Designing Quality Tech-Enabled Learning Experiences course
A Final Report

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Project Context

1. **Purpose of the course:** The overarching objective of this 4-module course will be to *facilitate the development of Ontario higher education faculty, instructors, and teaching staff who seek 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*.

2. **Short background to the course and its end objectives:** The course will meet the above objectives through its community building and e-moderation in the first half of the course as participants are *Blueprinting technology-enhanced learner experiences* in the first module, and *Blueprinting learner interactions* within the second. Module 3 and 4 will enhance participant draft designs through its *Assuring access to flexible experiences* and *Activating learning within digital spaces* moderated activities.

   2.1. **Other objectives:** Other objectives this project seeks to accomplish are to i) Build and share a model course that can act as a 'worked example' of current, effective, open design and teaching structures/practices, and can be used freely by any Ontario post-secondary institution, and ii) Work in partnership with Nipissing University to design

and pilot faculty development support, that further strengthens our Northern Ontario University Alliance.

Project Requirements

3. **Specifications provided by the project owner or key stakeholder:** course must be creative commons licensed and shared back to the eCampus Ontario database for access by other post secondary institutions.
4. **Cost:** total course development and pilot is $171,000 dollars.
5. **Timelines:** Project launch occurred on April 7th 2021, and project reporting and close will occur on February 28th 2022.
6. **Standards:** Open practice standards will be protected throughout development and delivery, and interoperability will be accomplished through the development of an implementation guide that will accompany the final course package. The team will use a massively open online course (MOOC) design framework to ensure global accessibility compliance, and adherence to multicultural design practice standards.

Learning Requirements

7. **Overview Information about the audience:** The course will be designed to serve the development needs of teaching staff (full-time and sessional), and those who will be involved in the design and development of technology enabled learning in higher education.
   7.1. **Audience profile #1:** Full-time *teaching staff supporting a university program*.
   7.2. **Audience profile #2:** Sessional *teaching staff supporting a university course*.
   7.3. **Audience profile #3:** *Media developer or technical support specialist supporting university colleagues in the design of quality tech-enabled learning experiences*.
8. **Learning environment(s):** participants can access the course from home or work and can utilize either a laptop or mobile device (eg. phone, iPad) to connect and interact.
   8.1. **Online:** participants will complete all course requirements from any location with a connection to the internet and a browser
   8.2. **Hybrid:** participants can download the course for offline review, and can complete creation and reflection activities while offline. To participate in the embedded learning community a learner will have to access the course through an internet connection and browser.
   8.3. **Offline:** If offline is the preferred or the only manner of participating, the learner can complete approximately 70% of course as designed. In this manner, it will be treated as a self-directed study with limited interaction with course elements or others.

Course Outcomes

9. **Course level outcomes**: **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** an adapt pedagogical framework for activating learning within a digital space.
10. **Module level outcomes:** To achieve the course level outcomes there are several module level outcomes which structure and direct the course experience:
    10.1. **Unit 1: Draft** a thoughtful course design that will map the build of your online course space; **Design** opportunities in your course map to give and get formal and informal feedback.

10.2. **Unit 2: 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.

10.3. **Unit 3: Embed** media assets in the curriculum in thoughtful ways; **Map** learner-centered options, for your course, for distributing/accessing media effectively.

10.4. **Unit 4: 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.

Instructional Strategy

11. **Presentation patterns:** Each 'phase' presented within each module will begin with content presentation. A video overview and page content will start the **Introduction** phase; A graphic and page content will start the **Expansion** phase; A graphic/video and page content will close off the **Application** (or refinement?) phase. The final **COI** phase will be primarily for learner to learner and learner to moderator interactions so little to no content will be presented. One task statement will be provided to initiate connection at each point.

12. **Media strategy:** There will be a module introduction video to start each directed unit of learning (design, interaction, resourcing, and engagement). A member of the development team will appear in each of these instructional introduction videos. Wherever possible alternatives to didactic video will be utilized throughout the rest of the course. Explain everything will be used to create video elements which model a practice/process (anything requiring a whiteboard for digital inking), and H5P media elements will be embedded to encourage interaction with and through the Pressbooks space. Padlet will be embedded for learner interaction with each other and the course moderators, and this will allow learners to share media within the course also (eg. Post an image/drawing/pdf to a padlet 'wall').

Assessment Strategy

13. Define the purpose, frequency, and scoring strategy: Selected strategies will primarily support assessment **for** learning, and assessment **as** learning through a Self-Expert-Peer process.
Self-Expert-Peer: a cycle within each module that guides participants to create draft development work within activity, then compare to expert task completion examples, and then connect/refine through COI participation.

13.1. <u>Formative assessments</u>: self-checks embedded within modules (at end of expansion, and refinement/application sections). Provide 'what would an expert do' examples to help participants self-assess their performance against an 'in-practice' person. Faculty and student personas were created and embedded within module 2 and 3 to conduct this assessment.

13.2. <u>Summative assessments</u>: This is where the COI will support participant skill development (through peer-coaching focused feedback). Checklist/matrix for assessing 'level of' will be added to the course for those not interested/able to connect with others (the 'offline' participant group).

Course Structure

14. **High level course Outline:** This project creates a 4 module, 32-hour faculty development course, focused on the design/delivery of quality, digital learner experiences. The course will be discipline-independent by design to support the widest variety of faculty, by embedding

experiential learning practices throughout, with feedback specific to each participant. This aspect will require at least 40% of the total course time.

  14.1. **No. of modules:** There will be a short introduction, and summary module (requiring participants to invest no more than 2 hours for each). Core content modules will ask for a participant investment of between 4-6 hours (depending on previous KSA's). There will be 4 core content modules.

  14.2. **No. of instructional videos in each module:** No more than 3 instructional/didactic videos will be embedded in each unit (with a maximum time frame of 6 minutes) to assure that participant workload for these content pieces will not exceed 1 hour. This protects between 3-5 hours for interaction elements that support application, reflection, and creation.

15. **Content strategy at each core module level**: The four core course modules, each requiring between 4-6 hour of participant time, will focus on the cycle of flow design, interaction design, resourcing effectively, and activating learning. A graphic which depicts the course flow and topic connections will be used within each core module as a 'waypoint' marker so that participants know the focus, and purpose for each.

  15.1. **Unit 1:** Introduction: Identifying the 'location' of this module within the course level learning will spark the introduction of module theories being considered (connectivism, and flow). The 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 for participants to fill in with what currently exists, in one week/module for their own course and participants are then asked to 'try it on'. 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 their first attempt, and to refine it with new knowledge and examples provided. Benefits and challenges are presented to close this phase. COI: Participants are asked to take the bold step to share their refined draft with others and to share also the changes they made to refine their first draft + what triggered this change for them.

  15.2. **Unit 2:** 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: With this next set of learnings, participants are asked to return to their current attempt (template), and to refine it with new knowledge and examples provided. Benefits and challenges are presented to close this phase. Refinement/Application: Faculty members personas (2-3) 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 Unit 1. COI: 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.

  15.3. **Unit 3:** 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 the course participants, who will share their experience learning within technology-enabled spaces (good and not so good). There will be a 'pick your own adventure' set of doors to choose from to see

what happens with each learner in different scenarios of 'current practice'. This will set participants up for later 'doors and windows' activity set to improve learning experiences. <u>Expansion</u>: 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. <u>Refinement/Application</u>: Here we will look to the classroom as both virtual AND place-based. The students are introduced to the faculty members from Module two. A few scenarios of teachers and students experiencing IN activity are presented with 'doors' and 'windows' presenting resulting effects (locked out, access from bus, etc). <u>COI</u>: Participants are asked to share potential 'doors' and 'windows' in their own course, and their plans for change as a result of the module experience. Also share plans that will be protected as a result of the module experience. Provide an artifact if possible (checklist, job aid, tips sheet, etc).

15.4. **Unit 4:** <u>Introduction</u>: 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, interactivity, and social connectivity). Course participants will explore several 'toolkits' that demonstrate these themes in action, and will apply these concepts to their own work. <u>Expansion</u>: Participants will be challenged to analyze these toolkits and their contents and see which activities fit their own teaching. Independent exploration will allow participants to become comfortable and familiar with the active learning toolkits and provide time to reflect on how to blend theory and practice. <u>Refinement/Application</u>: Once course participants familiarize themselves with the toolkits, they are asked to take an example(s) from the toolkit and apply it to their course/lesson/program. Mastery will be shown with a before & after document. <u>COI</u>: Participants are asked to take the bold step to share their refined draft or expansion with others, and to share also what changed from their first draft, what triggered this change for them, and why they believe it will enhance learner engagement and agency. 1) What are some opportunities and challenges/limits with these toolkits (pre-application)? 2) What did you learn/will you apply to your own context? What were the challenges and opportunities in practice? Participants will be asked to share their changes and rationale via a module-specific Padlet.

Development Tools
16. **Authoring tools used:** Pressbook textbook platform will be used to create an open course space accessible by most people regardless of location.
17. **Other tools:** Padlet spaces will be embedded in course for community of inquiry connectivity, as will H5P interactive task elements.

Draft design stakeholder Review process
During the Summer of 2021, once the development team was happy with the flow of the course modules, and the scope of the course was perceived to be manageable, stakeholder interviews were held to review the above detail. Two faculty members from each of the partner institutions, and one leadership member from each of the institutions were interviewed to test our assumption. Also included in this process was discussion and review of the course structure and expected learner experience with Lakehead University's Indiginous curriculum specialist. A few of the course refinements implemented as a result of this step;
- The inclusion of a glossary of terms (embedded in the course, linked at the first instance of each term) as many disciplines use different terminology in verbal and written

communications. This will help to orient learners to the language of learning experience designers.

- The modification of one of the course outcomes to more explicitly represent the competence achieved within the scope of the course
- To make more explicit the practical nature of the course. The benefit of drafting and refining the course design blueprint to assure all participants take up this active learning task. With the amount of time asked for each week (between 4-6 hours) this will state why this investment of time has value.
- A statement clarifying the flexibility built in to the course so that all learners are aware at the start that there are different possible 'schedules' they can choose to complete the course outcomes

Draft course pilot and feedback process

During the late Fall of 2021, once the development team was happy with the build of all course content and interactions, and after the team had agreed upon its eModeration process, the course was piloted with select participants from government, healthcare, University, and college environments. Seventeen participants agreed to participate in the pilot in total.

Over a period of 5 weeks the course was run as designed. At the close of the course, an electronic survey was distributed with 9 participants responding to questions asked. In mid-January 2022, 10 participant interviews were held with questions asked complementing those asked in the survey.

Survey questions:
- Participants were asked the degree to which they achieved each of the identified course outcomes
- Participants were asked the course content they would NOT change to aid their design of learner experiences
- Participants were asked what they would do to improve upon the course content provided to aid their design of learner experiences
- Participants were asked the aspects of eModeration they would NOT change to aid their design of learner experiences
- Participants were asked what aspects of eModeration they would do to improve to aid their design of learner experiences
- The course provides an opportunity to create and refine a design blueprint for your workshop/course. Participants were asked the aspects of this design activity they participated in.

Interview questions:
- Participants were asked to share the types of development/learning opportunities they have been accustomed to participating in their past, and how this course compares to those experiences
- Participants were asked to share their process/approach to participating in the course during the pilot period (if they were active, and how we could have engaged them better if they were not)
- Participants were asked to share one or two ways that you see what was learned impacting their work/department in the next year (if anything)

- And finally whether they feel this course may be relevant to their department or peers (and how to best inform them of its availability).

Final course revisions, based on feedback, and additional documentation to implement this course effectively

Final refinements to the course resulting from feedback

As a result of the development team's eModeration experience, survey responses, and participant interviews a set of final course revisions were completed. Added to this course also was an administrators guide to aid any person or institution to implement this course as a facilitated, faculty development opportunity.

Changes made resulting from participant feedback;
- A Student Quick Start Guide was included in the course pilot but this has been refined to include more detail about the three 'schedules' that are possible for learners to support flexible learning, and new detail will be added to guide learners to incorporate the 'buddy system' in their study and development of the course design blueprint.
- The Learner Success Guide will be embedded into the introduction and acknowledgements section. It will accompany the Syllabus (instead of just being emailed with the course welcome).
- More explicit language will be included in the front matter that the platform of Pressbook uses the terminology of 'book' and chapter' but is being utilized as a learning management system.
- The Learner Success Guide will incorporate strategies for developing the course design blueprint (draft elements, add sections in later modules, etc). Learners will be encouraged to be bold in their design choice (don't design something easy or 'canned' but something that most needs their attention right now).
- The course design blueprint will be modified and shared again in Module 2 in an expanded form to show how it can grow and give permission to learners to modify and expand it to suit their needs. This was done during the pilot in the weekly messaging but was missed so should also be included directly within the course.
- The course design blueprint sharing by learners: In the moderated instance, the eModerator needs to remind learners at the start of Module 2, and again at the start of Module 3 that learners should comment openly, in the space where the draft designs are shared. They need this permission to feel comfortable/safe to impose their perceptions.

An Administrator's Guide; as appendix

Provided as an appendix within the *Facilitated course experience* is an Administrator's Guide to aid any institution who wishes to implement the course with their own faculty. It outlines best practices for eModeration in general, steps to import and prepare the course for instruction, and a schedule of moderation/communication events that should be incorporated to effectively support learners in achieving the course outcomes.

Two course instances as final submission

A facilitated course experience:

https://ecampusontario.pressbooks.pub/creatingqualitytelexperiences

A self-directed course experience:

https://ecampusontario.pressbooks.pub/creatingqualitytelexperiencesselfstudy/