What are the Key Elements a Teacher Should Consider When Designing Effective and Engaging E-learning Opportunities?

by

Bradley A Breitkreutz

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF EDUCATION IN EDUCATIONAL LEADERSHIP

VANCOUVER ISLAND UNIVERSITY

We accept the Process Paper as conforming to the required standard.

December 4, 2017

Dr. Randy LaBonte, Major Project Faculty Supervisor
Faculty of Education,
Vancouver Island University

Dr. David Paterson, Dean,
Faculty of Education,
Vancouver Island University

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Abstract

As education practices continue to move into online learning spaces the need for educators to be trained for the e-learning environment is of paramount importance. The intention of this Masters project was to provide the knowledge, skills as well as an example of this training to address my critical challenge question: What key elements should an educator consider when designing and delivering effective and engaging e-learning opportunities? I created an online course titled Learn2TeachOnline where educators could participate as a student in an online course while learning some of the essential considerations needed for online education. The course, created in the Moodle Learning Management System and hosted by Canadian eLearning Network (CANeLearn), was designed to take approximately two weeks to complete. Initial feedback regarding the course as a tool for educators to learn how to teach in the online environment was very positive. Applying some sort of credentialing, as well as approaching educational institutions in both the public and private sector, could broaden the reach of the course to many educators. Further investigation and research around connected e-learning opportunities such as blended learning and mobile learning would be encouraged.

Learn2TeachOnline (Major Project) url. (login as “guest” to view)


Keywords: e-learning, online education, learning theories, learning design models, communication, community, privacy, social media, standards, technology
Acknowledgements

The journey to complete my Master’s degree would not have been possible without my wonderful support network. First to my wife, Judy, your patience with me during this process has been appreciated. With long hours away from you sitting at my computer, you have continued to love and support me through the process. To my mom, Ramona, and step-dad, Jim, without all your support and firm belief I could accomplish this task, the process would have been nearly impossible. I also want to thank my dad, Alvin, and step-mom, Bonnie, for your encouragement. Thank you to all my family and friends for still loving me even though I had to excuse myself from your lives for this time of study. Thank you to my Anchor colleagues for your support, prayers and encouragement throughout this process. I would also like to thank all the instructors in the OLTD program for guiding and sharing your passion of online education to us students. A big thanks to my OLTD friend, Lindsey, for all your help, encouragement, friendship, and when needed a little friendly push. You helped make this whole process a little easier. Thank you to Mary O’Neill for being our OLTD ‘mother hen’ and all your encouragement throughout this entire process. I would like to give a very special thank you to Randy LaBonte for believing in me, guiding me and mentoring me throughout the Master’s program. Finally, I would like to thank my Lord for the strength, determination and for providing me with this wonderful support network.
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Chapter 1 – Introduction

Purpose of the Study

Neat rows of desks in an organized classroom and a teacher standing in the front of the room writing notes onto a chalk or white board are now no longer the standard for education. Technology and the increasing availability of reliable high-speed internet has allowed for education to shift away from this traditional view of a brick and mortar classroom. Distance and online education allows students the ability to complete their education without ever entering a traditional classroom. This form of education has become a common choice for many Canadian students in Kindergarten to grade 12. Canada wide, Barbour & LaBonte (2016), estimate 5.7% of student are enrolled in a K-12 distance or online education program. British Columbia holds the highest per capita number of students enrolled in a distance or online education program, in Canada, at 11%. Post-secondary institutions in Canada (excluding Quebec), found that approximately 16% of university enrolments and 12% of college enrolments were for online courses (Bates, 2017).

To be an effective educator, a teacher needs to possess a basic set of skills. This is true for traditional face-to-face as well as for online educators. A few of these basic skills include: content knowledge, the ability to structure appropriate lesson sequencing, knowledge of the teaching content, knowledge of how a student learns, as well as the ability to believe both the teacher and student can be successful (Burns, 2011). E-learning adds a complexity to the delivery (Bennett & Lockyer, 2004) and the unique set of skills required to be successful in this environment (Black, DiPietro, Ferdig, & Polling, 2009).

Most teachers entering into distance and online education have not had any formal teaching or experience with this form of schooling. Teacher education programs have been slow
in providing opportunities for pre-service teachers to learn about online teaching. Instead, they focus on programs that “concentrate on practica that are set in traditional brick-and-mortar settings” (Kennedy, Cavanaugh, & Dawson, 2013). Barbour (2012) points out that even though online education has become more commonplace, teachers are still being prepared for the traditional face-to-face practice, not an online delivery system.

**Justification of the Study**

Teaching in an online environment is different than the traditional face-to-face system. Bob Blomey said, “[t]here is a persistent opinion that people who have never taught in this medium can jump in and teach a class, a good classroom teacher is not necessarily a good online teacher” (Furger, 2010). Caplan and Graham (2011) point out, “[t]his new mode of learning is also redefining teaching” (p.250). If teachers had even a basic understanding or experience of online education, they would be better equipped to handle the differences between bricks and mortar and online teaching. Research has shown, online educational programs have been found to be as effective as traditional bricks and mortar classes when correct pedagogical practices are used (Driscoll, Jicha, Hunt, Tichavsky, & Thompson, 2012).

Bates (2017) notes that, especially in smaller post-secondary institutions, finding qualified learning technology support staff was a barrier for online course implementation. He reports that “[a]bout two-thirds of institutions identified lack of training and resistance from instructors as a main barrier or challenge” (75). As an administrator at a Distributed Learning (DL) school in British Columbia, I have been involved in the hiring of teachers for our programs. Very few applicants had any prior experience or training of teaching online. Typically the training occurred after hiring through the administration, professional development, or a mentor
teacher assigned to the new teacher. Smith, Clark, & Blomeyer (2005) estimate less than 1% of teachers in the United States have had training as online teachers.

Baron & McKay (2001) designed a course for K-12 educators that modeled some of the experiences students would face in an online class. Elements such as peer-to-peer collaboration, instructor feedback, student-centered learning, authentic learning, critical thinking, and project based learning were added to the course. The authors discovered the timing of content release to the students had an impact on the work being completed. It was found that with busy working lives, most students were spending the weekend working on the course, so readings released early in the week did not generate the weekly discussion that was anticipated. They found releasing the readings later in the week and adjusting the due dates of assignments slightly helped to improve online discussions.

Creating a course that could encompass all elements of e-learning would be virtually impossible, given the differences between individual school systems. There are, however, general elements an online teacher needs to consider in the designing and delivery of their program. A teacher who had the general knowledge and skills in online course delivery would give themselves a definite advantage as they entered the eLearning environment. As Everson (2009) reflected, after 5 years of distance and online teaching, there was much more she wished she had known when she started. As such, there exists a need for teachers to be trained in creating and delivering online programs.

**Critical Question/ Challenge to be Addressed**

To address the lack of specialized training of educators in online education, I have posed the Critical Challenge Question: *What key elements should an educator consider when designing and delivering effective and engaging e-learning opportunities?*
**Definition of Terms**

E-learning is the key term used throughout this paper. This term refers to “both online and internet based learning under the general definition of online learning” proposed by Mohamed Ally (2011). As such, e-learning is “[t]he use of the internet to access learning materials; to interact with the content, instructor and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience” (17). For purposes of this paper, e-learning includes: online learning, internet based learning, computer based training, mobile learning, blended learning, distance learning, distance education and distributed learning. A Glossary of Terms is listed (Appendix A) to assist in the understanding of other terms that may need clarification.

**Major Project Design Timeline**

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<tr>
<td>Finish Project and Process Paper for final approval</td>
<td>December 2017</td>
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Overview of the Project

To help answer the problem posed in my critical question, information gained from Chapter 2: Literature Review, as well as my time in the Online Learning and Teaching graduate Diploma (OLTD) program, offered by Vancouver Island University, was used to guide my project development. I chose to build an online course to address and teach skills needed for an educator to design and deliver engaging e-learning opportunities. This course, designed in the open source Moodle Learning Management System (LMS) and hosted by the Canadian eLearning Network (CANeLearn), consists of seven units and is designed to be completed in approximately a two-week period with learners spending around 21 hours on the course. In the current format, students work through the course asynchronously with feedback on submissions given by the course facilitator. The course was not intended to be an exhaustive look at each topic area but rather an overview of the skills needed to hopefully encourage educators to explore these topics in more detail.
Chapter 2 – Literature Review

Introduction

Online learning is a discipline that is expanding rapidly. As such, the need for educators who are familiar with online teaching will grow in demand (Goodyear, Salmon, Spector, Steeples, & Tickner, 2001). Many students choose to try online education for all or part of their education due to convenience of program choices offered by online schools both in the delivery and curriculum offered. Reasons students choose an online program may include: attendance at a small school that may not offer a needed program, the ability to meet a different academic schedule, and many families have become more mobile and are not at a fixed location for any given length of time (Toppin & Toppin, 2016). However, even with the growing popularity of online education, there has been little research when it comes to this method of learning in the Kindergarten to grade 12 context (Black, et al. 2009; Rice, 2006; Goodyear et al., 2001). In the United States, recommendations have been made to have all pre-service teachers take some training for online teaching (Kennedy et al., 2013).

Before designing an online course to instruct pre-service and in-service teachers about online pedagogy, essential skills and theoretical teaching roles required to teach in an online learning environment, the foundational aspects need to be identified from current literature. This literature review presents and examination some of the key elements a teacher should consider when designing effective and engaging online learning opportunities.

Learning Theories and Models

Learning theories. Learning theories examine knowledge, both the nature and how it is learned. Our preconceptions of the nature of learning have an influence on teaching and learning (Bates, 2015). Bates claims that different learning theories may prove to be more effective for
learning depending on the context. He points out how learning theories provide a framework for decisions made about teaching and technology. Siemens (2004) lists three learning theories that are most commonly used in educational environments: Behaviourism, Cognitivism, and Constructivism. Siemens also adds Connectivism to the list as he feels it considers the use of technology in learning, something that is missing from the other theories.

Behaviourism is best known from the work of B.F. Skinner and his use of what is known as operant conditioning (Bates, 2015). Through rewarding specific behaviours, Skinner could teach complex tasks. Skinner determined that applying immediate feedback to specific stimuli encourages learning. As Bates pointed out, this reinforcement for humans can be as simple as “immediate feedback for an activity or getting a correct answer to a multiple-choice test” (p. 45). Behaviourism assumes knowledge is objective; meaning there is a right and wrong answer. Because of the objective nature of Behaviourism, learning that leads to a correct answer works well with this theory; whereas, higher order thinking such as evaluation, problem-solving and decision making need a different approach (Keramida, 2015).

Cognitivism focuses less on the observable behaviours and instead focusses on thinking and the mental processes that occur in learning. Learners have pre-knowledge that they bring with them to the learning process. Cognitivism takes past learning and makes connections to new information and thinking to create new knowledge (Wilburg, 2010). Psychologists such as Jean Piaget, Lev Vygotsky, and Benjamin Bloom are commonly associated with Cognitivism. Ertmer & Newby (2008) list four principles for Cognitive Learning Theory.

- Emphasis on the active involvement of the learner in the learning process
- Use of hierarchical analysis to identify and illustrate prerequisite relationships
• Emphasis on structuring, organizing, and sequencing information to facilitate optimal processing

• Creation of learning environments that allow and encourage students to make connections with previously learned material (p. 53)

One cognitive approach commonly used in education is Bloom’s Taxonomy (Krathwohl, 2010). Bloom’s Hierarchy of Learning Model is characterized by two groups of thinking, lower order thinking skills and higher order thinking skills. Lower order thinking skills are considered to be knowledge, comprehension, and application. Higher order thinking skills include analysis, synthesis, and evaluation. With the addition of technology in education, Bloom’s taxonomy was updated in 1990 changing the nouns in the hierarchy to verbs in order to relate thinking to “an action based process rather than one of passive acquisition” (Common Sense Education, 2016).

Constructivism is based on the belief that the interaction between the environment and the learner combined with the learners’ interpretation is how one learns. As David Jonassen (1991) states: “[c]onstructivism claims that the reality is more in the mind of the knower, that the knower constructs a reality, or at least interprets it based upon his or her apperceptions” (p.10). In simpler terms, the meaning which we construct is based upon experiences we had in the past. Much of the Constructivist’s approach to learning is based on reflection and commonly used in the humanities rather than the maths and sciences.

Connectivism was proposed by George Siemens (2004) as a response to the impact of technology in learning. Siemens tied theories of chaos, network, complexity and self-organization theories into his model and proposed knowledge isn’t internal to the individual. By creating networks, a person is able to connect to and gain the knowledge that was not previously known. He lists eight principles of Connectivism:
• Learning and knowledge rests in diversity of opinions.
• Learning is a process of connecting specialized nodes of information sources.
• Learning may reside in non-human appliances.
• Capacity to know more is more critical that 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.
• 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 (p.7).

The basic conclusion Siemens made with Connectivism was that the connections we make in learning are more important than the material learned; in that knowledge may change over time. The framework that learning theories provide model how educators view student learning. Once this has been understood by the educator, work into course design may begin.

**Learning models.** Learning models or instructional design models help educators design courses that are effective for e-learning. Many models exist to help in the course design; however, five are commonly used in the education field. These are:

1. Analyze Design Develop Implement and Evaluate (ADDIE),
2. Technological Pedagogical Content Knowledge (TPACK),
3. Community of Inquiry (CoI),
4. Understanding by Design (UBD), and
5. Universal Design for Learning (UDL).

ADDIE is an acronym for the steps of the design process which are, analyze, design, develop, implement, and evaluate. Branch (2008) points out that one of the main focuses of ADDIE is learning should be “student centered, innovative, authentic, and inspirational” (p. 2). ADDIE allows for a systematic and detailed design process with constant revision throughout the process of implementing an e-learning opportunity (Bates, 2015).

Others (Moore-Adams, Jones, & Cohen, 2016) argue an online educator must have knowledge of content, pedagogy and technology and the interplay with each other in a virtual setting. Moore-Adams et al. suggest the Technological Pedagogical and Content Knowledge (TPACK) framework is well aligned with this skill. TPACK was a design framework based around technological knowledge, pedagogical knowledge and content knowledge otherwise known as the three knowledge forms. These knowledge forms create interplay and form a total of seven primary and interconnected knowledge areas (Koehler, 2012). The argument is made that using the TPACK framework can provide a common language to determine which areas of weakness can be assessed and strengthened in a teacher’s professional development (Moore-Adams et al.)

Community of Inquiry (CoI) was created by Garrison, Anderson, & Archer (2000) to create learning experiences through the interaction and relationships between social presence, teaching presence, and cognitive presence. Social presence refers to the ability of a person to portray who they are as a person to the community around them. Teaching presence focusses on the design of the learning experience as well as supporting both the social presence as well as the third presence, cognitive presence. Cognitive presence is a learner’s ability to learn through being involved in the learning community throughout the experience.
Understanding by Design (UbD) is a design framework created by Wiggins and McTighe (2005). Also known as Backward Design, UbD focusses on the desired goal first. This is followed by the evidence or assessments you need to collect to show your goal was met. The last step in UbD, is to determine the learning experiences necessary to create the evidences to show the goal has been met.

Universal Design for Learning (UDL) allows for multiple means of acquiring the same information. As Meyer, Rose, & Gordon (2010) state, “to reach this goal for all learners, there is not one fixed route”(p. 84). This is accomplished through providing students with what are known as guidelines. These include “multiple means of engagement, multiple means of representation and multiple means of action and expression” (p. 111). It is through these guidelines that different areas of the brain are stimulated allowing for leaning to occur in multiple ways.

**Community and Communication**

Garrison & Anderson (2003) writes “communication is at the heart of all forms of educational interaction” (p. 2). E-learning presents a challenge for communication as learners and educators are often at a distance from each other. To help bring clarity to online communication, Ellis, Gibbs, & Rein (1991) created the “time space matrix” showing how communication and collaboration occurs in an e-learning environment. The matrix consists of four possible learning environments:

- Same time and same place – Face-to-face learning environment
- Different time and same place – Asynchronous environment
- Same time and different places and – Synchronous distributed
- Different time and different places – Asynchronous distributed
Typically, e-learning opportunities come from the asynchronous or synchronous distributed environments. In an asynchronous environment, learners meet at the same location (website, blog, discussion board) to interact with each other. This method of communication takes place at different times allowing for students to participate as they are able. Asynchronous interaction has been the traditional method for student interaction in e-learning environments until recently (Watts, 2016). Synchronous distributed environments meet at the same time; however, learners are at a distance from each other. In order for synchronous tools to be a successful means of communication, dialogue needs to be interactive between participants and not just a one-way session (Morrison, 2014). Watts concluded, the inclusion of asynchronous or synchronous elements to an e-learning environment helped students to feel higher levels of satisfaction and motivation in their online experience.

Creating community in e-learning experiences helps to keep students motivated. Kear (2011) connects online communication to a sense of community which is important for learning. Through online communication, learners can gain support from their peers, and feel part of a learning group, or a course cohort, or their institution as a whole. The increased sense of belonging that can arise from regular online interaction perhaps explains why the term ‘online community’ is often used in this context. The development of a sense of community is an important aim for educators, and for many students it is a key factor in promoting motivation, confidence and enjoyment of their learning (p. 2).

Building community in an e-learning environment is based on three types of learner interactions. The first, learner-content interaction, described how the student interacts with the course material. Learner- instructor interaction largely was in the form of feedback on assignments;
however, could also include other means such as counsel and encouragement, also sometimes referred to as teacher presence (Lowenthal & Parscal, 2008). The third form of learner interaction was called learner-learner interaction. This refers to interactions between participants in the e-learning opportunity and is usually done in small group assignments or class discussions (Moore, 1989; Abrami, Bernard, Bures, Borokhovski, & Tamim, 2011).

**Technology**

Bates (2015) described technology “as hardware and software to support the learning and teaching”. The use of technology in education however is still a controversial topic. For example, cellphones are often still banned in class (McQuigge, 2017). E-learning on the other hand requires technology. Germain (2011) encouraged course designers to go beyond simply adding static course content and embrace the ability of technology to add new dimension of experience to learning. This thought is continued with Toppin & Toppin (2016) who pointed to student’s diverse learning styles. Technology then, needs to be simple and reliable but also engaging and use multiple approaches of instruction similar to course design.

In selecting tools (hardware and software) to use in an e-learning environment it is important to consider the value of the tool. Value should be looked at in terms of cost as well as educational usefulness. When determining the cost of a tool, Annand (2011) suggests looking at both the direct and indirect cost. Direct costs are purchase and license fees. Indirect costs would include expenses like time learning the new tool, set up, and maintenance. Kanuka (2011) argues that the educational usefulness of a tool depends greatly on the educators philosophy of e-learning. Kanuka describes three categories of educational philosophy: uses determinism, social determinism, and technological determinism. A uses determinism approach views technology as simply a tool that helps us perform a task. The user determines the use of the tool. The social
determinism view believes social and technological uses of tools shape the learning. Technical determinists believe the use of technology takes away the freedom educators have in determining lessons and increases the commercial and business side of education.

**Open Educational Resources**

Open Educational Resources (OERs) as described by Bates (2015) are based on the premise that education should be available to all. They also are based on the five core rights of openness: retain, reuse, revise, remix and redistribute. Wiley (n.d.) defines the principles.

1. Retain – the right to make, own, and control copies of the content
2. Reuse – the right to use the content in a wide range of ways
3. Revise – the right to adapt, adjust, modify, or alter the content itself
4. Remix – the right to combine the original or revised content with other material to create something new
5. Redistribute – the right to share copies of the original content, your revisions, or your remixes with others.

OERs do not give up copyright unless the author specifically releases the work to the public domain. Instead, Creative Commons (2017) licensing was created to allow for the vision of openness while still protecting and licensing the rights of the creator of the work.

**Social Media**

Social Media is a tool that allows the user to create, control and share content across a network of other users (Bates, 2017). The use of Social Media in post-secondary contexts has been shown to help learners connect and build on the learning outside of the classroom environment (McLeod & Richardson, 2014). Hunter (2008) highlighted that many e-learners use Social Media as a platform for discussing concepts with other learners due to the fact that their
learning occurs in isolation. Holmquist (2011) describes the benefits and concerns in using Social Media in the classroom. The benefits include the ability for students to practice social skills, learn to use technology, develop independence and express personality. Concerns include the possibility for bullying, misuse of personal information and passwords as well as exposure to content that may be inappropriate. Holmquist believes that many of the negative aspects of Social Media can be negated through proper modeling and teaching about how to use the Social Media platform responsibly. Social Media platforms do have age restrictions which may make it difficult for educators of younger students to implement these resources into their e-learning courses. Even if 78% of children under the age of 13 have at least one Social Media account (Gill, 2017), as educators we have the duty to not use resources that go against these restrictions. Educators need to find an alternative.

Social Media is not just a useful tool for student use. Tarte (2013) encourages educators to use Social Media to find relevant information as it happens. Asher (2015) describes the using Social Media tools to increase an educator’s personal learning network and professional development opportunities. Social Media, he also asserts, can be a great way to connect with parents and keep them informed about the expectations and learning that is occurring.

**Standards and Evaluation**

Standards for creating online classes are a critical component for quality assurance in online course design. Randy LaBonte (2008) stated, [Standards are] “criteria to be used as rules and guidelines to ensure content materials, delivery processes, and services meet their intended purpose.” One such set of standards are the National Standards for Quality Online Teaching Version 2 by International Association for K-12 Online Learning (iNACOL). These 11 quality standards contain both the teacher knowledge and understanding required as well as abilities that
are needed in a quality online learning experience (Tracy, Baltunis, & Swiderski, 2011). While not every standard or descriptor relates directly to course creation, each standard is applicable to online teaching.

The organization Quality Matters (QM) [https://www.qualitymatters.org/] has also developed research-based standards for online courses. While the QM rubric is the mainstay of the Quality Matters community, it is only a small piece to align with the standards (Adair & Shattuck, 2015). Quality Matters assesses online courses through both a rubric and a rigorous peer review by a certified review team. Feedback and collaboration between the course developer and the review team, allow for course improvement and once the standards reach 85% quality level or better the course receives a QM Certification (MarylandOnline, 2017).

The BC Ministry of Education released the Standards for K-12 Distributed Learning (DL) in British Columbia (British Columbia, 2010). Again, while this document focused primarily on DL, it does address specific teacher roles in relation to delivery and communication with students.

The review of the literature made it clear that there was a need for training for educators new to e-learning. I next took what I learned through the OLTD program and the review of the literature and created an online course to teach those new to e-learning the identified needs. The procedures and method of my project build are presented in Chapter 3.
Chapter 3 – Procedures and Methods

Choosing a Proposal Topic

The idea to create a course to introduce educators to the basics of e-learning was born during a conversation at the CANeLearn Symposium and DL Conference in early April of 2017. I was discussing my difficulty narrowing my interests, and choosing a specific topic for investigation for my Master’s project with Vancouver Island University’s Online Learning and Teaching graduate Diploma (OLTD) Program Coordinator. My problem was that I had been immersed in such a variety of interesting topics in the OLTD program that I was unsure where to focus my attention. The Program Coordinator mentioned what a good idea it would be for preservice teachers to have a “mini” version of the information taught in the OLTD program. Immediately, I knew this was a direction I wanted to follow. The topic was broad enough to take it in many directions, yet focused enough to give me direction for a project I could complete within the scope of the Masters of Educational Leadership (MEdL) program. The topic wasn’t limited to something pertinent to my current position as a Vice Principal for a Distributed Learning school. It would certainly benefit the school, but the project would also be useful for the greater educational community.

I also knew who I wanted to ask to be my Supervisor for the process during that same meeting with the OLTD Program Coordinator. Dr. Randy LaBonte was a natural choice as his knowledge and experience in the e-learning field was a great fit for this project idea. By the end of the conference, I had a general topic to focus on and a Supervisor to facilitate the process. Narrowing the topic idea into a succinct and appropriate critical challenge question was the next step.
This was a challenging exercise. Because the topic was so broad, I needed to narrow my focus to one that could be contained by my project and paper. A few of my initial thoughts and questions included:

- What does a new teacher need to know to ensure student success online?
- How can distant learning teachers ensure student success online?
- How does online learning meet the needs of a 21st century learner and what knowledge, skills and technology-enhanced tools should a teacher integrate to ensure student success online?
- How does blended and online learning meet the needs of a 21st century learner and what knowledge, skills and technology-enhanced tools should a teacher integrate to ensure student success online?

I was reminded during this process that I needed to think of my purpose. What was it I wanted to create? Were these initial questions answering what I really wanted to achieve? The answer was ‘no’. All my first questions revolved around student learning. This wasn’t the intent of my original idea which was about training educators. This led me to the question: What are the essential skills a teacher requires to teach in an online learning environment and how should that training be modelled? This question was getting closer to the original idea for the project and was eventually changed and reworked to become the critical challenge question of this paper: What are the key elements a teacher should consider when designing effective and engaging e-learning opportunities?

**Major Project Design**

To address my critical challenge question, I felt a course build would be an appropriate method to communicate the desired intention. Learners would be able to gain the knowledge
needed but also participate in an online course from a student’s perspective. The first step in the development of my project was to choose the main units of study for the course. This was done through a combination of research on the topic, as well as considering the general design of the OLTD program. I felt the program built upon the initial ideas in a logical and sequential way, something that I wanted to model in my course as well. I chose 7 broad units to cover in my course (see Appendix B for course syllabus). The units were designed as follows:

- Unit 1: Learning Theories and Models
- Unit 2: Community and Communication
- Unit 3: Technology
- Unit 4: OER’s, Resources, and Content
- Unit 5: Social Media
- Unit 6: Standards and Evaluation
- Unit 7: Upkeep and Final Project

In combination with the development of the content of my online course, I also needed to consider the delivery method. I struggled to decide whether I wanted to have the course open to all or closed and accessible by a login and password. I considered having the content in a password protected website but felt I needed ability for assignment submissions and to provide feedback to the submissions. Eventually, I decided to have the content open and available for anyone to review; however participation would require login information. This led me to using a Learning Management System (LMS) for my course delivery. I had experimented with both Canvas and Moodle, in the past, and eventually chose Moodle as my platform of choice due to personal preference with regard to how the platform performed. One problem with using Moodle however was I needed to have the platform hosted. I installed a local instance of the
program on my computer to begin learning and working with the Moodle platform. While this allowed for course development I would be unable to publish the course using this method. My Supervisor offered to host the course through the Canadian eLearning’s (CANeLearn) Moodle instance, which I accepted.

**Major Project Development**

The course was designed to include an Introduction and seven learning units to be worked on sequentially. The course build was designed to be used in an asynchronous manner with learners entering the course as they enrolled, working on the course independently, gaining feedback on assignments and interacting with the course facilitator as needed. A student who would spend a one to two hours per day on the course would finish the workload in approximately two weeks. The design of each unit was created to be consistent throughout the course with concepts building upon previously learned information. Each unit was created using at least one Moodle book to display the main learning content of the section, at least one assignment (with the exception of Unit 1) and selected readings from the e-book Education for a Digital World (Harper, 2008).

Although I had a good idea of the topics and general information for each unit, specific research was still required to complete the course design. I started working on the course in mid-June with the goal was to have it finished by the first week of September. Due to the scope of the project the volume of research for each unit took longer than I had expected, and project completion occurred mid-October when it was then released for field/beta testing. It wasn’t until late in my project development that I chose the actual project title. I decided “Learn2TeachOnline” was appropriate as it succinctly stated the courses purpose. The initials for the course title were chosen as the short acronym (L2TO) was catchy and brandable.
Project Unit Overview

The Introduction to the course gave learners the ability to examine the definition of e-learning as well as look at common myths around this means of learning. Learners were asked to reflect on the e-learning myths as well as list any pre-conceptions they may have had before they began learning about e-learning. To conclude the initial section, learners were instructed to introduce and share information about themselves.

In Unit 1, participants examined learning theories and models also known as learning design models. These topics form the frame for each of the other units. How a learner would incorporate learning from the other units is based on this foundational unit.

Unit 2 had students examine how to create community and communicate within an e-learning environment. Participants examined the differences between synchronous and asynchronous environments and were given the opportunity to try a synchronous tool. I included a personal experience on how as a student, teacher presence (or lack of) has affected my ability to engage in a course both positively and negatively.

Technology was the focus of Unit 3. This section included hardware as well as software that is highly recommended in e-learning. Participants were also asked to create a screencast as one way to build teacher presence learned in Unit 2.

Unit 4 focused on OER’s, resources and content. Learners were introduced to the concept of sharing knowledge through the Creative Commons and highlights the benefits of knowledge sharing can have through the video “The Internet’s Own Boy: The Story of Aaron Swartz.” A brief look at paid learning resources was also examined. I also included a resource I created for an inquiry project for one of my OLTD classes. This resource examined different
resource evaluation tools concluding with a self-made recommended evaluation tool combining the features I liked about each of the other tools.

The role Social Media could or should play in e-learning was examined in Unit 5. Students also looked at digital privacy and were given the opportunity to look at the Freedom of Information and Protection of Privacy Act (FIPPA) or Personal Information Protection Act (PIPA) as it pertained to their situation.

Unit 6 dealt with the concept of standards and course evaluation. British Columbia specific Distributed Learning Standards from the Ministry of Education were examined as well as some international organizations standards (iNACOL/ Quality Matters).

Unit 7 concluded the study by reminding learners that a course is never fully complete. They will need regular checks on course content to check for broken links and to keep the course fresh, relevant and up to date. The culminating project was to have learners describe how they would apply the information they learned throughout the course and apply it to where they were or want to be.

**Logo Design**

The logo for the course was created in Microsoft Publisher. The logo (see Appendix C) was created to display three people sitting behind three computers. Each person was designed wearing a grad cap, not to symbolize that they have graduated but rather to show they were learners. The use of three people was also included to communicate the idea of community and how we learn better when surrounded with other learners. The people were designed in an offset manner to symbolize the idea that the ‘place’ of learning can be different for everyone. The two computers to the right and left were drawn containing several connected lines and circles to represent networking. This feature also closely resembles a design element in the CANeLearn’s
logo and was included to pay homage to CANeLearn for hosting the course. The center computer was designed with a green triangle to represent a play button common in online video playback. The course name and initials were also displayed clearly for learners to identify the course.

**Project Evaluation**

Finally, the course ended with a Feedback section. Originally, a course participant feedback section was available for reviewers for feedback however a form specifically for the beta testing of the course called the ‘Course Reviewer Feedback Form’ was added after some early user feedback. This new form was included to help reviewers comment on the field/beta testing findings as well as make suggestions for future improvements in the course without having to actually complete the whole course. Results and recommendations from this section are discussed in Chapter 4.
Chapter 4 – Field/Beta Testing and Findings

Methods and Process

The creation of the course *Learn2TeachOnline* was designed to help answer the critical challenge question: *What key elements should an educator consider when designing and delivering effective and engaging e-learning opportunities?* The project, in the form of an online course, was released for beta/field testing the week of October 23, 2017. The course was opened to allow all material to be visible with a guest login to the CANe-Learn course site. This access however did not allow ability to participate in the assignment areas. Along with guest access, 10 users were created to allow access to submit assignments and interact fully with the course. To receive one of these logins, interested reviewers had to request full access at which time a username and login were provided. To aid reviewers, the option of reviewing the complete course or just the course syllabus was permitted. A call for reviewers was sent via email to both Alumni and current OLTD program students as well as posted to my Facebook, Google+ and Twitter accounts to elicit interested participants.

The course allowed for multiple means of feedback which included email and two Google Forms. Contact information was also given inside the course and course syllabus, so reviewers could also give feedback through email. Google Forms were chosen because of the ease of use, the ability for users to respond to the form without identification and the ability to easily tabulate results. The two Google Forms, one for course participants and one for course reviewers, were provided at the end of the course by a hyperlink. The forms were created asking for feedback using a point scale as well as for written anecdotal feedback. Reviewers were given the ability to include their name and email if they wanted the author to respond to any questions
they may have had with the course. This information was optional and not required to complete either of the forms.

The course feedback form (see Appendix D) was designed for people who had full access or fully participated in the course. The course reviewer feedback form (see Appendix E) was created specifically for the field/beta testing period. Upon initial release of the course, only the course feedback form was implemented for review. After some initial conversations with those in my close learning community, it was suggested a reviewer feedback form be added. This second form would be less intimidating and geared towards people reviewing the course and not necessary for feedback on participation in the course. After implementing the new form, more feedback relating to a general overview of the course was obtained. This second form proved to be the most popular method of feedback.

**Findings of Beta Testing**

Through the various methods of feedback collection in place, I ended up receiving four email responses, two course feedback forms and seven course reviewer feedback forms. This data was collected over a period of approximately three weeks ending mid-November. Overall, all respondents were positive about their interaction with the course and the content.

**Email response.** Email response was chosen by four reviewers to communicate their evaluation of the course. Each of the email responders believed overall the course was successful in its purpose however constructive feedback was also given. One responder wrote “Marvelous job! You’ve organized the course very clearly and logically. You have found great reference materials for each unit of the course. I’ll be saving some of these for myself, thank you very much!” This person suggested adding instructions on how to use the various Moodle components such as the Wiki. Another email responder wrote “thanks for letting me have a look
at the course! You’ve put a lot of work into it.” This person wondered if they took the course would there be any ‘recognized credit’ received or would they be taking the course for ‘fun’? A third email responder said “You have done a great job making the course relatively easy to navigate…” The responder wondered if the amount of information in the course may have been overwhelming. A fourth email reviewer commented “It looks like you spent a lot of time working on this. Great job!”

The course participant feedback form. The course participant feedback form which was completed by two people, showed the following results:

Question 1 asked participants to rate the statement: ‘My learning focused on issues that interested’ me on a 1-5 scale. Both respondents answered the learning was of interest as a 4 and 5 out of 5 was given as a response.

Question 2 asked course participants to rate, using the same 1-5 scale the statement: ‘What I learned is important for my professional practice.’ Again, both responses indicated that the course was important for professional practice given the 4 and 5 out of 5 rating.

Question 3, using the same rating scale asked: ‘During this course I learned how to improve my professional practice.’ A positive response of 4 and 5 out of 5 indicates the reviewers believed their professional practice was improved through the course.

Question 4 asked: ‘This course connected well with my professional practice.’ Using the 1-5 rating scale both responders awarded the course 5 out of 5. The course reviewers believed the course completely fit within the scope of their profession.

Question 5 asked the reviewers if: ‘The course allowed me to critically think about what I was learning.’ Response to this question using the 1-5 scale was positive with two ratings of 4 out of 5. This was likely due to the reflective questions asked in each unit.
Question 6 asked: ‘The course allowed me to share my ideas about the topics presented.’ One responder answered in the middle, a 3, and the other response was a 4 out of 5. The lower result could indicate more collaborative activities were needed or possibly reviewers didn’t participate in the full course.

Question 7 inquired: ‘I want to learn more about one or more of the topics presented in the course.’ The choice of a ‘yes’ or ‘no’ was possible and responders were split, one ‘yes’ and one ‘no’. When asked to explain the answer, one response indicated “I think you could probably extent the ‘Content’ section of your site. When educators are looking to implement online or blended learning into their practice, a big hurdle is the time it takes to ‘create content’ however, as you mentioned – there is a lot of content out there and available. So I think sharing some of those specific sites/locations/sources would be very valuable!” The second response wanted to learn more about UDL and Creative Commons licensing but admitted “you can’t do it al[l] in an introductory course.”

Question 8 requested response to the question: ‘The course allowed me to contribute to discussions and that my ideas were valued.’ Respondents indicated a neutral response and agreement with this statement. Neither responder fully participated in the course to gain feedback from the instructor or from other participants which may have explained the ‘neutral’ response.

Question 9: ‘What did you find most useful about the course?’ Both reviewers gave similar feedback to this question. They both believed the course had good information and a variety of topics.

When asked question 10: ‘What frustrations did you have with the course?’ One reviewer mentioned the course was a bit text heavy at times and wondered if content could be delivered in
a different modality. The other response indicated there were no frustrations experienced in the course.

Question 11 asked: ‘Is there anything that should be taken out of the course?’ Both respondents believed the course was valid and relevant to new online teachers. Both also indicated that content was appropriate and nothing should be taken out of the course.

Question 12 solicited a response to: ‘Is there anything that should be added to the course?’ One response included the idea to add specific information on assessment practices in an online course and how it differs from a face-to-face classroom. Response two repeated the earlier request for UDL and CC licensing.

The final question asked: ‘Do you have any other questions or comments?’ The first response inquired about my plans for the course, if I was planning on selling or making it available through creative commons. The second response suggested adding more video as well as using a cohort intake model.

**Course reviewer feedback.** Course reviewer feedback was the second Google Form. It was completed by seven respondents and included the following opinions.

Question 1 and 2 focused on the course layout and used a 10-point scale for responders to submit their feedback. Question 1 asked if the course was very difficult to navigate (1) to very easy to navigate (10). Each of the seven responses indicated the course was easy to navigate with a score of seven or greater. Question 2 asked responders to examine if the course looked sloppy and rushed (1) or polished and professional (10). Again, each of the responses rated a seven or higher indicating the look of the course was appropriate.

A written question was then posed: ‘How could course layout be improved?’ The responses to this question suggested that: I offer a less robust course, make sure that I explained
education lingo for those who don’t yet know all the abbreviations and terms, add more visuals and graphics to help reduce the text heaviness, link the units together so progression of content is clearly visible and add some navigation aids to help participants navigate Moodle easier. One response also noted that a couple of the links were not working. This was a frustration to me; as a week before the course was released each link was active and working. When I discovered this was an issue I checked each link and I either updated the link or if deleted the dead link if I could not find a replacement.

When asked: ‘What did you find most useful about the course?’ Overall, responses were complementary about the content and resources which the course offers. One responder wrote, “I really liked that there were separate articles to read (I really enjoy[ed] the Michael Moore one), videos to watch, and interaction to have. I think you did a great job of making it interesting by pulling people in.” Another specific response noted how a similar layout for each unit made the course easy to navigate.

The next question asked: ‘The content was not appropriate to the topic (1)’ and ranging to ‘the content was very appropriate to the topic (10).’ Responses to this scale question were very positive with the low score of 8 out of 10 and 5 of the seven responses being 10 out of 10.

‘What frustrations did you have with the course?’ was asked next. Not all of the responders had frustrations with the course. One mentioned the course looked a little bland, one mentioned the broken links, as noted earlier, and a couple responses included the amount of content could be an issue.

When asked the question: ‘Is there anything that should be taken out of the course?’ five of the responses believed the course was good as it stood. One comment suggested having some mandatory and some optional content to help reduce the load as mentioned in the frustrations
question. The final suggestion linked to a section below where there were a few suggestions which were more edits and reorganization as opposed to taking material out of the course.

The next question asked: ‘Is there anything that should be added to the course?’ Responses to this question were varied. One response noted how much of the content would also apply to a blended learning environment with a few little changes and additions. One comment suggested adding more video to introduce each topic as well as a video introducing the author including my credentials at the beginning of the course. One commenter wanted to see more FIPPA and PIPA material. Three reviewers believed there was enough content as the course was presented.

I asked for a response to the question, ‘This is a course I would be interested in taking or requiring others to take.’ Possible answers included: ‘Yes, I would be interested in taking the course (as is)’, ‘Yes, I would be interested in taking the course (with modifications)’, ‘No, this course doesn’t provide me with the information I need’, and ‘No, this course doesn’t interest me.’ Of the seven responses all would be interested in taking the course again with four participants wanting modifications and three interested in participating in the course “as is.” Of the responses that said the course “needed modification” when asked what changes they would suggest, the idea to make the course a little less intense as well as engaging students by implementing a cohort model of enrolment were mentioned.

The final question ‘Do you have any other questions or comments?’ drew the following response. Five of the seven responders had no additional questions or comments other than they were impressed and offered a “well done” comment. One comment included advice to check to make sure the links work and that the informational videos were current. The final response
included general editing and a suggestion to add a how-to for installing an additional component to Moodle called an “Application Programming Interface” (API).

**Field Testing Conclusion**

I felt all of the feedback I was given for my project was fair and valid. As this was the first draft of the course, I did know changes would need to be made in order to keep the course current and relevant. I really liked the idea of adding more video content and enrolment based on a cohort model for this course. One of the email comments, which asked if credit could be granted for taking this course, led me to wonder if this was possible and how recognized credentials could be obtained.

Results gathered between surveys and emails results showed that the material I presented, did answer the critical challenge question in the eyes of the reviewers. In retrospect, if I had the course reviewer feedback form available upon initial beta release, my results would have been more consistent for reporting as all feedback would have been provided through this form and possibly email. I was pleased with the overall number of reviewers as well as their suggestions for course improvement ideas and increase the effectiveness of the delivery, given the short time the course was in active beta/field test. An unintended outcome from my course was multiple inquiries about how other schools could access the information for their teachers. Although this was not anticipated it is not surprising considering the lack of online teacher training as identified in the literature (see Chapter 1 and Chapter 2) and the growth in this field. Conclusions and recommendations to this project are presented in Chapter 5.
Chapter 5 – Conclusions and Recommendations

Conclusions

The popularity of e-learning, not only in Canada but specifically British Columbia, has created a demand for educators who are qualified to teach in this environment. Moving to an e-learning delivery model is not as simple as switching a traditional classroom. New methods of presenting material, communicating, and building community need to be developed when learning online. Having experienced both positive and negative e-learning experiences, I had a desire to help those who were interested in, or new to, the e-learning environment develop the necessary skills to be successful in this medium. The Major Project was designed to be a delivery tool for providing this help to the education community. Training for e-learning has been slow to be implemented for pre-service teachers, district and independent school systems. Efforts to answer the critical challenge question (What key elements should an educator consider when designing and delivering effective and engaging e-learning opportunities?) were undertaken in this paper as well as through the Major Project.

Research of the literature reinforced my pre-supposition about the lack of training online educators receive prior to hiring. As e-learning becomes more common educators will need to have access to training in this form of education. The Major Project was developed to provide educators with an introduction to the theoretical, as well as practical knowledge, needed in design and delivery of an e-learning course. It was hoped the project would allow participants to learn some of the key elements needed to be a successful e-learning educator, thus answering the critical challenge question. Feedback from the beta testing showed promise that the project could be one method of providing the introductory training needed for educators to transition into the e-learning world.
Limitations

Although the literature supports the claim teachers should be trained in e-learning as it differs from the traditional classroom (Bennett & Lockyer, 2004) teachers accessing this vital information may be limited. Districts may be hesitant to offer this training to a wide group of educators and teachers may not understand the differences between online and traditional learning and thus are unable to see the need for this training. Educators may also feel they already are doing extra learning in many areas and don’t want to add another ‘thing to do’ to that list. Those who are interested may not know where to access the material needed to learn how to teach in an e-learning environment. Currently the course does not contain credentialing. This could limit the validity of the course in the eyes of districts, principals or other educators.

Major Project Recommendations

While the recommendations to the Major Project from the reviewers was generally positive, careful review and reflection has helped me to compose a set of proposed changes and revisions to be made to the course. The goal of these changes would be to make the course better suited to its original purpose, help make the experience more user friendly, help create more student engagement and provide better exposure to the course.

The course syllabus was created to give readers an overview of the courses purpose, why it was created, the approximate time commitment as well as the general course topics. While feedback specifically on the course syllabus was limited, more information should have been provided in the form of specific unit explanations of assignments and expectations. The addition of basic Moodle instructions for navigation and assignment submission, on the course syllabus could make first time users more comfortable in the LMS.
Overall the response to the course design itself was neutral to slightly positive. While some reviewers believed the layout was relatively easy to navigate, others thought that the LMS was bland looking and could be improved with a little more visual appeal. The use of video to introduce each topic, as suggested by one reviewer, would be one way to add ‘teacher presence’ as well could be used as a tool to generate some pre-thinking of the specific unit. Similarly, as was suggested by another reviewer, when a new Moodle concept is introduced, instructions on how to navigate, complete or submit to that new feature should be included. This could be done in the form of a video or an instruction page.

Other than some comments to the amount of material presented in the course as possibly being excessive in some areas, overall feedback was generally positive. This view of excessive material could be because the course currently does not have any value to users other than personal knowledge. Possibly approaching school districts, universities as well as other organizations, such as CANeLearn, for credentialing may be an effective way to increase the course’s value.

Feedback showed a need to reevaluate some of the content and activities. This would include adding more collaborative and possibly synchronous components to help create a CoI. A couple of reviewers suggested using the course in a cohort model. This would help in the development of community, within the course, as multiple people would be accessing the same course at the same time. Currently, there is the possibility of only one person being active in the course making community building harder to achieve.

A few of the course reviewers asked about future plans for the course. One final suggestion would be to try and promote the course to as many teachers as possible. The promotion of the project at conferences, districts, universities, and other appropriate locations
could help more educators become familiar with e-learning. While the course was designed to be an introductory course, it could be used as a gateway to other learning such as the OLTD graduate program.

**Recommendations for Future Research**

The Major Project provides some elements required in designing and delivering effective and engaging e-learning opportunities. The list of topics in the course was not fully exhausted and further investigation on other elements could be undertaken. The development of a site that links e-learning to resources that can be incorporated into an engaging experience would also be beneficial to investigate.

E-learning is an area which will likely continue to grow. As technology advances and classrooms transition from being a physical location to a virtual location many more opportunities will exist to extend the research in e-learning. Areas such as blended learning or mobile learning (M-learning) which were not addressed through this course could be areas of exploration as both areas fit closely with this project. My hope is educators will embrace e-learning and create courses and content that will engage and excite student learning.
References


Appendix A: 
Definition of Terms

Analyze, Design, Develop Implement and Evaluate (ADDIE) – a design model (paradigm) that helps course developers by using a systematic method of instructional design (Branch, 2008).

Asynchronous communication- A communication method where learners learn at different times but at the same place such as a discussion board (Ellis et al., 1991).

Behaviourism (Behaviorism) – A learning theory popularized by B.F. Skinner. This theory utilizes rewards when a desired behaviour is shown. The reward reinforces and the behaviour will persist (Bates, 2015).

Bloom’s Taxonomy- A hierarchy of learning created by Benjamin Bloom that orders thinking into lower and higher order thinking skills (Bates, 2015).

Canadian e-Learning Network (CANeLearn) – “The Canadian e-Learning Network is a Canadian registered not-for-profit society with a mission to provide leadership that champions student success in online and blended learning. CANeLearn provides members with networking, collaboration, and research opportunities” (LaBonte, n.d.)

Cognitivism – A learning theory that deals with mental processes that occur in learning. A common cognitivism model used in education is Bloom’s Taxonomy (Wilburg, 2010).

Community of Inquiry (CoI) – A design model (framework) that suggest learning is best done when done when in a community of learners based around the three key elements of social, cognitive and teaching presence (Garrison & Anderson, 2003).

Connectivism – A learning theory created by George Siemens which teaches learning is made through connections in ones learning network. Learning takes place as we are able to build upon and move throughout the network (Siemens, 2004).
Constructivism – A learning theory that believes students construct knowledge based on their experiences and interaction with the environment (Bates, 2015).

e-learning – This term refers to both online and internet based learning under the general definition of online learning proposed by Mohamed Ally (2011). As such, e-learning is “[t]he use of the internet to access learning materials; to interact with the content, instructor and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience.” For purposes of this paper, e-learning includes: online learning, internet based learning, computer based training, mobile learning, blended learning, distance learning, distance education and distributed learning.

Freedom of Information and Protection of Privacy Act (FIPPA) – A British Columbian act that addresses the collection and use of personal data for individuals as it relates to the public sector in British Columbia (OIPC, 2012).

Learning Management System (LMS) – An internet based tool that holds course content and allows for student teacher interaction as well as administration and documentation of a course.

Moodle – An open sourced Learning Management System (LMS) used to create a learning environment for students.

Personal Information Protection Act (PIPA) – A British Columbian act that addresses the collection and use of personal data for individuals as it relates to the private sector in British Columbia (OIPC, 2012).

Social determinism – A view that technological tools shape the learning taking place (Kanuka, 2011).

Synchronous communication – A communication method where learners learn from various locations but at the same time (Ellis et al., 1991)
Technological determinism – A view that technology takes away the freedom of educators and turns education into business and commercial opportunities (Kanuka, 2011).

Technical Pedagogical Content Knowledge (TPACK) – A design model (framework), that incorporates knowledge of technology, pedagogy and content into design and technology integration (Koehler, 2012).

Understanding by Design (UbD) – A design model (framework) based on a 3-stage backwards design concept that starts at the desired goal through to evidences to show the goal has been met (Wiggins & Mc Tighe, 2005).

Universal Design for Learning (UDL) – A design model that focusses on 3 core principles: students must have multiple means of engagement, multiple means of representation, and multiple means of expression (Meyer et al., 2010).

Uses determinism – A view of technological tools as simply devices that are used to perform a task (Kanuka, 2011).
Appendix B: Course Syllabus

Learning 2 Teach Online is an introductory course for those wishing to explore e-Learning. The course is free and open for those wishing to view the content however to participate in the assignments, discussions and Wiki’s a username and password is needed. If you wish to have access to participate in the course please email me.

The original purpose of this course was partial fulfillment of my Masters of Educational Leadership through Vancouver Island University. The hope is this course will grow and become a useful resource for those wanting to explore online learning and possibly transition into a post degree online learning degree program offered through many universities.

The course consists of an introduction and 7 units. The entire course is designed to be worked on over a period of approximately 2 weeks, 2 or 3 nights per week. The course could be completed more quickly or slowly depending upon past experience, user involvement, and time spent per day in the course. Each unit section, after the introduction, will likely take approximately 2+ hours to complete. Enrolled users can expect timely feedback on discussions as well as submitted assignments.

If at any time you have a question or would like to discuss a topic with me please feel free to email me.

Introduction: Completion time: ~30 minutes

The introduction section defines e-Learning for the purposes of this course. It also exposes participants to some common myths around e-Learning. Learners will post a discussion about their view of e-Learning myths and pre-thoughts. Next, learners will be introduced to the course readings and discover the requirements for reflections. An assignment with participants introducing themselves to the course instructor/guide will complete the introduction section.

Unit 1: Learning Theories and Models

Unit 1 introduces participants to learning theories and learning design models common in e-Learning experiences. Learning theories include: Behaviourism, Cognitivism, Constructivism, and Connectivism. Popular learning design models are discussed and learners are given a list of other design models to explore. Learners will reflect on the different learning theories as well as the learning models presented. A final unit reflection will pose a problem-solving question for learners to consider.
Unit 2: Community and Communication

Unit 2 focuses on the importance of community and communication in an e-Learning environment. Learners will explore a variety of both synchronous and asynchronous tools to build community. Participants will also explore what qualities a student and teacher needs to be successful in an e-Learning environment.

Unit 3: Technology

Unit 3 focuses on what technology is needed to teach in an e-Learning environment. Hardware and software needs are viewed and learners will get the chance to complete a screencast and reflect on that process.

Unit 4: OER’s, Resources and Content — Completion time for this unit is significantly longer due to the Aaron Swartz video of almost 2 hours in length. This unit should be spread over a couple days.

In Unit 4, learners will examine the OER movement. Participants will gain an understanding of the different Creative Commons licenses as well as explore some of the resources available. The struggle of creating an OER community is explored and the story of Aaron Swartz is examined. Paid resources are then briefly discussed. Tools for evaluating the resources you plan on using in your e-Learning environment are considered.

Unit 5: Social Media

Unit 5 will introduce learners to social media in education. Learners will be able to see arguments for and against social media as well as safety concerns and privacy regulations that need to be addressed before implementation of social media into the classroom. Participants will be able to express their views on the use of social media in the e-Learning environment.

Unit 6: Standards and Evaluation

Unit 6 deals with standards and course evaluation. Standards are important to keep consistency and quality with online courses. Learners will examine different standards which can be used to evaluate and assess their courses.

Unit 7: Upkeep and Final Project

The final unit, unit 7, discusses the importance of checking and updating a course. A teacher who is not moving forward is in fact moving backwards. The same is true for an e-Learning course. If it is not updated and changed regularly it will become obsolete. Unit 7 also contains the final project for learners.

Course Feedback

At the end of the course is a section for course feedback. Feedback to this course is an important component to allow me to keep the course up-to-date. If you are looking through this course for interest, or if you are enrolled in the course, please provide feedback when you have finished.
Appendix C:  
Project Logo

L2TO  
Learn 2 Teach Online
Appendix D:
Course Evaluation Form (Adapted from the Google Form)

L2TO Course Feedback (adapted from the online Google Form)

Please take some time to submit feedback on the Learning2TeachOnline course. Your feedback will help me with future changes and improvements to the course.

If you would like me to respond to your feedback, please include your name and email below.
Name: __________________ Email Address: __________________

Question 1:
My learning focused on issues that interested me.
1 2 3 4 5
Almost never Almost always

Question 2:
What I learned is important for my professional practice.
1 2 3 4 5
Almost never Almost always

Question 3:
During this course I learned how to improve my professional practice.
1 2 3 4 5
Almost never Almost always

Question 4:
This course connected well with my professional practice.
1 2 3 4 5
Almost never Almost always

Question 5:
The course allowed me to critically think about what I was learning.
1 2 3 4 5
Almost never Almost always

Question 6:
The course allowed me to share ideas about the topics presented.
1 2 3 4 5
Almost never Almost always

Question 7:
I want to learn more about one or more of the topics presented in the course.
   ○ Yes
   ○ No
Question 8:
If you said yes, to the above question (question 7), what topic(s) do you want to learn more about? If you said no, what topics would you like to learn about?

Question 9:
The course allowed me to contribute to discussions and that my ideas were valued.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Written responses

Question 10:
What did you find most useful about the course?

Question 11:
What frustrations did you have with the course?

Question 12:
Is there anything that should be taken out of the course?

Question 13:
Is there anything that should be added to the course?

Question 14:
Do you have any other questions or comments?
### Appendix E:
Course Reviewer Form (Adapted from the Google Form)

**L2TO Course Reviewer Feedback (Adapted from the Google Form)**

This form is for people reviewing the L2TO course. Thank you for your time and feedback!

If you would like me to respond to your feedback please include your name and email below. (optional)

Name: __________________________ Email Address: __________________________

**Question 1:**
Course layout

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very easy to navigate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very difficult to navigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Question 2:**
Course layout

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Looks polished and professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks sloppy and rushed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Question 3:**
How could course layout be improved?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**Question 4:**
Course content

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very appropriate to the topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not appropriate to the topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Question 5:**
What frustrations did you have with the course?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**Question 6:**
Is there anything that should be taken out of the course?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Question 7:
Is there anything that should be added to the course?

Question 8:
This is a course I would be interested in taking or requiring others to take.
  - Yes, I would be interested in taking the course (as is)
  - Yes, I would be interested in taking the course (with modifications)
  - No, this course doesn’t provide me with the information I need
  - No, this course doesn’t interest me

Question 9:
If you responded “Yes {with modifications}” what modifications would you suggest?

Question 10:
Do you have any other questions or comments?

Thank you

Thank you for taking the time to review my course. Your answers will help guide this course in the future.