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Trifecta of Student Engagement: A Framework for an Online Teaching Professional Development Course for Faculty in Higher Education

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Abstract

Purpose – The purpose of this paper is to describe an online faculty development pilot course on how to engage students online. A framework was used, referred to as the Trifecta of Student Engagement, for the design of the course. The Trifecta of Student Engagement proposes that students, in order to be fully engaged in a course, need to be engaged with their course content, with their peers and with their instructor. The course has three units of content that each correspond to the Trifecta of Student Engagement. This course has gone through one pilot with faculty and has impacted students and faculty positively.

Design/methodology/approach – An online faculty development course was piloted with eight faculty members across a range of disciplines who participated in the program. After taking the course, they had to apply the Trifecta of Student Engagement framework to a course they taught and share what they did via written report, webinar, or web presentation. This study summarized the faculty participants' written reports and presentations as well as provided a qualitative evaluation on the impact this course had on students and faculty.

Findings – After faculty applied the Trifecta of Student Engagement framework to courses taught, faculty saw an improvement in student engagement, satisfaction, learning and achievement. Three faculty surveyed students to determine their engagement and satisfaction and found students to respond positively to the use of tools and activities for student-to-content engagement, student-to-student engagement and student-to-instructor engagement. Two faculty examined student grades to determine if there were changes in student outcomes. One professor saw average grades increase by 11 percent. Another professor saw grades improve by 8 percent. She also found that student assessment of learning increased by 0.57. Both faculty attributed the improvement to the effectiveness of the teaching strategies employed.

Research limitations/implications – This research is limited to the eight faculty who participated in the pilot. Some faculty used methods to attempt to measure the impacts of their teaching practices by surveying students and looking at student performance data. A second pilot is needed for additional faculty to take the course and apply the Trifecta of Engagement framework to generate more data for impact.

Practical implications – Institutions looking to create an online teaching professional development course for faculty can utilize the Trifecta of Student Engagement framework for their course design. Additionally, faculty can read about tools and strategies that they can immediately apply to create more student-to-content engagement, student-to-student engagement and student-to-instructor engagement.

Social implications – Faculty can be more intentional in how they engage students in their online course experience.

Originality/value – This paper adds to the literature on faculty development regarding student-centered teaching practices. Other institutions looking to create a faculty development course or program that utilizes a student-centered framework may find aspects of this paper useful for their own online teaching professional development initiatives.

Keywords Online learning, Professional development, Student engagement, Faculty development, Online teaching, Student-centered teaching

Paper type Conceptual paper

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Introduction

The following paper describes an online teaching professional development course for higher education faculty. The course, called enhanced teaching and learning strategies (ETLS), was piloted with eight faculty members at National University from a range of disciplines – criminal justice, nursing, biology, economics, engineering, business, education and psychology. The ETLS course utilized a framework for engaging students that faculty apply to a course they teach. Results are shared from the faculty who applied the framework. The ETLS course is described in detail as well as theories that informed the design of the course. For those in higher education seeking to design an online pedagogy course for faculty, this paper provides a description of such a course. Finally, the paper provides a qualitative evaluation of the findings, next steps for the course and recommendations for future research.

Background

In March of 2016, a $25,000 Innovation Grant from the National University System was awarded to create an online teaching professional development course for faculty. The need for such a course arose from requests by faculty for a professional development course beyond the Blackboard learning management system (LMS) training that faculty are required to take to teach courses at National University. The Blackboard LMS training is more of an introductory up-and-running, technology-based training course than a course about online pedagogy. Research was conducted to find examples of online pedagogy courses for faculty development at other higher education institutions, but it became challenging to find examples of such a course or program. In turn, the course was designed based on best practices and research found in the online pedagogy literature.

Upon consulting the online pedagogy literature, one concept that was mentioned as being important when designing and teaching online courses is "student engagement" (Meyer, 2014; Wankel and Blessinger, 2012; Everett, 2015). Student engagement, as a concept, is not new. It has been described in terms of focusing on what the student does, rather than what the teacher does (Tyler, 1949). Although there is a lack of agreement on a single definition of student engagement, the importance of student engagement is underscored as being linked to positive outcomes such as student success and development (Mayhew *et al.*, 2016). According to the Glossary of Education Reform (2016, n.p.), student engagement "refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education." Focusing on student engagement has become synonymous with being learner-centered, a teaching approach that has been recognized in education as being effective (Beaudoin, 1990; Darsih, 2018; Schreurs and Dumbraveanu, 2014).

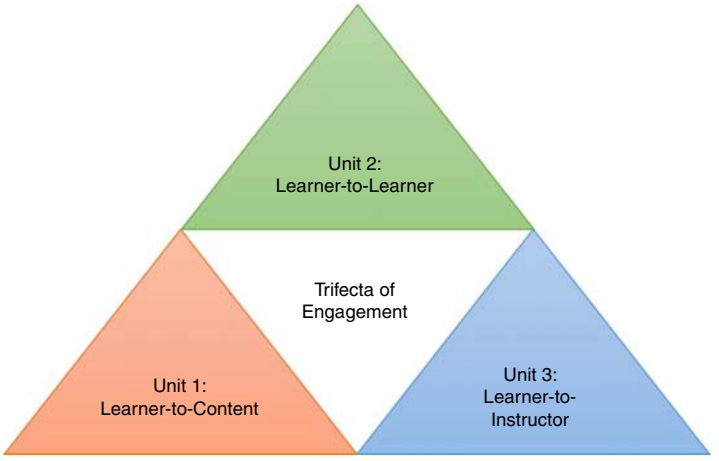
What makes student engagement particularly relevant for online pedagogy is that well-designed online courses revolve around the learner and are considered learner-centered (Mccombs, 2015). The teacher-centered method of transmitting content information, which has been central to traditional teaching in face-to-face classes, is not central to online teaching since the content information is already embedded in the online course through readings, videos and links to web resources that students review independently (Sanga, 2018). Online teaching involves the facilitation of student learning through collaborative and experiential activities as well as through learning assessment, learning support, instructional design and technology guidance (Badia, Garcia and Meneses, 2017). Online courses that are learner-centered also tend to require more work for students such as problem solving or virtually collaborating on projects to show that they are present in the course (Meyer, 2014). In contrast, the same level of work may not be required for a student to show their presence in a face-to-face course. Online courses that are learner-centered can also address student success by taking into account important aspects of learning such as motivation, engagement, and satisfaction (Johnson-Lutz *et al.*, 2015).

Kuh (2009) defines engagement as involvement in learning. Research states that student engagement has been positively associated with student academic achievement, progression, graduation, satisfaction and deeper learning (National Survey of Student Engagement, 2017; Zilvinskis *et al.*, 2017; Lei *et al.*, 2018). Because engagement is shown to positively impact student success, the professional development course created for faculty at National University focused on student engagement as the main theme.

One of the main drivers of student engagement in online courses is interaction (Purarjomandlangrudi *et al.*, 2016; Wanstreet, 2009). Interaction allows students to exchange ideas and construct meaning individually and with course participants. Further, interaction in online courses has shown to have a direct impact on student satisfaction, student achievement and learning outcomes (Durrington *et al.*, 2006; Bernard *et al.*, 2009). Michael Moore (1989), in his seminal research, outlined three types of interaction in online courses: learner–content interaction, learner–learner interaction and learner–instructor interaction. Student–content interaction is "the process of intellectually interacting with content that results in changes in the learner's understanding, the learner's perspective, or the cognitive structures of the learner's mind" (Moore, 1989, p. 2). Learner–learner interaction is the process of learners collaborating and communicating information with peers, which can be especially valuable in the areas of application and evaluation (Sharp and Huett, 2006). Learner–instructor interaction "is widely considered essential by educators and students alike. This interaction type includes three tasks to be performed by the instructor: to stimulate interest and motivation; to organize application of student learning; and to counsel, support, and encourage each learner" (Sharp and Huett, 2006, p. 4).

A framework for student engagement, based on the three types of interaction, was utilized as the foundation for the design of the National University professional development course for faculty. This framework, referred to as the Trifecta of Student Engagement, proposes that students, to be fully engaged in a course, need to regularly interact with their course curriculum content, with their peers and with their instructor (Figure 1).

The Trifecta of Student Engagement organizes student engagement into three areas: learner–content, learner–learner and learner–instructor. Each area intersects and overlaps with one another in a student-centered online learning community (Hoidn, 2017). Institutions looking to create an online teaching professional development courses can also utilize this framework.



Source: Moore (1989)

Figure 1.
The trifecta of engagement

The faculty development course, called ETLS, has three units of content that correspond to each area of the Trifecta of Engagement. Each unit contains theories, best practices and pedagogies for online teaching:

- Unit 1 student-to-content engagement: focuses on the principles of universal design for learning (UDL) that give students choice in how they want to engage with curriculum content.
- Unit 2 student-to-student engagement: uses social learning theory and constructivist approaches to facilitate student engagement with their peers.
- Unit 3 student-to-instructor engagement: focuses on building connections with students as well as advanced assessment, feedback and facilitation strategies.

Pedagogical practices and teaching strategies are combined using engaging education technology tools available in the LMS. Faculty take on the role of learners in a cohort interacting with each other via discussions and comments on each other's work. Eight faculty made up a cross-disciplinary cohort in the pilot. Faculty collaborated together in this professional learning community (also known as community of practice) and were exposed to a diverse range of disciplinary perspectives.

Each unit in ETLS follows the same format and structure in terms of content presentation (video, pdf job aids and interactive eLearning modules), the activities faculty complete, and the opportunities for interaction with peers. Each unit contains learning objectives, content presented in various formats, resources to assist with completing activities, checklists of the activities to complete, a peer-to-peer learning activity and a public reflection journal for faculty to brainstorm ideas for how they might use the tools and strategies in their real course.

There is a virtual office discussion board for faculty to post general questions or comments about the course. There is an end-of-course survey for faculty to provide their feedback on the course. Announcements are sent out every day or so and contain information such as reminders, best practice tips and scholarly articles. After faculty complete each unit, they receive a digital badge that displays in the course validating that they did the work.

Faculty begin the course by partaking in an ice breaker discussion titled, "I knew I wanted to be an educator when […]." Faculty are required to respond to each other's post with a reply that contains the phrase, "That reminds me of […]" until there is a discussion of interconnected experiences. This exercise uses a constructivist method intended to tap into faculty's intrinsic motivation for teaching (what is your "why") to start off the course on a positive and exciting note. Faculty have two months to complete each unit, after which they have another six months to submit a final project.

For their final project, faculty apply the Trifecta of Engagement framework to a course they teach. Faculty then share how they applied the framework to explain the design, tools, strategies, activities and pedagogies they used to enhance student-to-content engagement, student-to-student engagement and student-to-instructor engagement. Faculty are encouraged to reflect about how their application of the framework impacted students. Faculty create their final projects using a format that can be disseminated to the entire National University faculty community (such as a webinar, written paper, video presentation or recorded course tour) with the goal of inspiring teaching innovation. These projects have been summarized in the "Faculty final project results" section.

Literature review

The following is a review of the literature that went into the design of each unit of the ETLS course using the Trifecta of Engagement framework (Figure 2).

Unit 1: engaging Learners with Content

Unit 1 focuses on the first component of the Trifecta of Engagement, with the identification of ways for faculty to help students to engage with their course curriculum content. There are many strategies that can encourage students-to-content engagement including activities where they can make meaning of the content.

Give students the opportunity to make meaning of the content. McDonald *et al.* (2005) caution against assuming that simply providing academic content materials for students to passively absorb will cultivate learning. Rather, providing students with opportunities to do something with the course content such as solve problems, ask questions, examine concepts, compare and contrast views, and complete challenges and exercises allows engagement to occur (McDonald *et al.*, 2005). Activities that go beyond passively taking in information to making meaning of that information follow a constructivist approach to learning, also referred to as active learning. This approach tends to work well for adult learners who bring life experience to draw on to make meaning of new information (Karge *et al.*, 2011; Hasan and Fraser, 2015).

In order for faculty to formulate the exercises or activities for students to do, it can be helpful to evaluate the "why" of the content or the "so what" of learning the content. Adult learners want to know why they should learn something before they engage in learning it (Knowles, 2005). Giving students an explanation of why they are about to learn something inspires motivation to learn it. Adults are also "just-in-time" learners where they are ready to learn what they need to know. For students to engage deeply with content, it needs to be relevant to them. For retention of content, students need to form a connection with it and internalize it. It can be worthwhile to come up ways for students to experience the content, rather than just consume it (Fink, 2007).

Likewise, the content designed for Unit 1 is not for faculty to passively absorb and then forget about. The content shows faculty how to do the activities. The activities faculty complete include creating instructional videos. Why should faculty know how to present content to students using video? Because presenting content as video can be engaging for learners (Hibbert, 2014). In online courses, instructional videos can serve as a significant component. Hibbert (2014) states that "Video has the ability to convey material through auditory and visual channels, creating a multisensory environment" (Para 2). Videos can convey instructor presence and add a human element (Hibbert, 2014). Videos can be an effective way to demonstrate a procedure, explain a detailed method or bring a process or idea to life using 3-D images, audio and graphics. Faculty can use videos to introduce course material as well as highlight, explain or reinforce content.

Choi and Johnson (2005) found that the use of instructional videos can be used to motivate learners by attracting their attention and can help with comprehension and retention of information through the use of visual and audio aids. It is a recommended best practice to create a course introduction video to make a good first impression on students and orient them to the course (Blackboard, n.d.; Suh, 2018). Faculty can also humanize themselves to students (e.g. show that there is a human being on the other side of the screen) through the use of recorded webcam videos (Friend, 2017) which also falls into the area of instructor-to-student

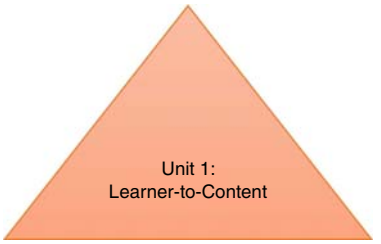


Figure 2.
Learner-to-content engagement

engagement. Activities like storytelling, anecdotes, connecting course concepts to personal experience and sharing passion for the discipline can provide students with engaging content that they may not otherwise get in an online course, particularly if the course is asynchronous (Buffo, 2015). Faculty can incorporate online videos to support course learning objectives such as video lectures to teach course material. Faculty can also have students create videos or video presentations such as digital storytelling, which can give students the opportunity and creative freedom to synthesize information, showcase their learning, and develop twenty-first century digital literacy skills (Cramer, 2007).

Presenting content in multiple modalities such as video follows the principles of UDL (The National Center on Universal Design for Learning, n.d.). UDL seeks to design a learning environment that is accessible by all students, hence the term universal. Faculty can build lessons that are educationally accessible to all students. UDL is rooted in the foundation that students have different learning preferences such as auditory, kinesthetic or visual (or a combination). Students also bring with them multiple intelligences such as interpersonal, intrapersonal, musical or existential among others (Gardner, 1983). UDL is based on brain research that addresses how learners make sense of presented information, how they are engaged and motivated by learning and how they express their understanding of the learning. UDL is comprised of three principles: first, Representation is how educators present information to reach all students. Second, Engagement is how educators motivate and encourage all students to participate in learning. Third, Action, or Expression, relates to how students demonstrate what they know (The National Center on Universal Design for Learning, n.d.).

Content can be presented in different ways that appeal to diverse learner preferences and can include variations in audio, visual and kinesthetic elements. For example, having the same content presented as text-based reading, video, audio lecture and an interactive eLearning module can add variety in the format learners choose to consume, which can increase learning engagement (Cramer, 2007). Learners can pick and choose which materials to review which gives the learner choice and freedom, as a choose-your-own-adventure approach, that can result in more self-directed learning and motivation due to self-determination (Merriam and Bierema, 2014; McDonald *et al.*, 2005).

Modeling the experience for faculty by giving them choice in content. In Unit 1 where faculty learn about how to create student–content engagement, the design of the ETLS course models student–content engagement by engaging faculty through video tutorials, self-paced interactive (clickable) eLearning modules and PDF job aids with step-by-step instructions and visual screenshots. The variety in types of content presented appeals to visual, auditory and kinesthetic learning preferences. Faculty can pick and choose which of these materials to review to complete the activities, which allows them to be more self-directed in using materials to meet their learning needs. The content is presented in a way that models to faculty how they can present their own course content in a variety of ways to appeal to diverse student learning preferences.

Faculty are encouraged to use the content they usually teach to complete the activities. This way, faculty can use what they create in a real course they teach, making it most relevant. Making the activities relevant follows the principles of adult learning theory and assumptions on andragogy which state that adults want to engage in learning activities that are personally a professionally relevant to them (Knowles, 2005; Merriam and Bierema, 2014). Faculty post the videos they create in the Unit 1 Blog of ETLS, so they can all see each other's videos and comment on them. Finally, faculty complete the Unit 1 reflection journal in which faculty answer questions such as, "How would you use these media tools in your course?" and "How could using these media tools enhance students' engagement with the content?" Faculty post their thoughts on using the tools and can view each other's reflections. Reflective exercises such as journaling allow learners to

examine what they have been learning and develop their metacognition skills, an important skill for lifelong learning (Cornford, 2002). It also helps teachers become reflective practitioners, as advocated by philosophical educator, John Dewey (Simpson, 2005). After completing Unit 1, faculty receive a Digital Media Badge that visually displays they completed the unit in the course (Figure 3).

Unit 2: engaging learners with learners

Unit 2 focuses on the second component of the Trifecta of Engagement, generating opportunities for student–student engagement. Humans are social beings and this affects how we learn. Social learning theory, also known as social cognitive theory (Merriam and Bierema, 2014), developed by Albert Bandura (1977), suggests that people learn from one another via observation, imitation and modeling. Socialization online has become a driving force in people's lives, particularly with the rise of social media and social networking. Collaborative and cooperative learning are popular instructional strategies in online teaching with students working together to solve problems, complete projects and learn from one another through discourse (Roberts, 2004). Student-to-student engagement activities in an online course can include collaborative activities such as discussion boards, group projects, wikis, blogs and peer assessments.

Harasim's (2012) online collaborative theory provides a framework for how learners construct knowledge in an online community in which ideas are generated, organized, compared, analyzed and categorized through discussion and argument. Learners eventually reach "intellectual convergence" where consensus is reached, including agreeing to disagree, usually through a group deliverable such as a project, although the learning never really ends. This is referred to as "project-based learning" where students are presented with a problem to solve or question to answer and work on this collaborative project for an extended period of time (Roberts, 2004).

Modeling the experience for faculty by encouraging them to engage as peers. Faculty have the opportunity to engage with their peers and learn from each other in this situated learning context (ETLS course), which can also be referred to as a community of practice (Wenger, 1998). For example, in a discussion on the future of online courses one faculty member expressed concern over the future role of instructors in online education in which he felt that, in the future, instructors would be removed from courses and replaced with teacher robots.

Faculty from diverse disciplinary explored and engaged, through a discussion thread, differences of opinion as well as commonalities central to the teaching profession. This was a rare opportunity to discourse with peers who have different points of view and yet are still part of the same teaching community. The result was a high-level dialogue among peers who shared insights about how humans learn from other humans in ways that technology cannot substitute.

In Unit 2, faculty partake in a peer-to-peer collaborative activity where they are tasked as a group to create a "Guide for Faculty to Encourage Student Participation." The document is created using the wiki tool in Blackboard which allows all users to be able to edit a shared document. Faculty can use research or personal experience to formulate the guide.

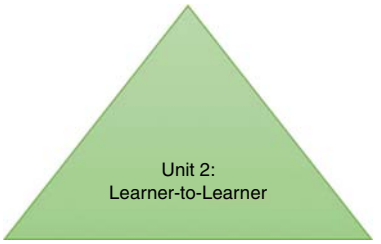


Figure 3.
Learner-to-learner engagement

Faculty also design a group project for students in Unit 2. The group project must allow student groups to have choice in their project deliverable, following the principle of UDL. A principle of UDL states that learners like to have choice in demonstrating what they have learned. For example, Group 1 may decide that they would like to submit a video presentation for their project. Group 2 may prefer to submit a group paper. Group 3 may decide to do a wiki with images and URL links embedded. Giving learners choice and freedom to make decisions in how they demonstrate their learning allows them to be more self-directed and take responsibility for their learning (Merriam and Bierema, 2014; McDonald *et al.*, 2005). Indeed, Butler and McMunn (2011) state that "To support student autonomy and decision making, students should be given some choice as to the tasks they will perform or they roles they will assume for the project" (p. 74). Faculty are tasked with setting up the group project using the groups tool in Blackboard.

Finally, faculty design a peer assessment activity for students in Unit 2 using the peer assessment tool in Blackboard. Peer assessment is a collaborative activity that can improve students' writing as well as develop assessment and evaluation skills, critical thinking skills and disciplinary skills (Baker, 2016). Peer assessment activities can include having students review each other's papers before they submit them. Or students can answer questions about a case study, for example, and evaluate each other's answers.

Faculty learn how to set up the group project and peer assessment by viewing the content in Unit 2 (video tutorials, self-paced interactive eLearning modules and/or PDF job aids). Faculty can pick and choose which materials to view according to their learning preference. Faculty answer questions in the Unit 2 reflection journal on how they can implement these tools and activities in their real course and how they think these tools can enhance student-to-student engagement. This reflective practice allows faculty to think through how they can apply what they have learned into a real course and plan out how they might do that, what potential issues they may encounter and how to mitigate those issues. This reflection space is a helpful in-between step between learning something new and applying it to a real situation. After completing Unit 2, faculty receive a peer-to-peer engagement badge that visually displays they completed the unit in the course (Figure 4).

Unit 3: engaging learners with instructor

Unit 3 focuses on the third component of the Trifecta of Engagement framework; ways faculty can engage with students. Faculty-student engagement is grounded in constructivist, community of inquiry (CoI), feedback and communication theories. Tools that faculty can utilize in an online course for student-instructor engagement include discussion boards, rubrics and journals. Instructors play a vital role in the students' learning experience.

However, what an instructor does online is different than what an instructor does face-to-face because instructors teaching online use the online platform to engage with students whereas teaching face-to-face requires being in the same physical space as students (McFarlane, 2011). One of the traditional methods of instruction for a face-to-face

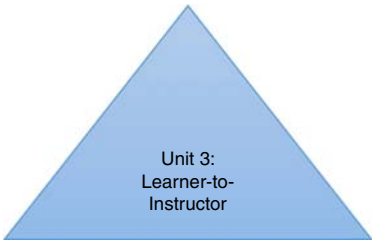


Figure 4.
Learner-to-instructor engagement

class is where an instructor, who is a subject matter expert, delivers course content to students via lectures, demonstrations or presentations (also known as the didactic method) (Bligh, 2000). Some parts of the didactic method can be incorporated online through the use of instructor-created lecture videos or via synchronous web lecturing, but this is only part of what an instructor does. Garrison and Shale (in Keegan, 1993) oppose the idea of education being "delivered" because it reduces teaching to telling (p. 125). Rather:

> Teaching has to encourage the development of new perspectives based upon the integration of the student's existing knowledge with the newly acquired knowledge. The student has then to validate the emerging knowledge through collaborative and sustained interaction with a teacher and other students. Education is a process which is characterized by the interaction of the teacher and a student which takes the form of dialectical exchange which is a negotiation of meaning. (Keegan, 1993, p. 125)

This perspective of teaching follows a constructivist approach that facilitates learning rather than delivers content. Indeed, Garrison and Shale (in Keegan, 1993) state that "the most important aspect of the educational transaction is what happens after the student has been presented with the content" (p. 126).

One theoretical framework that relates to student-instructor engagement is Garrison's (2000) CoI model. This model can be used for creating a meaningful (collaborative–constructivist) educational experience through the intentional development of three interdependent components – social presence, teaching presence and cognitive presence. Social presence enables learners to feel comfortable expressing themselves authentically in terms of their personality and identity. Teaching presence involves the design, facilitation and management of the learning environment to achieve the course learning objectives. Cognitive presence enables learners to construct meaning of the learning experience through activities such as reflection and discourse (Garrison, 2000). Faculty are introduced to the CoI model in Unit 3.

Social presence, a concept from communications theory, is the ability to transmit social cues online which can build trust and inspire a feeling of togetherness, even though a screen (Baozhou *et al.*, 2016). Richardson and Swan (2003) found that students perceived they learned more and were more satisfied with their instructors who exhibited more social presence than those who did not. Therefore, Richardson and Swan (2003) concluded that social presence plays a significant role in a learning experience. The part of cultivating a social learning community involves creating instructor social presence. Instructor social presence can be a communication style that conveys the instructor's personality whether in writing, video or audio with the goal of showing authenticity and that there is a human being on the other side of the screen. Showing online social presence helps students to feel comfortable as social participants and free to express themselves openly (Schmidt, 2017).

Online discussion and dialogue with learners and faculty is an important medium for enabling knowledge construction and meaning. Some have referred to this as communal constructivism (Leask, 2001). This method of facilitation of interaction allows learners to share their experiences, views, and ideas and contribute to a collective understanding. Salmon (2003) refers to the facilitation of this exchange as "e-moderating."

The origin of the word "teach" comes from the Old English teacan meaning "show, present or point out" (Oxford Dictionary Online). Teaching is an essential part of instruction that involves explaining concepts, theories and techniques that make up a discipline. Teaching might be considered explaining or telling students the answers whereas facilitating helps students discover the answers themselves. As content experts, teachers present information and provide the right answers. Facilitators guide the process and provide the right questions. Good instructors are able to both teach and facilitate. Facilitation plays a central role in online class discussions.

The use of the discussion board in online courses is a medium where robust conversations can take place. Because the discussion board is asynchronous, it allows

students the time to reflect deeply and craft thoughtful responses (Dawley, 2007). A well-designed discussion board allows demonstration of knowledge of key concepts, community building, consensus building, student leadership, critical thinking and reflection (TeacherStream, LLC, n.d.). Likewise, a good discussion requires effective facilitation by the instructor, a key component of faculty-student engagement.

Facilitating discussions that promote critical thinking go beyond asking students to recall what they learned in textbook readings. The use of Socratic questioning techniques and question types can be an excellent resource for facilitators. Rob Kelly (2009) summarized these as:

- Conceptual clarification questions – questions that allow students to think about the concepts behind their arguments (e.g. Why are you saying that? What exactly does this mean? How does this relate to what we have been talking about? Can you give me an example?).
- Probing assumptions – questions that get students to think about the beliefs that they base their arguments on (e.g. What else could we assume? How did you choose those assumptions? How can you verify or disprove that assumption? What would happen if …?).
- Probing rationale, reasons and evidence – questions that get students to think about the support for their arguments (e.g. Why is this happening? How do you know this? Can you give me an example? What do you think causes…? On what authority are you basing your argument?).
- Questioning viewpoints and perspectives – questions that get students to consider other viewpoints (e.g. What are some alternate ways of looking at this? Who benefits from this? How are x and y similar?).
- Probe implications and consequences – questions that get students to think about what follows their arguments (e.g. Then what would happen? What are the consequences of that assumption?).
- Questions about the question – questions that turn the question in on itself (e.g. What was the point of asking that question? Why do you think I asked this question?) (adapted from Kelly, 2009).

Online discussions typically require proper academic writing, grammar, spelling and formatted citations (Barstow Community College, n.d.). When discussions entail formal academic writing, students rarely dive deeper into the conversation or topic and many just do the bare minimum of responding to two of their peers if it is required (Bart, 2018). But Schmidt challenges the practice of discussions used as a space for formal academic writing and advocates for a more humanistic approach to the discussion board. Rather than using formal academic writing such as that used in a paper, Schmidt (2017) advocates using authentic language when engaging in online discussions (e.g. write how you would talk) as this:

> usher[s] learner motivation […] prepares the learner most effectively to transfer their developing language skills to the outside world […] motivates a learner to know that what they are engaging in will be directly applicable to real life as soon as they walk out of the classroom […] [and] creates a sense of community among students who are collectively engaged in the construction of meaning. (Para 3)

Therefore, using language that is more natural and informal while still probing students for understanding and asking them to demonstrate critical thinking related to the topic can be a strategy to engage students. This can make online discussions much more enjoyable, social and enriching, and not seem like busywork.

Faculty should aim to show their personality through their writing in the online course, whether it is instructions, interactions or lecture material. The use of humor, for example, can help keep students engaged (Anderson, 2011). The shortest distance between two people is laughter. Strategies for adding humor can include telling subject-related jokes or adding subject-related graphics, cartoons, animations, emojis, memes and comics (Panagopoulos, 2017). Instructors can also use humorous comments or give humorous virtual awards so long as they are subject related, not offensive and are peppered throughout, not overdone (Panagopoulos, 2017).

Faculty should be aware of the language they use to ensure it uses a tone that is learner-centered, meaning it addresses the students directly using words like you. Fulmer (2017) challenges faculty to focus on the point of view of students when creating course materials such as the syllabus. This entails transitioning from using a teacher-centered or content-centered approach to a student-centered approach. Using phrases such as "you will learn" rather than describing the content covered in passive or third person depiction can be motivational for learners. Additionally, instead of simply providing due dates and descriptions of assignments, let students also know why the course is relevant to them and what it takes to be successful.

The tone of a syllabus or course can traditionally be dry, boring, punitive or controlling. Fulmer (2017) encourages faculty to use a positive, uplifting, and inviting tone in which learning is viewed as a partnership between teachers and students rather than a teacher-directed endeavor. The motivators employed in a syllabus should convey meaningfulness, curiosity, student autonomy and community rather than grades or punishment (Fulmer, 2017). Students have rated learner-centered syllabi higher than content-centered syllabi (Harnish and Bridges, 2011). Instructors who use student-centered writing express themselves as being approachable, supportive, helpful and receptive (Fulmer, 2017). They come across as encouraging, enthusiastic and motivated to teach the course while also having high expectations for students. They express that they care about students and their learning and seek to help students discover the value of the course content as being important, relevant and interesting.

One of the most critical areas where instructors engage with students is through giving feedback (Dennen, 2007). Feedback can be provided in a variety of mediums including written, recorded audio, video or other. Prompt feedback allows learners to examine their current knowledge, reflect on their learning and receive recommendations for improvement. Feedback is a tool that can be used to facilitate learning (Pyke, 2010). Pyke (2010) notes two types of feedback instructors can use: corrective and motivational. Corrective feedback attempts to provide information to the learner about their performance while motivational feedback focuses on the goals of the learner. It is recommended that feedback be specific, objective, consistent and timely (Sachdeva, 1996). Sachdeva (1996) recommends that a supportive environment should be established with an open dialogue between student and instructor in a collaborative manner with mutually agreed upon goals that are reinforced through follow-up and action plans.

A tool that faculty can use to give objective, fair and consistent feedback is a rubric. A rubric provides a detailed overview of expectations for a given assessment and break downs the expectations into a range of performance standards to measure student achievement of learning goals (Barkley and Major, 2016).

Another space where faculty can engage with students and provide personalized feedback is through the use of journals. Journals allow a space for reflection and metacognition where students can ask questions, share their struggles and successes, think about their learning and receive one-on-one mentoring, coaching and support from faculty. Journaling can be one of the most effective exercises to promote self-awareness, improvement and reflectivity (Herndon, 1996). Reflection is an important part of the learning process and faculty can encourage students to reflect through journaling.

Modeling the experience for faculty through facilitated discussions and authentic activities. In Unit 3, faculty participate in an asynchronous facilitation module that consists of discussion board prompts where faculty are asked to reflect about their experience as teachers and learners using a social constructivist approach. Faculty are challenged to put themselves in the student's shoes and think about elements of the course students may find threatening (e.g. not being familiar with the online platform, appearing unintelligent or incompetent in front of peers, etc.). Faculty strategize how they can mitigate students' fears and concerns and create an environment conducive to learning.

Faculty learn about the various roles they can play as a facilitator to create a welcoming and inclusive learning environment. The facilitator of the ETLS course also models best practices by making faculty feel welcomed to the course, supported and encouraged throughout the course, and confident to use the tools and strategies on their own when it comes time to teach and the course has ended. The prompts, replies and feedback the facilitator of the ETLS course uses in the discussion board convey a warm, friendly, natural and, at times, humorous tone. Faculty are encouraged to write how they would speak in the online discussion threads, rather than use scholarly or academic language.

Faculty also practice their questioning skills via an activity where they have to facilitate a discussion on Reddit, a discussion board-based website. They can choose any topic they wish to start a discussion, but they should try to keep the conversation going by using probing and follow-up questions. This activity allows faculty to practice authentically engaging people in online conversation when there are no participation points. One of the biggest complaints from students regarding discussion boards is that, too often, discussions feel like busywork rather than interesting, meaningful dialogue (Bart, 2018). Faculty reflect on what they learned from the Reddit activity, how to authentically engage people in conversation, and how they can apply that method to their own threaded discussions with students.

In Unit 3, faculty give feedback to a fake student in his reflection journal. Feedback must be objective in terms of if the expectations were fulfilled or not fulfilled, how the student completed the expectations or what was left out, as well as personalized feedback about what the student achieved and the impact it had. Faculty give feedback via a rubric embedded in the reflection journal so that they can provide precise feedback on each level of criteria. Reflection journals are a medium where faculty can engage with students and provide feedback. Faculty receive feedback at various points in the course from their peers and from the course facilitator and are encouraged to give feedback to their peers and to the course facilitator in the spirit of continuous improvement for all. Feedback should be constructive, helpful, encouraging and personalized.

In Unit 3, faculty create a universal rubric to assess the group project they created in Unit 2. The rubric should be learning outcome-based to account for variation in the kinds of assignments student groups submit (e.g. a video presentation, a paper, a wiki, etc.). The rubric should be the same for all groups in order to ensure that groups are evaluated fairly and consistently. Faculty learn how to create a rubric, provide effective feedback and facilitate student interactions and active learning by viewing the content in Unit 3 (video tutorials, self-paced interactive eLearning modules, and/or pdf job aids). Faculty can pick and choose which materials to view to assist them in completing the activities. Faculty answer questions in the Unit 3 Reflection Journal on how they can use these tools and strategies in their real course and how they think these tools and strategies can enhance student engagement with instructor. Finally, faculty complete the end-of-course survey found at the end of Unit 3. After faculty complete Unit 3, they receive an instructor-to-student engagement badge that displays in the course indicating that the unit is complete. They also receive a digital certificate for completing the ETLS course. After completing the course, faculty do a final project where they apply the Trifecta of Engagement framework to a course they teach and report back the

results in a way that is shareable to the entire National University faculty community (such as a white paper/written report, video presentation course tour or webinar) so others can learn from their experience. The best way to learn something is to teach it and this model allows faculty to teach others what they learned in the ETLS course and how they applied the Trifecta of Student Engagement to their own courses.

Faculty final project results: application of the trifecta of student engagement to courses taught

In the pilot cohort, five faculty members did written reports for their final project and three faculty members did presentations to explain or show how they applied the Trifecta of Engagement framework to their course. Their names have been changed to pseudonyms to protect their identity.

Three faculty members added reflection journals to their course to encourage student-to-instructor and student-to-content engagement. Two faculty members used group assignments. One faculty member used blogs and audio and video for a student assignment. One faculty member added a wiki assignment. Three faculty members added synchronous web conferencing sessions with students to encourage student-to-student, student-to-instructor and student-to-content engagement.

Professor Rebecca, who added reflection journals, commented that having open-ended questions that students answer in the reflection journal can provide an opportunity for a structured dialogue between the instructor and students and allow for a more meaningful student-to-instructor connection. Professor Rebecca used the reflection journals as a strategy for metacognition. She gave students a space to express their thoughts about the course content (student-to-content engagement) and reflect on their learning. Questions that she asked students to answer in their reflection journals were:

- What is one learning outcome from this week that most interests you and why?
- What learning outcome do you feel the most confident with?
- What learning outcome do you feel the least confident with?
- What are you currently doing that is helping you to do well in this course?
- What can you do to improve in this course?

Please feel free to add any other comments or questions you wish to ask your instructor.

Professor Pauline also added reflection journals to her course and converted an individual paper into a group assignment to create more student-to-student engagement. She said that several students commented how "different" the course was compared to other online courses they have taken. In her write-up she said that students "seem to love the new tools."

Professor Penelope added a group assignment, journal assignment and rubric to her course. She stated in her write-up, "In order to bridge the gap between the knowledge students learned from the textbook and the business operations experience, I designed a group project for students to complete. Each student group needs to apply knowledge from the course to solve a real-world problem." She made the journal tool available for each group "to enhance the development of critical thinking and increase students' engagement with their team members and instructor." The journal was a space for students to post opinions, ideas and concerns about their project, or discuss and analyze project-related materials between instructor and students. Her instructions for the journal were as follows.

Please make sure your journal includes the following information:

(1) the progress achieved in your project during the week;

(2) the difficulties you encountered during the week and how you resolved the problems;

(3) useful published resources you would like to share with your team; and

(4) any other comments or questions you wish to ask your instructor.

Professor Penelope used scoring rubrics to communicate expectations, provide feedback and evaluate the quality of the journal assignment and group project. Rubrics were also used to delineate consistent criteria for grading. The journal assignment was evaluated using three criteria: reflection, clarity and grammar. The levels of achievement were novice, competent and proficient. She stated, "The rubrics not only made the evaluation in grading consistent, accurate, and fair, but were also used as a formative tool to help students develop understanding and skills and make independent judgments about the quality of their own work."

Professor Penelope surveyed her students and found that "The students demonstrated an apparent increase in engagement and enthusiasm toward the subject matter and depth of learning through the group project and journal assignment." Some of the comments she received from students were:

> My engagement in the class was increased with the journal assignment and the group project.
>
> I definitely had a lot of interactions and discussions with my team members when working on the group project.
>
> My professor provided timely feedback on my project through the weekly journal.
>
> I like the rubrics. They help us understand the expectations and provide us guidance when we write the journal and project report.

Professor Karen created a blog assignment for her course. She used audio and webcam to pose the question: "How does the public view nursing?" Students were placed in groups of three to four to complete the assignment to allow for student-to-student engagement. Students had to answer the question using audio and or webcam and post it to the blog. She stated that "This allowed for more intimate interaction between students and the opportunity to get to know each other. Working on an interactive assignment with one another will help provide an interactive environment." She created a video presentation using Power Point and Kaltura to provide the instructions for the assignment, which allowed some variety in the way content was presented in the course to encourage student-to-content and student-to-instructor engagement. Professor Karen also used a rubric to evaluate students' work and provide feedback and encouragement to students. After surveying students, she found that a majority of students (69 percent) responded positively to the blog assignment. In terms of her experience, she stated, "This was a positive learning experience for [me] as well. I was able to extract more of what the student understood of the topic posed through audio and video."

Professor Ned created webcam videos using Kaltura to introduce students to the topics and assignments each week, which created more of his instructor presence in the course. He also used the screen recording option to create instructional videos that walked students through solving problems in Excel. Video can be an effective way to explain a process or method and can allow for student-to-content engagement. To engage students with the content and incorporate active learning, Professor Ned had students do problem exercises to allow students to "learn by doing" and "take control of their own learning process" rather than just read the chapters. Professor Ned changed the discussion board questions in the class to make them more relatable and practical. He stated that he "learned (in ETLS) that discussion questions should be relevant to the student's own experiences, should be more applied than theoretical, and use external sources and visuals

to have an engagement effect." Here are some of his discussion board questions that he added to encourage student-to-content and student-to-student engagement:

(1) How do retail stores display their merchandise taking into account substitute or complementary goods? Give some examples and post pictures of any displays you see to illustrate your point.

(2) Watch this YouTube video on a parent's decision. How would you measure the opportunity cost of the parent in the video? How would you measure the opportunity cost of the kid?

Professor Ned replaced an individual paper with a group wiki to create more student-to-student engagement. He stated that "group work also has the potential to promote peer-to-peer learning, improve skills in the area of teamwork and leadership, as well as writing and research skills." Rather than having one large research paper that students submit as individuals at the end of the course, he had students work in groups to split up the assignment into "weekly doable sprints" where a portion of the overall assignment draft is due each week such as the introduction, empirical evidence, analysis and conclusion. This also allows the instructor to provide weekly feedback to the groups to allow for greater student-to-instructor engagement. He gives students the choice to pick a company to do their assignment on, which gave students more autonomy in decision making. Professor Ned surveyed students each week to get their feedback on how the course was going for them which helped him make adjustments to his teaching and support for students.

Professor Caroline stated in her write-up that teaching online in the past has made her feel "empty as a professor" and that she "was not connecting with [her] students like [she] had when [she] would teach face-to-face courses." She stated, "After participating in the ETLS course it truly opened my eyes to so many different ways we can enhance our courses online to help students connect with each other, the content, and us, the professors." She added an introduction video to her course, conducted live synchronous sessions with students, and added virtual office hours for students to log in and ask questions via Blackboard Collaborate Ultra web conferencing platform. Having live sessions with students allowed her to humanize herself to students and connect with them more authentically both as a class and one-on-one.

Professor Jackie redesigned her graduate capstone data analytics course using the Trifecta of Engagement. Her course includes an oral proposal presentation of students' thesis topic and a written thesis. She was inspired to re-design her students' oral presentation assignment after watching a Ted Talk by Melissa Marshall on the importance of communication skills for scientists and engineers. Professor Jackie decided to do away with the traditional presentation formula her students typically used to present their thesis proposals and replace it with a more engaging method. Traditional presentations typically contain lots of bullet points and jargon and can easily turn into, "death by Power Point" she said. So, instead, Professor Jackie taught her students about the assertion-evidence method for giving presentations in which the objective is to make complex topics understandable to a wider audience. The assertion-evidence method makes statements, or assertions, and backs them up with facts rather than simply presenting facts on their own. This student-to-content engagement strategy not only helps students make their presentations more engaging but also enhances students' engagement with content as they synthesize information and think about how they can present it using the assertion-evidence method. Jackie also used the assertion-evidence method when giving her presentations in order to model this practice to students.

To scaffold and build students' skills in giving presentations, Jackie had students do 10-min practice presentations on various course topics, which also enhanced students' engagement with content. She added rubrics to evaluate the quality of presentation

information as well as the delivery of information, which she used to provide feedback on students' work.

Other ways she incorporated student-to-content engagement strategies followed UDL principles. Jackie added videos to her course to add variety in the way the content was presented, which can be engaging for students. She included short videos on sample presentations and had students discuss these presentations (e.g. what was good, what was bad, and how they could apply what they learned to their own presentations) in a threaded discussion board with their peers to encourage student-to-student engagement. In her synchronous live Collaborate sessions with students, she created a breakout activity for students to discuss characteristics of engaging speakers. She also had students work collaboratively in groups to re-design Power Point slides from traditional to assertion-evidence as a formative assessment.

In terms of student-to-faculty engagement, Professor Jackie used a team-teaching approach to provide more individualized support to students. She enrolled librarians in her course to assist students with research and utilizing the library resources. To engage students with content, she also had one of her faculty colleagues come to her class to share his experience connecting course concepts to his work developing data dashboards. Having a guest speaker talk about practical examples of content used in real life can be engaging for students.

In terms of the results of her teaching strategy and using the assertion-evidence method to replace the traditional method, Jackie saw the minimum grade go from 66 to 78, the maximum grade go from 79 to 91 and the average grade go from 73 to 84. In the webinar she gave to showcase her application of the Trifecta of Engagement, Jackie commented that the ETLS course "enhanced [her] teaching."

Professor Samantha created a course introductory video to provide an orientation and virtual tour of her course. To engage students with content, she used case studies and had discussions with students about the case studies in her synchronous Collaborate sessions. Students have to write their own case studies as well where they apply the course concepts to a real-life case. Professor Samantha created an instructional video to explain the assignment, provide expectations and supply examples.

To engage students with their peers, Professor Samantha had students do a group case study project where they were given a choice of writing a group paper or doing a group presentation (either in a synchronous Collaborate session or record their presentation) the last week of class. Giving students choice in the deliverable follows the principles of UDL. Allowing students flexibility to complete the project asynchronously can be particularly helpful for busy adult learners. For the group case study project, students identify the issues, theories and concepts of the case and design an appropriate intervention. Students also write a group reflection to discuss how the project went and what they learned to allow students to engage in metacognition for deep learning.

Professor Samantha added an embedded rubric in the assignment so students could view the rubric before completing the assignment, which she had not done before. She asked students for feedback on the rubric. She used the rubric both to grade and to provide substantive feedback on the assignment to enhance student-to-instructor engagement. She also explained the rubric in more detail in her instructional video, which added more of her instructor presence to the course and differentiated the instructions by using visual and auditory elements.

In examining the impact of changing her teaching strategies, Professor Samantha looked at the average grades for the three case study assignments (the signature assignment for the course) and compared them to the same course she taught the previous year. She found that in the recent course, student grades improved more steadily by over 11 percentage points. In the previous year's course, student grades improved by a little over 3 percentage points. In the course taught the previous year, the average grade for the

first case study was 82.21 percent. The average grade for the second case study jumped to 85.56 percent (an improvement of over 3 percentage points). The average grade for the third case study went down a little to 84.86 percent (a decrease of 0.7 percent). In the recent course, the average grade for the first case study was 78.70 percent. The average grade for the second case study jumped to 83.33 percent (an improvement of over 4 percentage points). The average grade for the third case study jumped to 87.73 percent (an improvement of over 4 percentage points). In sum, the recent course improved 8 percentage points higher than the course the previous year. She also saw the average GPA go from 3.081 in the previous year's course to 3.233 in the recent course, an improvement of 0.152. Professor Samantha attributed this improvement in the recent course to the quality of the synchronous Collaborate sessions, the utility of the instructional videos that gave students guidance on how to write their case studies, usefulness of the embedded rubrics that students had access to prior to beginning their assignment, and the feedback students were given by the instructor to help them improve their case study assignments. She also went through past iterations of this online course and tallied up the average student assessment of learning from the end-of-course evaluations. The student assessment of learning averaged 4.13 from previous years. In the most recent course, the student assessment of learning averaged 4.70, an increase of 0.57. Professor Samantha commented, "What seems to be happening is that I'm seeing improvements in how well [students are] learning and their ability to integrate feedback and instruction. So that was pretty exciting to me."

Professor Samantha also surveyed students regarding her teaching practices. She asked students if they watched the course introductory video. Of the student respondents, 80 percent said they watched the video and 20 percent said they did not watch it. Of the students who watched the video, a majority (47 percent strongly agreed, 33 percent agreed, 20 percent Not Applicable) that the video helped them understand the requirements of the course. Students were invited to share comments related to the video. One student said, "I wish that some of the other courses would have done the same. The video helped me get a better start." Another student said, "It was very helpful with navigating throughout Blackboard and gave me a clear picture of what to expect." Another student commented, "English is my second language so not only reading but hearing the instructions is very beneficial for me. It helped me comprehend and, frankly, I wish all professors did this." Another student said, "It was very helpful to me. Being in an online class, it is hard to build a relationship with your teacher behind the computer screen, but the introductory video really helped and allowed me to feel a sense of comfort before starting the class. I wish all my classes had it."

A majority of students (73 percent) watched the case study instructional video. A majority of students strongly agreed (27 percent) or agreed (40 percent) that the video helped students to be successful when writing their case studies. A majority strongly agreed (40 percent) and agreed (40 percent) that the videos helped students feel more connected to their instructor. A majority of students strongly agreed (67 percent) and agreed (20 percent) that the Blackboard Collaborate synchronous sessions helped them to be more engaged with their instructor. A majority of students strongly agreed (53 percent) and agreed (27 percent) that the Blackboard Collaborate synchronous sessions helped students feel more connected to classmates. A majority of students strongly agreed (67 percent) and agreed (20 percent) that the Blackboard Collaborate synchronous sessions helped students better understand the course material and requirements. A majority of students strongly agreed (53 percent) and agreed (33 percent) that the rubric helped them better understand how they would be graded. The group project received mixed reviews. Of the student respondents, 27 percent strongly agreed and 40 percent agreed that the group project helped them to be engaged with classmates. A majority of students strongly agreed (13 percent) and agreed (47 percent) that the group project helped them to better understand the course

material. When invited to give comments, one student said, "I didn't really want to do it but communicating with other students has been a good experience."

Professor Samantha also commented that her experience teaching the course was different. She said, "Through the group project, I was better able to see what [students] were learning and how they were incorporating feedback."

Discussion of findings

The following section describes the findings from faculty participating in the ETLS course. Findings are divided into the following categories: impact on students; and faculty satisfaction with the ETLS professional development course.

Impact on students

Faculty were encouraged to determine the impact their teaching had on students when applying the Trifecta of Engagement framework to their course. Three out of the eight faculty chose to survey their students to determine impact. Professor Penelope shared comments from her students, which indicated that they responded positively to the use of new tools (journal, groups and rubrics) as well as her instructor feedback. One of her students said, "My engagement in the class was increased with the journal assignment and the group project." Professor Penelope stated that, through the use of these tools and strategies, she thought that "The students demonstrated an apparent increase in engagement and enthusiasm toward the subject matter and depth of learning."

Professor Karen also surveyed her students on her use of the blog tool in which her survey results indicated that a majority of students (69 percent) had responded positively to her blog assignment. She stated that "Student feedback, in general, was positive but they did not feel [the blog] took less time than the original discussion board. There was a mix of those who were comfortable with just using audio and others who enjoyed combining both audio and video." She also found that a majority of students (76.92) had difficulty with the blog instructions. She noted that "Improvements should be made to the instructions on how to access the blog assignment within the course and how to complete the assignment."

Professor Ned surveyed his students every week asking them if they found the tools and activities (homework exercises, Kaltura videos and threaded discussions) helpful to their learning. Students reported the homework exercises, videos and threaded discussions did help their learning of the material. One of his students said, "I think it's better to have the homework per chapter that way it gives students a push to study the material. And it also makes it easier to retain the information." Professor Ned noted he was "surprised that 100 percent of students support weekly homework assignments, [in which] all of them mentioned that it helps learning and preparation for tests." He also found that all the students reported that they liked the discussion questions. One student said, "I like the threaded discussions, the topic was fun to write about and it seems like it gives us more of an option to write about rather than doing research on a topic." Another student said, "The experience was good because the introduction video was very helpful." Professor Ned reviewed his students' comments every week to adjust his teaching and provide additional support where needed.

Professor Samantha surveyed her students to get their input on her use of tools and teaching practices. She found that a majority of students (73 percent) watched her instructional video and (67 percent) found it helpful for their assignment. A majority (80 percent) also felt that the videos made them feel more connected to the instructor. A majority of students (87 percent) felt the synchronous live sessions made them feel more engaged with their instructor and classmates and also helped them with their understanding of the material and requirements. A majority of students (86 percent) found the use of a rubric helpful in understanding how they would be graded. A majority of students (67 percent) felt that the group project helped them to

be engaged with their classmates and (60 percent) felt the group project helped them better understand the course material. Overall, students seemed to respond positively to Professor Samantha's use of tools and teaching practices.

Two faculty examined students' grades to determine if there were changes in student outcomes. Professor Jackie saw an improvement in the overall grades of her course. Professor Jackie compared the same course she taught previously to her recent course after applying new teaching strategies from the ETLS course. In her recent course, she saw the minimum grade increase by 12 percent, the maximum grade increase by 12 percent and the average grade increase by 11 percent.

Professor Samantha also compared student grades from the same course she had previously taught to the course she taught after incorporating new teaching tools and strategies from the ETLS course. She found that student grades improved 8 percentage points higher in the second course. She also found that, in the end-of-course evaluations, student assessment of learning increased by 0.57. She attributed the improvement to students' satisfaction with and effectiveness of the new tools and teaching strategies employed.

These preliminary results seem to indicate that, overall, students reacted positively to faculty's use of new tools and teaching strategies in online courses. For faculty who examined student outcome data, the results show an improvement in student achievement and satisfaction.

Faculty satisfaction

After faculty completed the ETLS course, they were invited to take a survey to provide their feedback on the course. Seven out of the eight faculty participated in the survey. Faculty were asked to rate their overall satisfaction with the ETLS course on a Likert scale. Of those who participated, 66.66 percent indicated that they were very satisfied and 33.33 percent indicated that they were satisfied with the course. Faculty were asked which Blackboard tools they were familiar with prior to taking the ETLS course. Of the tools listed, only one tool (rubric) was familiar to faculty who answered the survey. Faculty indicated that prior to the ETLS course, 66.66 percent were not familiar with using Kaltura (to create videos); 83.33 percent were not familiar with using self and peer assessments; 16.66 percent were not familiar with using the groups tool; 66.66 percent were not familiar with using journals; and 100 percent were not familiar with using blogs or wikis. Survey results indicate that every faculty member who participated in the ETLS had the opportunity to learn some new teaching tools that they were not already familiar with.

Some of the faculty had stated that they appreciated the opportunity to learn and practice new tools, as this is not something they regularly seek out on their own due to competing priorities. In this situated learning context, faculty had opportunity to learn new tools with peers in a community of practice. Because faculty are very busy and have to prioritize their time carefully, one of the benefits of this professional development program was that faculty were compensated for their time with funds from the grant. If faculty are not compensated for their time, participating in professional development may not be a priority.

Overall, the comments faculty made in their final projects regarding the ETLS course were positive. Professor Pauline said that her students "seem to love the new tools." She stated that she "is very excited for the students and for [herself]." Professor Jackie said that the ETLS course "enhanced [her] teaching." Professor Samantha said was "very excited by the results" in her class. Professor Karen said that "This was a positive learning experience for [her] as well." Professor Penelope said that participating in the ETLS course "was a rewarding experience." She stated that she "learned how to create course content that appeals to diverse learning preferences; how to create activities that promote peer-to-peer learning and collaboration; and how to use advanced assessment strategies and give effective feedback."

Professor Ned said that the ETLS course "made a difference" in his teaching especially in thinking though how to engage students. He also noted that he had more "confidence to try new Blackboard tools." But he also acknowledged that the ETLS course was not "just about the tools. It included learning theories and best practices to ensure active and deeper learning." He stated that the course connects the tools to "a teaching and learning purpose which is different than previous Blackboard courses offered." He also appreciated that the course was "a true learning experience with instructors participating as students." He said that this is "the first time he was able to experience the pressures his students must feel when they are taking [his] courses." One of the things he realized during this ETLS course experience is he "abuses the use of readings in his courses and that [he] limits his students to paper assignments." He now plans on incorporating UDL principles by adding variety in the kind of content offered, such as videos and video quizzes and will "diversify the kind of student assignments through wikis, blogs, and papers." Before taking the ETLS course, he was "already convinced that learning was collaborative." But through the ETLS course experience, he "got more ideas to improve group assignments such as peer assessments for group assignment and group presentations." He recommends faculty to take the ETLS course to improve their teaching.

Professor Caroline said that participating in the ETLS course "truly opened [her] eyes to so many ways to enhance online courses to help students connect with each other, with content, and with professors. Completing this training has given [her] many options and ideas to improve the courses that [she teaches]. In using several of the techniques and strategies learned, [she] feel[s] more fulfilled as a professor. [She is] making greater connections with students and [is] eager to engage the adjunct faculty in some techniques and strategies that [she] learned in the ETLS course."

Professor Rebecca stated that participating in the ETLS was "a really wonderful experience in so many different ways. [She] got to meet a lot of educators who were facing the exact same problems that [she] was in online teaching." She stated that there were "some really great facilitators and guest speakers who modeled some excellent strategies to overcome some of the difficulties." She also said that "The course itself was really helpful. The online learning lab [allowed her] to try out new tools that [she] never tried before in an environment where it was ok to explore and play with them and see how [the tools] might [be used] in [a] class. Some of the tools that [she] ended up using were really useful in onsite courses as well. Journals and Collaborate Ultra were helpful in getting students to connect with [her] in an online environment." She "really recommend[s] this course to other professors and recommend[s] that this course continues because educators have to learn all the time to stay on top of [their] game." She stated that "Even if you've been teaching online for 10 years or you're a pro at Blackboard, there's always something new you can take away and try in your classroom. And this course gives you a chance to think about that."

In terms of the content of the ETLS course, faculty seemed to be satisfied with the quality of the content and the facilitation of the course. One faculty stated in the survey that "the quality of the content [was] great and the materials [were] delivered well." Some faculty thought there was "too much content" and that the course should be reorganized into smaller units or stand-alone micro-courses. Some faculty also stated that the time frame of six months for the ETLS course was far too long and that the timeline needed to be shortened.

Next steps for the ETLS course

After completing the first pilot of the ETLS course, many lessons were learned through both trial and error and feedback received from faculty. Because the grant funding was extended for an additional year, a second pilot with new faculty will be scheduled to further refine the course and test the impact. The course duration will likely be shortened and some of the content may be condensed, removed or marked as supplementary. In terms of evaluating

the outcomes of the ETLS course, quantitative measures will need to be put in place including the development of a survey instrument and/or a standardized data collection method that faculty can use to collect student outcome data. Student outcomes data can then be captured and compared to further determine the impact of the ETLS course. There may be a need for some professional development for faculty in the area of educational/action research methodology to measure student responses to course changes. After the ETLS is piloted with a second group of faculty members, a determination can be made on how best to make the course available to more faculty, particularly adjunct faculty who teach a majority of the courses at National University.

Recommendations for future research

The following section provides some recommendations for future research. Despite the fact that many faculty members who participated in the pilot had been teaching online for many years, some had stated that this was the first online course they had ever taken as a learner (aside from the Blackboard training). Further, some faculty said that it was refreshing to experience the student perspective as it gave them a lot of first-hand experience and insight into the challenges that online learners face. This realization brings to mind the question of whether being an effective online learner correlates to effective online teaching. Or, at least, whether gaining experience as an online learner can have a positive impact on effectiveness of online teaching. In design thinking, the first step in designing anything is to develop empathy for the user (Stanford D School, 2010). Whether or not this method of developing learner empathy through an online learning experience can have positive effects for online teaching requires further study.

Another area that is ripe for research is the development of an evaluation model to measure the effectiveness of an online faculty professional development program. Ideally, this model would be able to assist decision makers and institutional stakeholders in determining the impact of their faculty development programs in terms of student outcomes achieved and return on investment.

There is also opportunity for faculty to create their own scholarship based on their final projects and their application of the Trifecta of Student Engagement framework. Many faculty members who participated in ETLS course implemented innovative teaching practices and those innovations can be added to the body of the scholarship of teaching and learning. What was fascinating about the way that faculty applied the Trifecta of Student Engagement framework was the diversity of ways faculty applied it. Every faculty member applied the framework differently to their own courses. Because the framework is not prescriptive, faculty had the creative freedom to innovate using the framework and experiment with new methods, tools, pedagogies, and strategies. Faculty can use the Trifecta of Student Engagement framework in their own empirical research to further the study of effective online pedagogy.

Conclusion

This paper provided a description of a faculty development course that utilized a learner-centered framework for engaging students in an online course. This framework proposes that students, in order to be fully engaged in an online course, need to be engaged with the course curriculum content, with their peers, and with their instructor (Moore, 1989). The course has three units on engaging students with content, engaging students with students and engaging students with their instructor. Each unit is based on best practices and strategies for online teaching grounded in the literature such as the use of media (videos) to supplement written course content to promote student-to-content engagement, collaborative constructivist social learning activities to encourage student-to-student engagement, and assessment, feedback, and facilitation methods to foster student-to-instructor engagement.

This course has gone through one pilot and has had some positive impacts on students and faculty. This course is now in the process of being scaled out to more faculty for a second pilot. The course will be revised based on faculty's suggestions for improvement. Other institutions looking to create a faculty development course that utilizes a student-centered framework may find that there are aspects of this course they may want to use for their own online teaching professional development initiatives.

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