Engaging Students in Asynchronous Online Courses

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According to the Best Colleges.com (2018) survey of online programs, fully online programs have increased by approximately 31% between 2016 and 2017. Prior to the 2020 Pandemic at least 25% of all Minnesota State University (2019) courses were online system wide. Due to the impact of COVID 19, the move to virtual learning has been quick and often without the professional development and other infrastructure supports historically provided faculty in making the transition to online instruction. This lack of appropriate support has been one of the reasons the past year's instruction has often been referred to "remote learning" as opposed to the traditional terms of "online" or "virtual" learning (Craig, 2020). This practice has helped to accentuate the need for proper pedagogical professional development for instructors to be fully prepared to teach in an online environment. According to Lederman (2019), only about half of professors are comfortable in an online environment. Meanwhile, only 26% of college students are satisfied with an entirely virtual classroom experience (Burke, 2020). During the spring of 2020, in some reported cases, at least 40% of students were not engaged in their remote or virtual courses (Quesada, 2020).

As the potential for remote or virtual learning appears to be pushing into the spring of 2021 (Liesman, 2020; Natanson. & Strauss, 2020), it is essential to ensure instructors have the ability to engage their online students. Students and faculty are both concerned about ensuring adequate engagement within online courses. Therefore, as a project with the scope of a scholarship of teaching and learning grant at a midwestern university, the author and several faculty colleagues looked to determine the impact on student engagement of three key approaches to improving student engagement in online asynchronous graduate courses. The first was the potential impact of providing student choice within the required discussion threads of the course. The second was the impact of requiring students to complete an introductory video for a course. A third was adding a voluntary synchronous study session to an asynchronous online course to engage students more fully.

Research Questions

During the 2019-2020 academic year, several faculty in an online asynchronous graduate program decided to try to determine effective ways to improve student engagement in the courses. There were three primary research questions:

Research Question 1: Did student choice in asynchronous online discussion boards generate more student engagement?

Research Question 2: Did the addition of a video-based introduction requirement increase student engagement?

Research Question 3: Did the inclusion of a voluntary weekly synchronous study session improve student engagement in an otherwise asynchronous course?

This research study was limited to fully online asynchronous courses as part of a graduate program at a midwestern university leading to a degree in either special education or educational administration.

Background

One of the reasons students are concerned about online courses is the lack of personal engagement with the instructor and their peers. At the same time, potential students are worried about the potential lack of quality in online programs and the perceived lack of interaction and community among classmates and with the professor. (Best Colleges, 2018; Burke, 2020). Student engagement remains a significant concern for online instructors.

A secondary factor considered was whether or not students participated in a video introduction with their peers at the beginning of a course. A recent metanalysis (Ma, 2019) considered video introductions as a key determining factor of student engagement. Similarly, the University of Phoenix's College of Doctoral Studies (2020) stated 85% of students felt all online courses should include a welcome video and 95% of students felt an instructor's welcome video encouraged them to reach out to their instructors.

Methodology

This exploratory mixed method study reviewed the impact of three particular instructional practices on student engagement within asynchronous online course discussions, the provision of choice to students within the discussion prompts (RQ1), the use of video introductions within the course (RQ2), and in two courses, the addition of a voluntary synchronous study session (RQ3). The methodology consisted of an ex-post facto analysis of the student responses to weekly discussion prompts in multiple sections of asynchronous online

graduate courses and a review of the data available from within the CANVAS LMS system. Some of the discussion prompts provided students choice in what to discuss and others did not provide for student choice. The initial review was an analysis of the number of posts per student and the overall word counts of those responses.

The fact of whether or not students were asked to participate in a video introduction to their classmates was considered as another potential factor in developing student engagement as well in conducting a similar analysis (RQ2). The research then considered the overall grades earned by students for the discussion posts, the length of their posts, and the number of posts the students made. Increases in those areas were considered to be evidence of increased engagement by the student when the requirements within the course was not otherwise modified.

In addressing the third research question, the researcher reviewed the system end of course surveys to identify the potential impact of the synchronous study sessions. Additionally, the students from the Summer 2020 course sessions were provided the opportunity to complete a survey to respond to the impact of the instructional changes intended to increase student engagement in their courses. The non-demographic questions from the survey queried students about:

1. Do you feel you are learning enough in the course at this time?
2. Do you feel the optional Zoom sessions are helpful?
3. Do you think I am participating or moderating the discussion questions?
4. Do you prefer to have a couple of questions to select from in the discussion threads or would you prefer all students to answer the exact same discussion prompts?
5. Do you feel you are getting adequate feedback on your assignments?
6. Do you find the video introductions helpful as a way to get to know each other?
7. If we were able to allow for greater differentiation in the course, by allowing students to choose one or more modules to complete would you be in favor of that approach?
8. What additional things could I do to improve student engagement within my online courses?

Prior to employing the new options for students, students in courses without choice within the discussion prompts were asked if they felt providing choice within the discussion prompts was a good idea. The results were initially split. The question, "Would you prefer to have a couple of questions to select from or continue to have everyone in the class respond to the same questions?" How respondents answered is shown below in Figure 1.

Figure 1
Percentage of students who wanted to implement choice in discussion threads.
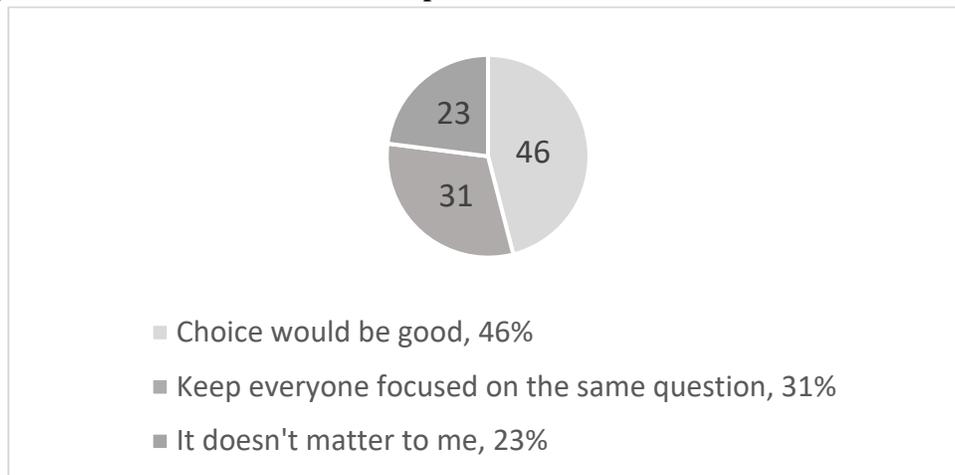
The discussion threads were then divided into those offering choice and those without student choice. They were compared by number of student posts, the length of posts, and the overall grades obtained by students for each approach to the discussion section of the course. A similar review was conduced based upon whether or not the course required an introductory video. The survey results were relied upon for the impact of the synchronous study sessions as they were only implemented by one faculty member in two courses. Faculty who had implemented choice or video introductions were asked for feedback as well as to the impact of the new facets of their courses.

Results

The Impact of Choice within Discussion Threads

The goal of adding choice to the discussion threads was to allow students to have a greater voice in determining the direction of the discussions and therefore encourage student engagement. After the initial pilot survey about choice, one initial course was offered with choice within the discussion threads. At the end of the course, they were given a similar survey as to the one mentioned in Figure 1. At that point, 94% of the students identified that they preferred choice and 6% stated no preference. None of the students wished to return to a system without choice.

Choice was then implemented within approximately half of the course load of the faculty involved. A simple analysis of the discussion threads from the courses showed that students in the courses where they were given choice in their discussion prompts wrote posts that were approximately five percent longer than those without choice. Overall, average student grades for the discussion threads were approximately 96% without choice and 98% when they were offered

choice. The specific numbers regarding the length of posts are shown in Figure 2. The basic discussion rubric used in all of the courses involved expected a minimum of 150 words per post.

Figure 2:

Scope of Discussion Prompts with and without Choice

Average Word Count per Post

Choice	225.58
No Choice	213.15

205   210   215   220   225   230
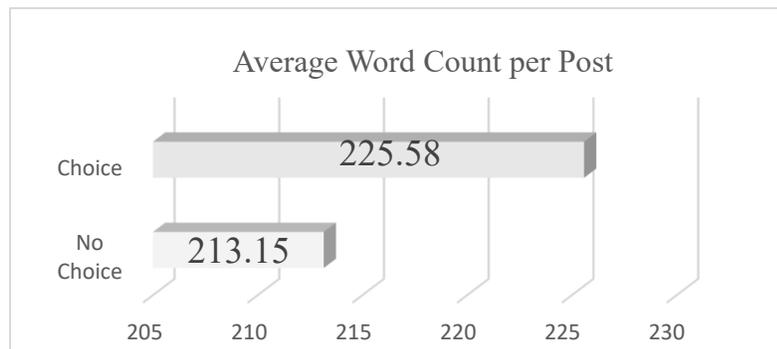
When offered the opportunity to voice their comments about choice in the discussion portion of their courses, 61% percent of the respondents preferred choice. 16% of the respondents would have preferred to have students focus on a single set of questions without choice. The other 22% did not have a preference. This was higher than the percentage of students who wanted choice prior to being exposed to choice within a course. Only one respondent added a specific comment about the discussion threads offering:

To add excitement I think laughter is always good...maybe some "what is your favorite.....to do outside of school?" or "what is your favorite meal to grill outside?" Just to get us talking about something that we could find common ground with. It could build cohesiveness in cohorts.

When reviewing the number of discussion posts in courses with and without choice, there was no effective difference between the number of posts made by students. Faculty felt that the choice encouraged both student engagement and the development of higher-level thinking skills.

The Impact of Requiring Video Introductions

Asking students to post an introductory video appears to have had a major impact on student engagement. Students appear to have responded positively to the implementation of introductory videos. Sixty-nine percent of the respondents felt that the introductory videos were helpful for students get to know each other. The other 31% didn't feel the video introductions were helpful.

Students were provided a prompt to respond to in order to guide their response within the introductory video. An example is below:

Getting to Know You

- *An important part of learning online is creating a learning community and a sense of interaction with the other members of the class. The introductory video and your profile are a great first step towards that goal.*

- *Create a brief 2-3 minute video introduction that tells the class more about who you are. In your introduction, you could include a little about yourself, your background and work experience, why you are enrolled in this course, and after looking at the syllabus something you are excited about.*

As illustrated in Figure 3, students in courses with a video introduction requirement posted 33% more than students without the requirement. Additionally, the posts were slightly longer on average as well. Initially, several of the course had the introductions completed through FlipGrid, a third-party service. Then all the introductory videos were managed through the CANVAS LMS in order to save students having to set up an additional account or potentially learn another system. It does not appear to have made a difference to student engagement as to whether the videos were managed through FlipGrid or within the CANVAS LMS itself. However, among students who completed the Summer 2020 survey, all respondents rated their technology skills as average or above average (the highest rating), so working with students with lower levels of digital literacy might appreciate not having to learn an additional technology tool.

Figure 3

Number of Posts Per Week Based upon Video Introduction Requirement
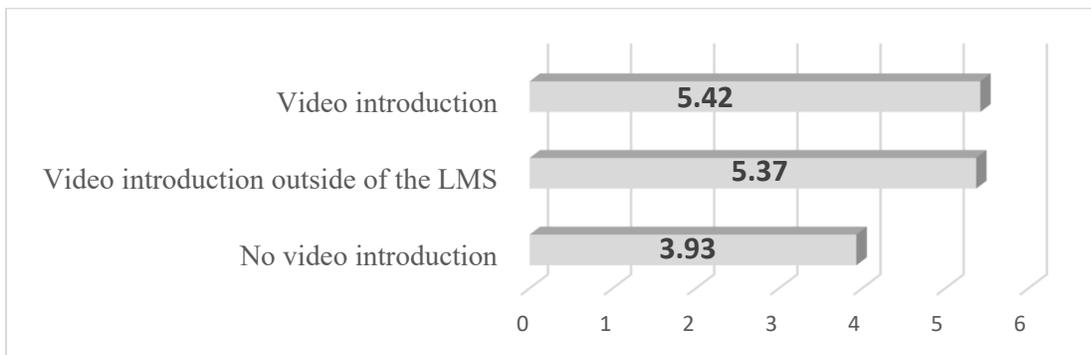
Student survey responses were uniformly positive. Some specific comments regarding the introductory videos included:

The video introductions allow more of our personalities to show through.

I, for one, am very much enjoying the video introductions!

> *I like when we have options to do short video discussion threads. It does make the class more personal.*

Faculty responding to a request for insights on using introductory videos stated using helped to engage students and to help the faculty get to know the students as individuals. Some faculty stated they returned to the videos throughout the course as a way to remind themselves of the students' backgrounds and interests.

The Impact of Synchronous Study Session in an Asynchronous Course

Due to the impact of COVID 19, a voluntary study session was added to assist students in coping with the isolation of the pandemic. The session was held in the evening on the same day or the week throughout the course. It was clearly articulated that the sessions were voluntary and the sessions were recorded and the recorded sessions were posted into the LMS for students who wished to review them or who had been unable to attend the live session. One hundred percent of the students exposed to the study sessions responded that they felt they were helpful. In general, at least two-thirds of the students participated in each of the study sessions. Several sessions had 100% attendance. Specific responses about the study sessions included:

> *These meetings help me connect with you and my classmates. These connections motivate me to extend myself on the discussion board posts. The meetings are also good springboards for the weekly writing assignments.*

> *Although online independent study really fits my career/lifestyle with my family at this time, nothing can replace the face-to-face conversation and thought process you get when talking outloud. I really appreciate these meetings and having them to "add" to what we are discussing, reading, researching, and experiencing.*

> *Very helpful most of the time. Great to connect with others, hear their questions...etc.*

> *I liked the balance of online work and the optional weekly face to face* [sic] *meetings.*

> *This class was the best online learning experience I have had ... ... [the instructor] offered short weekly Zoom meetings. These were very helpful in guiding my learning and motivating me. They also helped create a sense of community with my peers.*

Students who did not have the opportunity to participate in the synchronous study sessions were asked it they would like access to such sessions. Fifty-two percent of the respondents said they would prefer not to have such sessions. That did not align with the fact 78% of the same group of respondents said if the time wasn't convenient to them, they would utilize a recording of the

session. A second brief poll of students was conducted in the Fall of 2020 with current students and 93% found the synchronous sessions to be valuable.

Some Additional Insights

During the review of the discussion posts by students and other LMS data, two additional insights were drawn from the LMS data. The first was that there was a moderately strong positive correlation between the number of discussion posts a student made and their final course grade as shown in Figure 4. A second insight was that simple access to the course in the LMS was not enough to improve student performance. The correlation coefficient for page views v. final grade was $r = 0.3632$ compared to the $r = 0.6084$ for the number of discussion posts v. final grade. Simply viewing course materials was not as effective in raising student performance as active engagement in the discussion threads.

Figure 4

Final Grade v. No. of Discussion Posts
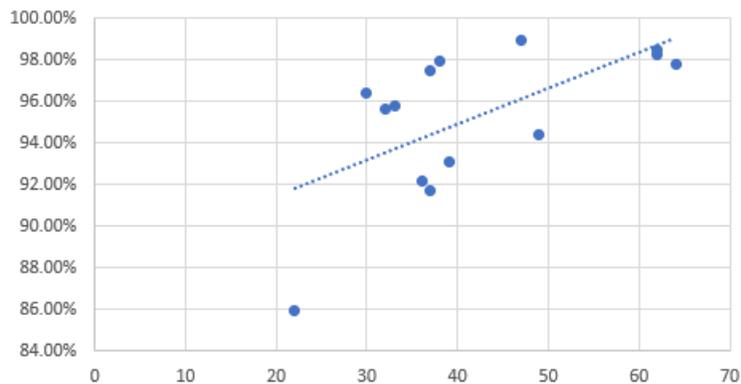
Conclusions

This study was based upon the review of graduate level education courses delivered in a asynchronous online format .Students were not in cohorts and the course scheduling process generated a range of students within each course from first time graduate students through students in their final course. Courses were identified as either providing for choice in discussion prompts or not allowing choice. Each course was generally structured to include weekly

discussion prompts as part of the course design and those discussions accounted for 20% of the student's final grade.

Recommendations for Practitioners

Students tended to perform at a higher level of engagement when they had choice within the discussion threads. The students provided about five percent longer posts when they had choice in which discussion prompts to respond to. The students who had the opportunity for choice lost about half the amount of discussion points that students without choice lost during the length of the course. Therefore, it is recommended to allow students choice in the discussion prompts to which they are asked to respond.

Having students and the instructor create introductory videos at the beginning of the course is another way to improve student engagement. Students in courses requiring videos posted about a third more than students without such a requirement. Open responses similarly show students felt the introductions were helpful in building community and engaging students. Therefore, asking students to complete an introductory video within the LMS, if possible, is a good way to improve student engagement within online courses.

Adding synchronous study sessions is another recommendation after reviewing the responses from students about the impact of the sessions and 100% of the students responded that the sessions were useful. It is important to share with students that active participation in the discussion threads is a positive method for improving student performance. Students sometimes think of the discussion threads as busywork and not a core component of the coursework.

Recommendations for Further Research

This study was conducted among graduate students in educational graduate programs. It would be helpful to replicate the three facets of the study among undergraduate students. Additionally a study utilizing secondary students, who are also experiencing a high level of online instruction and reportedly low levels of engagement in many areas, would be helpful as online learning is likely to remain with a lager presence in that realm of the foreseeable future.

Another way to build on this study would be to complete a content analysis of the discussion posts themselves to confirm that choice does encourage higher levels of thinking skills as defined by Bloom's Taxonomy (Anderson, L. W., & Krathwohl, D. R., 2001).

As the initial study was conducted in a rather homogeneously white rural area of the Midwest, testing the recommendations made in areas with more heterogeneous demographics may potentially provide additional insights.

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