Curriculum Guide:

Collaborative Technology Tools

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SECTION A: OVERVIEW

A.1 Welcome Message

This Curriculum Guide (is CC-BY licensed, which means you can redistribute, reuse, remix, and retain it) has been developed to support navigation of the [Collaborative Technology Tools](#) professional development site. This website grew out of early discussions the design team had about our educational technology (edTech) interests and the challenges often faced by our colleagues when incorporating edTech into their students' various learning contexts. A barrier we saw in our own teaching and learning contexts was that teachers had limited time to learn new tools and needed structured support to understand how educational tools could be brought into the classroom. Our teams' final project for ETEC 510 (design an online learning experience around a topic of your choice) became our answer to the question: How can we design a learning environment for teachers who have little time for professional learning? Our shared motivation was to support the professional development of our colleagues and assist their incorporation of edTech using pedagogically informed decisions. From the many edTech options available to teachers, we narrowed our focus down to consider those edTech tools available to assist teachers with training their students in the important 21st century skill of **collaborative learning**. In this Guide, you will find learning objectives outlined for each of the three content Units as well as objectives, rationales, and brief explanations behind every site page. Pages are content-rich and designed to spark ideas for how to integrate online collaborative edTech tools in all your classes.

We hope you enjoy learning from this resource as much as we enjoyed developing it!

Sincerely, The Design Team,

Lexi, Jan, & Briar

A.2 Who is this Guide for?

Collaborative learning is a viable practice for teachers and students of *all* ages and cultures. We anticipate a broad audience for [Collaborative Technology Tools](). Since collaborative technology tools can be used by educators of any age range, our overall target audience is simply educators. However, to focus the general scope of the project we narrowed down our target audience to K-9 educators. Activities and examples deliberately cross the curriculum to increase the return interest of our K-9 teachers who change teaching assignments over the course of their career.

We have further drilled down the focus on the specific lesson plans for the Collaborative EdTech Units to target middle school grades (6-8). Each of the three tool Lesson Plans identify curriculum expectations/prescribed learning outcomes from the three different provinces the members of the design team hail from - Kidblog, **British Columbia**; Skype, **Ontario**; and VoiceThread, **Manitoba**.

A.3 What You Need

To follow this Guide you will need this hyperlink to the website [Collaborative Technology Tools]() found at the address http://collaborativetechtools.weebly.com/. We have assumed that teachers using this site are technology ready and have skills navigating computer hardware and the Internet, including downloading appropriate plug-ins if required. (Note: As this website is in its first iteration we have not tested the technology for accessibility. If you require assistance with access please email one of the authors who will take steps to assist you). Otherwise...

Minimum requirements:
- Computer with Internet Connection

Additional requirements: (if you are participating in any of the audio or video submissions)

- headset
- microphone
- webcam

A.4 Organization of Guide

The Guide closely follows the website through a linear narrative. For ease of use each section of this document provides a hyperlink and/or a QR code linking to the appropriate webpage. It has been divided into four Sections, labelled (A) through (D)...

A. Overview
This section provides background information about the Collaborative Technology Tools design challenge.

B. Theoretical Foundations
This section frames the theoretical underpinning of the learning space and technology choices.

C. Design Environment
This section outlines the online environment and the tools that will be encountered as Interactivities.

D. Website Navigation
This section of the guide provides very specific narration of each page of the website. This is further divided into four modules.

Module 1	Module 2	Module 3	Module 4
Introduction	Units	Building a Community of Practice	But Wait There's More!
	Kidblog Skype VoiceThread		

E. Conclusion and References
This section of the guide provides the wrap up of the guide and references.

SECTION B: THEORETICAL FOUNDATIONS

B.1 What is "Collaborative Learning"?

Collaborative learning is a student-controlled activity where learners work together and through consensus accomplish group or individual tasks (McAlpine, 2000; Panitz, 1999). Collaborative learning strategies are approaches to learning that are based on constructivist theories. This theory is based on Vygotsky's sociocultural theory which states that "social experience shapes the ways of thinking and interpreting the world" (Jaramillo, 1996, p. 135). Acquisition of knowledge in constructivist (and therefore collaborative) learning environments needs to be *contextualized* and *negotiated* through social interaction (Jaramillo, 1996). This theory values students' prior knowledge; Vygotsky's zone of proximal development suggests that new knowledge must be built upon pre-existing knowledge (Watson, 2001). Collaborating through discussions or reflective writing with peers is a proven classroom technique designed to encourage students to make connections to prior knowledge and then link that schema to new ways of knowing. Teachers who have embraced collaborative learning create environments where learners talk with each other and are "learning so much more; they're learning how to be proactive, they're learning how to depend on their peers" (Edutopia, 2012). This anecdotal evidence is not surprising when one considers Vygotsky's social premise. Collaborative activities which require groups of learners to interact is an effective design for learning environments because these groupings nurture the social interaction upon which connected, socially constructed learning depends (Scheer, Noweski, & Meinel, 2012).

B.1.1 Collaborative Learning does not equal Cooperative Learning

Educators may mistakenly think 'collaborative learning' is a synonym for the various group work activities of 'cooperative learning' (ie. Think-Pair-Share, or Jig-Saw) but this is not

the case. In a video interview David Olio shares that while *cooperative* learning works toward

consensus that is concerned with a single, end product or idea, "collaboration isn't a

consensus driving device, it's a way for people to problem-solve, and it's an environment for

them to be able to engage in productive thinking and [deeper] learning" (Teaching Channel,

n.d., 2:28). Collaborative learning is designed for individual ideas to emerge after being

reworked from hearing the ideas and perspectives of others. While the locus of control in

cooperative learning is teacher-centered (Panitz, 1999), collaborative learning is a

student-centered practice that "has been shown to result in higher student achievement, higher

self-esteem, higher motivation for all students across socioeconomic and cultural

backgrounds" (Edutopia, 2012, 0:55).

B.2 Collaborative Educational Technology Defined

Collaborative educational technologies are tools that allow groups of learners to share

their learning. According to Bonk and Cunningham (1998), collaborative educational

technologies afford social interaction that is "in the hands of the learner to build, browse, link,

draw, juxtapose, represent and summarize information" (p.30). Further, Bonk & Cunningham

posit that collaborative educational technologies extend interactions beyond teacher-student

and provide opportunities for shared knowledge and introduction of new learning (p.31).

Returning to Vygotsky's theory of social constructivism, Bonk & Cunningham's explanation of

collaborative educational technology aligns with the constructivist educational theory that

learning is active and socially situated.

B.3 Why are These Tools Necessary?

There is an increasing need for teachers to prepare 21st Century learners to develop

the critical thinking skills necessary for inclusion in the increasingly participatory, connected

culture within which learners are immersed (Scheer, Noweski, & Meinel, 2012). Collaboration

does not only take place off-line, in face-to-face interactions because online tools allow for increased connection in both real and asynchronous time. Thus, teachers must model collaborative skills in the digital contexts their students are likely to experience (Kivunja, 2015). Despite an increased emphasis on incorporating online, digital technologies in the classroom (Chen, Gallagher-Mackay, & Kidder, 2014), many teachers are still not actively integrating these technologies into their lessons (Garcia & Morrell, 2013; Palak & Walls, 2009). Several reasons for this include the:

- effort required to navigate the depth and scope of edTech (Ciampa & Gallagher, 2014)
- analysis required to understand the pedagogical affordances of the tool (Ciampa & Gallagher, 2014)
- planning required to use the tool within their curriculum (Beggs, Shields, Telfer & Bernard, 2013; Ciampa, 2014)
- time required for skill development (Ackermann, 2002; Ciampa, 2014; Harris, 2008b; Harris, Mishra, & Koehler, 2009; Papert & Harel, 1991).

This professional learning environment is our response, as educational technologists, to meet the above needs of our teaching colleagues. The primary educational activities are designed as instructional exemplars to increase teachers' a) awareness, b) comfort level and, thus, c) classroom use of, three specific collaborative edTech tools. Research suggests that "just-in-time" PD opportunities allow immediate action by teachers in their classrooms which increases likelihood of student exposure to collaborative methods (Harris, 2008a; Harris, et al., 2009; Lawless & Pellegrino, 2007; Owston, Wideman, Murphy, & Lupshenyuk, 2008; Palak & Walls, 2009).

Studies suggest effective edTech professional development (ETPD) will result in higher levels of change in teachers' behaviour regardless of the highly individualized contexts informed by education panel, student population, or content areas inhabited by individual teachers (Harris, 2008a). Our learning design project draws on five relevant characteristics of effective teacher ETPD. Effective ETPD is,

1. **"Conducted in school settings" where teachers are comfortable and can easily access the resources directly relevant for creating materials tailored to their needs"** National Staff Development Council [NSDC] (as cited in Harris, 2008a, p.21). Providing an online, interactive platform allows educators to access their learning instantly from anywhere, whether from their own schools or homes, at a time that is convenient to their schedules.

2. **"Planned and offered by teachers"** NSDC (as cited in Harris, 2008a, p.21). It is easier to respect and receive direction from fellow teachers, as opposed to overly optimistic administrators long out of the classroom.

3. **Includes concrete mentor models of specific curriculum best practices with opportunities for Q&A troubleshooting.** The website includes a comments designed for troubleshooting and sharing of general questions and success stories from the field.

4. **Includes *direct* instruction in the operationalization of student-centered pedagogy.** Focus on teacher training should move away from isolated tech training and toward integration of tech into curriculum to help teachers use tech to support student-centered pedagogy (International Society for Technology in Education [ISTE], n.d.; Palak & Walls, 2009, p.437). Our learning design includes highlighting the usefulness of this epistemology for student success.

5. **Provides or constructs ready-to-use resources.** A lack of easily accessible sets of classroom-ready resources or tools often results in confusion and resistance [towards new teaching approaches] which undermine educational reform efforts (Ackermann, 2002; Harris, 2008b; Harris, et al, 2009, p.404; Papert & Harel, 1991). Each tool section has an associated lesson plan, example, or exemplar prepared for immediate classroom use.

B.4 Digital & Provincial Standards for Collaborative Learning

Technology and collaboration within education go hand-in-hand. Framing this topic as a professional learning experience for educators was directly informed by the infrequent levels of school integration observed by the design team. The legitimate value of focusing on edTech tools specifically designed for collaboration was confirmed by the international standards for

technology integration promoted by the International Society for Technology in Education

(ISTE), an organization dedicated to facilitating system-wide technology integration in

innovative and relevant ways for students, teachers, technology coaches, and administrators

(ISTE, 2008). Couched in the familiar language of educational objectives and goals, ISTE has

developed distinct sets of standards for each of the major stakeholders in education. Although

not mandated by any of our Canadian Ministries of Education, we felt these standards were of

sufficient quality to establish strong rationales and provide useful guidance for designing our

professional learning experience. Relevant ISTE Standards are introduced on the site and

summarized below. (Users should note that the ISTE sources below are hot-linked for further

exploration. Those printing this Guide may scan the QR codes to access both sources).

	ISTE*S Standards for Students, 2007		ISTE*T Standards for Teachers, 2008

B.4.1 ISTE Student Collaboration Standards

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media

b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats

c. Develop cultural understanding and global awareness by engaging with learners of other cultures

d. Contribute to project teams to produce original works or solve problems

(ISTE*S, 2007).

B.4.2 ISTE Teacher Collaboration Standards

The following screenshots of ISTE*T Standards show highlights of various spots where teachers are encouraged to explicitly or inferentially collaborate with students, model collaboration as a professional, or empower students to collaborate with other students or experts in both face-to-face and virtual learning environments.

ISTE Standards
Teachers

Effective teachers model and apply the ISTE Standards for Students (Standards•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

1. Facilitate and inspire student learning and creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

a. Promote, support, and model creative and innovative thinking and inventiveness

b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources

Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes

Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and develop digital age learning experiences and assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards•S.

a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources

d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards, and use resulting data to inform learning and teaching

3. Model digital age work and learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations

Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats

Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

5. Engage in professional growth and leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

a. Participate in local and global learning

(ISTE*T, 2008)

Since all three designers are Canadian educators and we do not presume to be familiar with the expectations and standards of other countries, the target audience of this professional development experience is Canadian teachers. Although we welcome and expect international opportunities to collaborate, with the exception of the ISTE standards that deliberately market themselves as international content, we have not specifically addressed globally diverse regional standards and invite contributions from those with more experience in these areas.

Canada's provinces and territories do not have a country-wide standard for collaborative student behaviour, let alone anything specifically mandating the use of technology for collaboration, yet there *is* a precedent in the "learning skills" or "work habits" category of many Canadian regions' report cards.

Collaboration	The student: • accepts various roles and an equitable share of work in a group; • responds positively to the ideas, opinions, values, and traditions of others; • builds healthy peer-to-peer relationships through personal and media-assisted interactions; • works with others to resolve conflicts and build consensus to achieve group goals; • shares information, resources, and expertise and promotes critical thinking to solve problems and make decisions.

(Ontario Virtual School, n.d.)

The content-specific lesson plans provided at the culmination of the three edTech tool units have their own curriculum expectations attached to the particular subject and grade they are designed for and will be provided, and referenced, in the appropriate section of the webpage and this Guide, further on.

SECTION C: DESIGN ENVIRONMENT

The three collaborative edTech tools which the design team chose to showcase as the backbone of the learning content for this site are online tools we were familiar with and enjoyed using, which we felt our colleagues would gain the most value when given the opportunity to familiarize themselves more deeply with each tool for their students' use. In addition to personal preference, the tools presented here had to meet the following criteria:

- the tool is available online
- has a viable no-cost option
- has privacy options for safety and accessibility
- affords enjoyable collaborative engagement
- uses different modes of communication as its central affordance - text, visual, and audio
- provides a range of synchronous and asynchronous options

C.1 Design Choices

We have endeavoured to design our learning environment (website) to be as user-friendly as possible, allowing learners to easily navigate every page, in optimal order, understanding how to interact with the content and other learners without the need to refer extensively to this Guide.

For example, each Collaborative edTech Unit of the website (referenced in this Guide under Module 2) has been organized into a minimum of three site pages:

- edTech tool main page, which describes the tool in basic terms,
- Collaborative Ideas page, which connects the learner with the collaborative affordances of that specific tool for the classroom,
- Lesson Plan page, which provides a ready-to-use lesson plan, following a uniform three-part lesson format, for teachers to implement immediately in their own classrooms, if they choose

C.2 Design Elements

In terms of deliberate website design elements, a variety of design decisions were made to allow continuity, familiarity, and self-directed learning to occur:

- colour- and font-specific formatting (ie. red italics for meta-text or teacher-to-designer/designer-to-teacher conversations; green for InterActivities; blue italics for quotes; black for main content)
- small blue buttons or underlined link text leading to specific pages
- the use of horizontal dividers to further delineate the progression of ideas upon a page
- underlined links within the main body of text to indicate a definition of a term or a named page within this site
- icons designed as semantic signposts for:
- InterActivities for each major section, culminating in a visit to the Forums
- Big Ideas, or "take aways", from a particular page, where relevant
- Skype icon in the same position on each of the four call style "mini-pages"

C.3 Design Features Within the Learning Experience

In being directed to create an online learning environment, it seemed logical to include opportunities to present and interact with content that went beyond what would be possible with traditional print media. Therefore, a variety of programs, digital artifacts, and ways of engaging with both the learning content and fellow learners were deliberately included in the design of this online learning experience.

C.3.1 Weebly

Our group has chosen to use the growingly popular Weebly website generator platform to create our interactive learning environment.

Global Growth

👥 Over 20 million people around the world have started a site on Weebly

👤 Weebly sites receive over 175,000,000 unique visitors each month

👤 Weebly is offered in 12 languages: English, French, Spanish, Italian, German, Portuguese, Polish, Dutch, Chinese, Japanese, Russian and Turkish

Weebly affords each of our group's members with the ability to contribute to the site simultaneously. The capabilities for including and/or embedding text, pictures, videos, and tools from outside sources, through the use of the drag and drop building feature, makes the creation of customizable web pages easy.

C.3.2 Thinglink

Learners will encounter a ThingLink embedded on the last site page of Module 2. ThingLink is an interactive image generator which makes use of rich-media tags to embed links to relevant content directly onto the image (or video) chosen. This provides a unique and interesting way to privilege visual and audio multimedia content over traditional text-based presentations. We chose to include ThingLink at the end of our collaborative edTech tool units as a means to provide micro-snapshots of additional examples of how middle school teachers could incorporate these three tools in their classes, regardless of which subjects they teach. We also included a brief appeal to the versatility of collaboration as a 21st Century tool applicable to students of any grade level in the K-9 panel.

C.3.3 The Forums

Weebly provides creators with the option of adding a blog or a discussion forum to their website. Here participants/readers can post their feelings, comments, and questions on an interactive platform. We chose to include a forum, rather than a blog, because website creators are also able to organize and assign tiers of topics for participants to interact with. This helps to motivate and streamline learners' experience on the forums.

C.3.4 Padlet

Padlet walls can be described as virtual bulletin boards where people can simultaneously post their thoughts on a specific topic and view other's posts in real-time. The owner of the Padlet wall has the ability to customize the walls' aesthetic appearance with a variety of template layout options. Owners are also able to adjust the privacy features of the wall making it visible to the public and the level of moderation required before posts are visible.

C.3.5 Google Form

Google Form is an online application to create, distribute, and collect surveys. This application allows a one-way collaboration from the participants to the survey creators (who design and edit questions, and can then view incoming data streams).

The data fields within Google Form are robust question types that are 'click ready' to edit and drop into the survey. Questions types include: Multiple choice, scale, text, and checkbox. There are also a variety of design templates to provide tone for the survey.

Researchers can keep watch as surveys are completed. Google moves this data into Google Sheets (a spreadsheet document) for easier manipulation of data.

Google Form was chosen as the feedback tool for the following reasons:

- data collection in one location eases monitoring and coordination between researchers
- data can be shared immediately with the community by allowing respondents to link directly to the Google Sheet after responding
- the tool affords collaboration on the project development and management

C.4 Description of Learning Content - Our Three Collaborative Tools

The learning content itself consists of introducing teachers to three online tools specifically designed to afford quality collaboration both locally and globally.

C.4.1 Kidblog

Kidblog is one of the largest student blogging platforms in the world. It is specifically designed to provide educators with the ability to create safe and free online communities for their students. Educators can design their platforms to suite their class's personality using over 100 different layout formats. Educators can then create classes, add students, and adjust privacy and moderation settings. Educators can monitor all of the activity taking place on their blog. Teachers can also choose to moderate (or not) all or some posts and comments being made on the class blog prior to them being published. Similarly, they are provided with the option of having a closed blog, only open to those within the class, or a public blog, visible to the world. In the middle, teachers can collaborate with other teachers and add each other's classes to a "blog roll" to expand the audience beyond the four walls of their classroom while still keeping students insulated from the rest of the online world.

Kidblog has created opportunities for learning to become more authentic where the main audience is not only the teacher but other learners, peers, and the outside world. Students are given their own blogging space where they can post images, text, videos, and links, all while being given the opportunity to access and read posts made by other students.

Best of all, Kidblog provides a viable mobile version which works on most smart devices so BYOD (Bring Your Own Device) schools, or those with hybrid hardware policies can all easily access their blogs on anything, from anywhere.

All of these options create a personalized, safe space for student collaboration that carries the potential to teach positive digital citizenship. By creating digital works, students are also creating positive digital footprints that can benefit them in their futures with regards to income and job opportunities.

C.4.2 Skype

Skype is a free audio and video internet-based calling service that has a dedicated education division known as Skype in the Classroom. A growing community of teachers and classes attest that @SkypeClassroom is well-designed for connected communication, whether with the class down the hall, down the road, or across the globe.

To use Skype in the Classroom, teachers sign up for an account (additional to personal Skype accounts but linkable) and then connect with other teachers who also have accounts. Email correspondence is generally utilized to confirm content details and timing. Then, in the case of a whole class call, classes are rearranged to allow a webcam to capture one or more students in the class and, if possible, project their callers' images for the rest of the class to see. Speakers are hooked up and live audio and video should result.

We chose to showcase Skype as one of our collaborative technology tools because students can collaborate with and learn from so many more individuals than just those within the walls of their classroom. Another reason we chose it is because of its versatility as a collaborative tool. Many people initially assume that their students can only Skype for real-time/synchronous communication and collaboration (made even more powerful with built-in chat and file sharing features) but when coupled with time zones this can become a

constraint. However, teachers and organizations offering educational Skype experiences have overcome this constraint by embedding videos either directly on their Skype lesson pages, sharing them via the chat feature, or simply agreeing to share them on YouTube and record their responses to be viewed at a more convenient time for the other callers.

C.4.3 VoiceThread

VoiceThread is an online application that allows for participants to share pictures, documents, and videos. The shared materials are entered as objects in a slideshow. Every slide provides the opportunity for viewers to attach comments via audio, text, or video; as more learners contribute it enriches the original shared object. VoiceThread requires creating a free user account (there are paid accounts to manage classes or schools); there is also a mobile version of VoiceThread.

VoiceThread maintains a blog for educator examples, you can also browse public VoiceThreads. There is a large VoiceThread educator community who contribute ideas and tips on VoiceThread, and on other blogs and wikis (visit the Resources page of our site to explore these). Outside of the company's blog, there are also many educators who have created tips and ideas for curriculum integration.

VoiceThread affords constructivist, collaborative engagement for active, social learning. The asynchronous feature of this tool provides learners with time to reflect and prepare answers rather than being required to respond immediately. This slower conversational pace will undoubtedly suit some students prefered collaboration style.

SECTION D: WEBSITE NAVIGATION

D.1 Professional Development Environment

The information in this Section contains an overview of the click-through of the website content but does not specifically reiterate it. Likewise, consideration has been given to briefly describing the rationale for the InterActivities and the instructions in general terms but the actual questions have not been reproduced nor has an "answer guide" been featured because the learning occurs primarily through the self-reflections and peer interaction among teachers, rather than mediated feedback by the designers.

Our online learning environment has been divided into the following four Modules, which are represented as navigation tabs on the main menu bar pinned to the left hand side of every screen:

1. Introduction
2. Collaborative edTech Units
3. Building a Community of Practice
4. But wait, there's more!

D.2 Click Through the Website

In this Section of our Curriculum Guide, you will find descriptions and brief explanations for the purpose and content within the matching named site pages for each of the four site Modules.

Details have been organized as follows:

- brief description of the pages found within each of the site's Modules
- general explanation of the overall purpose of including each Module within the design of this learning experience
- further description of each page

- text link and QR code to the page for ease of access regardless of the viewers chosen method of consumption for this Guide (online or print)
- brief list of the purpose of the page
- roughly sequential list of the multimedia elements learners can expect to encounter
- identification and brief explanation of special design features ie. InterActivities, Big Ideas, specific formatting elements, etc.
- brief rationale for design choices ie. pedagogical or aesthetic, etc.
- explanation of how and where the learner will be led next

D.3 Website Modules

Module 1: Introduction

Module 1: Introduction

a. Introduction: Landing Page
b. Introduction: The What
c. Introduction: The Why

In this Module, learners are presented with a basic description/rationale for this learning experience, informed about basic concepts and definitions related to the topic of collaboration and collaborative technology tools, and introduced to the main design features (ie. conceptual and iconic signposts) which will be used throughout the learning experience. These include the spotlighting of Big Ideas within a page's content, and the opportunity to deepen understanding of the concepts and actively collaborate with peers through InterActivities which are expressed via a collection of Forums in which to post their reflections.

a - Introduction: Landing Page

The purpose of this page is to guide learners towards the following goals:

- understand what the website is about
- introduce the website authors as UBC MET students
- define and encourage participation in InterActivities
- explain InterActive Session icon and ways to interact

Learners will encounter the following elements when navigating the learning content found on this page:

- written content explanations including hot linked text to:
  - outside sources and explanations, where useful
  - internal pages or online definitions, where underlined
- explanatory text about InterActive Sessions
- images (credited under the References tab)
- the live Twitter feed for #etec510
- instructions for navigating the website
- red meta-instructions beside two button links directing the learner about where to begin the first stages of this PD experience

The **InterActivity** for this page asks learners to introduce themselves to their peers using the Introductions thread on the Forums. This is designed to familiarize learners with the organizational set up of the Forums in preparation for more detailed responses to come and to provide an opportunity for relationship-building and collegial collaboration as early in the learning process as possible.

There are no specific **Forum questions** for this page. This was a design decision as there will be opportunity for learners to engage in the reflective interactives on other pages. Learners are then presented with two buttons linking to the next page, where they can decide where to go to next based on their interests - The What, or The Why.

[b - The What](#)

The purpose of this page is to guide learners towards the following goals:

- demonstrate an understanding of the definition of collaborative learning
- differentiate between collaborative and cooperative learning strategies
- recognize and identify collaborative technology tools
- reflect and connect on the Forums via an InterActive Session

Learners will encounter the following elements when navigating the learning content found on this page:

- two embedded videos expounding a Big Idea
- written content explanations including hot linked text to:
  - internal pages, where underlined
  - external Design Wiki page
- hot-linked images
- a three question InterActive Session with icon, questions, & button to the Forums
  - a sample answer for the brainstorm question
  - a link to a brainstorm tool to explore on your own
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **InterActivity** questions for this page ask learners to reflect on the differences between collaborative and cooperative learning and create a mindmap to share their brainstorming for a list of general collaborative technology tools. **Forum questions** are designed to increase teachers understanding of collaborative learning approaches as juxtaposed to cooperative approaches. Learners are then presented with red, italicized instructions and a button linking to the next page, where they can explore why collaborative edTech tools are necessary.

c - The Why

The purpose of this page is to guide learners towards the following goals:

- being able to positively answer the question, "Why should collaborative technology tools be a regular part of my students' learning experience?"
- becoming familiar with the International Society for Technology in Education and its standards for students and teachers, particularly where collaboration is concerned
- discovering the collaborative standards within the region where they teach
- reflecting upon the affordances and constraints of different styles of collaboration

Learners will encounter the following elements when navigating the learning content found on this page:

- title in the form of a guiding question
- explanatory or encouraging quotes
- written content explanations including hot linked text to:
  - outside sources and explanations, where useful
  - internal pages or online definitions, where underlined
- the live Twitter feed for @ISTEconnects
- hot-linked photographs, screenshots, and quotes from ISTE
- embedded, scrollable frames of online documents for ISTE Standards (students & teachers) with instructions to view and/or highlight collaboration expectations for quick reference
- hot-linked screenshot of a provincial expectation related to collaboration for students
- a Big Idea icon with descriptive caption
- a three question InterActive Session with icon, global collaborative learning Wordle, questions, & button to the Forums
- red, italicized meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **InterActivity** questions for this page ask learners to consider the global collaborative word cloud related to this page's Big Idea and the ISTE standards from this page's main content and facilitate related discussions about these ideas on the Forums. **Forum questions** are designed to facilitate teachers' interaction with the 21st Century skills' semantic domain of "collaborative learning" by asking them to engage with their region's unique mandated standards in relation to this domain. Teachers are also given opportunities to make text-to-text, text-to-world, and text-to-self connections as they consider if/whether their region's standards can be adapted to reflect the ISTE standards, and if/how the different styles of collaboration referenced on this page (face-to-face vs. global collaboration) can incorporate technology and achieve a balance within their own classroom. Learners are then presented with a button linking to the next page, where they are led to the next stage of the learning experience, the Units.

Module 2: Collaborative edTech Units

Module 2: Collaborative edTech Units
a. Collaborative edTech Units: Landing Page
b. KIDBLOG Unit Main Page
    i. Collaborative Ideas
    ii. Lesson Plan
c. SKYPE Unit Main Page
    i. Collaborative Ideas
        i. Four Styles of Skype Classroom Calls
    ii. Lesson Plan
d. VOICETHREAD Unit Main Page
    i. Collaborative Ideas
    ii. Lesson Plan
e. Across the Curriculum

a - Collaborative edTech Units: Landing Page

The purpose of this page is to guide learners towards the following goals:

- learn about the benefits of the educational tool given and how that tool affords collaboration
- learn and experience how to use the tool through online engagement
- see a sample lesson plan for integrating the specific tool into the classroom
- prepped to be looking for the Big Idea & InterActive Session icons as signposts for regular opportunities to reflect, connect, and collaborate in the upcoming pages

Landing Page

Learners are then presented with a triple column, topped by three buttons linking to the three

Unit pages and a brief description of the tool and each Unit's learning goals. Although the rest

of the pages are structured in a sequential format, leading from Kidblog to Skype to

VoiceThread, we recognize the autonomy of the learner as a professional with diverse

experiences and learning needs, thus they are given the opportunity to skip directly to the tool

of their choice, as well as clicking links straight to each Ideas or Lesson pages for each tool.

b - KIDBLOG Unit Main Page

The purpose of this page is to guide learners towards the following goals:

- create a basic understanding about what Kidblog is and how it is used
- understand why Kidblog is a valuable tool to use in the classroom by exploring the positive effect that the use of Kidblog has on students
- build an understanding for what an up and running kidblog site looks and functions like
- learn how to create and use a Kidblog site

Learners will encounter the following elements when navigating the learning content found on this page:

- embedded videos
- hot links text to:
    - outside sources and explanations, where useful
    - internal pages or online definitions, where underlined
- explanatory or encouraging quotes
- photographs, images, info-graphics
- the live Twitter feeds for #kidblog and @kidblogdotorg
- how-to video series hosted on youtube.com
- a three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **Forum questions** for this page ask learners to reflect on the expressed potential for the use of Kidblog while also encouraging them to begin thinking about Kidblog use in their personal classrooms. Learners are then presented with a button linking to the next page, where collaborative ideas for using Kidblog in the classroom will be presented.

i. Collaborative Ideas

The purpose of this page is to guide learners towards the following goals:

- develop an understanding for the potential ways that Kidblog can be used in the classroom
- explore samples expressing how Kidblog is currently being used in classrooms
- learn how they can make their blogs more effective by increasing engagement with other educators and students throughout the world
- explore a sample of how they can encourage/teach students to effectively and appropriately use their blogs

Learners will encounter the following elements when navigating the learning content found on this page:

- explanatory or encouraging quotes
- Kidblog images, logos, and infographics
- real examples of student work on Kidblog
- the live Twitter feed for #comments4kids
- a sample lesson plan for Paper Blogging
- a three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **Forum questions** for this page ask learners to think of additional benefits to using Kidblog within the classroom, with emphasis on their specific students and classrooms.

Learners are then led from this page to the next via a button and meta-instructions, where a collaborative lesson plan for using Kidblog in a Grade 7 Social Studies classroom is provided. They are also given the option of skipping this page and provided with an underlined text link to Unit 3's landing page.

ii. Lesson Plan

The purpose of this page is to guide learners towards the following goals:

- implement a Kidblog lesson in their own classrooms
- if a teacher of Grade 7 Social Studies use, or adapt for use, the provided lesson plan

Learners will encounter the following elements when navigating the learning content found on this page:

- an embedded document containing the 'A Day in the Life of _____' Grade 7 Social Studies lesson plan
- an InterActive Session with icon & button to the Forums

The InterActivity Forum questions for this page are not included**.** This page is intended as the exit page to the Kidblog Unit.

[c. SKYPE Unit Main Page](#)

The purpose of this page is to guide learners towards the following goals:

- developing a basic understanding of what Skype is
- differentiating Skype in the Classroom as a separate and dedicated educational technology tool for teachers and students
- be able to positively answer the question "Why should is use Skype with my classes?" through being introduced to:
    - the benefits for students,
    - skills that videoconferencing develops, and
    - pedagogically sound methods to ensure that a Skype is "a learning call".
- deepen their learning by engaging in reflection and sharing on the Forums via an InterActive Session

Learners will encounter the following elements when navigating the learning content found on this page:

- embedded videos
- explanatory or encouraging quotes
- written content explanations including hot linked text to:
    - outside sources and explanations, where useful
    - internal pages or online definitions, where underlined
- photographs, images, info-graphics, & slide-shows
- the live Twitter feed for @SkypeClassroom
- a three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **InterActivity** questions for this page ask learners to reflect on the pedagogical activities for "before, during, and after" a call, as well as the list of student skills developed by using videoconferencing. **Forum questions** are designed to activate teachers' schema by

connecting these activities and skills to what they are already doing in their classrooms and guiding them to make connections between how they can transfer these analogue learning techniques for use within the experience of using this digital tool within a variety of subjects. Learners are then presented with a button linking to the next page, where collaborative ideas for using Skype in the Classroom will be presented.

i - Collaborative Ideas

The purpose of this page is to guide learners towards the following goals:

- develop an appreciation of the unique affordances Skype in the Classroom offers for collaborative learning which dismantles classroom walls and authentically opens the world to students
- understand that there are four broad categories, or styles, of Skype Classroom calls for teachers to consider involving their class in, each with its own purpose and benefits
- explore the examples and explanations on each of the four linked call style pages in order to engage in the InterActive Session reflection

Learners will encounter the following elements when navigating the learning content found on this page:

- explanatory or encouraging quotes
- written content explanations
- Skype Classroom images or logos
- four item list providing underlined text links to call style mini-pages
- a three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The InterActivity questions for this page ask learners to reflect on three of the four Big Ideas presented in the subsequent call style pages which they access through numbered and titled links. These Big Ideas are linked to reflection questions which ask teachers to:

- troubleshoot potential challenges,
- identify specific benefits for teachers rather than just students, and
- actively consider and adapt curriculum expectations for their respective provinces or countries to become directly aligned with the experience of three topic calls within science and social studies or history offered by U.S. based Buffalo Bill Center of the West.

Forum questions are designed to cause teachers to overcome the tendency to dismiss new activities as soon as an obstacle is perceived, expand their appreciation of the value of collaborating with Skype to include professional learning objectives, and actively practice transferring location-specific curriculum expectations/prescribed learning objectives (PLOs) to Skype call content, regardless of whether the PLOs of the geographical location of the call-provider differs from their own. When all four call style pages have been visited and the InterActivity completed, learners are then led from this page to the next via a button and meta-instructions, where a collaborative lesson plan for using Skype in the Classroom is provided. They are also given the option of skipping this page and provided with a an underlined text link to Unit 3's landing page.

i.i - Four Styles of Skype Classroom Calls

The four call style pages can be accessed via the Skype Collaboration Ideas link or QR code in the previous section. Since Skype is such a comprehensive, collaborative technology tool with a vast range of possibilities, options, and potential for classroom integration the content in this Unit requires greater detail than that of the other two tools.

These mini-pages have been designed to provide a series of detailed snapshots of the various uses to which teachers might put this tool.

The purpose of these pages is to guide learners towards the following goals:
- develop understanding of the four styles of Skype Classroom calls, specifically
  - [Peer to peer calls](#)
  - [Class to class or whole class experiences](#)
  - [Expert collaborators and/or guest speakers](#)
  - [Virtual field trips](#)
- gain appreciation of the diversity and scope within each style of call by reading and viewing succinct examples of past or current calls within an educational context
- connect to a Big Idea highlighting the unique value of each style of call and be able to reflect on these ideas in the InterActive Session housed on the Collaborative Ideas page

Call styles have been organized into discrete pages in order to take advantage of the pedagogical usefulness of "chunking" ideas into manageable sizes. Each page has been designed using a congruent format in order to aid in the continuity of the learning experience. Format features include:
1. Descriptive title
2. Brief introduction of call style
3. "See it in Action" three column table including:
   a. image or video hook
   b. explanatory title
   c. expository quote or text
   d. button link to relevant external source (website or video)
4. Big Idea highlighted with title, image, and explanation, followed by additional details to aid in the completion of InterActivities found on the Collaborative Ideas parent page (ie. videos, twitter feed, documents, or info-graphics related to the Big Idea)
5. Button link leading back to Collaborative Ideas parent page

Learners will encounter the following elements when navigating the learning content found on these pages:

- Skype Classroom logo
- written content explanations
- explanatory or encouraging quotes
- photographs and images
- embedded videos
- Big Idea icon, with caption and explanatory content including:
  - embedded documents
  - embedded videos
  - additional images or photographs
  - quotes or testimonials
- Button link guiding the learner back to the Collaborative Ideas parent page

ii - Lesson Plan

The purpose of this page is to guide learners towards the following goals:

- implement a Skype in the Classroom lesson in their own classroom, as soon as possible after completing this professional learning experience
- if a teacher of Grade 7 Science, use or adapt for use the provided lesson plan
- begin to purposefully include ways to integrate Skype Classroom calls in their regular planning and student programs

Learners will encounter the following elements when navigating the learning content found on this page:

- explanatory or encouraging quotes
- written content explanations
- an embedded document containing the Bridging the Gap for Great Marble Run Challenge culminating task plan

- an embedded .pdf scan of the text book pages that supplement the lesson plan

- a link to download the .pdf

- an alternative to using the Science lesson plan, presented as an opportunity to create their own lesson plan on the Skype Classroom site

- embedded blog instructions and video on how to connect with other educators on Skype and create their own Skype in the Classroom lesson

- an InterActive Session with icon & button to the Forums

The **InterActivity** questions for this page invite learners to share their questions and/or experiences with these lessons after they complete them. There are no specific **Forum questions** for this page as it is intended as the exit page to the Skype Unit's learning, to be enacted in the classroom.

d. VOICETHREAD Unit Main Page

The purpose of this page is to guide learners towards the following goals:

- introduce VoiceThread as a collaborative educational tool
- identify collaborative affordances of VoiceThread
- demonstrate the simplicity of how to create a VoiceThread
- apply digital skills to teaching context by exploring functions available in VoiceThread
- brainstorm with colleagues about integrating tool into teaching context
- deepen learning by engaging in reflection and sharing on the Forums via an InterActive Session

Unit 3: VoiceThread

Learners will encounter the following elements when navigating the learning content found on this page:

- embedded videos
- explanatory and encouraging quote
- written content
- photographs, image
- embedded VoiceThread
- the live Twitter feed for #voicethread
- a three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

The **InterActivity question** for this page asks learners to demonstrate their use of the VoiceThread application by adding a comment to the sample slideshow; this task also allows participants to explore the user interface and media options. **Forum questions** are designed to encourage learners to identify training needs or skill building that would be required before they used VoiceThread. Another question asks learners to reflection on another slideshow

application, PowerPoint in order to consider the various collaborative affordances of these

comparative tools. Participants are asked to join fellow practitioners in a community forum to

further discuss the VoiceThread tool and the integration into their practices. Learners are then

presented with a button linking to the next page, to explore VoiceThread Collaboration Ideas.

i. Collaborative Ideas

The purpose of this page is to guide learners towards the following goals:

- evaluate the relevance of VoiceThread approaches to own teaching practice
- analyze sample VoiceThreads for evidence of collaborative learning
- consider their approach to privacy settings in VoiceThread with their learners
- plan for scaffolding activities and supports for students in their teaching context
- identify different uses contents and groupings that VoiceThread affords for collaboration

VoiceThread Collaborative Ideas

Learners will encounter the following elements when navigating the learning content found on this page:

- embedded VoiceThreads
- hot-linked image and underlined defintion link
- content introducing the different context of the videos
- three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

Forum questions are designed to encourage teachers to reflect on their own teaching

contexts and how the VoiceThread application might be applied in their educational context.

Specifically learners are asked to consider how VoiceThread supports collaborative learning, what privacy approaches they would implement, and what preparation/knowledge would learners require before introducing VoiceThread.

ii. Lesson Plan

The purpose of this page is to guide learners towards the following goals:

- consider how this lesson might transfer to their own educational contexts, through
    - recognizing components/patterns of a typical ELA8 lesson that integrates VoiceThread
    - considering VoiceThread debate sample

Learners will encounter the following elements when navigating the learning content found on this page:

- embedded lesson plan and links to shared document for copying and editing
- embedded VoiceThread as a template for debate structure
- additional resources to sample VoiceThreads
- three question InterActive Session with icon, questions, & button to the Forums
- red meta-instructions beside a button link guiding the learner to the next stage in their PD experience

InterActivity Forum questions are designed to encourage teachers to reflect on their own teaching contexts and how the application of the VoiceThread tool might make sense in their educational context.

The purpose of this page is to guide learners towards the following goals:

- explore an interactive image in the form of a ThingLink sharing many more examples of how Kidblog, Skype, and VoiceThread are being and have been integrated into content-specific classrooms
- transfer understanding of collaborative affordances of these three tools in the particular subjects they have previously been highlighted in during the previous content units over to even more subjects typically found in a middle school curriculum
- provide micro-snapshots of tool usage for those learners who chose not to take the time to go in-depth in one or more of the Unit pages
- share informal, summative feedback about the kinds of learners visiting our site and their mindsets towards integrating these three technology tools for collaborative learning

Learners will encounter the following elements when navigating the learning content found on this page:

- teacher-to-designer question (as title)
- image & written content explanations including hot linked text to:
    - outside sources and explanations, where useful
    - internal pages or online definitions, where underlined
- iconic and text legend explaining how to interact with the ThingLink image
- embedded ThingLink image which includes rich media tag icons leading, when touched, to examples in the form of:
    - text explanations in internal, embedded boxes
    - internal, embedded videos
    - internal, boxes including brief descriptors and links to outside sources which open in another tab if clicked

- a three question InterActive Session with icon, questions, images, & button to the Forums
- a two-question survey which send results to one of our emails
- three radio-button polls which show results as a current percentage of all voters
- red meta-instructions indicating the conclusion of the learning experience beside a button link guiding the learner to share their own success stories with collaborative tech of all kinds on our Building a Community of Practice section's Padlet wall.

The **InterActivity** questions for this page ask learners to rank the usefulness of the ThingLink for providing idea-provoking content and ranking their personal likelihood of incorporating each of the tools into their curriculums in the future. They are given the opportunity to submit additional written responses directly on the survey element. The polls ask learners to identify the subject areas they currently teach, which areas they feel the tools could be most useful in for them personally, and their previous level of exposure and experience with these tools or those like them (ie. GAFE).

Forum questions are designed to encourage teachers to elaborate on their survey and poll responses by posting to the Forum as well as to reflect on which tool appeals to them the most and why, as well as evaluating any past experiences within particular subject areas and considering how to improve any experience. Learners are then presented with a button linking to the next section of our webpage, where they can share their favourite links, images, or descriptions of collaborative tech tools of any kind.

Module 3.0: Building a Community of Practice

Module 3: Building a community of practice

a.   Building a Community of Practice:
     Landing page
b.   The Forums
c.   Success Stories (Padlet)
d.   About Us
e.   Feedback Survey (Google Form)

a. Building a Community of Practice: Landing Page

The purpose of these pages is to guide learners towards the following goals:

- link to the online spaces that have been created for learner-designer, learner-learner, and group-group interactions
- take the opportunity for learners to engage with a larger community of educators in order to develop their personal learning and expand their personal learning network.
- interact via learner-designer using the feedback form

b. The Forums

Throughout the website participants will encounter reflective questions based on specific pages with buttons that will link them to our Forums Section. It is our hope that participants build on and share expertise by responding to the questions, adding new thoughts, or asking additional questions.

The Forums

c. Success Stories (Padlet)

On our Success Page participants will encounter our Padlet wall where they can collaborate and share with other participants. With a simple double click on the wall participants are given the ability to post images, videos, documents, and links, creating collaborative interactive spaces. Similarly, by clicking on any previous post on the wall, participants are able to interact with the posts, viewing the content up close and linking to any additional content in the pop up window.

d. About Us

The About Us page provides learners with context as to who we are. It also provides them with any relevant contact information where they can reach us for further collaboration. In addition to this, participants can also follow other fellow UBC MET students and on-going conversations from the live Twitter feed for #UBCMET.

e. Feedback Survey (Google Form)

In order for us to grow as learning designers we have asked learners to provide feedback on their experience with the website. There is an embedded survey that asks for specific feedback on different areas of the website. There are only four questions so more learners will take the time to complete. We hope to receive thoughtful suggestions on what can be improved. The Design Team will consider community input for future changes.

Module 4.0 But Wait, There's More!

Module 4: But Wait, There's More

a. But Wait, There's More: Landing Page
b. Resources
      b.i. Collaborative Technology Tools Site
      Official Curriculum Guide
c. Site References & Image Credits

The purpose of these pages is to guide learners towards the following goals:

- access additional links to resources for the three Collaborative

  EdTech tools presented in Module 2

- access extra collaborative resources

- be guided to the online copy of this Curriculum Guide

- refer to image credits and the academic references

a. But Wait, There's More: Landing Page

The purpose of this page is to provide a navigation to pages in this module

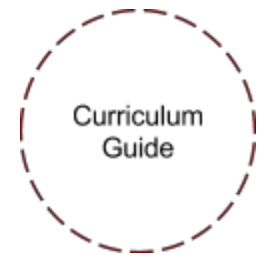with a collection of descriptive buttons linking to the pages.

Landing
Page

The purpose of this page is to extend the learning beyond the scope of this

design project. We have curated supplementary materials and resources for

teachers that need further examples.

The purpose of this page is to provide access to the accompanying Curriculum

Guide.

The purpose of this page is to reference sources of information and

acknowledge the sources of the images and quotes.

SECTION E: CONCLUSION

The Collaborative Technology Tools project aims to provide an introductory sampling

of the many practical applications and edTech resources available to educators interested in

collaborative e-learning. It is our hope that participants will be able to see the power of

collaborative edTech tools within their classrooms, regardless of the specific differences within

their individual jurisdictions while at the same time building a deeper appreciation of the

possibilities as a result of recognizing those differences.

The design team's own collaborative experiences thus far provide encouragement that

this is possible. Despite negotiating ideas across careers, student age-levels, and provinces,

our different perspectives and our shared professionalism including commitment to learners,

application of professional knowledge, and the need to engage in continuous professional learning, combined to provide a well-rounded design.

Beyond simply creating a website, we hope to design an interactive e-learning environment that teachers will continue to find timely, applicable, and engaging.

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COLLABORATIVE TECHNOLOGY TOOLS

INTRODUCTION

COLLABORATIVE EDTECH UNITS

BUILDING A COMMUNITY OF PRACTICE

BUT WAIT, THERE'S MORE!

PD FOR TODAY'S TEACHERS:
COLLABORATIVE TECHNOLOGY TOOLS IN THE CLASSROOM

This guide and accompanying website were developed as a student project for the University of British Columbia, Master's of Educational Technology course of Design of Learning Environments (ETEC510), August 2, 2015.