology enabled Learning (TeL) experiences

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Recap, reflect, and plan your next steps

ACKNOWLEDGMENT AND THANKS

Introduction

The overarching objective of this 4-module course will be to facilitate the development of any person who seeks to create quality, technology-enhanced (digital) learner experiences. Learners will leave the course able to take the best resources and experiences from this course and apply them to the design and structures of their own courses. This course was made possible with funding from the Government of Ontario – Ministry of Colleges and Universities. It was supported through the province's Virtual Learning Strategy, by eCampusOntario – a provincially funded, not-for-profit consortium supporting the open education community at large.

The partnership between Lakehead University and Nipissing University furthers a collaboration that began with the Borealis Summer Institute for Teaching and Learning in August 2020 (a joint effort to provide professional development at the outset of the COVID-19 pandemic).

Land Acknowledgement

We are coming together in a virtual space, but we cannot forget that we are still sitting on traditional Indigenous lands that have been inhabited long before us. The ground we each walk upon has a specific history; a nuanced relationship with Indigenous peoples from across Turtle Island. As a co-constructed virtual space, we want to acknowledge the territories that our respective universities reside upon.

Nipissing University

Nipissing University sits on the territory of Nipissing First Nation, the territory of Anishnabek, within lands protected by the Robinson Huron Treaty of 1850.

Lakehead University

Lakehead Thunder Bay, sits on the traditional lands of Fort William First Nation, Signatory to the Robinson Superior Treaty of 1850.

Lakehead Orillia is located on the traditional territory of the Anishinaabeg, including the Ojibwe, Odawa, and Pottawatomi nations, collectively known as the Three Fires Confederacy.

We are humbled by the histories of and on this land, and deeply grateful for the contributions of Indigenous peoples, as stewards of the land, for their cultures, their languages, and their wise teachings; their protection of Mother Earth including the finned, feathered, and crawlers of the land; and to their ways of being, seeing, and speaking. We are all grateful to be able to live and learn on these lands with all our relations.

Why Do We Acknowledge the Land?

Land acknowledgements are used to "express gratitude to those who reside here, and to honour the Indigenous peoples who have lived and worked on this land historically and presently" (University of Toronto, 2021). Land acknowledgements demonstrate and reaffirm a commitment to our shared responsibilities of improving our understandings of Indigenous peoples and their cultures, to acknowledge the harms of past mistakes, to recognize that colonialism is ongoing, and to commit to a peaceful, shared path forward as we take action toward Truth and Reconciliation.

Use the following links to learn more about Land Acknowledgements in your city, province, state, or country:

- Whose Land if you reside in Canada

- #HonorNativeLand if you reside in the United States

ACCESSIBILITY STATEMENT

Accessibility Statement

Your course development team, Lakehead University and Nipissing University, are committed to ensuring digital accessibility for all persons interacting with course content. We are also committed to continually improving the learner experience, and applying relevant accessibility standards.

Conformance status

This course has been designed with accessibility in mind by incorporating the following features:

- It has been optimized for people who use screen-reader technology.
  - all content can be navigated using a keyboard
  - links, headings, and tables are formatted to work with screen readers
  - images have alt tags
- Information is not conveyed by colour alone.
- There is an option to increase font size (see tab on top right of screen).
- All video provides closed-captioning, downloadable scripts, video files and (where applicable) accompanying slides.

Feedback

We welcome your feedback on the effectiveness of accessibility elements in this course. Please let us know if you encounter accessibility barriers at online.tc@lakeheadu.ca.

LET'S START BUILDING QUALITY TECHNOLOGY ENABLED LEARNING (TEL) EXPERIENCES

Welcome to the first of five weeks dedicated to designing quality **tech-enabled** learning experiences! Before we jump in to the 'thick of things' and begin to create and refine a design for *your* course, we want to provide a 'birds eye view' of the course 'flow', and an introduction to the course development team. As the first course eModerators we also speak about our approach to supporting learners in this course during its pilot.

Your Development Team

We have created both a video introduction, and are providing you with a written form of the same. Throughout the course you will see that you have the option to 'stream' embedded videos or choose to download and read transcripts/review slides. What is your learning preference?

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Dr. Lisa O'Neill

Hello! Welcome to your Designing quality tech-enabled learning experiences course! My name is Lisa, and I am an Instructional Developer at Lakehead University.You'll see me again in Module 1 where I will lead you through a few basic principles that have a positive impact on learning, to help you draft a design blueprint for your own course/ workshop or training session.

Shantala Singh Robinson

My name is Shantala, and I've worked with the team through the development process for this course to enhance it with engaging graphics and illustrations. By Module 3 you will come to appreciate these elements, embedded throughout this course, as learning resources;-) We hope that they inspire you to incorporate some of the practices we've used to embed them in your own course.
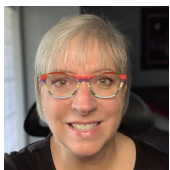
Dr. Angela van Barneveld

My name is Angela and I'm a faculty member at Lakehead University in the Faculty of Education. I've spent many years working with people, just like you, to design quality teaching and learning. I will lead you through your learning in Module 2 to enhance the draft learning design blueprint you will create in Module 1. We will do this by incorporating some of the best that technology can provide to enable learning in 21st century classrooms.

Heather Carroll

My name is Heather and I'm the Senior Instructional Designer at Nipissing University. I often deliver workshops that help to clarify the benefits of design before delivery, and the value of a learner-centered approach to teaching.I will lead you through your learning in module 4 to assure that your near final design has accounted for the most effective methods of activating learning in tech-enabled spaces. You should finish module 4 with a plan that your learners will surely appreciate.

Dr. Sarah Dreissens

My name is Sarah and I am Nipissing University's Manager of eLearning. I invest a significant amount of my time supporting the development of teaching excellence. Once you create your own draft design, and then enhance your design with technology interactions, you'll start to see the benefits as I do. By module 3 you will be able to choose the most effective and accessible resources, so that you can finish module 4 strong by incorporating activity that engages your learners in the topics you are so passionate about.

Dr. Pat Maher

And I'm Pat. As the Dean of the Teaching Hub at Nipissing University I help the leadership at my institution to incorporate systems that support tech-enabled teaching and learning. I'm here to help you to do the same. We've really enjoyed bringing our varied and extensive expertise to the development of this course. We will be here to connect with you through discussion and feedback activities, and are excited to learn from all of you. Let's get started!

A COURSE OVERVIEW

Before you dive in, let's take a quick tour through the journey ahead so you know what to expect.
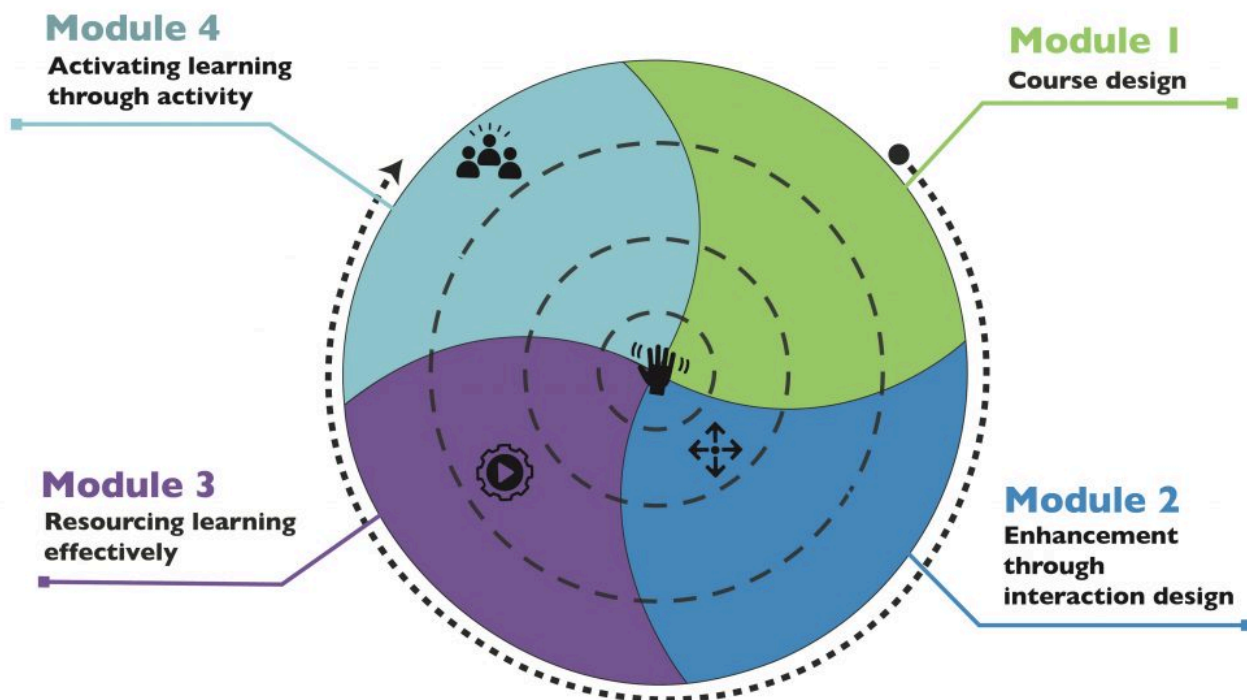
Module 1: Course design

Create and refine a blueprint of your course.

This module focuses on course design where you will create and refine a blueprint for your course. Your blueprint will become an anchor for your journey through the modules, and you will be invited to reflect, refine, and revise the blueprint throughout each week.

Module 2: Enhancement through interaction design

Engage in interactive reinforcement activities (H5P).

This module focuses on enhancing your blueprint through interaction design. You will spend the week learning about expert practices that enhance learner engagement, particularly how designing interactive experiences enhances connections between learners and instructors, and learners and their peers.

Module 3: Resourcing learning effectively

Look at an array of 'places and spaces' for learning and the degree to which each can support flexible, hybrid, and fully online/offline experiences.

This module focuses on resourcing learning effectively. You will spend your time getting intentional about the addition of meaningful resources that have a positive impact on learning. Moreover, you will spend some time considering your own blueprint context and how appropriate resources support flexible, hybrid, and fully online/offline experiences.

Module 4: Activating learning through activity

Explore several 'toolkits' that demonstrate course themes in action, and analyze these toolkits and their contents to see which activities fit their own teaching.

This module focuses on active learning. This final stage will help you to further enhance your detailed and refined design with effective active learning strategies that fit your learners, your context, and your digital/physical spaces. Finally, you will consider cultivating digital/physical spaces conducive to learner agency.

Each module has four parts:

Introduction

Identifying the 'location' of this module within the course level learning, and provide a 'spark' to further your module learning.

Expansion

A worked example is provided to help you apply learning to current course frameworks.

Refinement/Application

Each module, by this point, will help you to answer the question 'How does your learning apply to in-world experiences?'.

Learning community participation

Share your learning with peers to discuss and provide valuable feedback.

By investing approximately 4 hours each week to course content review and activity you'll finish the course able to;

- **Apply** the knowledge, skills, and best resources from this course to the design and structure of your one course;
- **Create** quality, technology-enhanced (digital) learner experiences;
- **Design** and develop strategies to realize **equity, diversity, and inclusion** within digital spaces;
- **Design** adaptations of **pedagogical frameworks** for **activating learning**, within **digital spaces**

We will begin each of the 4 core modules with a map similar to the one pictured above. It will help to 'locate' us in the course and share a bit more about what each section of the module will provide/support. Consider using a consistent approach to your course design. Doing so helps establish learner expectations and eliminates the 'guess work' of what is expected each week.

A Course Syllabus

A learner success guide

If you have arrived at this **facilitated** instance of the *Designing Quality Tech-Enabled Learning Experiences* course, but are not a participant in a facilitated instance from within your University, perhaps you would prefer to complete the course as a self-directed study.

This course is also available as a **self-directed study** at the following location: https://ecampusontario.pressbooks.pub/creatingqualitytelexperiencesselfstudy/

THEORY AS A COMPASS

Morten Paulsen (2012) identified the theory of cooperative freedom to describe online participation decisions made by individuals. It is based on three pillars: voluntary but attractive participation, individual flexibility, and relationship to the learning community. These are the principles that have guided the development team throughout the design of this online course.

More explicitly, the course will model practices, based on the following theories and principles, to help build community through your sustained interaction with course content, e-Moderators, and each other.

Principles of **Flow**, **Presence**, and **Active learning**

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Your (and our) location, in relation to...

Let's get to know each other a bit better to start growing our learning community. Please introduce yourself in the map below. Note learners who have participated in this course previously have already 'made their mark'. Share how you want to make your mark!

Once full screen you will see that (on the main layer) you can add a marker at the point where you live. You can also add a photo that is meaningful to you about your place/town (as Lisa has done for her location in The Hague).

- Step 1: You should first (in the upper right corner) choose to make the map full screen.
- Step 2: Add details (your name, land acknowledgment, photo). Remember the land acknowledgment in the previous section? This is a time when you can also share details about the traditional lands where you are joining us from!

- Step 3: Click save, then exit window and return to course. You can now refresh the page and see your marker included in our map.
- Step 4: click on other participant markers to learn about others who have joined our community in this and previous sessions.

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https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=55#h5p-13

PARTICIPATING IN COMMUNITY BUILDING

The course has been designed to allow flexibility in the approach(es) each of you will take through the process of creating and refining your design blueprint. To receive feedback on your designs from your e-Moderators and other participants, we encourage you to participate in our learning community.

Look for the Learning Community section icon near the end of each of the 4 modules. This is where we connect most often throughout the course.

If your needs are private or urgent, please email an eModerator directly for support.

Let's launch the learning community by sharing our thinking right now

Whenever people have a conversation about technology in training and development, it always brings up issues/frustrations and/or questions (technical and people related) that need to be addressed. What issues, frustrations, or questions do you have? You can response from your experience as a learner through technology or your instructor/trainer experience. Post 1 issue and 1 question in the **Tech-enabled learning design, through appreciative inquiry space**.

In the final week of the course, we'll return to this activity to wrap things up by populating the final thread in this section.

In closing

As we move through the course modules together, you will also have the chance to post any questions you have for us and share your answers to specific questions asked as part of a module experience. If not used in an activity within the module, we'll remind you that you can post any questions you have to the **course Q&A space** at any time to close each module.

A DEVELOPMENT PROCESS IN FOUR PARTS

Now that we have a clearer picture of the course flow, and how to use the course to create and refine a design for your own course, let's do a deep dive into four critical success factors for teaching and learning with and through digital spaces.

We will start by helping you to create a draft design blueprint in Week 1. Let's get started!

BLUEPRINTING TECHNOLOGY-ENHANCED LEARNER EXPERIENCES

L O'Neill

This module creates and refines a draft blueprint for your course

Module 1
Course design
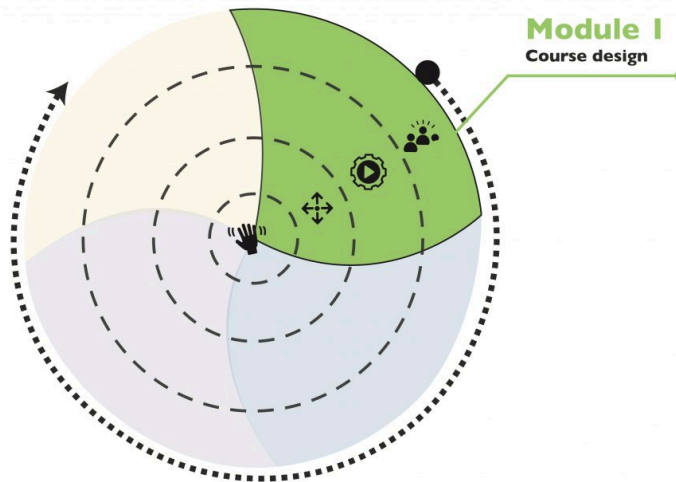
Key Takeaways

Draft a thoughtful course design that will map the build of your online course space.

Design opportunities in your course to give and get formal and informal feedback.

This module has 4 parts:

Introduction

Identifying the 'location' of this module within the course level learning will spark the introduction of module theories being considered (connectivism and flow). These process of design blueprinting is introduced at this point also. As a first method of working with these, in context, a template will be provided.

Expansion

A worked example is provided to show a blank versus a roughed in blueprint template for a post-secondary course. The concept of 'flow' is presented for consideration.

Refinement/Application

Participants are asked to return to first drafts, to refine designs. Benefits and challenges are presented to close this phase.

Learning community participation

Participants are asked to take the bold step to share refined draft designs with others and to share the 'why' behind any refinements made.

Introduction

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When choosing to incorporate technology-enabled spaces in teaching, it's far too easy to return to learning experiences where learners

passively consume our course curriculum like one might binge-watch the latest season of [insert your favorite show here].

A learner-centred perspective on instruction presents knowledge management with its central challenge since "circulating human knowledge is not simply about search and retrieval" (Brown & Duguid, 2002, p. 124). The harvesting of information and intellectual capital are important to knowledge management but are "subordinate to the matter of learning for it is learning that makes intellectual property, capital, and assets usable" (Brown & Duguid, 2002, p. 124).

This unit supports the design of engaging blended and online learner experiences by aligning our designs to the ways people learn in activity and through technology. The first and overarching theory introduced

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in this unit is constructivism. Constructivism most importantly recognizes that learners are not passive recipients of knowledge but those who 'construct' knowledge.

In support of constructivism our second theory, connectivism, assists us in designing technology-enabled spaces, as it supports the distribution of knowledge across networks. Learners then traverse those networks to make connections. A connected perspective on learning which supports authentic learning is the idea that people enter a state of flow when learning. Because flow views learning as a process, it further supports the co-construction of knowledge, situated in contexts, embedded within environments (both physical and virtual)... but more about that later.

A constructivist primer

Constructivism and Social Constructivism are two similar learning theories that share a large number of underlying assumptions, and an interpretive research 'position'.

Both approaches

- Deep roots in classical antiquity. Socrates, in dialogue with his followers, asked directed questions that led his students to realize for themselves the gaps in their thinking.
- Learning is perceived as an active, not a passive, process, where knowledge is constructed, not acquired.
- Knowledge construction is based on personal experiences and the continual testing of hypotheses.
- Each person has a different interpretation of' and process for' constructing knowledge based on past experiences and cultural factors.

Social Constructivism

- Emphasizes the collaborative nature of learning and the importance of cultural and social context.
- All cognitive functions are believed to originate in, and are explained as, products of social interactions.
- Learning is more than the assimilation of new knowledge by learners; it is the process by which learners are integrated into a knowledge community.
- Believes that individual constructivism overlooked the essentially social nature of

language and so supports learning as a collaborative process.

Underlying Assumptions

Jonassen (1994) proposed that there are eight characteristics that underline the constructivist learning environments and are applicable to both perspectives:

- Constructivist learning environments provide multiple representations of reality.
- Multiple representations avoid oversimplification and represent the complexity of the real world.
- Constructivist learning environments emphasize knowledge construction instead of knowledge reproduction.
- Constructivist learning environments emphasize authentic tasks in a meaningful context rather than abstract instruction out of context.
- Constructivist learning environments provide learning environments such as real-world settings or case-based learning instead of predetermined sequences of instruction.
- Constructivist learning environments encourage thoughtful reflection on experience.
- Constructivist learning environments "enable context- and content- dependent knowledge construction."
- Constructivist learning environments support "collaborative construction of knowledge through social negotiation, not competition among learners for recognition.

A **connectivist** primer (... think distributed learning)

A network can be defined as connections between 'things'. Computer networks, power grids, and social networks all function on simple principles that nodes (people, groups, systems, entities, etc.) can be connected to create a new 'thing'. Altering elements of a network has a ripple effect on the whole, and nodes that increase their profile (through interaction with other nodes, by performing actions, etc.) will be more successful at acquiring additional connections and expanding further.

Applied to the context of learning, the likelihood that two concepts of learning can be linked depends on how well each is currently linked. Nodes can be fields, ideas, or communities that specialize and gain recognition for their expertise, have greater chances of recognition, thus resulting in cross-pollination of

learning communities. Weak ties are links or bridges that allow short lived connections between information. Our small world networks are generally populated with people whose interests and knowledge are similar to ours. Finding a new job, as an example, often occurs through weak ties.

Underlying assumptions

Learning is a process that occurs within nebulous environments of shifting core elements – not entirely under the control of the individual. Learning (defined as actionable knowledge) can reside outside of ourselves (within an organization or a database), is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing.

Connectivism is driven by the understanding that decisions are based on rapidly altering foundations. New information is continually being acquired. The ability to draw distinctions between important and unimportant information is vital and critical to support. The ability to recognize when new information alters the landscape based on decisions made yesterday is also critical.

Principles

- Learning and knowledge rests in diversity of opinions;
- Learning is a process of connecting specialized nodes or information sources;
- Learning may reside in non-human appliances;
- Capacity to know more is more critical than what is currently known;
- Nurturing and maintaining connections is needed to facilitate continual learning;
- Ability to see connections between fields, ideas, and concepts is a core skill;
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities; and
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Creating, preserving, and utilizing information flow should be a key organizational activity. Knowledge flow can be likened to a river that meanders through the ecology of an organization.

In certain areas, the river pools and in other areas it ebbs. The health of any learning ecology depends on effective nurturing of information *flow*.

The starting point of connectivism is the individual. Personal knowledge is comprised of a network, which feeds into institutions, which in turn feeds back into the network, and then continues to provide learning to individuals. This cycle of knowledge development (personal -> network -> organization) allows learners to remain current in their field through the connections they have formed.

'Connectivism: A learning theory for the digital age' by George Siemens is licensed under CC BY 4.0

John Seely Brown (2010) presents an interesting notion that the Internet leverages the small efforts of many with the large efforts of few. The central premise is that connections created with previously unconnected nodes supports and intensifies existing large effort activities. Brown provides the example of a Community College project that linked senior citizens with elementary school students in a mentorship program. The children "listen to these 'grandparents' better than they do their own parents, the mentoring really helps the teachers" – the seniors (small efforts of the many) – complement the teachers (large efforts of the few). This amplification of learning, knowledge, and understanding is accomplished by extending personal networks, and so is at the core of connectivism.

Application

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First things first: download a design blueprint template.

Starting in this module, you will create a draft design for your own module/workshop/course. We will return to your draft design throughout this course to help you refine your design based on new information introduced, and activities completed in Module 2, 3, and 4!

NOTE: The question prompts provided in red text within the design template help you to draft a design for your own context! Also note that columns are color coded. Fill in as much as you are able within this first module but do not worry if you are not able to complete all columns. Future modules will dive deeper in to other aspects of this template (eg. see Module 3 for help completing the 'resources ,and tools' columns!).

I've created and shared, below, an example of a completed design (based on how I have designed this module) for you! If you want to read details, in the upper right corner, you can 'make fullscreen'.

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Expansion

A FLOW primer

The 9 dimensions of **FLOW**; from a learner's perspective

Balance between the degree of challenge and the current skill level (a learner feels engaged by the challenge, but not overwhelmed)	Action and awareness are merged without distracting thoughts (a learner feels completely immersed in the task at hand)	It is very clear what should occupy our attention (a learner has a good grasp of what to do next)
Reactions are adjusted to meet current demands due to timely feedback (a learner knows how well they are doing, all the time)	Absorbed in the activity, we are aware of what is task relevant (a learner has a high level of concentration)	An absolute sense of personal control (a learner is able to do what they feel is right)
Lack awareness of being self-conscious (a learner loses their need to protect their ego)	Time either slows down or flies by (a learner feels engaged 'in the moment')	An activity is done for its own sake (a learner feels 'value' in the activity regardless of reward system)

As you can see from the table above, instructors must balance the complexity of quality learning experiences with the design of teaching. The Design Blueprint helps you to draft a flow of a module/week/course. Note in the table above that principles of flow assume the presence of 'feedback loops' (e.g., "a learner knows how well they are doing'). There are technology features that can automate this feedback loop but, for now, let's say that you are in charge of this. Where in the chosen individual or group activity can you intervene to confirm that this is true? What might you say or do to achieve this? Is it noted in your design blueprint yet? Add this notation now while you are thinking about it.

Refining your draft to account for flow

The template provided will be used throughout this course in order to help you to embed practices which are known to create quality tech-enabled learning experiences. How will you refine your draft as a whole, in order to embed the dimensions of FLOW that benefit you and your learners in instruction, in activity, and/or in assessment?

Learning Community Participation

I've posted my refined map, based on the dimensions of flow, that I feel will be of benefit to you and me. I have also identified why I've made these changes. What changes have you made to your draft, and why did you make these choices?

   You can save your map as a PDF by going to your 'file' pulldown menu, choosing 'export' and selecting PDF. You can then post your details in text along with the PDF of your design to our **design share space**. After posting your first draft review and commented on the designs shared by your peers. Early feedback will help all os us refine our designs.

In closing

Post any questions you have for us, and share your answers to questions posed by others to the **course Q&A space**.

Module References

Brown, J. S., & Duguid, S. (2000). *The social life of information*. Harvard Business School Press.

Hagel III, J., Brown, J. S., and Davison, L. (2010). *The power of pull: How small moves, smartly made, can set big things in motion*. Basic Books.

Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development, 48*(3), 23-48. https://doi.org/10.1007/BF02319856

Rowe, K. (2006). *Effective teaching practices for students with and without learning difficulties: Constructivism as a legitimate theory of learning AND of teaching*? Australian Council for Educational Research: Student learning processes series. https://research.acer.edu.au/learning_processes/10

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Go Beyond the Module with These Readings and Resources

- A bit more about the Power of Pull with John Seely Brown
- Eight Tips for Fostering Flow in the Classroom. Greater Good magazine

About the Author

Dr. Lisa O'Neill
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Dr. Lisa O'Neill has executed the duties of educational developer, researcher, and technologist, primarily

within Teaching and Learning Centers, since 2005. She supports this project as its' Project Manager, and instructional designer/developer/eModerator within her role as Instructional Developer in Lakehead University's Teaching Commons.

Dr. O'Neill currently lives in the Netherlands but is Canadian born and raised. Lisa has lead the development of more than 40 massively open online courses (MOOC's) and also supports teachers as an online sessional faculty member, at the University of Cape Breton. Her courses assist the design of effective technology enabled (young person) learner experiences.

BLUEPRINTING LEARNER INTERACTIONS

A van Barneveld

This module enhances your blueprint with communication and interaction structures.

Module 2
Enhancement through interaction
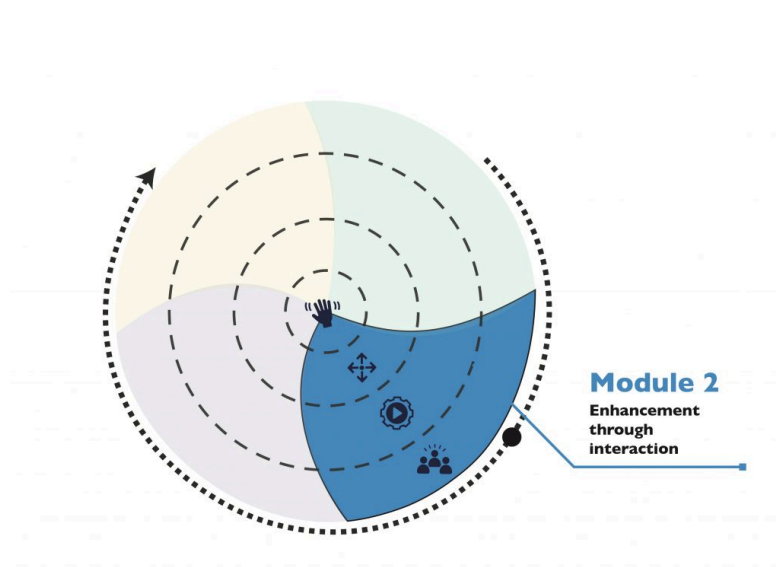
Key Takeaways for this week

Create course structures that provide a consistent look and feel, which my learners 'feel' is easy to use.

Create a course structure that allows for effective communication and interaction.

This module has 4 parts:

Introduction

Identifying the 'location' of this module within the course level learning will spark the introduction of module theories being considered(community of inquiry and types of interaction). These frameworks will be introduced in relation to defining communication strategies and approaches to interaction, all with the intent to create and foster community in tech-enabled courses. Participants will engage in interactive reinforcement activities (H5P).

Expansion

A worked example is provided to show a blank versus a roughed in blueprint template for a post-secondary course. The concept of 'flow' is presented for consideration.

Refinement/Application

Faculty members personas (2) are introduced to participants to consider 'in practice' perspectives on this like 'interaction with and through technology', to connect with others and learn. Participants will apply to-date learning to the draft started in Module 1.

Learning community participation

With a focus on communication and interaction approaches, participants are asked to share the expansion of their draft with others and also the rationale for their decisions.

Introduction

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In this module, we look at course structures that you can create to bring your design to life through communication and interaction! We'll explore the what, when, and why of each of these within critical course structures.

Before we get to that, let's talk about the importance of community, especially from the learner's perspective.

Community is no longer a place-based concept or constrained by location. The establishment of community within your **digital spaces** is an intentional process to ensure that learners feel seen, heard, and included. Creating a *learning* community within your course, according to Palloff and Pratt (2007), allows for "mutual exploration of ideas, a safe place to reflect on and develop new ideas, and a collaborative, supportive approach to academic work" (p. 26). Having a sense of community contributes positively to perceived learning, satisfaction with the course and the instructor, actual learning, and sense of belonging.

I know what you're thinking, and you're not alone. How can communications and interactions be used to create a sense of community in digital spaces? Let's get to it!

Theoretical Perspectives

Community of Inquiry

The **Community of Inquiry** (COI) framework is a social constructivist model of learning processes that identifies three core dimensions that contribute to a well-designed, technology-enabled learning experience. These dimensions, referred to as presences, lay the groundwork for building and maintaining community in your course, whether it be place-based, online, or hybrid. The ultimate goal of the Community of Inquiry is to build a solid foundation of **social presence** and **teaching presence** to stimulate **cognitive presence** in a course. Note that the learner is central in this model, by implication, since they are the one's having the educational experience.

> 📑 *One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=27#oembed-2*

As the instructor, there are a variety of ways to build community through a focus on the three presences. Click on each presence to see if any of these ideas resonate with you.

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Types of Interactions

According to Moore (1989), there are three types of interactions that contribute to effective learning. We added the fourth interaction (learner-interface), since the flow and layout of your digital space is also a place where the learner interacts and engages, and reflects teaching and cognitive presences. Note that the learner is central in this framework as well and, by extension, a central consideration as you make use of structures to support the design of your course.

Click on the hotspots below to see explanations of the different types of interactions. Note that the learner is central in all types of interactions,

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The integration of the COI presences and types of interactions in your course contributes to the creation and maintenance of community.

Expansion

Now that you've gotten familiar with presences and the types of interactions as they contribute to learning and community building, take time to explore what, when, and why of some critical course structures.

Communication can happen throughout your course and in various ways, even before your course officially starts. What would that entail? Consider sending a pre-class email and a pre-class survey.

A pre-class email serves as the launch of teaching presence and is a one-way interaction from the instructor to the learners. Indeed, Palloff and Pratt (2007) refer to Week Zero as an important time and indicate that this initial contact should focus on community-building within the group prior to engaging in content. This email can include:

- a purpose for the early communication (why learners are receiving the email)
- information about course textbook(s) that should be purchased sooner than later
- course site opening dates, and/or
- links to an online pre-class survey.

What would you include?

Think about what you might put into a pre-class email for your particular learners for your particular subject area. Include whatever you deem is important for your learners to know/do/have to prepare for a successful entry into the class.

A pre-class survey starts the two-way 'conversation' between the instructor and the learners, and contributes to the sense of social presence. The purpose of the survey is to gather information about your learners ahead of time in order to inform the delivery and supports for your learners. The survey can include questions about:

- number of courses completed in the program (speaks to support),
- experience and comfort with digital learning spaces (speaks to support),
- experience and comfort with subject matter/course topic (speaks to support and delivery),
- time management strategies (speaks to support), and
- questions and curiosities about the subject matter/course topic (speaks to delivery).

What else would you want to know?

After looking at the pre-class survey (see sample), think about what questions would you keep/ add/ edit/ delete to help you get to know this particular group of learners in this particular class.

Remember that each question you ask must be purposeful and provide information that you can use to enhance delivery and learner support in your class.

The email and survey link would ideally be sent to learners at least 4 weeks before the course starts along with a 'submit by' date that is at least 10 days before the course starts. This allows time for learner response (and a reminder or two), integration of findings into your design blueprint, as appropriate, and summary and sharing back of results to learners. This last aspect – sharing the aggregated results back to learners – is also an important element in growing the community and social presence. The learners can see not only what the whole group shared, but also that their voices and contributions matter.

Once your class starts, you have critical structures than can be used for communication and interaction.

Critical Structures to Create and Maintain Community

Announcements

Announcements are a key way to communicate with your learners. This is a good way to establish your presence at the start of your course, and help to build community throughout your course.

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Discussion

Discussions (between learners) are much more than simple Q & A spaces. They are an important component of tech-enabled courses, and support the development of the learning community. Discussions can be informal and formal.

Informal discussion spaces

These are the spaces where interactions between learners have a non-course content related focus. Informal discussion forums can be set up for:

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Formal discussion spaces

Formal discussions are a great way to foster interactions and engagement between the learners and the content, the instructor, and other learners. You can design activities that allow learners to be creative and apply knowledge and skills, either individually or collaboratively, in small or large groups. Ideally, formal discussion

should be open-ended, allowing for robust interaction and exchange of ideas. Avoid posing questions that have a right answer (yes/no, factual answers). Once the correct answer is posted, what else is there to discuss?

What ideas do you have for your class discussions?

Formal discussions can take many forms and are an opportunity for you to get creative! In an effort to move beyond the simple Q&A format, see if any of the suggestions below (certainly not a finite list) could find a place in your course and excite your learners.

- engaging in an organized debate
- addressing problems/solutions through case studies/scenarios
- curating content with a purposeful goal/product
- sharing and providing feedback to peers
- engaging in role plays
- creating visual or video responses

Critical Structures for Feedback and Assessment

Assignments Dropbox

Feedback and assessment are, no doubt, part of your course design. While the Assignments Dropbox can also be utilized in different ways support learning, two key ways to incorporate the Assignments Dropbox can be to have learners:

- Draft assignment submissions to receive actionable feedback (no grade), so learners have a chance to make revisions prior to final submissions and grading, and
- Final assignment submissions for final grading, where feedback can also be given but where no opportunity is provided to implement what was learned from feedback given.

Grading and feedback associated with the Assignments Dropbox can be easily linked to the groups space so to make it administratively easy to provide feedback and grades to group projects.

Group Spaces

Your **LMS** may have a feature that supports the creation of group spaces. These spaces allow a group to work in private on 'in process' collaborations and development, visible only to the group, and all spaces visible to the instructor.

Group spaces can also be used to create topics/spaces for all learners (think of a virtual site visit in the environmental sciences). Data can be provided within each space specific to the focus/topic, and discussions can be linked to focus conversation on these topics, within these spaces.

Now, let's get back to our instructors and see what they are up to in their digital spaces.

Application

Meet our faculty community members

Roger, full-time instructor in the School of Environmental Sciences, has been around technology and has managed digital systems that help him with data collection and research for years, but his needs are rarely connected to technology in his role as educator. In his class, he has incorporated online discussions, but finds that the question/answer format does not engage the learners like he was hoping.

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https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=27#h5p-20

In her part-time teaching role in the School of Business, Christina supports students to use media as a communications tool, and to create media systems for marketing purposes. Christina has been assigned an asynchronous online class and, while she is comfortable with technology-enabled communications, she is a little concerned about how to ensure that she and her learners see each other as real and all in the class together.

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https://ecampusontario.pressbooks.pub/ creatingqualitytelexperiences/?p=27#h5p-19

What have you used in your practice?

There are many things to consider in your tech-enabled course. The structures that you learned about in this module offer a good grounding and support the development of community through communication and interactions. Let's do a brief review, aligning presences with interactions with course structures.

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https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=27#h5p-16

What have you already used and what do you want to add?

Think about how you currently use or would like to use the course structures available to you in your digital space. Applaud yourself for what you already have in place and consider what you might add to positively contribute to the learning experiences in your class.

- Pre-class emails and/or surveys
- Announcements (at various times throughout a week)
- Informal discussion forums
- Formal discussion forums (a whole variety beyond simple Q & A)
- Assignments Dropbox for ungraded and graded submissions
- Group spaces for collaborative activities

The theoretical frameworks included in this module are well known and applied extensively to support learners and learning in digital spaces. To get a more in depth understanding of the Community of Inquiry and its presences, Garrison et al., (2000) and the COI website are good places to start. Additionally, the Purdue PoRTAL site offers many practical tips and strategies that also align with the COI. And Moore's (1989) brief editorial gives you more details about the types of interaction (see the Module References and Readings and Resources sections below to learn more).

Now let's get back to your design blueprint from Module 1. Refine the blueprint by considering how to integrate the 3 presences and apply types of interactivity to enhance the learning experience in your digital space.

Learning Community Participation

We covered a lot in this module – not only how to create community through communication and interaction, but also how to enact those through various structures available in your digital learning space. As you continue to work on your design blueprint, think about the following questions and see how they might be addressed in your course.

- What strategies can I use to demonstrate and foster presence – social, cognitive, or teaching?
- What are my communication strategies for the class – where do I communicate (and do learners know that), when, and about what?
- What opportunities are there in my course for interaction with and, especially, between learners?

Share your refined course map draft/design blueprint

Did you make changes to your design draft, or begun to add detail to other columns not completed in Module 1? Share your refined draft, and review/comment on each other's posts to see learn from other approaches used within other disciplines in the **Design share space**!

In closing

Post any questions you have for us, and share your answers to questions posed by others in the **course Q&A space**.

Module References

Borup, J. (June 20, 2014). *Community of inquiry*. Retrieved August 17, 2021 from https://www.youtube.com/watch?v=273WuFa6Z04

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 87-105. https://doi.org/http://dx.doi.org/10.1016/S1096-7516(00)00016-6

Moore, M. G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education, 3*(2), 1-7. https://doi.org/10.1080/08923648909526659

Palloff, R.M., & Pratt, K. (2007). *Building online communities*. Jossey-Bass.

Go beyond the Module with these Readings and Resources

- COI (n.d.). *Community of inquiry framework*. Retrieved October 11, 2021 from https://coi.athabascau.ca/coi-model/
- Purdue University (n.d.). *Purdue repository for online teaching and learning* (PoRTAL). Retrieved September 15, 2021 from https://www.purdue.edu/innovativelearning/supporting-instruction/portal/
- Pre-class survey video summary (an example of how I share back the input from learners and what I do with it – please forgive my use of "you guys")

- Course orientation video (an example of how I orient learners to flow and expectations in an asynchronous online course – again, please forgive my use of "you guys")

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ASSURING ACCESS TO TECH-ENABLED EXPERIENCES

A van Barneveld and L O'Neill

This module will look at an array of 'places and spaces' for learning and the degree to which each can support flexible, hybrid, and fully online/offline experiences.

Module 3
Resourcing learning effectively
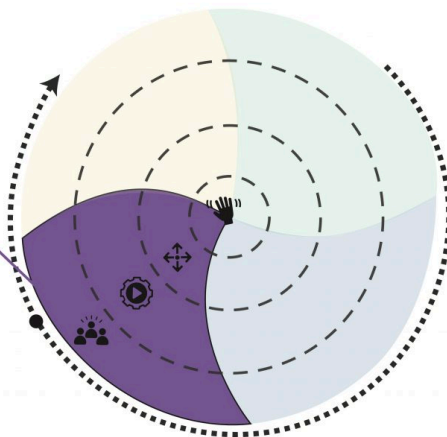
Key Takeaways for this week

Embed media assets in the curriculum in thoughtful ways.

Map learner-centered options, for your course, for distributing/accessing media effectively.

This module has 4 parts:

Introduction

Identifying the 'location' of this module within the course level learning will spark the introduction of module theories being considered(time versus security of resources). Three students are introduced to participants, who will share their experience learning within technology-enabled spaces.

Expansion

Here we will look at an array of 'places and spaces' for learning and the degree to which each can support i) flexible, ii) hybrid, and iii) fully online/offline experiences.

Refinement/Application

Its now time to look at the classroom as both virtual AND place-based. The students are introduced to the faculty members from Module 2. How can these instructors best support these learners?

Learning community participation

With a focus on resourcing for access, with the learner in mind, participants are asked to share the expansion of their draft with others and also the rationale for their decisions.

Introduction

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In order to a support the academic success of learners like Bobbi, we will consider resource accessibility (by location and by function). This requires us to consider resource distribution/access from a learner's point of view.

Do you investigate what digital spaces and other tools your institution has available when you choose or create readings, videos, and graphics for your workshop/course? Are your resource choices a result of design/development decisions you have made?

Learner-centered resourcing looks at where teaching happens and where learning can happen, and *then* determines where to place resources in ways that maximizes potential for learners to apply them to activities and assessments.

Expansion

Hakeem is out in the field conducting interviews as part of a class assignment. He wants to be able to capture all necessary information during the interview and, while he has a phone to record the interviews, he has no ability to access assignment resources when he is 'in the field' because he has no data plan for his phone.

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> *https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=29#h5p-18*

Fern is also 'in the world' for some of her course activity; much more perhaps even than Hakeem! She will be leading other students through a set of land experiences and will be calling a circle during one of these in order to facilitate a discussion about their experiences and how these connect to their past and future experiences.

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> *https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=29#h5p-14*

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Resourcing learning through mobile devices

Here are a few tips for making your content accessible through a mobile device, like a smartphone:

- Provide bite-sized chunks of learning content
- Convert current resources into user-friendly and easily accessible formats
- Make assessment instructions available in audio format

For additional tips on how to help learners to study effectively any time, anywhere with smartphones, see Faculty Focus.

Application

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https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=29#h5p-21

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creatingqualitytelexperiences/?p=29#oembed-3

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Has this module provided you with some methods you were able to incorporate into your design blueprint? Perhaps in your earlier versions, you had clearly identified the resources needed to introduce topics (teach) but were not yet clear on other resources for the green and blue sections. Take a few minutes to add possible resources that support activity and assessment now.

Cycle/Module/Week: _____
Theme: _____

Learning Outcome (s)	Topics/content and methods to introduce	Instructional resources	Individual Activities	Group Activities	Learning resources	Assessment method	Tools used	Total Student Workload (in hrs)
Identify the cycle/module/week learning outcome that directly support the rest of this row.	*Outline the direct instruction method(s) used to help learners start/complete identified activities in this row.*	*What resources must be used to help you deliver the direct instruction method(s) in this row?*	*Outline activity an individual learner can apply topics/content from this row.*	*Is this outcome/topic better supported by having learners work together to apply/develop?*	*What are the tools and media/handouts learners can/must use to complete identified activities?*	*How you will observe learners exhibiting the desired behavior and/or enacting the skill set out in the outcomes identified?*	*What resources must be handed out/uploaded to help achieve the outcomes (rubric, sample of completed work, etc)?*	

Learning Community Participation

If your design blueprint changes during this module (especially in the resources and tools column!), re-share with a comment about what was added, and compare your refinements to those of your peers. Comment and questions are encouraged in the **Design share space**.

In closing

Post any questions you have for us, and share your answers to questions posed by others in the **course Q&A space**.

Go beyond the Module with these Readings and Resources

- A Learning space definition in Wikipedia
- A place-based education overview
- Faculty Focus (June 7, 2021). *Three tips on how to help your students study online effectively with a smartphone.*

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Dr. O'Neill currently lives in the Netherlands but is Canadian born and raised. Lisa has lead the development of more than 40 massively open online courses (MOOC's) and also supports teachers as an online sessional faculty member, at the University of Cape Breton. Her courses assist the design of effective technology enabled (young person) learner experiences.
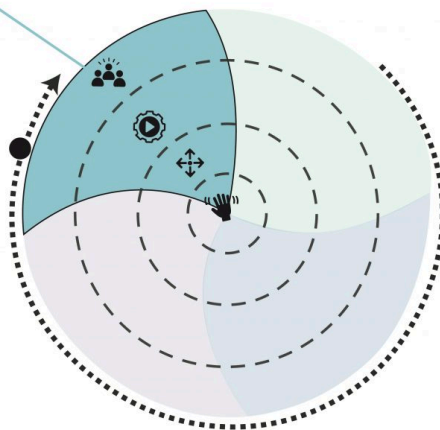
ACTIVATING LEARNING WITHIN DIGITAL SPACES

H Carroll; S Driessens; and P Maher

This module explores several 'toolkits' that demonstrate course themes in action, and analyze these toolkits and their contents to see which activities fit their own teaching.

Key Takeaways for this week

Create a course structure that effectively activates learning within a digital space.

Design and implement strategies that activate learning in ways that support learner agency for pace, place and mode of learning.

This module has 4 parts:

Introduction

Identifying the 'location' of this module within the course level learning will spark the introduction of module theories being considered(inquiry based engagement, active learning and social connectivity). Course participants will explore several 'toolkits' that demonstrate these themes in action, and will apply these concepts to their own work.

Expansion

You will be challenged to analyze these toolkits and their contents to see which activities fit your own teaching.

Refinement/Application

Once more familiar with the toolkits you will be asked to take an example and apply it to your course/lesson design.

Learning community participation

Sharing a final, refined design blueprint all participants can see the ways that course learning appears in teaching and learning.

Introduction

In the previous modules, you have explored course design, enhancing your course design through interaction, and resourcing learning effectively. In this final module, we are going to explore the importance of activating learning including different strategies and activities you can use to move learners from passive to active participants. We will also discuss the importance of learner agency in relation to active learning and course design more broadly.

Before we dive in, take a few minutes to summarize what you have learned so far; just a few sentences to summarize each module. Then, pose one or two questions about the final module keeping in mind the theme of active or activating learning. When you are ready, watch the introductory video that maps out the final module.

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Active Learning: A Primer

Where Have You Been?

When thinking about designing and creating quality, technology-enabled learner experiences, a key consideration is how to move beyond passive learning to incorporate active learning. Part of this process involves a shift in how we think about learning and learners, from passive recipients of knowledge to active co-constructors of knowledge in relation with their instructor and peers. Put differently, active learning supports Freire's (1970) belief that "the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with students-teachers" (Freire, 1970). Within this context, instructors become learners as you consider your own knowledge, experiences, areas of strength, and opportunities for growth.

Before diving into this module, ask yourself the following reflection questions. Make note of anything you want to get curious about as you move through the content.

- What are my experiences with learning as a learner and teacher?
- What do I believe about how learners learn best?
- What do I already know about active learning?
- What piques my interest in active learning?
- What makes me uneasy about active learning?

Where Are You Going?

There are many factors to consider when planning and implementing active learning strategies. The final module in this course will help support your growth by offering practical strategies that you can implement into your course design. Before diving into the content, remember that the goal is to meet you where you are in your own learning journey, while similarly extending this mindset to your course design and current/future learners.

This module will help you to:

1. Define active learning including its underlying assumptions and principles;
2. Compare and contrast active learning with experiential learning and activating prior learning/ knowledge;

3. Provide examples of active learning strategies;
4. Invite you to consider your strengths and areas for growth in relation to bringing active learning into your course design; and
5. Offer opportunities for you to apply your learning to your course design.

What is Active Learning?

Active learning involves actively engaging learners by "involving [them] in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991). For example, you might involve learners through online discussions, role playing, or case studies. The key factor to consider when designing active learning strategies is to ensure that learners have greater responsibility for their learning, thinking, and doing, but that you are still providing support and guidance.

"Active learning strategies are classroom techniques that engage students with the subject they're studying by discussing it, writing about it, applying it in some meaningful context, or otherwise working it into the fabric of their own experience and prior knowledge. They become active creators of knowledge rather than passive recipients of information" (Worley, 2007, p. 450).

Underlying Assumptions of Active Learning

Based on a review of the literature, active learning:

- Involves dialogue with the self, as learners reflect on their learning, thinking, and doing; and dialogue with others, as learners converse (orally or in writing) with peers, as well as you (Fink, 2010).
- Looks at learning holistically by focusing on experience (e.g., doing, observing), reflective dialogue (with self or others), and information and ideas found within the content (Fink, 2003).
- Is learner-centred emphasizing exploration, growth, and development, rather than instructor-centred, which emphasizes knowledge transmission (Austin & Mescia, 2004).
- Focuses on interaction as learners encounter and engage with new information and

ideas, perspectives, viewpoints, etc. (Columbia Center for Teaching and Learning, n.d.).

- Incorporates learning by doing whereby learners dive deeper into course content through active involvement (Bolliger & Des Armier, 2013).
- Involves drawing upon the learner's prior knowledge to scaffold new information and ideas (Kinsella, Mahon, & Lillis, 2017).
- Allows learners to move beyond surface level learning by diving deeper into course content through application and knowledge transfer (Queens University, n.d).

Principles of Active Learning

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences/?p=31#oembed-2

'Active Learning Overview' by 'MIT OpenCourseWare' is Creative Commons BY-NC-SA licensed

As you learned previously, constructivist learning emphasizes knowledge construction, including collaborative construction or co-construction of knowledge. Active learning applies principles of constructivism (e.g., dialogue, knowledge construction, diverse ways of knowing and thinking, learning is contextual, learning takes time) to help learners thoughtfully engage with course material, each other, and their own thinking. Active learning has roots in experiential learning, or learning by doing, whereby instructors give learners "something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results" (Dewey, 1916). Active learning involves elements of, but is not necessarily synonymous with, experiential learning. Relatedly, activating learning by drawing on the learner's prior knowledge, is equally important. The figure below compares and contrasts these three interrelated concepts.
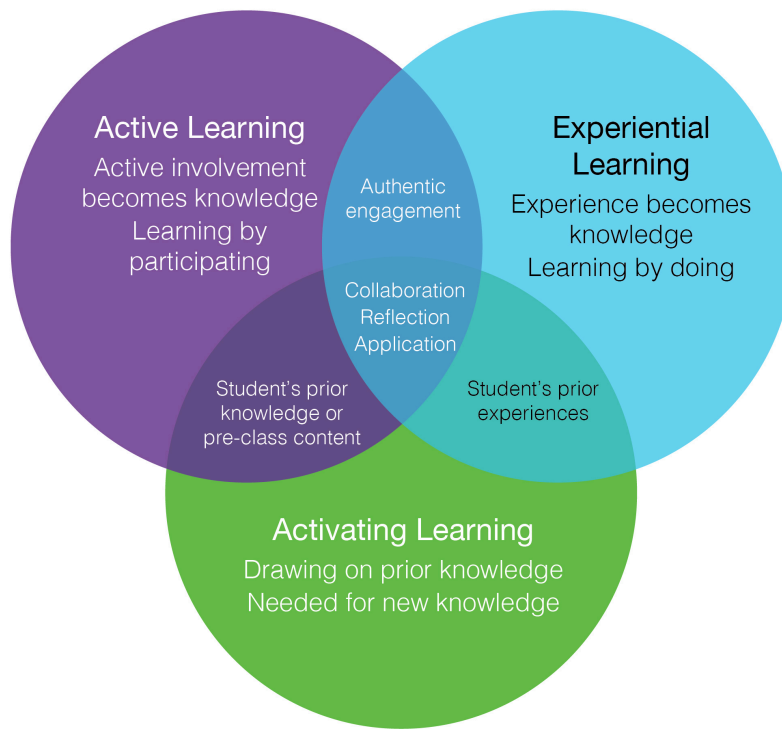
When thinking about active learning, keep in mind that it can take a variety of forms and can occur individually, in small groups, or in large groups. Active learning shifts the onus of responsibility for learning from the instructor to the learner, but guidance and modelling are critical structures for active learning to thrive. Active learning strategies can be woven into your course design, including those strategies that tend to be more passive for learners such as lectures. The next section provides some examples of active learning strategies for your consideration.

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Evidence that Active Learning Works

Active learning is a proven learning strategy that supports learner engagement as they dive deeper into course content and apply their learning. For example, active learning has been linked to:

- Increased understanding and knowledge of course material, and a more enjoyable learner experience

(Braxton et al., 2008)
- Broadened scope of application (Waldrop, 2015)
- Enhanced resilience, problem-solving, and ability to overcome challenges (Lopatto, 2007)
- Improved test scores and overall passing rates (Mello & Less, 2013)

> *One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/ creatingqualitytelexperiences/?p=31#oembed-3*

'A Jigsaw Activity as a Capstone in a Mineralogy Classroom – Part 1 of 3' by 'University of British Columbia Faculty of Science' is licensed under a CC Attribution-NonCommercial-ShareAlike 4.0 International License.'

For us, active learning isn't a question of what or why, it's a question of how. How you use active learning in your course is up to you and needs to make sense in the context of your course design.

Now let's get back to your design blueprint from Module 1. Refine the blueprint by considering how to integrate active learning either for an individual learner or a small or large group of learners.

Expansion

What is Learner Agency and How Does it Relate to Active Learning?

According to Stommel (2020), designing quality technology-enabled learning experiences requires you to build a course and a classroom. The best learning experiences are those grounded in learner agency. You should build a course by considering who your learners are – where they come from, what they know, what they ought to know – and build pathways that empower them to own their learning journeys.

There is no universally accepted definition of learner agency. However, a review of the research literature suggests some common elements:

- A belief in learner self-efficacy on both the part of the instructor and the learner (Davis Poon, 2018);
- Choice, voice, and ownership within, throughout, and over the learning process (Driessens, Scarlett, & Parr, 2019);
- Meaningful connections between what is being learned and the learner's lived experiences (Margolis, 2016); and
- Learners as active agents who have a desire to deeply engage with the learning process (O'Rourke & Addison, 2017).

This is not necessarily an exhaustive list, but it does at least highlight important elements that provide insight into how you can use active learning strategies to cultivate learner agency within your course design.

Grounding your course design in learner agency also demands that you recognize the inherent worth and value of learners; you must view learners as fully capable of engaging in real social change and enacting diverse destinies. In order to make this a reality, you need to wholeheartedly trust them as competent and capable learners.

Cultivating Learner Agency Online

According to Morris (n.d.), when it comes to online course design we need to "begin playfully outside the borders of how we've always taught and how we relate to the machines that can help us teach." Pause for a moment to really reflect on what you believe learner agency looks, sounds, and feels like, and how that translates into a digital space. We offer a few suggestions below to get you started, but encourage you to get curious about your own understanding of learner agency in relation to yourself as instructor, your course, and your learners.

- Whether teaching fully synchronous or asynchronous, onsite, or hybrid, you need to put the work of your learners, including their lived experiences, interests, and passions, at the centre of your course. Allow their voices to be heard more than yours. For example, invite learners to create or co-create lecture videos so that they learn from each other, while simultaneously building community.

- Consider allowing your learners to 'choose their own adventure' when it comes to assessment. Ask yourself how you can provide multiple modes of representation to meet learners where they are, rather than where you expect them to be. For example, allow learners to choose how they represent their learning (e.g., through an essay – traditional, video, or photo -, podcast, tweets, etc.) or, better yet, plan open-ended projects that have real-world applications.
- Get curious about what you use for evaluating assignments. If you typically use traditional rubrics, consider adopting a single-point rubric. Push yourself to take this one step further by inviting learners to co-construct evaluation criteria by asking what they feel is most important and/or most representative of their learning.
- Critically reflect on your beliefs, assumptions, and practices about teaching, learning, and learners. How do you view your authority as an instructor? Remember that "active learning puts [learners] at the center of the learning space" (Stommel, 2020). How will you lean into active learning as a fully engaged learner and participant in your course?
- Get intentional about the technology you use. Remember, use the technology, don't let it use you! Quality technology-enabled learning provides sets of tools that you can use, but they do not, and should not, dictate how you teach. Your course design needs to be grounded in pedagogically-sound principles and practices that shift learners from passive to active participants in your course. Whatever tool you select from your toolkit needs to be intentional.

Application

Pause & Ponder

Pause for a moment to revisit your learning design blueprint. Put yourself in the position of a learner and ask:

- Would you feel trusted, valued, empowered?
- Would you feel like you could succeed?

Make any necessary adjustments or modifications to your design based on your answers.

Active learning can be used to introduce new topics, ideas or information (both online and face-to-face); analyze or apply course concepts and content; facilitate effective peer feedback; and apply learning. When considering which active learning strategies you will utilize, the following questions can help to facilitate your decision-making process:

What are your time constraints?	How much time you have to focus on building and implementing active learning strategies ought to be considered during your planning process. However, even if you are pressed for time, brief active learning strategies can still help support student engagement.
What is your class size?	Active learning can occur in both large and small classes, you will just need to adjust your format. In a smaller class, you might be able to utilize a think-pair-share, whereas in a larger class, you may find yourself weaving in a jigsaw activity.
What is your comfort level?	Your own experiences with active learning, as both a learner and an educator, are important to consider. If you are new to active learning, start small and consider adding a small, low-risk active learning activity to break up the course delivery or get curious about what students learned in class that day.
What is your course modality?	Active learning is valuable for face-to-face, online, and hybrid course delivery. What activity you choose needs to fit both the context of your course, as well as the context of your course delivery. For a face-to-face course, students may brainstorm by creating a graffiti wall. The same activity can be utilized online (both asynchronous and synchronous) by creating a shared, interactive document for students to brainstorm such as a Jamboard or virtual whiteboard.

We encourage you to start small in your planning and think about one active learning strategy you may want to include in your course design. As your experience and confidence builds, then so, too, can your course design.

Learning Community Participation

Now that you have reviewed the content about active learning, we invite you to reflect on what you have experienced as a learner and what you have used as an instructor. Using the following reflection questions as gentle prompts, rejoin our learning community by sharing your ideas and experiences in our **designing experiences space**.

- What active learning strategies have you experienced as a learner?

- What active learning strategies have you used as an educator?

Next: Consider what areas of your course could most benefit from active learning. We invite you to get curious about one or two new activities and apply to your course design. In the spirit of collaboration, we invite you to share with the community what active strategies you hope to use and why using this collaborative Jamboard.

Finally: Twitter chats are a fun and engaging way to get intentional about social media and tech-enabled learning. We invite you to get curious about learner agency and what it means to you within the context of your course. Share your thoughts, perspectives, and experiences by using the hashtag #LearnerAgency. Please tag the creators of this resource in your tweets/retweets (@NU_TeachingHub and @LUteaching).

In closing

First off, let's take a moment to celebrate how far you have come! From Module 1 all the way until now, you have brainstormed, drafted, edited, revised, and polished your design blueprint. Congratulations! We invite you to put the finishing touches on your design blueprint, save a final PDF of your design, and post to our **design share space**.

After posting your final design, review and comment on the designs shared by your peers. Make note of those that have 'stood out' for you, noting elements that represent why (for you). Remember the importance of relationality in learning – the more you put into your design and the community with whom you shared this experience, the more you will get out of the course. Moreover, seeing the work of others positively contributes to teaching excellence and creates opportunities for you to not only lean on your peers, but also adapt or modify their practices to strengthen your own.

"Success is a journey, not a destination. The doing is often more important than the outcome." ~ Arthur Ashe

In closing, we would like to reiterate that course design is iterative; you'll move back and forth between brainstorming, drafting, editing, back to brainstorming, and so on. Congratulations again on your journey!

Module References

Austin, D., & Mescia, N.D. (2004). *Strategies to incorporate active learning into online teaching.* Retrieved from https://ap.uci.edu/wp-content/uploads/102417-Austin-and-Mescia-STRATEGIES-TO-INCORPORATE-ACTIVE-LEARNING-INTO-ONLINE-TEACHING.pdf

Bolliger, D.U., & Des Armier, D. J. (2013). Active learning in the online environment: The integration of student-generated audio files. *Active Learning in Higher Education, 14*(3), 201-211. https://https://doi.org/10.1177/1469787413498032

Bonwell, C.C., & Eison, J.A. (1991). *Active learning: Creating excitement in the classroom*. Association for the Study of Higher Education. https://files.eric.ed.gov/fulltext/ED336049.pdf

Braxton, J. M., Jones, W. A., Hirschy, A. S., & Hartley III, H. V. (2008). The role of active learning in college student persistence. *New Directions for Teaching and Learning*, *2008*(115), 71-83. https://doi.org/10.1002/tl.326

Columbia Center for Teaching & Learning. (n.d.). *Active learning for your online classroom: Five strategies using Zoom*. https://ctl.columbia.edu/resources-and-technology/teaching-with-technology/teaching-online/active-learning/

Davis-Poon, J. (2018, September 11). *Part 1: What do you mean when you say "student agency"?* https://education-reimagined.org/what-do-you-mean-when-you-say-student-agency/

Dewey, J. (1916). *Democracy and education.* Courier Corporation.

Driessens, S., & Parr, M. Cultivating critical imaginations in ourselves, others, and the world. *CAP Journal: The Canadian Resource for School-Based Leadership*, Spring Issue. https://cdnprincipals.com/cultivating-critical-literacy-imaginations-in-our-selves-others-and-the-world/

Fink, L.D. (2003). *A self-directed guide to designing courses for significant learning*. https://www.deefinkandassociates.com/GuidetoCourseDesignAug05.pdf

Fink, L.D. (2010). *Active learning*. https://commons.trincoll.edu/ctl/files/2013/08/Week-3-Active-Learning.pdf

Freire, P. (1970). *Pedagogy of the oppressed.* Continuum.

Kinsella, G.K., Mahon, C., & Lillis, S. (2017). Using pre-lecture activities to enhance learner engagement in a large group setting. *Active Learning in Higher Education, 18*(3), 231-242. https://doi.org/10.1177/1469787417715205

Lopatto, D. (2007). Undergraduate research experiences support science career decisions and active learning. *Life Sciences Education*, *6*(4), 297-306. https://doi.org/10.1187/cbe.07-06-0039

Margolis, A. (2016, March 23). *What is student agency?* https://inspiredteaching.org/what-is-student-agency/

Mello, D., & Less, C. (2013). Effectiveness of active learning in the arts and sciences. *Humanities Department Faculty Publications & Research*. 45. https://scholarsarchive.jwu.edu/humanities_fac/45

Morris, S. M. (n.d.). *The failure of an online program*. https://pb.openlcc.net/urgencyofteachers/chapter/the-failure-of-an-online-program/

O'Rourke, M., & Addison, P. (2017). *What is student agency?* https://www.edpartnerships.edu.au/file/387/I/What_is_Student_Agency.pdf

Queens University. (n.d.). Active learning. https://www.queensu.ca/teachingandlearning/modules/active/index.html

Stommel, J. (2020, May 19). *How to build an online learning community: 6 theses.* https://www.jessestommel.com/how-to-build-an-online-learning-community-6-theses/

Waldrop, M.M. (2015). Why are we teaching science wrong, and how to make it right. *Nature*, 523, 272-274. https://doi.org/10.1038/523272a

Worley, R. B. (2007). *A*ctive learning strategies, part 1. *Business Communication Quarterly, 70* (4), 450-451. https://doi.org/10.1177/1080569907308961

Go beyond the Module with these Readings and Resources

- Centre for Teaching Excellence, The University of Waterloo. (2021). *Active learning activities.* https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/developing-assignments/assignment-design/active-learning-activities
- Centre for Teaching & Learning, Columbia. (n.d). *Active learning for your online classroom: Five strategies using zoom.* Active Learning for your Online Classroom: Five Strategies using Zoom (columbia.edu)
- Petersen, C.I, & Gorman, K.S. (2014). Strategies to address common challenges when teaching in an active learning classroom. *New Directions for Teaching and Learning, 2014*(137), 63-70. https://doi.org/

10.1002/TL.20086

- Wahyuningsih,D. (2016). Active learning through discussion in e-learning. *International Journal of Active Learning, 1* (1), 1-4. https://www.learntechlib.org/p/208699/

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RECAP, REFLECT, AND PLAN YOUR NEXT STEPS

This section provides a detailed summary of the growth and development for participants of the course, and provides direction for your further development.

IT'S A WRAP!

We've travelled a great distance over the last 5 weeks. We hope that you have been able to apply the concepts to your own workshop/course and that the types of interaction that you have experienced here has inspired you to 'level up' your resource and media game.

Remember our first learning community activity? You each shared 1 issue that you have connected to tech-enabled teaching and learning. You also posted 1 question you have connected to this topic.

Sharing your current perspective is important to the process of appreciative inquiry; equally important is to come to resolutions. As a final course activity, let's look to the final column. What solutions can you offer to us/each other for one of the issues stated? Perhaps instead you see a question that you have an answer for. Let's get this final activity started by returning to the **Tech-enabled learning design, through appreciative inquiry space**!

Further readings beyond the course worth exploring

- Naidu, S. (2017) How flexible is flexible learning, who is to decide and what are its implications? *Distance Education, 38*(3), 269-272. https://doi.org/10.1080/01587919.2017.1371831