Report of the Massive Open Online Course

on

Introduction to Technology-Enabled Learning
(TEL MOOC 2)

Second offering: November 6- December 10, 2017
Credits

The following TEL MOOC design and delivery team members from Athabasca University, Canada, have contributed to this report:

**Dr. Martha Cleveland-Innes**, Project Director and TEL MOOC Instructor  
**Dr. Nathaniel Ostaszewski**, Content Specialist and TEL MOOC Facilitator  
**Daniel Wilton**, Instructional Designer, Web Developer and Analytics Specialist  
**JoAnne Murphy**, Project Manager

This report, on the second offering of Introduction to Technology-Enabled Learning (TEL MOOC), has been submitted to COL as part of the agreement between COL and Athabasca University.

© Commonwealth of Learning and Centre for Distance Education, Athabasca University, 2018.  
This document is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. Any reuse of this document must make attribution to Athabasca University and the Commonwealth of Learning and carry the same license. https://creativecommons.org/licenses/by-sa/4.0/
# Table of Contents

Executive Summary .......................................................................................................................... iv  
SECTION I. Background of TEL MOOC ....................................................................................... 1  
  Need and Purpose ......................................................................................................................... 1  
  Planning ..................................................................................................................................... 1  
  Technology ................................................................................................................................. 1  
  Marketing ................................................................................................................................. 2  
SECTION II. Design and Development .......................................................................................... 3  
  Principles ................................................................................................................................. 3  
  Instructional Design .................................................................................................................. 3  
  Content and Structure .............................................................................................................. 4  
  Weekly Topics .......................................................................................................................... 5  
  Video Production ..................................................................................................................... 6  
  OER Sourcing and Integration ................................................................................................. 7  
  Quiz Development ................................................................................................................... 7  
  TEL Activity Plans .................................................................................................................. 8  
  TEL Resources repository ........................................................................................................ 8  
  Certificates ............................................................................................................................... 9  
SECTION III. Delivery .................................................................................................................... 10  
  What was different in the second TEL MOOC? ...................................................................... 10  
  Registrant Demographics ........................................................................................................ 10  
  Video Lectures and Instructor Presence ................................................................................. 12  
  Facilitator’s Role and presence .............................................................................................. 13  
  Discussion participation .......................................................................................................... 14  
  The Hangout ........................................................................................................................... 14  
  Adobe Connect sessions ......................................................................................................... 14  
  Weekly Quizzes ...................................................................................................................... 15  
  The mooKIT app ..................................................................................................................... 16  
  Technology-Enabled Activity Plans ....................................................................................... 16  
  Certificates-issued .................................................................................................................. 18  
SECTION III. Findings .................................................................................................................... 19  
  Summary of Pre-course Survey results ................................................................................. 19  
  Summary of End-of-Course Survey Results ......................................................................... 21  
  Correlations between Participant Surveys ............................................................................ 24  
SECTION IV. Outcomes & Recommendations ............................................................................. 26  
  Things that worked well ......................................................................................................... 26  
  Areas for improvement .......................................................................................................... 27  
  Lessons learned from TEL MOOC 2 ..................................................................................... 27  
  Recommendations ................................................................................................................. 28  
  Discussion ............................................................................................................................... 29  
  Research Agenda .................................................................................................................... 30  
Appendices ..................................................................................................................................... 31
Executive Summary

The Introduction to Technology-Enabled Learning (TEL) MOOC was offered for the second time from November 6 to December 10, 2017. A collaboration between the Centre for Distance Education at Athabasca University, Alberta, Canada, and the Commonwealth of Learning based out of British Columbia, Canada, this five-week MOOC is intended to engage teachers who work in any level of education, are from all over the globe, and are interested in technology-enabled learning and open education resources.

There were 3881 registrants for TEL MOOC, the majority from Rwanda (33%) and Bangladesh (22%), followed by India (8%) and Barbados (4%). There was close to an equal number of Certificates of Completion (347) and Certificates of Participation (349) issued; for a total of 696 certificates. There were 202 technology-enabled activity plans added to the TEL Resources open-source repository.

The scheduled course ending date of December 10 was extended until December 22, 2017 to allow participants additional time to submit the Technology-Enabled Activity plan, the final summative project for TEL MOOC. Data contained in this report is based on the latter course end date.

Instructional design of TEL MOOC is based on the Community of Inquiry framework which is also included in the course content. Course topics are introduced through video followed by content-based activities, most of which are carried out in the course discussion area. Assessment includes a multiple choice quiz at the end of each weekly unit and, as a summative project, the creation of a technology-enabled activity plan. Certificates of Participation for TEL MOOC require participation in at least three discussion forums and achieve at least 60% on all quizzes, while the Certificate of Completion requires the same level of achievement plus the creation of a technology-enabled learning object.

Several aspects of course that worked well for the initial offering of TEL MOOC were replicated for the second iteration, such as the course material, activities, assessments, and the three-layered instructional model. Content experts from Athabasca University, Dr. Martha Cleveland-Innes and Dr. Nathaniel Ostashewski returned as course instructor and facilitator respectively, joined by a group of teaching assistants to facilitate course discussions. TEL MOOC is delivered using the mooKIT learning management system developed by the Indian Institute of Technology, Kanpur, India.

A series of support videos and forums were introduced at the outset of the second iteration of TEL MOOC, explaining the main components and procedures involved with the course, particularly those areas which caused confusion in the first offering of the MOOC. An additional video was added upon the release of the mooKIT app, which appeared to be met with much enthusiasm by participants.

The TEL MOOC homepage, http://telmooc.org, again served to promote the MOOC and also provides the course registration function. The TEL Resources repository (http://telresources.org) was also used again, providing a submission platform and open-source repository for technology-enabled activity plans voluntarily shared by participants of TEL MOOC. This open educational resource now contains 285 TEL activity plans.

A research plan has been formulated for TEL MOOC, which includes both short-term and longer term research projects, including publications in open-source academic journals. The first publication is currently in progress, with two others to follow later this year.
SECTION I. Background of TEL MOOC

The TEL MOOC initiative is well-aligned with the mandates of both the Commonwealth of Learning (COL) and Athabasca University (AU). Both organizations strive to remove barriers to education and promote lifelong learning worldwide. Accessibility factors, such as bandwidth has been a priority in the creations of the mooKIT learning management system (LMS). Moreover, the very nature of MOOCs generally speaks to removing barriers to learning by providing learning opportunities to anyone, anywhere.

Need and Purpose

The purpose of TEL MOOC is to provide an accessible learning opportunity to teachers, particularly in developing countries, to expand upon their knowledge and skills regarding the use of technology in teaching and learning.

Planning

Initial planning for the TEL MOOC endeavour began in Spring 2016 under direction of Dr. Sanjaya Mishra of the Commonwealth of Learning (COL) and Dr. Martha Cleveland-Innes of the Centre for Distance Education at Athabasca University (AU-CDE). A Memorandum of Agreement was signed shortly thereafter and the TEL MOOC partnership officially formed between COL and AU-CDE. Dr. Cleveland-Innes engaged a group of AU experts who later became the TEL MOOC team. These team members were confirmed as:

From the Commonwealth of Learning: Dr. Sanjaya Mishra, Education Specialist, eLearning
From Athabasca University:
  Dr. Martha Cleveland-Innes, Project Director and TEL MOOC Instructor
  Dr. Nathaniel Ostashewski, Content Specialist and TEL MOOC Facilitator
  Daniel Wilton, Instructional Designer, Web Developer and Analytics Specialist
  JoAnne Murphy, Project Manager
  Carmen Jensen-Tebb, Contract Administration Advisor
  Levina Yuen, Instructional Design Advisor

A final report on the first offering of TEL MOOC was prepared by AU-CDE and submitted to the COL proving an account of the course creation, delivery and participant feedback including what worked well, lessons learned, and suggested changes for subsequent iterations of the TEL MOOC. This report serves the same purpose, for the second offering of the MOOC.

Technology

As per the MOA, COL provided access to the mooKIT learning management system (LMS) for use in this MOOC. Three particular emphases distinguish mooKIT as a delivery platform in comparison to other platforms, and were key parameters in the course delivery:

- video as the primary content delivery format,
- synchronous and asynchronous interaction through forums and chat, and
- accessibility, with low bandwidth requirements and alternative modes of access.

This platform was developed and is supported by the Indian Institute of Technology, Kanpur, India. mooKIT questions and issues were communicated to Dr. Mishra of COL who then contacted the mooKIT team through COL’s Knowledge Management Team.
A key outcome of the course was for participants to create a technology-enabled activity plans as a final assessment. For greater authenticity in the creation of these plans as open educational resources, participants were given the option to share their plans through an open and permanent repository. A supplemental web site, the TEL Resources repository, was developed by AU and is available at http://www.telresources.org.

**Marketing**

The target learners for TEL MOOC were teachers in developing countries. COL agreed to carry out the majority of marketing efforts as the organization has an established network of connections in the education sector throughout the developing world. The TEL MOOC registration web site was promoted through COL’s network and the promotional brochure was distributed through COL’s Focal Points in the Commonwealth countries. Content of the promotional site and log in page is shown in Appendix A and the most recent brochure in Appendix B.

TEL MOOC was also advertised on the CDE-AU homepage (see Appendix C) and through AU social media channels. An advertisement and brief write-up was also submitted to OpenUpEd (http://openuped.eu), a European MOOC provider and promoter, which whom AU is affiliated.

Finding suitable marketing channels will remain an important marketing strategy in the future.
SECTION II. Design and Development

The design of the initial iteration of TEL MOOC was based on initial concepts and outcomes identified in the MOA and additional requirements identified through discussion between COL and AU. The design process was a collaborative engagement initiated by sharing perspective and documenting ideas. This collaborative process continued throughout the creation and delivery of the first run of TEL MOOC and again in the preparation for, and delivery of the second offering of the MOOC.

Design and development activities guided by the MOA for TEL MOOC include the following:

1. The design required at least 2 videos of approximately 7 minutes per week; TEL MOOC included between three and five videos per week of approximately 3-5 minutes each.

2. TEL MOOC is designed to be delivered via the mooKIT platform. TEL MOOC is designed to be delivered via the mooKIT platform. Discussion forums, quizzes and other learning assessments, and interaction opportunities were shaped with the capacity of mooKIT in mind.

3. The structure and process of TEL MOOC includes two experts in online learning: an instructor who delivered content via video and a facilitator who provided videos to open and close each week, each of whom met with students twice in a synchronous chat forum during the course. Teaching assistants offered ongoing technology and learning support to TEL MOOC participants.

By and large, the design and development was for the second offer of TEL MOOC was kept similar to that of the first offer. However, there were additional inputs in contents and approaches that are described at relevant places in this report.

Principles

Athabasca University is committed to removing barriers to learning, in all meanings of the word, and improving quality in education. This mandate extends to all pedagogical work created by AU faculty and staff and was therefore a first principle in the TEL MOOC design. In keeping with this principle and those brought forth by COL, TEL MOOC was designed to be:

- learner-centred
- highly engaging via a multi-modal, media-rich online environment
- directly instructed via video and text-based media
- facilitated via weekly opening and closing videos
- supported by roving learning-support teaching assistants throughout
- freely accessible
- a repository of relevant resources, during and after the course.

Instructional Design

The Community of Inquiry (CoI) theoretical framework (Garrison, Anderson, & Archer, 2000) provided guidance for the instructional processes in TEL MOOC. In keeping with the three presences of the CoI model (social presence, cognitive presence, and teaching presence), the MOOC design offered opportunities for self-reflection, active cognitive processing, interaction, and peer-teaching. In addition, our expert guidance on the need for shared application activities in teacher professional development shaped the important final assignment.
Course content was delivered through video with scripts provided to participants, and learners were given the opportunity to test their learning through end-of-week multiple choice quizzes. Material was reinforced by the course facilitator and by the teaching assistants. A three-tiered model of instruction was featured in TEL MOOC, provided by course instructor, the course facilitator, and the roving teaching assistants. Participants learned from one another in TEL MOOC through active discussions and sharing of activity plans. Additional resources were provided in TEL MOOC for participants wanting to learn more about a particular topic.

TEL MOOC was designed in reference to the points listed below. These objectives are supported when translated into delivery actions, as described in the Content and Structure of the report.

TEL MOOC participants will:
- Meet online with teachers all over the world who are also learning about technology-enabled learning
- Be supported by instructors who understand technology-enabled teaching and learning
- Explore easy-to-use technologies for classroom and online teaching
- Evaluate best fit technologies for teaching/learning contexts
- Experience a fun and collaborative learning environment via the Internet
- Receive a certificate on completion of required activities

**Content and Structure**

TEL MOOC takes place over five weeks, with each week structured similarly.

Each content topic was delivered using a video lecture as a trigger to the learning. Under each video, there was a link leading to a set of instructions outlining the topic activities and including a prompt for the topic discussion located directly underneath. These activity instructions used the following headings to guide the participant through a learning sequence:
- **READ:** primary reading material for the content topic
- **REVIEW:** activities to support the readings, such as reviewing relevant web sites
- **RESPOND:** the main discussion prompt for the topic discussion
- **EXPLORE:** optional enriching readings or activities, and
- **ASSESS YOUR LEARNING:** prompts for reflection and self-assessment, and/or
- **ASSESSMENT:** the weekly summary quiz or activity plan.

This design strategy allowed for the presentation of some course content as text to supplement the videos and support multimodal learning, as well as providing links to openly licensed resources and prompts for reflection and discussion. The Review, Read, Respond, Explore and Assess is a model practiced for many years by Dr. Cleveland-Innes, which was adapted to reflect the design of TEL MOOC.

An example of topic activities presented in terms of READ REVIEW, RESPOND, EXPLORE and ASSESS for Week 1, Topic 1: The Community of Inquiry, is outlined below.

**1.1.2 ACTIVITIES**

After each lecture, you will be asked to read, review, and respond as required activities. You will also be presented with optional explore and self-assessment activities to take a deeper look into the lecture’s topic. After the final lecture of each week, you will be asked to complete a quiz.
Participating by replying to the Respond questions of at least three Activity forums and completing all five weekly quizzes with at least 60% is required for a Certificate of Participation. A Certificate of Completion also requires the posting of a completed TEL Activity Plan in Week 4 or Week 5.

**READ:** Vaughan, Cleveland-Innes, & Garrison (2013). Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry. This chapter is available in the course Resources section, or you can download the chapter or entire book by selecting “Free PDF” at http://aupress.ca/index.php/books/120229.

**REVIEW:** Review the range of collaborative technologies and their applications in the document, Collaborative Learning Technologies, available in the course Resources section or at http://tinyurl.com/collaborativecommunity.

**RESPOND:** Throughout this MOOC, use the Activity Forums to respond to key questions based on the video lectures, readings, and your own experience. In the forum titled “The Community of Inquiry: Activities”, reply to the forum post with your responses to: What do you see as beneficial about the CoI as a way to understand technology-enabled learning for your students? What possible challenges do you see?

**EXPLORE:** Watch the video at https://www.youtube.com/watch?v=pZQm8Fta93k. It is an instructor talking to students about what a community of inquiry is. Consider how you would introduce your students to a community of inquiry.

**ASSESS YOUR LEARNING:** Identify an area where you feel you want to learn more. Say how you will arrange to learn more.
Now, use the forum titled “The Community of Inquiry: Activities” to reply to the RESPOND question above.

The TEL MOOC Resources section is included as Appendix J.

**Weekly Topics**
The mooKIT homepage for TEL MOOC listed the heading for each of the five weeks followed by links to an introduction, the topics for the week, the end-of-week quiz, and the summary. Figure 1 provides a screenshot of the mooKit homepage, displaying the layout for Week 1.
The weekly topics covered in TEL MOOC are listed below.

**Week 1: Models of Technology-enabled Learning**
1.1: Community of Inquiry
1.2: Two Models: TPACK and TIM
1.3: On Teaching Presence

**Week 2: Technology in Education**
2.1: Integrating Technology in Education
2.2: Benefits of Technology in Education

**Week 3: Open Educational Resources**
3.1: Understanding OER
3.2: Types of Open Licenses
3.3: Finding Open Educational Resources

**Week 4: Application of Technology**
4.1: Practical Application of Technology
4.2: Getting help with technology

**Week 5: Creating Technology-enabled Learning**
5.1: Creating technology-enabled learning

**Video Production**
Video production protocol was determined with consideration of 1) empirical findings about video quality in MOOCs, 2) expertise of TEL MOOC designers and video consultants, and 3) characteristics of possible TEL MOOC participants and appropriate video design.
Empirical findings on video usage in MOOCs suggest that:

- shorter videos, divided into segments of less than 6 minutes, are more likely to be watched until the end and are more engaging;
- pre-production lesson planning allows studio recordings to include practiced script with friendly gestures and salutations; and
- videos that intersperse the instructor view with slide displays are more engaging than slides alone or instructor view alone.

This empirical evidence was reviewed during discussions of the video design. Content videos were recorded in the studio in accordance with interpreted empirical findings.

Similar protocols were applied for facilitator videos. Facilitator videos were recorded at the beginning and at the end of each week. However, empirical findings also suggest that videos which demonstrate an informal, personal feel are more engaging in some settings. In the case of facilitator videos, the more informal approach was used.

Participants who are English-as-a-second-language learners can benefit from adjusted language usage strategies. TEL MOOC videos included several such strategies. First, speaking was adjusted to a slower than normal pace to allow such participants time to process the words and syntax. This is in contrast to empirical findings on MOOC video, which identify a quick and varied speaking voice as more engaging for learners. Content video in particular was recorded with a slow and monotone voice.

PowerPoint slides in the content videos included written words and visuals to support concept understanding and language interpretation. All videos were scripted and the written scripts were offered to participants in the course Resources section of the platform.

**OER Sourcing and Integration**

Open Educational Resources (OER) are central to open education, providing accessible educational resources, which is part of the TEL MOOC mandate. There are many OER publicly available on the internet that can be used to integrate technology into teaching and learning, rendering this topic an important component of the TEL MOOC material. The various types of licensing conditions for the use of OER were discussed, with particular focus on the Creative Commons and its licensing system.

OER were featured in TEL MOOC not only as a major topic but also integrated into the course design as assigned readings and additional resources. The supplemental website at http://www.telresources.org is an OER repository of participant submissions of technology-enabled activity plans, the major assignment in TEL MOOC. In fact, TEL MOOC itself could be considered an OER.

**Quiz Development**

One of the key components of the TEL MOOC assessment set was a series of five online multiple-choice quizzes. Each of the five quizzes was provided to learners with the intent of providing an opportunity for learners to review and “check their understanding” of the materials provided each week, and were required for a Certificate of Participation or Completion. Quizzes for Weeks 1 through 4 of the MOOC included eight questions each and were developed referencing materials
that had been provided in that week. The week 5 quiz was different in that it included ten questions, reviewing materials from all of the weeks and standing as a course review.

Quiz questions were developed using a standard multiple-choice protocol: a question was formulated based on key materials presented to learners, and four choices of answers were created with one choice being the correct answer. Following is an example a quiz question from the Week 4 Quiz:

According to Bates (2016), technology can be defined as:
A. Hardware
B. Software
C. Networks
D. All of the above

**TEL Activity Plans**

The Week 4 activities incorporated a key assessment learning activity described as the TEL Activity Plan. Participants were provided with a template outlining the key components of an activity plan involving technology-enabled learning, which they could adapt to a learning objective or topic specific to their own teaching environment. Below is the description of the learning activity posted to the course in Week 4:

**Week 4: TEL Activity Plan**

Instructions: As the major assignment for the course, you are asked to develop a Technology-Enabled Learning Activity Plan. See the topic activities for Weeks 4 and 5 for more details, and download the TEL Activity Plan Template and Exemplar for your reference. A copy of this Exemplar is located in Appendix D.

When you have completed your plan, register at http://www.telresources.org and contribute your plan as a resource to the TEL Resources repository. Then return here to post the link or the PDF summary from your resource’s page on TEL Resources.

The basis of the TEL Activity Plan assessment originates from research into teacher technology professional development (PD) that has shown that online teacher communities benefit from creating and sharing artifacts, particularly lesson plan artifacts. With this in mind, the TEL MOOC development team created this assessment for the course participants.

**TEL Resources repository**

The assessment not only provided learners with an opportunity to prepare an application of what they had learned in the course, but also to share and compare it with what other learners had prepared. An innovative feature developed specifically to support this form of sharing in TEL MOOC was the TEL Resources Repository, a public, searchable archive to which participants could optionally upload their TEL Activity Plans. This custom web-based application developed and maintained through Athabasca University allows activity plan authors to annotate their projects with descriptions and metadata, so users can browse by level, modality, technology, and keyword. Membership and “like” functions help support the sense of community, as well as allowing authors to track the number of downloads of their individual plans. The Repository and its archived activity plans will remain available to participants and the public as a collection of open educational resources at http://www.telresources.org.
Certificates
There are two certificates available to be earned by Tel MOOC participants, a Certificate of Participation and a Certificate of Completion; the differentiating factor being the completion of the TEL Activity Plan to earn a Completion certificate.

Participant activity TEL MOOC is largely tracked by the mooKIT analytics which is utilized to verify participant activity towards meeting certificate criteria with the exception of the Activity Plan which is collected and assessed by the course facilitator. Information regarding participant eligibility for certificates is compiled by the mooKIT developers at the Indian Institute for Technology, India. Once certificate recipients have been verified, a link to the appropriate certificate is activated in participant profiles in the TEL MOOC course site, allowing learners to download their certificates.
SECTION III. Delivery

There were 3881 registrants for the second offering of TEL MOOC, an increase of 2738 (239.5%), from the first offering of the MOOC for which enrolment was 1143. Of the 3881 registrants, 2561 (66%) actually showed up for the course, meaning that they logged in to the course at least once. There were 696 certificates issued for the second iteration, therefore 27% of the active participants earned a certificate.

What was different in the second TEL MOOC?

There were several differences between the two iterations of TEL MOOC. There were specific additions to the MOOC, and other differences such as a different demographical distribution of participants, a greater sense of language differentials, and a significant volume of TEL Activity Plans submitted. The following elements were added for, or during, this second run of TEL MOOC:

- a series of seven support videos and forums
- introduction of Hot Topics
- release of the mooKIT mobile app
- two live sessions held in Adobe Connect
- a shared Google spreadsheet used by the instructional team to share information during TEL MOOC

Registrant Demographics

During the course registration process, individuals are prompted for information on their age, gender, country, education and affiliation. The majority of participants of the second run of TEL MOOC were educated male academics having an undergraduate education or beyond. The most common age group of registrants was between 21-25 years. Highest enrolment numbers were from Rwanda (1289) and Bangladesh (854), then India (310) and then Barbados (153). There were 94 countries represented by TEL MOOC registrants. A list of the top ten countries with highest enrolment numbers is shown in Table 1.

Table 1. Countries with the greatest number of TEL MOOC enrolments.

<table>
<thead>
<tr>
<th>Country</th>
<th>Enrolments</th>
<th>Percentage (n=3881)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>1289</td>
<td>33%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>854</td>
<td>22%</td>
</tr>
<tr>
<td>India</td>
<td>310</td>
<td>8%</td>
</tr>
<tr>
<td>Barbados</td>
<td>153</td>
<td>4%</td>
</tr>
<tr>
<td>Mauritius</td>
<td>112</td>
<td>3%</td>
</tr>
<tr>
<td>South Africa</td>
<td>106</td>
<td>3%</td>
</tr>
<tr>
<td>Canada</td>
<td>91</td>
<td>2%</td>
</tr>
<tr>
<td>Bahamas</td>
<td>85</td>
<td>2%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>83</td>
<td>2%</td>
</tr>
<tr>
<td>Namibia</td>
<td>56</td>
<td>1%</td>
</tr>
</tbody>
</table>
All countries of the Commonwealth were represented except Brunei Darussalam, The Gambia, Seychelles, St. Kitts and Nevis, and Tuvalu. In fact, of the 3808 registrants who identified their country, 3754 (98.7%) were from countries of the Commonwealth, and only 51 (1.3%) were from countries that are not members.

Appendix E lists the enrolment in TEL MOOC by country. The shaded countries are members of the Commonwealth.

**Personal Characteristics**

Of the 3837 registrants who indicated their gender, 2358 (61%) were male, 1465 (38%) were female, and 44 (1%) chose not to declare either gender (see Figure 2).

![Figure 2. Gender of TEL MOOC registrants](image)

Of the 3866 who identified their age range, the majority were (29%) were between 21 and 25 (29%), and between age 26 and 30 (15%). Figure 3 illustrates the distribution all of age ranges reported.

![Figure 3. Age groups TEL MOOC participants](image)

**Education and Professional Affiliation**

Responses to education qualifications (n=3832) showed 1660 (43%) as having an undergraduate education, 1652 (43%) having a post-graduate degree, and 283 (7.4%) reported having a Doctorate.
Finally, of the 3866 registrants who identified their professional affiliation, most were from academia (65.5%) while 1094 (28.3%) identified as individuals or non-affiliated. Figures 4a and 4b represent the full set of responses for education and affiliation, respectively.

Figure 4. TEL MOOC participants by (a) educational qualifications, left, and (b) professional affiliation, right.

**Video Lectures and Instructor Presence**

TEL MOOC features eleven content videos presented by Dr. Martha Cleveland-Innes to introduce each topic; total viewing time of 52 mins. 27 seconds. There are two Introductory videos at the beginning of the course, one by Dr. Sanjaya Mishra of COL and the other by Dr. Cleveland-Innes and Dr. Ostashewski. At the end of each weekly unit, a summary video is also posted by Dr. Ostashewski. The second offering of TEL MOOC, the seven support videos, total viewing time of 11 minutes and 15 seconds, and forums were added:

- Take a Tour of mooKIT- Start Here- screencast by Dan Wilton
- Dr. Nathaniel Ostashewski:
  - Introduction to the Instructional Team
  - How to use the forums for discussion
  - Quiz assessments in the TEL MOOC
  - Certification requirements in the TEL MOOC
  - Technical Issues and Solutions
  - Information and Comments on the mooKIT APP

Figure 5 contains links to the support videos by Dr. Ostashewski, facilitator of TEL MOOC.
Facilitator’s Role and Presence
The facilitator’s role in TEL MOOC was intended to provide the present or live instructional component. The primary goals of this role were to:

- present announcements to guide learners during the course
- highlight any weekly questions or concerns via announcements and mass email tools to learners as needed
- provide a sense of direct teacher presence in general discussion forums that were student generated, and
- provide weekly summaries of the ongoing activities of which learners should be aware.

The announcements were a critical component of the direct facilitator-learner interaction that supported the administrative tasks required during the course through broadcast messages to participants, such as the release of the mooKIT app. This required a constant review of the activities occurring in TEL MOOC during the delivery, and while the facilitator posted the announcements, content of several of the...
announcement required the support of the delivery platform and supports teams. A list of facilitator announcements is located in Appendix F.

**Discussion participation**

Discussion was an important component of TEL MOOC. Introduced early in the course as critical to building a community of inquiry, discussion participation was frequently encouraged by the instructor and teaching assistants, and was also a criterion for earning a certificate.

There were a total of 2413 discussion forums created; 12 of which accompanied the introduction message and weekly course lessons; seven support forums, and the remaining 2394 forums created by participants of TEL MOOC.

There were 13,326 discussion posts made to the discussion forums; 437 by the instructional team; 12,889 by MOOC participants. Post were made by 1013 unique students, and the average words per post was approximately 13 words per participant post.

**The Hangout**

The Hangout is mooKIT’s synchronous chat tool. This tool was available to participants throughout the duration of TEL MOOC but was not officially used as part of the delivery as was the case in the first run of TEL MOOC, where it was used for the synchronous sessions held by the course instructor and facilitator. Limited to text-based dialogue, the Hangout was not ideal for these live sessions which often feature visuals, voice communication, and have the ability to record the meeting.

The Hangout was however still an active messaging tool in TEL MOOC, with 1093 total messages posted, by 400 distinct participants, and 7 facilitators. Total number of words posted in these messages was 15,487, with an average of 14 words per message (SD 19.2).

**Adobe Connect sessions**

Adobe Connect was used for the synchronous sessions in the second iteration of TEL MOOC. This web conferencing tool, allows for verbal communication, video capture of participants, text chat, as well as PowerPoint presentations, screen sharing and whiteboard functionality, all of which add interactivity and active engagement to web-based meetings. Web conferences can be recorded and shared with participants unable to attend the live sessions. This feature is especially useful in the case of TEL MOOC where participants were dispersed throughout the world, thereby making it a challenge to schedule synchronous events that are suitable to all time zones.

Athabasca University provided access to Adobe Connect; the application is external to the mooKIT learning management system. Links to the meeting spaces were posted to the course homepage in advance and, upon meeting time, participants simply click on the meeting link, enter their name at the prompt, and then they are put into the conference space. Sessions were recorded and links to the recordings were posted to the course homepage within 24 hours following the session.

Dr. Martha Cleveland-Innes held the first one-hour web conference on November 22, 2017, presented on *Facilitation in online and blended learning*, discussing the Community of Inquiry framework and how to facilitate with teaching and online and blended learning. The latter half of the session was reserved for questions and discussions. There were 65 attendees at this synchronous online meeting.

This second sixty minute session was led by Dr. Nathaniel Ostashewski on November 29, 2017, who conducted an interactive presentation called Integrating Technology into the Classroom: What, When and Why? There were 45 participants in Adobe Connect for this session.
Segments pertaining to these sessions, taken from the Resources page in TEL MOOC, shown in Figures 6a and 6b.

**PRESENTATION 1**: November 22, 2017  
**Teaching Presence: Facilitation in online and blended learning**  
Dr. Martha Cleveland-Innes  
In this presentation, course instructor Dr. Martha Cleveland-Innes discusses the Community of Inquiry framework and how to facilitate with teaching presence in online and blended learning. *(The recording of this session will open in Adobe Connect.)*  
» watch a recording of the full presentation (1 hour)  
» view slides

Figure 6a. Summary information on the first live session held by Dr. Cleveland-Innes as listed on the Resources page in TEL MOOC.

**PRESENTATION 2**: November 29, 2017  
**Integrating Technology into the Classroom: What, When, and Why**  
Dr. Nathaniel Ostashewski  
In this presentation for TEL MOOC, course inspirer Dr. Nathaniel Ostashewski discusses how to integrate technology into the classroom, including social media and more. *(The recording of this session will open in Adobe Connect.)*  
» watch a recording of the full presentation (1 hour)  
» view slides

Figure 6b. Summary information on the first live session held by Dr. Cleveland-Innes as listed on the Resources page in TEL MOOC.

**Weekly Quizzes**

Each week included one multiple-choice quiz of eight to ten questions, for a total of 5 course quizzes. Multiple attempts at the quizzes was important for TEL MOOC as it is an open professional development (PD) course. The option for learners to complete and achieve a certificate of participation or completion required a base grade on the quizzes, and learners quickly understood that their failure on a quiz without an option for multiple attempts jeopardized any possibility for a certificate.

For the students who completed all quizzes, the average quiz scores were as follows: Quiz 1: 88.28%, Quiz 2: 88.79%, Quiz 3: 86.32%, Quiz 4: 92.24%, Quiz 5: 85.21%.

Detailed completion data is available from mooKIT analytics however further analysis of quiz activity has not yet been carried out.
The mooKIT app
The app for Android devices was released on November 10, 2017, followed by the iOS app, announced in TEL MOOC on November 30. The following links were provided to participants to download these apps:

Discussion forum remarks indicate that the app was met with much enthusiasm from TEL MOOC participants however closer examination of mooKIT data regarding access methods and devices will need to be conducted in order to report further observations.

Figure 7 is a snapshot of a segment of the mooKIT video created by MOOC Facilitator, Dr. Ostashewski and added to the TEL MOOC support videos. An active link to the video appears beneath the image.

![Figure 7. Snapshot of mooKIT video tutorial in TEL MOOC.](https://www.youtube.com/watch?v=Xl2TNkAugE0)

Technology-Enabled Activity Plans
Creation of a technology enabled activity plan was the final assignment in TEL MOOC and a requirement to receive a Certificate of Completion for TEL MOOC. Participants had the option of submitting their plan through the assignments section of TEL MOOC or submitting it to the TEL Resources repository located at www.telresources.org. There were 202 Activity Plans submitted through the TEL Resources web site and 83 submitted through the TEL MOOC course site. Figure 8 shows an example of a TEL Activity Plan as it appears in the TEL Resources repository.
The TEL Activity Plans contained in the TEL Resources repository are searchable by level of education to which the plan pertains, the modality, the technology involved, country of the creator, and by keyword as shown by the images below in Figures 9a, b, c, d and e.

**Figure 9a. TEL Activity Plans according to Level.**

**Figure 9b. TEL Activity Plans according to Modality.**
Figure 9c. TEL Activity Plans according to Technology

Figure 9d. TEL Activity Plans according to Country.

Figure 9e. TEL Activity Plans according to Keyword.

**Certificates issued**

There were 696 certificates issued for this second offering of TEL MOOC, meaning that 28% of active participants earned a certificate. Almost an equal number of Certificates of Completion and Certificates of Participation were earned, 332 (48%) and 364 (52%) respectively. Expressed as a percentage of the active student population in TEL MOOC, 13.5% earned a Certificate of Completion and 14.8% earned a Certificate of Participation.

There was a greater percentage of active students who earned a certificate in the second run of TEL MOOC than in the first, 28% to 16% respectively, but a significant difference in the proportion of each type of certificate. Certificates of Completion accounted for 83.2% of certificates issued in the first iteration of the MOOC, and only 16.8% were Certificates of Participation.
SECTION III. Findings

Summary of Pre-course Survey results
Data collected from the TEL MOOC registrants (n=3881), as well as segments from the active course population (n=2365) extracted from mooKIT analytics, have been discussed in previous sections of this report. Here, in Findings, results from the third set of data will be presented; the Pre-course survey results (n= 767), the End-of-course survey (n=297), and the 187 respondents to both surveys. The two surveys used the same consent letter, see Appendix G. A copy of the Pre-course survey and the End-of-course survey are included as Appendix H and I respectively.

Summary of Pre-course Survey results
Although there were 767 Pre-course surveys completed, response numbers fluctuate by question depending upon the number of responses received for that particular survey question.

The majority of respondents who disclosed both their age group and level of education (n=766) were between the ages of 40- 54 (41%) and 30-39 (38%) years; and 76% held a Masters (46%) or Bachelor’s (30%) level degree or equivalent.

Of the 761 responses specifying gender, there was almost an even divide between male (53%) and female (47%); and the majority of respondents reported 61% (n=760) reported English as their primary language. Over half of those whose primary language was not English (39%) indicated Bangla or Bangali as their primary language, not surprising since Bangladesh was the most common country (almost 28%) of survey respondents (n= 747), followed by Barbados (7.1%), India (7.0%) and Mauritius (5.5%).

Teaching experience of respondents (n=745) fell mostly within the 6- 15 years (40.3%); 24.4% of responses were in the range of 16- 25 years of experience, followed by those with over 25 years of experience (n=134). Figure 10 provides a visual representations of respondent education levels (n= 766), years of teaching experience (n=745), and level of education taught, a multi-select question (n=900), respectively.

The other multi-select survey question regarding participant roles resulted in 30% of the responses (n=1968) for face-to-face teaching. Figure 11 is a word frequency diagram representing the various roles of respondents, with the largest items receiving the highest frequency of responses amongst the group. Frequencies for other roles shown in the word cloud were educational support services (11%), management and administration (9.9%), research-related roles (9.7%), online teaching and facilitation (9.3%), both distance education and work-based training 9.1%), and blended/hybrid teaching at 8.6%.
Figure 10. Pre-course responses: education levels (n= 766), years of teaching experience (n=745), and level of education taught.

Figure 11. Word frequency diagram illustrating respondent roles and frequencies thereof.
In regards to skills levels with technology, the majority of respondents self-reported a skill level of proficiency or higher in their personal use of software and social media (83.9%, n = 741 and 72.6%, n = 734 respectively), though a greater number indicated only basic skills in digital media creation or instruction using technology (45.3%, n = 722 and 44%, n = 731), a trend that occurred in the first run of TEL MOOC as well.

Of the 745 who reported primary reason for taking TEL MOOC, 424 (56.9%) indicated a general interest in technology-enabled learning and 29.8% as professional development. Approximately 5% indicated the purpose was to earn a certificate or due to general interest in MOOCs.

Most respondents learned of TEL MOOC through a colleague or the workplace e (33.9%), through email notification (20.6%), or through social media channels (n=744). Table 2 shows the full list of responses.

Table 2. How respondents learned of TEL MOOC

<table>
<thead>
<tr>
<th>Media/Communication</th>
<th>Number of responses</th>
<th>Percentage or responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleague/workplace</td>
<td>252</td>
<td>33.9%</td>
</tr>
<tr>
<td>Email notification</td>
<td>153</td>
<td>20.6%</td>
</tr>
<tr>
<td>Social media</td>
<td>146</td>
<td>19.6%</td>
</tr>
<tr>
<td>COL website</td>
<td>75</td>
<td>10.1%</td>
</tr>
<tr>
<td>Other</td>
<td>57</td>
<td>7.7%</td>
</tr>
<tr>
<td>COL newsletter</td>
<td>28</td>
<td>3.8%</td>
</tr>
<tr>
<td>Athabasca University</td>
<td>19</td>
<td>2.6%</td>
</tr>
<tr>
<td>Course brochure</td>
<td>9</td>
<td>1.2%</td>
</tr>
<tr>
<td>OpenUpEd</td>
<td>4</td>
<td>0.5%</td>
</tr>
<tr>
<td>PCF8</td>
<td>1</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Summary of End-of-Course Survey Results

Three hundred and two participants completed the End-of-Course Survey, of which 297 qualified to be retained for further analysis. Survey responses to questions regarding general satisfaction with TEL MOOC indicate that respondents were both very happy with, and grateful for, this learning opportunity. The survey results indicate a very positive participant response to TEL MOOC, with 95% (n = 294) agreeing or strongly agreeing to the statement, “Overall, I was satisfied with TEL MOOC”, and over 95% (n =294) agreeing or strongly agreeing with “TEL MOOC met the learning objectives.” Similar responses were found regarding the course material, with 92% (n = 295) agreeing or strongly agreeing with “The course material was of good quality”.

Of the 109 respondents to the statements under the heading of “Course Components Feedback”, there was high level of agreement, or strong agreement, particularly for the following items:

- The TEL MOOC met the learning objectives
- The course material was good quality
- Assignments were helpful to acquire knowledge and skills
- The TEL MOOC experience will assist me in the use of educational technology for teaching and learning
- Overall, I was satisfied with TEL MOOC

Slightly lower ratings were received for the items concerning respondents feeling that their learning was supported by the teaching assistance, facilitator, and other learners in the course, albeit still relatively positive ratings where there were between 20-30% in the neutral range, whereas the ratings described in the previous section were almost exclusively ‘agree’ or ‘strongly agree’ in favour of those aspects of the course. Ratings for “It was OK to express emotion in TEL MOOC” fell in this category as well.
In further support of these results, 25.7% of indicated that they would like to have had somewhat more instructor/facilitator involvement, with almost half of the respondents stating they would choose the same level of instructor and facilitator involvement as was provided in TEL MOOC.

In summary, it could be said that these results indicate a high level of satisfaction with most aspects of TEL MOOC, with some preference expressed for increased instructional team and peer involvement in support of participant’s learning.

The two open ended categories in the survey, Suggestions and Feedback, were treated as one single transcript since, in many cases, respondents did not discern between the two, and responses ended to overlap between the two sections.

Satisfaction and gratitude were clearly the dominant theme of these comments, with over 300 expressions of such sentiments throughout the qualitative remarks, ranging from one-word answers such as thanks, great, wonderful, to longer comments, a few of which are listed below.

- Excellent, I have gained a wealth of knowledge and it connected me back to the pedagogy of education and the reason I teach the way I do.
- It was an eye opener for me because I wasn’t exposed to so much that can now be done to assist students through TEL.
- I found TEL MOOC very helpful and I will be actively recommending it to my teaching colleagues.
- It has been a wonder moment of exposure, mentoring and grooming to become a SEASONED teacher.
- I appreciate your work and effort to nourish us with technological development in technological world. God bless this team.
- I think the TEL MOOC is good and it will help teachers in all levels of education. This is the kind of teaching experience teachers need in the 21st century. Thanks so much TEL MOOC team.
- Participating in the TEL MOOC is my new experience. I think it’s a very useful course for the modern and global world teachers.

Under this widespread canopy of praise and thanks, three themes we are prevalent throughout the qualitative comments provided: the desire for more courses, suggestions to increase the duration of TEL MOOC over a longer duration; and remarks surrounding language issues.

**More courses.** There were numerous requests for more courses, more offerings of TEL MOOC and for a continuation or advanced TEL MOOC. Some comments referred to not having enough time for the course this time around, others wanting to recommend the course to others. Offering TEL MOOC regularly was suggested as well as providing this opportunity to communities throughout the world. Of the 33 remarks along this theme, two examples were:

- We want to listen TEL MOOC advance courses in future. Thanks to team members.
- We need more courses from TEL MOOC. Thanks.
I want to say a big thank you to all team members who have made this course a success. I hope that they will be a follow up course soon.

**Longer duration.** Another theme arising from participant feedback was that TEL MOOC be spread over a longer period of time to enable participants to complete all of the course activities, and to earn a certificate. Running the course over 6 to 8 weeks was suggested as well as three months. Two of the 15 comments were:

*To widen the time for a week in order to make all participants to certify.*

*The activities in certain week should be lesser.*

**Language differentials.** Issues associated with language differentials was another theme that emerged from participant comments. These remarks ranged from simple expressions of frustration, requests for translation and technologies for translating, requests to speak more slowly, more clearly, using basic English vocabulary, and simplify course material and the website. The follow comments are two of 13 remarks surrounding language issues:

*Because most of the participants are from various countries to instructor should have mind to design the course very simply. We are Bangladeshi so it would have been better if this course was a little easier for us. It is a very important course.*

There were several comments regarding interactivity and practical application of material. Early introduction of activities involving practical application of course material was suggested, including the provision of more time and opportunities for feedback with the TEL activity plan, more TEL activity planned activities, and peer assessment of these plants prior to submission.

**Challenges surrounding engaging in continuous discussion** was also the theme of the qualitative feedback. Specifically mentioned was the absence of a reply option, and difficulty locating posts.

Lastly comments about the course site. There were two types of remarks both pertaining to timing out per se: the issue experienced where the site would not load or took a very long time, and in some cases, would put participants out of the course site; and the other comments were regarding the brief amount of time allowed for course site in activity before requiring participants to log in again.

Finally, there were numerous benefits mentioned throughout the qualitative responses such as the following:

- learn relevant 21st Century skills
- establish connections
- share ideas with colleagues
- learn with peers in supportive environment
- earn a free certificate
- become a more knowledgeable and confident user of technology
- experience the online learning environment as an online learner
- explore and expand upon the use of technology in teaching
- flexible learning environment for adults with jobs and families
- gain exposure to many innovative technologies
Correlations between Participant Surveys

There were 767 pre-course surveys completed and 297 end-of-course surveys. Cross-tabulations are based on the 187 who completed both the pre-course survey and the end-of-course survey.

The following per-course variables were examined:
- Language
- Gender
- Age
- Region
- Education

According to these seven criteria:
1. Completion level
2. Responses to the end-of-course survey question, “My learning about TEL was supported through my discussion with other students”.
3. Responses to the end-of-course survey question, “I felt like I was part of a community in the TEL MOOC”.
4. Responses to the end-of-course survey question, “It was OK to express emotion in TEL MOOC’.
5. Responses to the end-of-course survey question, “The TEL MOOC experience will assist me in the use of educational technology for teaching and learning”.
6. Responses to the end-of-course survey question, “Overall, I was satisfied with TEL MOOC”.
7. Education level

Some highlights from the results of the cross-tabulations are as follows:
- Of the 187 participants who completed both the pre-course survey and the end-of-course survey, 57.2% (n=107) were male, 42.8% were female (n=80).

- The older the participant, the more educated they tended to be, and the more likely to earn a Certificate of Completion. 84.2% (n=16) of the respondents age 55 or older (n=19) earned a Certificate of Completion, whereas 53.3% (n=8) of the 15 respondents in the age range of 20-29 earned a Certificate of Completion.

- Males earned fewer Certificates of Completion than females, 57.9% (n=62) and 80% (n=64) respectively; while males earned more Certificates of Participation than females, 27.1% (n=29) and 11.3% (n=9) respectively.

- Of those whose primary language was not English (n=105), 72.7% reported having a Masters degree or higher (n=56), and of those whose primary language was English (n=77), 57.2% had Masters degrees or higher (n=60).

- Younger participants rated higher on questions about feeling a sense of community in TEL MOOC and learning from other students. For example, one hundred percent (100%) of respondents with an age range of 20-29 (n=15) agreed, or strongly agreed, with the phrase “I felt like I was part of a community in the TEL MOOC” as compared with 68.4% of respondents in the age range of 55-over (n=19).

- Older respondents felt more comfortable expressing emotion in TEL MOOC than younger participants and interestingly, a higher proportion (85.7%) of those whose primary language was not English (n=77) indicated that it was OK to express emotion in the course, as compared to
62.2% of those whose primary language was English (n=106).

- Survey responses pertaining to participation in discussions, learning from other in discussions and feeling like part of a community, the male respondents rated higher. For example, when asked to rate the phrase “My learning about TEL was supported through my discussions with other students”, 75.7% of male respondents agreed or strongly agreed (n=81), while 61.3% of females either agreed or strongly agreed (n=49).

- With respect to language compared to number of certificates earned, 73.6% (n=78) of those who identified English as their primary language earned a Certificate of Completion compared to 58.4% (n=45) of those whose primary language was not English. On the other hand, participants whose primary language was not English earned more Certificates of Participation (n=23) than those whose primary language was English (n=14).

- Interestingly, 52.5% (n=21) of those who reported their interest to join TEL MOOC as “to obtain a certificate”, actually received a certificate. Though in absolute number more participants received a certificate (n=163) who indicated their reason of joining TEL MOOC as “General interest in technology-enabled learning”. 47.3% (n=105) of those who expressed the reason as “professional development” received a certificate. It is also important to note that 30.18% (n=201) of those who indicated to complete all the activities of the TEL MOOC actually received a completion certificate. However, 94.12% (n=32) of those who were “planning to complete some course activities, but not planning to earn a certificate of completion’ actually received completion certificate.

These results suggest that older, more educated participants were more likely to earn a Certificate of Completion than younger students, and indicated a stronger sense of comfort with the idea of expressing emotion in TEL MOOC. The younger students on the other hand, seemed to place more value on the discussion forums, feeling part of a community and learning from other participants. The findings also show that interest and intention are important factors in successful completion of TEL MOOC.
SECTION IV. OUTCOMES & RECOMMENDATIONS

Things that worked well
Aspects of TEL MOOC that worked well in the initial offering of the course that were repeated for the second run, and continued to work well were:

- The three-tiered model of instruction consisting of the course instructor, the facilitator and a group of teaching assistants in discussion forums to help participants connect with one another.

- The course material, activities, and assessments, as well as the delivery model of Read, Review, Respond, Explore and Self Assess.

- Weekly summaries prepared by the course facilitator.

- The TEL Resources repository used as a submission tool for the final assignment, detailed activity plans and as an ongoing open educational resource for sharing these plans.

- Weekly check-in meetings at the instructional and design team throughout the duration of the course offering.

The following new features were added for this second iteration of TEL MOOC, which worked well:

- The series of support videos and forums added to the course. These resources appeared to reduce the number of inquiries that participants had regarding these items, and served as a readily available help resource when participants did ask about these items.

- The use of Adobe Connect for the synchronous session held by the course instructor and by the facilitator provided affordances of synchronous voice dialogue, PowerPoint presentations including interactive features, the ability to see the list of attendees, video capture so that participants could see the instructor presenting, and the of ability to record the sessions so it could be viewed by those who could not attend.

- A shared Google spreadsheet used by the instructional group for communicating, to record time spent in the course and the number of active participants, questions and points of attention for the course facilitator, and notes to guide weekly meetings and notes resulting from the weekly meetings.

Other additions:

- Hot topics: Hot topics were introduced toward the end of week two of the course which were intended to draw attention and foster dialogue on the weeks material. These were student-generated and instructor-selected discussion forums, listed in the instructor’s weekly summary announcements. This strategy appeared effective but additional analysis is required to determine the specifics.

The mooKIT app: Release of the mooKIT app was well received by participants based on comments in the discussion forums, but further investigation is required to determine if there was an increase in course site access using mobile devices.
Areas for improvement

The second iteration of TEL MOOC experienced challenges in the areas of: sustained dialogue in the discussion forums, issues surrounding language differentials, processes surrounding the total activity plan assignment, and the issuing of participant certificates.

Course discussions. Participants expressed difficulty in conversing with one another in the discussion forms since there is no option to directly reply to a post and no way to organize or group posts belonging to a particular conversation. Moreover, it was difficult to determine whether or not one has reviewed all of the new posts and also very difficult to go back and locate a particular post. For example, in the End-of-course survey, a participant described having read a post from another participant who is having difficulty but upon returning with the intention of responding to assist this person, could not locate the post.

Further to this point, participants were able to create discussion topics on virtually any page of the website. This has resulted in thousands of discussion topics created, making it extremely difficult to keep up with all of the conversations, in all of the forums, on all of the pages.

Language issues. A significant number of participants appeared to experience difficulties associated with language, particularly those with very limited knowledge of the English language. This may have contributed to the large volume of 1-3 word posts; and interjected a sense of dismay in the discussion forums at times.

TEL Activity Plans. The TEL Activity plan, according to survey results, is an effective exercise, however there are some aspects of this assessment that may be improved. Specific difficulties were surrounding: having two places to submit the Activity Plans, inability to download the Plans from the assignments tool within the course site, participant confusion about the submission process, duplicate submissions, and the sheer volume of submissions to be individually assessed and feedback provided, while participants seemed to expect immediate response.

Certificates. The tracking of participants to receive certificates and which of the two certificates were earned, seemed to get confusing. Some participants received the incorrect certificate and others requested name changes, both requiring re-issuing of certificates. Some participants appeared to struggle with the process of obtaining their certificate, others seemed confused as to why they did not receive one. There were also instances where certificate validation was requested which did not appear to be straightforward.

Lessons learned from TEL MOOC 2

The following points suggest lessons to be learned from the second offering of TEL MOOC:

- Acknowledgement of different standards of communication among various nationalities and cultures may be helpful in increasing awareness and respect for such dynamics in course discussions.

- Obstacles arising from language differentials can have a significant impact on the delivery of a course and on the overall course experience for participants.

- The practice of academic integrity is not consistent throughout the world. Some regions consider the submission of another’s work as your own to be an academic offense while other areas of the world view this differently.
• Caution must be exercised when planning for individual assessment of participant assignments in MOOCs, especially where enrolment numbers are expected to reach hundreds or even thousands.

• Although certain information may be provided on the course site, it is not always evident to all participants, it may be difficult to find or easy to miss, or not easily understood, especially for participants whose primary language is not English.

• Receiving a certificate of completion for a course is of paramount importance for some participants while not as critical for others. There appears to be a range of meanings associated with certificates.

**Recommendations**

Recommendations are presented under the categories of: mooKIT functionality, language differentials, activities and feedback, discussion form guidelines, clarification of expectations, and survey questions and follow-up.

**mooKIT functionality.** Given the emphasis of the Community of Inquiry framework in TEL MOOC, further consideration may be warranted surrounding the functionality of the discussion forms to foster continuous dialogue. For example, the ability to respond to one another, threading of discussions or another method of organizing posts pertaining to one another, and limiting areas where discussion forums can be created.

Secondly, participants appear to be missing information provided on the course site, especially that contained in the support section. It would be extremely helpful if it were possible to post support resources and announcements at the top of the course module listing so participants will be sure to see this information upon entering the course site.

**Language differentials.** It was evident throughout the second run of TEL MOOC that language barriers were imposing difficulty for a considerable number of participants. Should TEL MOOC continue to attract a learner population where a significant number of participants speak very little English, discussions should be carried out amongst the TEL MOOC team to consider options, and establish plans, to address these dynamics and to support these participants.

Suggestions offered by participants in the Comments section of the End-of-course survey to assist those with limited knowledge of the English language included: speak slowly and clearly in videos, use basic vocabulary and less theoretical terminology, and simplify the course where possible including the website and the reading material.

**Activities and feedback.** Participants indicated the end-of-course survey and in discussion forums that they place high value in receiving feedback, and suggested that hands-on, practical activities be introduced early in the course. Suggestions specifically included more TEL Activity Plans, starting the TEL Activity Plan early in the course and having the opportunity for feedback, even through peer review.

Requests were made in the End-of-course comments for more activities that enable participants to practice using the Creative Commons and open licenses, and open educational resources (OER). There were several requests for the opportunity to receive the correct responses for quizzes as well.

**Discussion forum guidelines.** The TEL MOOC team should perhaps discuss and determine whether
any guidelines will be implemented for posts to the discussion forums and/or general etiquette suggested to participants. For example, the rationale for requesting only English discussion posts should be provided to learners, and perhaps respect for the variety of communication norms. Also, in the case where there were many, many posts of 1 to 3 words- restricting of such may be perceived to impede expression of emotion and open engagement, tenets promoted in TEL MOOC.

**Clarify expectations.** Comments by participants in the survey results, and also in discussion forums during TEL MOOC, imply that some participants may perceive TEL MOOC as a ‘regular’ online course, as opposed to a MOOC, where there is more instructor-learner interaction and guidance. Existing teaching and learning practices in different regions of the world may factor into this situation. In any case, it may be helpful if these types of details are communicated to participants so they know what to expect and do not become confused, frustrated or disappointed as the course unfolds. Expectations surrounding timelines for feedback, the TEL Activity plan assessment and issuing of certificates could also be included.

**Survey questions and follow-up.** Questions on the Pre-course and End-of-course surveys should be routinely reviewed to ensure relevant data is collected for both research initiatives and to inform ongoing course improvements. For example, the choice of options when respondents are asked how they found out about TEL MOOC needs revision to use the data in meaningful ways.

**Discussion**

There are many aspects of this report and the data collected from the second run of TEL MOOC that could be discussed further.

One such area is that most course registrants reported being within the ages of 21- 25 yet well-educated. This seems unusual. That trend was not repeated by respondents of the Pre-course survey. Another interesting point is that Pre-course survey results indicate the majority of respondents enrolled in TEL MOOC primarily due to general interest in technology-enabled learning, with only 5% taking the course for the main purpose of obtaining a Certificate of Completion. The subsequent question in the Pre-course survey regarding participant intentions for completion, resulted in almost 90% of respondents planning to complete all activities of the course and earn a Certificate of Completion. Although these respondents were a well-educated, older group (who were more likely to earn a certificate that the younger sample population), only 11% earned a Certificate of Completion, and 27% earned a Certificate of Participation.

On a broader front, there were 767 respondents to the Pre-course survey, of which 691 agreed to be contacted for follow-up interview. Based on the figures presented above, many of these respondents planned to earn a Certificate of Completion but did not do so. It may be worth following up with these participants to discuss.

Lastly, the majority of registrants for TEL MOOC were from Rwanda however the Rwandan participants were relatively quiet in discussions throughout the course. The majority of survey completions were by those from Bangladesh, with Rwanda placing fourth. It may be interesting to investigate the paths of activity of the Rwandan participant population.

Information about these types of gaps may help inform the factors influencing intentions, activity, and completion of TEL MOOC.
**Research Agenda**

Through discussion between AU and COL, a research plan has been established toward producing three academic research articles for publication in open-source peer reviewed journals by the end of 2018.

The first study, which is near completion, will be a descriptive article which examines the participants of TEL MOOC, specifically those of the second iteration, with respect to the following questions:

- Who are the MOOC participants and how did they respond to the experience?
- What was their motivation to take this MOOC and their intentions for participation and completion?
- What is the relationship between intention and the number of participants who completed the MOOC.
- How does our experience add to the research regarding dropout in MOOCs?

The remaining two studies are planned for publication later this year.
Appendices
Appendix A
Content of TEL MOOC promotional site and log in page (http://www.telmooc.org)

**Course Description**
Teachers who want to learn more about teaching with technology will find this Massive Open Online Course (MOOC), *Introduction to Technology-Enabled Learning* (TEL), informative and engaging. Using up-to-date learning design and simple, accessible technology, the course runs on an easy-to-use learning platform available via the Internet. The course is designed for teachers who want to build on their knowledge and practice in teaching and learning with technology. It will run over five weeks and requires approximately three to five hours of time each week. Designed to accommodate teachers’ busy schedules, the course offers flexibility with options for learning the content. You will learn from readings, videos, discussions with other participants and instructors, meaningful exercises, quizzes and short assignments. Certification is available for those who wish to complete all required exercises and quizzes.

[TELMOOC Commercial](https://www.youtube.com/watch?v=sothGmhmRL4&index=14&list=UUzGzmGZV0NOsBJQIaYvYQkQ)

**Learning outcomes**
Participants will:

- Meet online with teachers all over the world who are also learning about technology-enabled learning
- Be supported by instructors who understand technology-enabled teaching and learning
- Explore easy-to-use technologies for classroom and online teaching
- Evaluate best fit technologies for teaching/learning contexts
- Experience a fun and collaborative learning environment via the Internet
- Receive a certificate on completion of required activities

**Who should participate?**
*Introduction to Technology-Enabled Learning* is designed for teachers in diverse contexts – secondary education, post-secondary education and vocational education. You will benefit from this course if you are teaching face-to-face or in a distance/online environment. Anyone interested in improving teaching and learning would enjoy participating in this MOOC.

**Contents covered**
**Week 1.** Learners will investigate technology-enabled learning activities that make use of a wide range of educational technologies:

- successful learning approaches implemented by educators in various teaching contexts;
- open and available resources that support technology-enabled activities; and
- teaching presence in the context of technology-enhanced learning environments.
Week 2. Learners will explore various educational technologies to enhance teaching and learning through review and discussion of:

- the purpose and types of educational technologies;
- the unique opportunities provided by educational technologies; and
- how specific educational technologies enhance the teaching and learning experience.

Week 3. Learners will examine the application of educational technologies to address challenges in different educational contexts:

- how content, pedagogy and education technologies are interrelated;
- when to integrate educational technologies, subject matter and pedagogy to enhance teaching and learning; and
- the processes for selection and application of educational technologies to address particular challenges in different teaching contexts.

Week 4. Learners will develop and share a plan for technology-enabled learning in their own teaching and learning context by:

- creating a practical application of educational technology;
- sharing and explaining a personal, practical application of educational technologies; and
- discussing the challenges in creating technology-enabled learning plans.

Week 5. Learners will reflect upon the role teaching presence with technology and the processes used to develop educational technology-enabled lessons, including

- learning theory and activities which could work in their individual teaching context;
- potential roadblocks and challenges to implementation of technology-enabled learning; and
- how technology can support teaching presence.

Certification

Two levels of certification are available based on your level of participation and completion of tasks/activities:

- **Certificate of Participation**: requires participation in at least 3 discussion forums and completion of quizzes.
- **Certificate of Completion**: requires 60% on all quizzes, participation in at least 3 discussion forums and the creation and sharing of a technology-enabled object

Meet the Instructors

**Dr M. Cleveland-Innes** is Professor and Chair in the Centre for Distance Education at Athabasca University in Alberta, Canada. She has been teaching for 35 years in all areas of education, face-to-face and online. Martha has received awards for her work on the student experience in online environments and holds a major research grant through the Canadian Social Sciences and Humanities Research Council. In 2011
she received the Craig Cunningham Memorial Award for Teaching Excellence and in 2009 she received the President’s Award for Research and Scholarly Excellence from Athabasca University. Her work is well published in academic journals in North America and Europe.

Dr N. Ostashewski is Assistant Professor in the Centre for Distance Education at Athabasca University in Alberta, Canada. He has been utilizing technology in teaching since 1990, both at the K12 and graduate education level. For the past 20 years Dr Ostashewski has been training teachers how to incorporate technology into “worth-it” classroom, blended, and online activities. His current research areas include iPads in the classroom, networked teacher professional development, MOOC design and delivery and collaboration technologies in teaching. In 2012, he was invited to work in Western Australia at Curtin University assisting professors in implementing technology-enhancements for courses with up to 1500 students. His latest book is titled “Optimizing K12 Education through Blended and Online Learning” and he has several open access publications available online.
Appendix B
TEL MOOC brochure

Dr. N. Cleveland-Turner is Professor and Chair in the Centre for Distance Education at Athabasca University in Alberta, Canada. She has been teaching for 35 years in all areas of education, face-to-face and online. Martha has received awards for her work on the student experience in online environments and holds a major research grant through the Canadian Social Sciences and Humanities Research Council. In 2011, she received the Canada First Governor General's Award for Excellence in Teaching. She is the President’s Award Recipient for Research and Scholarly Excellence from Athabasca University. Her work is well published in academic journals in North America and Europe. She is also a visiting researcher at the KTH Royal Institute of Technology, Stockholm, Sweden.

Dr. N. Ostachowska is Assistant Professor in the Centre for Distance Education at Athabasca University in Alberta, Canada. She has been utilizing technology in teaching since 1990, both at the K12 and graduate education level. For the past 20 years, Dr. Ostachowska has been teaching teachers how to incorporate technology into their K12 classroom, blended, and online activities. She has current research areas include skills in the classroom, networked teacher professional development, MOOC design and delivery, and collaboration technologies in teaching. In 2013, she was invited to work in Western Australia at Curtin University assisting professors in organizing technology-enhancements for courses with up to 1800 students. Her latest book is titled Optimizing K12 Education through Blended and Online Learning and he has several open access publications available online.

To register, please go to:
http://www.telmooc.org
For more information:
Commonwealth of learning
4715 Kingway, Suite 2050
Burnaby, BC V5A 4G9 CANADA
Tel: +1 604 776 8230 Fax: +1 604 776 8235
Email: info@col.org www.col.org
Dr. Tatsuya Mihara, Education Specialist, e-Learning
Centre for Distance Education
Athabasca University
1 University Drive
Athabasca, AB T9S 5A3 CANADA
Tel: 1 (800) 788-8051 Ext. 6170 (call free for Canada/US)
Tel: (780) 675-6726 (outside Canada/US)
TELMOOC Inquiry: telmooc@athabascau.ca

Introduction to Technology-Enabled Learning
6 November 2017 - 19 December 2017

Learning for Sustainable Development

LEARNING FOR SUSTAINABLE DEVELOPMENT

Course Description
Teachers who want to learn more about teaching with technology will find this Master Online Course (MOOC) Introduction to Technology-enabled Learning (ITL), informative and engaging. Using up-to-date learning design and simple, accessible technology, this course will take you on a journey to learn what is available online and in the classroom. The course is designed for teachers who want to build on their knowledge and practive in teaching and learning technology, which will enable you to work in new ways and explore different learning and teaching strategies. The course is open for teachers who want to improve their learning and teaching with technology.

Who Should Participate?
Introduction to Technology-enabled Learning (ITL) is designed for teachers in diverse contexts – secondary education, post-secondary education and vocational education. You will benefit from this course if you are teaching technology or want to improve your teaching and learning using technology. The course is open to all who want to improve their learning and teaching.

Length of the Course: 5 weeks
Schedule: 4 November 2017 to 19 December 2017
Workload: 1 to 2 hours per week
Level: introductory
Language: English
Pre-requisites: None

Course Details
Week 1: Learners will investigate technology-enabled learning and the use of a range of technology in various teaching and learning contexts.
Week 2: Learners will explore various technologies in teaching and learning through discussion and reading of the chapter and related guides.
Week 3: Learners will examine the benefits of technology-enabled learning in their own teaching and learning contexts using a range of technology-based tools, including accessing and discussing relevant literature.
Week 4: Learners will apply the principles and strategies for technology-enabled learning to their own teaching and learning contexts using a range of technology-based tools, including accessing and discussing relevant literature.
Week 5: Learners will reflect upon the role of teaching and learning in various teaching and learning contexts using a range of technology-based tools, including accessing and discussing relevant literature.

DEVELOPMENT • INNOVATION • ENGAGEMENT • TRANSFORMATION

Learning Outcomes
The learning outcomes are:
1. Understand different ways of learning and teaching with technology.
2. Understand the principles of effective technology-enabled learning.
3. Understand the importance of technology in various teaching and learning contexts.
4. Understand the benefits of technology-enabled learning in various teaching and learning contexts.
5. Understand the role of technology in various teaching and learning contexts.
6. Understand the benefits of using technology in various teaching and learning contexts.
7. Understand the benefits of using technology in various teaching and learning contexts.
8. Understand the benefits of using technology in various teaching and learning contexts.
9. Understand the benefits of using technology in various teaching and learning contexts.
10. Understand the benefits of using technology in various teaching and learning contexts.
Technology-Enabled Learning (TEL) MOOC brings educators and learners together across 94 countries

January 21, 2018

The Commonwealth of Learning and the Centre for Distance Education ran another successful delivery of the Technology-Enabled Learning massive open online course (TEL-MOOC), which connected more than 3,900 participants across 94 countries in 2017.

The TEL-MOOC is a free, open course designed and led by CDE professors Dr. Martha Cleveland-Innes and Dr. Nathaniel Ostashewski to support educators in developing their understanding of pedagogical models, and integrating technology-enabled learning activities. Upon completion of the course, different levels of certification was offered to recognize participants' learning achievements.

For more information about CDE's massive open online course availability, visit http://cde.athabascau.ca/courses/mooc.php.

Related news: News Agency of Nigeria
Technology-enhanced Learning - Activity Plan

Name: Firstname Lastname
Grade / Course: Course Name Number
Length of Activity: 50 minutes

Lesson Summary:
Students will ……

Lesson Objective:
To provide students with ….

Resources/Technology – Teacher
Interactive Whiteboard
Online Resources
•

Resources/Technology – Students
Computer Lab or Student Laptop setting
Worksheet /Learning Materials
Online Resources
•

Intended Curriculum Learning Outcomes
• Students will
• Students will

Instructional Activities
Teacher will… (15 minutes)
Students …. (35 minutes)

Learner Assessment
 Students will demonstrate
Appendix E
TEL MOOC Enrolment by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>1289</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>854</td>
</tr>
<tr>
<td>India</td>
<td>310</td>
</tr>
<tr>
<td>Barbados</td>
<td>153</td>
</tr>
<tr>
<td>Mauritius</td>
<td>112</td>
</tr>
<tr>
<td>South Africa</td>
<td>106</td>
</tr>
<tr>
<td>Canada</td>
<td>91</td>
</tr>
<tr>
<td>Bahamas</td>
<td>85</td>
</tr>
<tr>
<td>Nigeria</td>
<td>83</td>
</tr>
<tr>
<td>Namibia</td>
<td>56</td>
</tr>
<tr>
<td>Saint Vincent &amp; the Grenadines</td>
<td>54</td>
</tr>
<tr>
<td>Fiji</td>
<td>52</td>
</tr>
<tr>
<td>Kenya</td>
<td>51</td>
</tr>
<tr>
<td>Grenada</td>
<td>37</td>
</tr>
<tr>
<td>Zambia</td>
<td>35</td>
</tr>
<tr>
<td>Ghana</td>
<td>31</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>30</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>30</td>
</tr>
<tr>
<td>Pakistan</td>
<td>29</td>
</tr>
<tr>
<td>Jamaica</td>
<td>28</td>
</tr>
<tr>
<td>Belize</td>
<td>27</td>
</tr>
<tr>
<td>Botswana</td>
<td>27</td>
</tr>
<tr>
<td>Kiribati</td>
<td>27</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>26</td>
</tr>
<tr>
<td>Guyana</td>
<td>25</td>
</tr>
<tr>
<td>Tanzania</td>
<td>20</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>20</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>18</td>
</tr>
<tr>
<td>United States</td>
<td>15</td>
</tr>
<tr>
<td>Australia</td>
<td>9</td>
</tr>
<tr>
<td>Uganda</td>
<td>7</td>
</tr>
<tr>
<td>China</td>
<td>6</td>
</tr>
<tr>
<td>Maldives</td>
<td>6</td>
</tr>
<tr>
<td>Brazil</td>
<td>5</td>
</tr>
<tr>
<td>Italy</td>
<td>5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5</td>
</tr>
<tr>
<td>Mozambique</td>
<td>5</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>5</td>
</tr>
<tr>
<td>Cyprus</td>
<td>4</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4</td>
</tr>
<tr>
<td>Singapore</td>
<td>4</td>
</tr>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>3</td>
</tr>
<tr>
<td>Croatia</td>
<td>3</td>
</tr>
<tr>
<td>Egypt</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>3</td>
</tr>
<tr>
<td>Ireland (Republic)</td>
<td>3</td>
</tr>
<tr>
<td>Lesotho</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>3</td>
</tr>
<tr>
<td>Malta</td>
<td>3</td>
</tr>
<tr>
<td>Nauru</td>
<td>3</td>
</tr>
<tr>
<td>Portugal</td>
<td>3</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>3</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>3</td>
</tr>
<tr>
<td>Spain</td>
<td>3</td>
</tr>
<tr>
<td>Cameroon</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2</td>
</tr>
<tr>
<td>Japan</td>
<td>2</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
</tr>
<tr>
<td>Morocco</td>
<td>2</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>2</td>
</tr>
<tr>
<td>Qatar</td>
<td>2</td>
</tr>
<tr>
<td>Romania</td>
<td>2</td>
</tr>
<tr>
<td>Samoa</td>
<td>2</td>
</tr>
<tr>
<td>Thailand</td>
<td>2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2</td>
</tr>
<tr>
<td>Algeria</td>
<td>1</td>
</tr>
<tr>
<td>Bhutan</td>
<td>1</td>
</tr>
<tr>
<td>Chile</td>
<td>1</td>
</tr>
<tr>
<td>Colombia</td>
<td>1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
</tr>
<tr>
<td>Dominica</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
</tr>
<tr>
<td>Georgia</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>1</td>
</tr>
<tr>
<td>Jordan</td>
<td>1</td>
</tr>
<tr>
<td>Lebanon</td>
<td>1</td>
</tr>
<tr>
<td>Liberia</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourgh</td>
<td>1</td>
</tr>
<tr>
<td>Niger</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>1</td>
</tr>
<tr>
<td>Senegal</td>
<td>1</td>
</tr>
<tr>
<td>Sudan</td>
<td>1</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1</td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
</tr>
<tr>
<td>Togo</td>
<td>1</td>
</tr>
<tr>
<td>Tonga</td>
<td>1</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1</td>
</tr>
<tr>
<td>Turkey</td>
<td>1</td>
</tr>
<tr>
<td>Ukraine</td>
<td>1</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 3808
## List of Facilitator’s announcements

<table>
<thead>
<tr>
<th>Announcement</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download your certificate</td>
<td>15/1/2018</td>
</tr>
<tr>
<td>TELMOOC Ends!</td>
<td>16/12/2017</td>
</tr>
<tr>
<td>Week 5 Extension, Notes</td>
<td>11/12/2017</td>
</tr>
<tr>
<td>Week 5 Updates</td>
<td>7/12/2017</td>
</tr>
<tr>
<td>Week 4 Summary</td>
<td>5/12/2017</td>
</tr>
<tr>
<td>Hot Topics &amp; News for Week 4</td>
<td>2/12/2017</td>
</tr>
<tr>
<td>MOOKit iOS App Launches!</td>
<td>30/11/2017</td>
</tr>
<tr>
<td>Week 4 &amp; Live Session Details</td>
<td>28/11/2017</td>
</tr>
<tr>
<td>Week 3 Summary</td>
<td>27/11/2017</td>
</tr>
<tr>
<td>Hot Topics &amp; News for Week 3</td>
<td>25/11/2017</td>
</tr>
<tr>
<td>Live online session Nov 22</td>
<td>21/11/2017</td>
</tr>
<tr>
<td>Week 3 Activities TELMOOC</td>
<td>20/11/2017</td>
</tr>
<tr>
<td>Week 2 Summary</td>
<td>18/11/2017</td>
</tr>
<tr>
<td>Week 2 Hot Topic Forums Updated</td>
<td>17/11/2017</td>
</tr>
<tr>
<td>Week 2 of the TELMOOC - Exciting APP Announcement</td>
<td>13/11/2017</td>
</tr>
</tbody>
</table>
November 6, 2017

Dear Participant:

We are researchers at Athabasca University and the Commonwealth of Learning. We invite you to participate in a research study entitled "Understanding the Experience of Technology-Enabled Learning". The purpose of this study is to create a detailed picture of the participant experience in this MOOC.

Your participation will involve completing two short surveys: one at the beginning of the course and one after the course has finished. Each survey will take between 5 and 10 minutes to complete. Some participants may also be contacted for a more detailed interview. This interview takes between 15 and 20 minutes in total.

Data about your general course participation, such as the assignments you submit and the time spent on different course activities, is also of interest to us. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to stop or withdraw from the study, the information/data collected from or about you up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed.

In either case, all information collected in this study will remain confidential. No individually-identifiable information about you, or provided by you during the research, will be shared outside the research/instructional team without your written permission. All research data will be kept on a secure drive for which only the principal researchers and instructional assistants will have access. Identifying information of participants will be removed from any reports that are seen by anyone other than the principal researchers and instructional assistants. The results of the research study may be published but your name or any identifying information will not be used. The published results will be in summary form only.

The findings from this project may provide information on how to improve the quality of learning experiences in other online courses. There are no known risks or discomforts associated with this research. If you have any questions about this research project, please feel free to contact Dr. Martha Cleveland-Innes via email at marti@athabascau.ca. This study has been reviewed by the Athabasca University Research Ethics Board. Comments or concerns regarding your treatment as a research participant should be directed to the Office of Research Ethics at 1-800-788-9041, ext. 6718 or via email at resec@athabascau.ca.

Use the buttons below to indicate whether you agree to participate in the research project described above. To correlate the surveys with your general course participation, we will also require the email address you used to register in TEL MOOC. If you choose to consent to a follow-up interview, we may use this email address to contact you; your email address will not be used for any other purpose or shared with anyone outside the research team.

Thank you.

Sincerely,
Martha Cleveland-Innes PhD, Chair, Centre for Distance Education, Athabasca University
Appendix H
Pre-course survey questions

Where do you live?
• Europe/UK
• North America
• Caribbean/Central America
• South America
• South Asia/Indian subcontinent
• Asia
• Oceania
• Middle East
• Africa
Please specify your country.

What is your primary spoken language?
• English
• Other (Please specify)

What is your gender?
• Male
• Female

What is your age group?
• Under 20
• 20-29
• 30-39
• 40-54
• 55 and over

What is your highest educational qualification?
• Secondary/high school diploma
• College certificate or diploma
• Vocational school certificate or diploma
• Bachelor degree or equivalent
• Master degree or equivalent
• M.Phil or equivalent
• PhD or equivalent

What is your teaching experience?
• Education student
• Less than 5 years
• 6-15 years
• 16-25 years
• More than 25 years

What does your job involve? (select all that apply)
• Face-to-face teaching
• Distance education
• Online teaching or facilitating
• Blended/hybrid teaching face-to-face and distance or online
• Work-based training
• Research
• Management/administration
• Education support services
• Other (please specify)

If your job involves teaching, at which levels do you teach? (select all that apply)
• Early education
• Elementary
• Secondary/high school
• College
• Vocational school
• University

How would you rate your current skill level when performing the following tasks? (none, basic, proficient, or advanced)
• Using standard computer programs (word processor, email, etc.)
• Using social media (Facebook, Twitter, etc.)
• Creating digital media (video, blogs, etc.)
• Teaching or supporting learners through technology

How did you find out about this course?
• Commonwealth of Learning website
• Commonwealth of Learning newsletter
• Course brochure
• Athabasca University
• Email notification
• Social media
• Colleagues/workplace
• OpenUpEd
• PCF8
• Other (please specify)

What is your primary reason for taking this course?
• General interest in technology-enabled learning
• Professional development (contributing to your CV, for example)
• Obtaining a certificate
• General interest in MOOCs
• Other (please specify)

Which of the following best describes your intention to complete this MOOC?
• To browse the course contents, but not planning to complete the course
• Planning to complete some course activities, but not planning to earn a certificate of completion
• Planning to complete all activities to earn a certificate of completion
• Have not decided whether I will complete any course activities

Do you consent to be contacted to participate in a follow-up interview as indicated in the consent form?
• Yes, I consent to be contacted
• No, I do not consent to be contacted
Appendix I
End-of-course Survey questions

Participant Consent. Please provide us with your feedback by indicating your level of agreement to the following statements (strongly disagree, disagree, neutral, agree, strongly agree).

- TEL MOOC met the learning objectives.
- The amount of time I spent on the course met my expectations.
- The workload was manageable.
- The pace of the course was comfortable for my learning.
- The course activities reinforced the course material.
- The course activities did a good job of triggering my thinking.
- The course activities did a good job of holding my interest.
- The course material was of good quality.
- Assignments were helpful to acquire knowledge and skills.
- The quizzes helped to test my knowledge.
- I experienced direct instruction during TEL MOOC.
- My learning was supported through facilitation by the Inspirer.
- My learning was supported through facilitation by the roving instructors.
- My learning about TEL was supported through my discussions with other students.
- My learning about TEL was supported by reading other student posts.
- TEL MOOC discussions provided me with information about resources that I will be able to use in my own teaching.
- I felt like I was part of a community in the TEL MOOC.
- It was okay to express emotion in TEL MOOC forums.
- The course website was user-friendly.
- The TEL MOOC experience will assist me in the use of educational technology for teaching and learning.
- The Course Support videos helped me navigate the course and understand course expectations.
- The Course Support forums helped me navigate the course and understand course expectations.
- Overall, I was satisfied with TEL MOOC.

Please indicate the level of instructor and facilitator involvement you would have liked to have had in TEL MOOC.
- Much more instructor and facilitator involvement
- Somewhat more instructor and facilitator involvement
- About the same level of instructor and facilitator involvement
- Less instructor and facilitator involvement
- I felt no need for instructor or facilitator involvement

Which weekly activities did you complete or do you expect to complete? (Please select all that apply.)
- Less than one week
- Week One activities, discussions, and quiz
- Week Two activities, discussions, and quiz
- Week Three activities, discussions, and quiz
- Week Four activities, discussions, and quiz
- Week Five activities, discussions, and quiz
- A TEL Activity Plan

What suggestions do you have for the instructor and/or course design team?
If you would like to provide general feedback on TEL MOOC, please enter it here.
Appendix J
TEL MOOC Resources section

Readings and Course Documents

LIVE PRESENTATIONS

**PRESENTATION 1**: November 22, 2017
Teaching Presence: Facilitation in online and blended learning
Dr. Martha Cleveland-Innes
In this presentation, course instructor Dr. Martha Cleveland-Innes discusses the Community of Inquiry framework and how to facilitate with teaching presence in online and blended learning. *(The recording of this session will open in Adobe Connect.)*
» watch a recording of the full presentation (1 hour)
» view slides

**PRESENTATION 2**: November 29, 2017
Integrating Technology into the Classroom: What, When, and Why
Dr. Nathaniel Ostashewski
In this presentation for TEL MOOC, course inspirer Dr. Nathaniel Ostashewski discusses how to integrate technology into the classroom, including social media and more. *(The recording of this session will open in Adobe Connect.)*
» watch a recording of the full presentation (1 hour)
» view slides

COURSE SUPPORT: Course Structure and Technical Issues

**COURSE SUPPORT**
This downloadable package contains complete transcripts of the Course Support videos, covering the instructional team, forums, quizzes, certification, and technical issues.
» view PDF

Audio recordings of the Course Support videos
Take a Tour of mooKIT
WEEK 1: Models of Technology-Enabled Learning

This downloadable package contains complete video transcripts, activities, and resource links for Week 1.

» view PDF

WEEK 1 SUMMARY: Trends, key posts, and prompts
Review this document for a summary of selected activity from Week 1 and reflections from your instructor.

» view PDF
» watch a VIDEO Summary

Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry
Vaughan, Cleveland-Innes & Garrison (2013)

Collaborative Learning Technologies

Worksheet of indicators for the Community of Inquiry

Audio recordings of the lecture videos
Welcome to TEL MOOC
Welcome to Week 1
1.1 The Community of Inquiry
1.2 Two Models: TPACK and TIM
1.3 On Teaching Presence
WEEK 2: Technology in Education

WEEK 2: Technology in Education
This downloadable package contains complete video transcripts, activities, and resource links for Week 2.
» view PDF

WEEK 2 SUMMARY: Discussion highlights and topics
Review this document for a summary of selected activity from Week 2.
» view PDF
» watch a VIDEO Summary

Evaluation of Evidence-Based Practices in Online Learning
U.S. Department of Education

Audio recordings of the lecture videos
2.1 Integrating Technology in Education
2.2 Benefits of Technology in Education

WEEK 3: Open Educational Resources

WEEK 3: Open Educational Resources
This downloadable package contains complete video transcripts, activities, and resource links for Week 3.
» view PDF

WEEK 3 SUMMARY: Discussion highlights and topics
Review this document for a summary of selected activity from Week 3.
» view PDF
» watch a VIDEO Summary

Quality assurance guidelines for open educational resources: TIPS framework
Kawachi, P. (2014)
Open Education and the Schools Sector
Habler, Neo & Fraser (2014)

Understanding Open Licensing
Habler, Neo & Fraser (2014)

Audio recordings of the lecture videos
3.1 Understanding OER
3.2 Types of Open Licenses
3.3 Finding OER

WEEK 4: Applications of Technology

WEEK 4: Applications of Technology
This downloadable package contains complete video transcripts, activities, and resource links for Week 4.
» view PDF

WEEK 4 SUMMARY: Discussion highlights and topics
Review this document for a summary of selected activity from Week 4.
» view PDF
» watch a VIDEO Summary

TEL Activity Plan TEMPLATE:  Word (DOC) | OpenOffice (ODT)
TEL Activity Plan EXEMPLAR:  Word (DOC) | OpenOffice (ODT)

Audio recordings of the lecture videos
4.1 Practical Application of Technology
4.2 Getting Help with Technology
WEEK 5: Creating Technology-Enabled Learning

This downloadable package contains complete video transcripts, activities, and resource links for Week 5.  
» view PDF

Three Generations of Distance Education Pedagogy  

Audio recording of the lecture video

5.1 Creating Technology-Enabled Learning