EFFICIENT STRATEGIES FOR MAXIMIZING ONLINE STUDENT SATISFACTION: APPLYING TECHNOLOGIES TO INCREASE COGNITIVE PRESENCE, SOCIAL PRESENCE, AND TEACHING PRESENCE

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ABSTRACT

As online learning continues to increase in popularity, it becomes more important to explore as many strategies and tools as possible to continually improve teaching and learning in the online modality. This paper explores the experiences of an online full time faculty member in the use of Flipgrid, Loom, Remind, and the Digital Breakout/Escape Room strategy. Each of these tools and strategies can help to decrease the factors of transactional distance and also provide opportunities to increase cognitive presence, social presence, and teaching presence to create a community of inquiry. Future research is needed to gain empirical evidence of the effects of using these tools and strategies, as well as others that were not discussed here.

Keywords: Online learning, community of inquiry, CoI, transactional distance, Web 2.0 tools, cognitive presence, social presence, teaching presence.

INTRODUCTION

Online education has continued to grow in popularity and it does not show any signs of slowing down (Allen, Seaman, Poulin, & Straut, 2016). With this growth in enrollment in online classrooms, it is important to provide students with the best learning experience possible. One of the perceived obstacles with online learning has been identified as the transactional distance between the learner and the instructor (Moore, 1993). The community of inquiry model (CoI) has identified three different elements that are important in the online classroom for optimal student learning: social presence, cognitive presence, and teaching presence (Garrison, Anderson, & Archer, 2000).

After a review of the literature, the authors will describe how to implement some Web 2.0 tools and other strategies to engage online students, provide a community of inquiry, and minimize transactional distance in the online classroom.

TRANSACTIONAL DISTANCE

Transactional distance theory describes how a learner can feel separated from the class and instructor in distance learning (Moore, 1993). In online learning, students can feel that they are alone unless the instructor of the class creates different strategies to connect learners to the classroom material and instructional practices. There are many tools and strategies that online instructors

can employ that will bridge this distance between the student, instructor, and learning materials.

COMMUNITY OF INQUIRY (COI)

In addition to transactional distance, a community of inquiry (CoI) can also help to bridge the perceived distance felt by students and instructors in the online modality (Garrison et al., 2000). CoI is a community of collaboration between learners and instructors to find meaning and understand concepts. The authors described three elements of CoI, which are cognitive presence, social presence, and teaching presence. Each of these will be described below.

Cognitive Presence

Cognitive presence can be defined as the ability "to construct meaning through sustained communication" (Garrison, et al., 2000, p. 89). Cognitive presence includes a "triggering event, exploration, integration, and resolution" (p. 89). Garrison et al. (2000) explained that cognitive presence is centralized by the encouragement or restriction of communication. Adding strategies to the online classroom in the form of technological tools or gamification could help to foster communication between students and instructors and among students.

Social Presence

Garrison et al. (2000) explained that cognitive presence alone cannot develop a strong community of inquiry. Social presence is an important factor that can support cognitive presence and is defined as the ability for learners to "project themselves socially and emotionally" (p. 94). The authors stated that this can be achieved through collaboration and critical discourse. Social presence can be supported by the strategies discussed later in this article.

Teaching Presence

The final element of a community of inquiry is teaching presence. Garrison et al. (2000) explained that it is critical to a community of inquiry to have a strong teaching presence to support cognitive and social presence. Garrison et al. (2000) described two functions of teaching presence: "design of the educational experience" and "facilitation" (p. 90). Both functions are directly related to the instructor's role in the online classroom. Technology tools and teaching strategies can help to create the kind of teaching presence that can help online classrooms become communities of inquiry.

Because online learning is growing at a rapid pace, it is important to find strategies that can bridge transactional distance and create cognitive presence, social presence, and teaching presence. The experiences of one online full time faculty member will be discussed in the following sections. Three Web 2.0 tools will be explored (Flipgrid, Loom, and Remind) as well as another strategy that helps to bridge transactional distance and create a community of inquiry (Digital Breakout/Escape Room).

Name of tool/ strategy	Web Address	Brief Description
Flipgrid	https://info.flipgrid.com/	Video discussion platform
Digital Breakout/ Escape Room	https://www.breakoutedu.com/digital	Activity "breakout"
Loom	https://www.useloom.com/	Communication tool using video
Remind	https://www.remind.com/	Communication tool using text message

Table 1. Web 2.0 Tools

FLIPGRID

Flipgrid is an asynchronous video discussion platform that allows students to record their thoughts in response to a teacher created topic. Topics (which are equivalent to prompts or discussion questions) can be written text, videos, or a combination of both, to spark discussion. Similar to traditional threaded discussions, students and instructors can respond and reply to the video Flipgrid posts shared within a topic. However, Flipgrid provides opportunities to foster face-to-face interactions that cannot be achieved in a written forum post. In an online environment, social presence has a large impact on student satisfaction and achievement (Zhan & Mei, 2013). Students are eager to put faces to names in an online environment, and instructors are constantly looking for ways increase engagement in weekly discussions. Flipgrid gives instructors and students a platform to make connections and build social presence despite never meeting in person.

Students can respond to a Flipgrid topic with a variety of devices including computers with webcam capabilities, tablets, and smartphones. Flipgrid can

also be utilized through an app that increases ease of use even more. Online students are thankful to quickly access classroom discussions through the app and complete discussion requirements on the go, between work and family commitments, and without having to log in.

DIGITAL BREAKOUT/ESCAPE ROOM

Escape rooms have recently increased in popularity. Participants have to solve a series of clues and locks to "break out" of a physical location in a set amount of time. Teachers have also incorporated this concept into their classrooms with physical boxes for students to break into by solving a series of word problems, finding hidden clues, or decoding information surrounding a specific standard or concept. Digital breakouts have also been developed where students enter their clues and codes within Google Forms to break out of an activity that shows evidence they have found information or solved equations to demonstrate mastery of a concept.

Research indicates that gamification does increase student participation and engagement in online settings and in-person learning environments (Hamari, Koivisto, & Pakkanen, 2014). Incorporating the escape room/digital breakout concept into an online environment motivates students to take on a challenge in the form of a game and provides instructors with physical evidence that students have visited a specific place within the learning management system, applied a concept correctly, or located certain resources, like instructor feedback, that are often overlooked. Instructors can simply hide "secret words" in grading feedback documents and by asking the student to state their "secret word" in a message or forum post, they can easily tell who is accessing the feedback and who may need additional coaching to utilize given resources within a course.

LOOM

Students have indicated that including video in an online environment helps to foster an emotional connection and makes them feel like their instructor is a real person, and feel confident they could count on their instructor for help (Borup, West, & Graham, 2012). Loom is a Chrome browser extension that allows instructors to record personalized video feedback for students to support instruction, answer questions, and provide grading comments. Instructors can record video welcome messages for their whole class and share them simply by coping and pasting a link into a forum, email, text message, or grading comment box. Students are immediately taken to the video and the instructor can see how many times a video was viewed or if students left any comments within the Loom video. Synchronous meetings can cause scheduling and timing delays as students cannot always meet at the offered time, but Loom allows the instructor to still welcome students at their convenience.

Unlike most learning management systems, Loom tracks how many views each video receives. This gives instructors evidence for which students are actually viewing the video feedback and provides additional opportunities to coach students on how to find feedback or follow up with them to ensure understanding if the video was not viewed. Students are given evidence that their instructor read their submission and can replay their instructor feedback video at any time, which is better than a coaching phone call, for example, that can only be experienced once. Instructors can capture their screen, face, and audio simultaneously, or choose any combination of those three options. Adding the screen capture to videos allows instructors to make changes, additions, or adjustments to a student's work while talking through the suggestions.

REMIND

Billions of text messages are sent every day and many students prefer text communication over emails, phone calls, or forum messages. Remind is a tool that allows instructors to communicate with students through text without having to share their personal cell phone number. When an instructor signs up, a code is provided for students to use to join their class and connect with their instructor. Instructors can send the whole class announcements, group messages, or communicate privately one-on-one with students through Remind. Sending reminders directly to student cell phones can be helpful for students who are juggling school, work, and family, and may not be able to log into their learning management system frequently throughout the day to check messages.

Remind is a great tool to use in conjunction with other technologies like Flipgrid or Loom. Video links and discussion grids can be texted through

Remind, which is more convenient for instructors, as opposed to emailing each student individually to remind them about additional posts or resource options. Reminders can also be sent when grades are finished, tests are coming up, or if instructors will be out of the office. Positive praise can also be quickly communicated through Remind, even in the form of images, emoticons, or gifs.

CONCLUSION

Each of the tools and strategies described above have an impact on transactional distance and in creating a community of inquiry. Flipgrid provides an opportunity for students to see classmates and the instructor as if they were in a traditional face-to-face classroom. This helps to break down the perceived distance between the members of the classroom and helps to put a face to a name. In addition, Flipgrid can help to create cognitive presence, social presence, and teaching presence.

The use of the digital breakout/escape room strategy provides the opportunity for students to play a game while learning the content of a class. This strategy can increase student participation in the online classroom and increase student learning outcomes. It also provides a space for teaching presence and cognitive presence through increased student engagement and instructor feedback.

Loom provides an opportunity to quickly add video feedback to student assignments as well as create either individual or group video announcements and screencasts. Again, Loom provides the opportunity to decrease transactional distance between the instructor and students in the online classroom, and it provides cognitive presence and teaching presence in the form of instruction and assignment feedback.

Finally, Remind is another excellent tool to provide students with text message announcements or updates for class. Remind can also become a vehicle for delivering Flipgrid or Loom messages. With these capabilities, Remind can bridge transactional distance and provide cognitive, social, and teaching presence for online learning.

This article contains reflections on an instructor's application of these tools and strategies. It appears that each of these tools and strategies decreases transactional distance and increases the elements of a community of inquiry. Future research is recommended to gain empirical evidence of the positive effects of these tools and strategies as well as others that are being used in the online classroom.

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