# TEXT-BASED VERSUS VIDEO DISCUSSIONS TO PROMOTE A SENSE OF COMMUNITY: AN INTERNATIONAL MIXED-METHODS STUDY

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# **ABSTRACT**

Creating an engaging online course where students feel part of an online community can be challenging even for the most experienced online educator. Online discussions are a common tool used to connect students in online courses, but it is often limited to text-based posts. This international research study compared the use of text-based versus video-based discussions in online courses to ascertain students' perceptions of social presence. A mixed-methods design using a modified Social Presence, Likert-scale survey and open-ended questions was utilized to evaluate students' perceptions. The results showed that while students preferred text-based to video-based discussions, students perceived more social presence when using video-based discussions.

Keywords: online learning, online discussions, video-based discussions, text-based discussions, community of learners

### INTRODUCTION

Enrollment in online programs, both in the United States and Canada, continues to increase. In the United States online education has increased for the fourteenth straight year with over 3.2 million students enrolled exclusively in online classes (National Center for Education Statistics, 2018; Seaman et al., 2018). Canada saw online course registrations grow approximately 10% from 2018 to 2019 while the total number of course registrations remained unchanged (Canadian Digital Learning Research Association, 2019). At the same time, online education has a 20% higher attrition rate than face-to-face programs. This attrition has been attributed to a lack of engagement leading to students feeling isolated (Purarjomandlangrudi et

al., 2016; Stott, 2016). Furthermore, the pandemic has moved many more students into the online environment as many colleges across both the United States and Canada were forced to quickly move their classes online. It is currently unknown when full face-to-face instruction will resume. As enrollments in online education continue to grow and the future of higher education course delivery remains unknown, it is imperative that educators design courses that are engaging and provide collaboration among students as well as faculty.

Traditionally, online faculty have relied on text-based discussion forums to stimulate student collaboration and engagement. These forums usually require that students respond to a question with an initial reply and then a minimum of two replies to two other students. While this method of discussion would be an appropriate exchange for a live classroom discussion, this is not always the case online. In fact, research has demonstrated that text-based discussions often do not promote genuine communication (Clark et al., 2015; Cummins et al., 2016; Denison & Shurts, 2019). An alternative to text-based discussion forums is video discussion. The purpose of this international study was to compare the sense of community experienced by online students taking part in text-based versus video-based discussions.

### LITERATURE REVIEW

As online learning environments grew, less attention was given to student engagement and retention (Sorenson & Donovan, 2017). To ensure that online learning can help address this problem, educators were tasked with pursuing strategies that would increase peer-to-peer, faculty-to-peer and student-to-peer engagement with a goal of increasing retention. Research shows that the more engaged students are, the better they perform academically (Kuh, 2009; Stone & Springer, 2016). Cooke (2016) regarded student engagement as the level of interest students show toward the subject matter and the degree of interaction with course content, faculty, and peers. Moreover, research indicates that engagement can be increased through the development of an online community (Martin et al., 2018).

### Text-Based Discussions

One way of creating a community of learners, while also increasing satisfaction and achievement, is thought to be active participation in discussion boards. Several studies, however, demonstrated that this is not necessarily so. Cho and Tobias (2016) discovered that participation in discussion forums did not affect course satisfaction or achievement. Selhorst et al. (2017) also learned that online discussions can lead to fatigue and result in lower student satisfaction and performance. These studies support the idea that text-based discussions may not be the best way to engage students and create a community of learners.

## Video-Based Discussions

Several studies have investigated the use of video responses in discussion boards in lieu of text-based discussion to see if these, along with other factors, could increase student course engagement.

These studies have demonstrated varied results while also using a variety of technologies for these video discussions. There are few studies on the use of video discussions and fewer still being replicated using one method. Cummins et al. (2016) used VoiceThread to study student perceptions and participation patterns related to asynchronous video discussion in an interprofessional graduate health sciences course. VoiceThread is a cloudbased, interactive, collaboration and sharing tool that enables students to build online presentations by adding images, documents, videos, and other media to which other users can add comments for discussion. Students were encouraged to use video posts versus audio or text. When asked which mode they preferred, 40% selected video, 30% chose audio, while 20% preferred text. Data from 10 student interviews and surveys indicated that student perceptions of social and teaching presence were significantly higher when using video posts. Students also indicated that the ability to view their classmates permitted them to get to know one another. On the other hand, they did note that preparation for video discussions required a greater time commitment than other methods. Faculty noted that it took some time for them and students to learn how to use VoiceThread. Additionally, one challenge noted was that while text-based posts are easily viewed and read, video posts take longer to access and view (Cummins et al., 2016).

Using a different video-based platform, Clark et al. (2015) compared video with text-based discussions in an online teacher education course. The technology used for the video discussion was Google+ and was placed within the LMS. Based on data from interviews and surveys for the 16 participants, the researchers found that video discussions were more effective in creating social and teaching presence than text-based discussions. Participants stated that the video discussions gave them the ability to see the faces of classmates and promote feelings of connectivity while lowering feelings of isolation (Clark et al., 2015).

Denson and Shurts (2019), conducted a pilot study comparing sixteen RN-BSN students' communication satisfaction with video discussion responses as opposed to text-based discussions. Using surveys, the researchers discovered that the students rated video discussions significantly higher

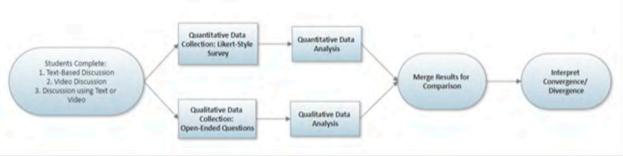


Figure 1. Convergent Mixed Methods Research Design

than text-based discussions for communication that was positive, accurate, and free flowing. A statistical significance did not exist for the difference in student satisfaction when comparing video and text-based discussions on their ability to assist them in meeting course objectives or teacher presence. Similar to the study by Clark et al. (2015), student comments revealed that the students enjoyed the ability of seeing classmates in their online classes when using video discussions (Denson, & Shurts, 2019).

Swartzwelder et al. (2019) investigated the use of text-based versus video discussions in a graduate nursing ethics course with 130 participants. The exact platform for the video discussions was not offered. In contrast to the findings by Clark et al. (2015) and Cummins et al. (2016), the researchers discovered that students sensed higher levels of engagement and interactivity with text-based than video discussions. Students found text-based discussions to be easier to complete and receive feedback than video discussions. The researchers attributed this to a lack of experience with the video-based discussion technology (Swartzwelder et al., 2019).

The mixed findings regarding the use of video-based discussions indicates the need for further research. This research study sought to compare a sense of community experienced by online students using text compared with video discussions. We wished to expand upon previous studies by increasing the sample size and utilizing an international population.

# THEORETICAL FRAMEWORK

The theoretical framework used for this study was the Community of Inquiry (CoI) as described by Garrison, Anderson, and Archer (2000). The CoI framework consists of three components considered essential to the online environment:

cognitive presence, social presence, and teaching presence. Cognitive presence refers to exchanging ideas and being able to apply what is learned in the course. Social presence focuses on students' ability to collaborate with classmates authentically. Lastly, teaching presence is required to ensure the first two elements are met. When all three elements are met, a student's online experience is enriched. For the purpose of this research, we focused on the second element, social presence.

# RESEARCH DESIGN/METHODS

Online graduate students from a large private university in the United States and online undergraduate students from an urban college in Canada were invited to participate in this study. Institutional Review Board (IRB) approval from both institutions was obtained prior to collecting data. A convergent mixed methods design was used to elicit both quantitative and qualitative data. See figure 1 for the research design.

The students completed a series of discussions using either text or video-based responses. The first discussion was text based and the second discussion was video based. For the third discussion, students were given the option of either text or video. While the discussion topics and platform utilized differed based on the course content, the guidelines and rubrics remained the same. During the last week of the course, after all discussions were completed, students were invited to take a survey, which included quantitative data as well as open-ended qualitative questions. All answers were anonymous, and the students provided consent prior to starting the survey.

The first part of the survey included demographic questions and questions to ascertain the students' comfort level and preference with text-based and video-based discussions. To elicit the students' perceptions of social presence,

we utilized a Likert-style survey. The Social Presence Scale developed by Gunawardena and Zittle (1997) is a 14-question Likert-style survey that has a reliability of .88. The Social Presence Scale was modified and used by Spears (2012) to compare social presence in online and face-to-face discussion. The reliability for the modified scale used in Spears' study was 0.72 for face-to-face courses and .76 for online courses. In this current study, the six questions from Spears' modified version were used to compare social presence with text-based and video discussions. In the study by Spears (2012), questions were also utilized from the Collaborative Learning, Social Presence, and Satisfaction Questionnaire developed by So and Brush (2008). Reliability for the collaborative learning subscale was .85 (So & Brush, 2008). Spears (2012) further established the reliability of their version of this subscale as 0.84 for faceto-face courses and 0.88 for online courses. Two of the following questions from the Collaborative Learning subscale were added to our questionnaire:

- 1. I actively exchanged my ideas with group class members.
- 2. Collaborative learning in my group discussions was effective.

Additionally, open-ended questions were asked to further understand the students' perception of social presence with online discussions. See Appendix A for the full survey.

### **RESULTS**

Study Sample

A total of 205 students completed the survey. Of the 205 students, 186 were graduate students and 19 were undergraduate students. The majority of the students were female (92.68%) and fell in the age range of 23–39. See Table 1 for the demographics of the sample.

### Quantitative Results

Descriptive statistics were utilized to ascertain the students' comfort level with text-based and video-based discussions and their perception as to which discussion format best facilitated peer-to-peer connection. On the survey, the students were asked to reflect on their preferences and comfort level with text-based and video-based discussions prior to the start of the course. Most of the students reported that they preferred text-

Table 1. Demographic Data (N-205)

Degree Program							
Undergraduate	19	9.3%					
Graduate	186	90.7%					
Age							
17–22	8	3.90%					
23-29	73	35.61%					
30-39	79	38.54%					
40-49	24	11.71%					
50-59	16	7.80%					
60 or older	5	2.44%					
Gender							
Female	190	92.68%					
Male	13	6.34%					
Prefer Not to Respond	1	0.49%					
Transgender	1	0.49%					

based discussions (72.2%), while only 4.39% preferred video-based discussions and 23.41% had no preference. Additionally, 81.46% of the students reported feeling "comfortable" or "very comfortable" with text-based discussions, whereas only 34.82% reported feeling "comfortable" or "very comfortable" with video-based discussions. See Table 2 for data on students' comfort level.

Table 2. Comfort Level with Discussion Types Prior to the Start of the Course

	Text-Based		Video-Based	
Not Comfortable	4	1.95%	54	26.34%
Somewhat Comfortable	34	16.59%	79	38.54%
Comfortable	77	37.56%	48	23.41%
Very Comfortable	90	43.90%	24	11.71%

As described in the research design, the students were given a choice for the last discussion and could use either a text or video format. A total of 131 (63.9%) students selected a text-based response, whereas 74 students (36.1%) selected a video-based response. However, when asked on the survey which discussion format made them feel most connected to their peers, the majority of students (60.49%) selected video-based discussions.

Descriptive and inferential statistics, specifically a paired t-test, were used to analyze the results from the survey. For the Likert-scale survey, the students were asked to reflect on discussion

assignments from the course and then indicate the extent to which they strongly agreed (5) to strongly disagreed (1) with each phrase as it relates to text-based discussions and video-based discussions. In Table 3, the means for each question, along with t values and significance, can be found. Overall, a statistically significant difference between text-based and video-based discussions was found with questions 1, 2, 4, and 6. The students were more comfortable conversing and participating in the text-based discussions; however, they felt the text-based discussions were more impersonal and they were able to form distinct impressions of their peers with video-based discussions.

# **Oualitative Results**

First and second cycle coding was used to analyze the qualitative comments from the survey. After obtaining a list of codes during first cycle coding, pattern coding was used to combine similar codes and identify themes.

**Text-based discussions.** In the survey, the students were asked if they felt more connected to their peers with either text-based or video-based discussions, followed by open-ended questions to allow them to elaborate. The students were also asked why they selected a text-based or video-based response for their final discussion. The themes related to text-based discussion that emerged were: (1) The students felt they were able to express themselves more in writing, (2) The students were uncomfortable being on video, and (3) The students felt text-based discussions were more convenient.

For the first theme, the students felt they were

able to express themselves more in writing. They expressed that there was no time limit with the written response; therefore, they were more thoroughly able to explore points of view. Additionally, the students felt there was more "back and forth" with their peers, which increased their feelings of connectiveness. For example, one student commented, "I feel I am able to give more information and express my ideas more thoroughly not having the time limit that video discussions have." Another student echoed this comment, "I express myself better in writing; I also have difficulty expressing myself in video discussions that have very short time limits such as only 3 minutes."

The students who preferred text-based discussions also felt uncomfortable being on video. One student shared, "I get really nervous when I am being recorded and I don't always remember what I want to say until after the fact." Additionally, many students commented that they felt like they were being judged when on camera, or they worried that they would be judged. One student commented, "I feel like people can discuss their viewpoints without feeling judged someone is looking at them." The students were also nervous about having their kids in the background, what they looked like, or the setting where they recorded.

Lastly, many students who preferred text-based discussions felt that this medium was much more convenient. The students liked that with a text-based discussion they could reply at any time (e.g., in the middle of the night) and anywhere. For example, one student commented, "I chose text-

Table 3. Modified Social Presence Scale Means and t-scores

N=205	Text-Based Mean	Video-Based Mean	t	Significance (two-tailed)
1. Communication in the course discussions was impersonal.	2.66	2.26	5.224	.000
2. I felt comfortable conversing in the course discussions.	4.25	3.66	7.081	.000
The course discussions enabled me to form a sense of an online community.	3.56	3.73	-1.878	.062
4. I felt comfortable participating in the course discussions.	4.29	3.76	6.845	.000
5. I felt that my point of view was acknowledged by other students in the course discussions.	4.14	4.09	1.118	.265
6. I was able to form distinct impressions of some of the students in the course through discussions.	3.70	4.03	-4.886	.000
7. I actively exchanged my ideas with group class members in the discussions.	4.06	4.03	.521	.603
8. Collaborative learning in my group discussions was effective.	3.99	3.96	.503	.616

based for the reason of convenience: I could work on the post and reply while at work or in a coffee shop without having to worry about recording myself. Although I definitely felt that the video format was more personal." Also, the students felt that they had to record and rerecord the video post to get it "perfect," so it was easier and more convenient to write out their posts. One student echoed this in their comment, "Video discussion takes me a whole lot longer in order to get the 'perfect' video where I touch upon everything I would like to. A lot of retakes = a lot more time to get an assignment done."

Video-based discussions. Several themes also emerged when coding the qualitative data related to video-based discussions, including (1) The students felt video-based discussions were more authentic, and (2) The students felt video-based discussions were easier and more enjoyable to participate in.

Many students felt that the video discussions felt more authentic. For example, one student commented that "it [video discussions] made the classmate experience seem real." The students also commented that video discussions were beneficial as hearing their peers and seeing facial reactions helped to interpret tone that cannot be ascertained in written responses. One student commented, "It is nice to be able to read body language and hear tones associated with the points being made." Another student echoed this response, "I see their facial expressions, interest, tone of voice, etc. All those things communicate and engage me in a way that written text discussions lack."

A second theme to emerge was that students who preferred video discussion felt it was easier and more enjoyable than text-based discussions. One student commented that "It was easier to prepare and was more enjoyable to engage in." The students felt that they could easily respond anywhere, as opposed to having to write and edit a lengthy discussion board post. In this way, it felt less impersonal and formal compared to text-based discussion. Another student echoed this point, "It felt easier to express my thoughts and ideas through video discussion, responses felt more discursive than just simply responding. I felt a little less formal while still professional."

### *Summary*

Both quantitative and qualitative data were

gathered and analyzed in this study. The students reported that at the beginning of the course they felt most comfortable with text-based discussions. While the majority of students selected a text-based response for the last discussion, many students felt more connected to their peers with the video-based format. After analyzing the qualitative findings, it was found that students who preferred text-based discussions thought it was more convenient, easier to express themselves, and they felt uncomfortable being on video. The students who preferred video-based discussions reported that it felt more "authentic" and they had a better connection with their peers.

### **DISCUSSION**

The data analysis was utilized to answer the following two research questions:

- 1. Do online students perceive that textbased or video discussions enhance social presence?
- 2. Do students in an online course prefer text-based or video discussion?

# Perception of Social Presence

Ultimately, while the students commented that they felt nervous about being judged with video discussions, over half of the students (60%) felt that this medium promoted connection more than text-based discussions. This finding aligns with the qualitative comments. Additionally, these results are similar to those of Cummins et al. (2016) and Clark et al. (2015) who found a statistical significance in the level of social presence for video discussions versus text-based discussions. The students in this study felt that the video discussions allowed them to get to know their peers better because they were hearing their voices, seeing their faces, and getting a glimpse into their personal lives by seeing their surroundings in the videos. Additionally, the video responses allowed the students to observe body language and interpret tone better. Denson and Shurts (2019) similarly indicated that students found the ability to see classmates as a positive for this type of discussion format. The students in the Denson and Shurts' study rated video discussions higher than text-based for communication that was positive, accurate, and free flowing (2019).

### *Preference*

While the quantitative and qualitative data

illustrated the importance of video discussions to increase social presence, students still preferred text-based discussions. When the students were given a choice to either participate in a discussion board using text or video, 64% chose text. When analyzing the comments, it was clear that those students who preferred text-based discussions worried about seeing themselves on camera. They felt that their peers would be judging their appearance or surroundings and not focusing on what they were saying.

Similarly, one other study found that learners preferred text-based to video-based discussions (Swartzwelder et al., 2019). Students in this investigation commented that the text-based discussions were easier for them to complete than video discussions. They also found it easier to ask classmates for clarification using text as opposed to video. On the hand, Cummins et al. (2016) found a preference for video-based over text-based discussions. Interestingly, they also noted that students commented that text-based posts were easier to be viewed and read than video posts and that video posts took longer to listen to. Denson and Shurts (2019) did not find a statistically significant difference between preferences for text or video discussions in their research.

These findings bring to light two recommendations about differentiated assessment. Faculty should use differentiated assessment in their classrooms. It is evident through this research that not every student expresses themselves best in writing or verbally. Faculty need to allow students to express themselves in multiple ways throughout the term; therefore, a mix of text-based and video-based discussions in one course is beneficial.

### Instructor Feedback

Even though the intention of this research was to identify student perceptions of social presence in an online course through the use of video-based discussions, it is also important to note the instructors' experiences in the study. The instructors experienced a greater connection with their online students through the use of video-based discussions. In addition, the use of video-based discussions resulted in mixed instructor perspectives regarding the workload in providing feedback to the students.

**Connection.** Using video-based discussions as an alternative way to communicate provides

both the students and the instructor with visual and auditory feedback that is often lacking in text-based discussion boards. Since most communication is nonverbal, including gestures, movements, posture, and facial expressions, this information cannot be gleaned from text-based communication in an online course. Video-based discussions, especially when used at the beginning of the course as an introductory exercise, helps in humanizing the experience and builds connections for the instructor between the student and their work and their progress within the course. Previous studies have confirmed that video-based communication helps foster a personal connection between the instructor and the students that ultimately has an impact on a student's success in the online environment (Joyner et al., 2014). Using multiple means of engagement can help to support the development of a connection between both the student and the instructor along with the greater learning community.

Challenges. It should also be noted that instructorsparticipating in this study shared different perspectives with respect to the effort involved in evaluating video responses in discussion boards. Some instructors communicated that evaluating and participating in video posts consumed more time than text-based posts. This challenge was also highlighted by researchers when comparing the evaluation of text-based versus video-based discussions (Cummins et al., 2016). In reviewing the video posts, instructors may need to review the post several times to extract key points or confirm understanding, whereas text-based responses may only be skimmed to achieve the same result. Also, if instructors choose to participate in engaging students in the discussion board using video, they will need to create a script or key points to guide their speech for the video and be cognizant of time constraints within the video software. However, other instructors communicated the opposite experience, and felt video posts were easier to evaluate since it was more convenient for them to listen than to skim through the text-based response. These experiences further support the need for differentiated assessment and multiple means of engagement in online courses to allow for differing preferences in both students and instructors to find ways to engage and collaborate in the online environment.

# Implication for Education

The timeliness of this study could not be overlooked as the education world was turned upside down in the face of the COVID-19 pandemic. With all face-to-face instruction forced online, faculty and students were asked to quickly transition to an unfamiliar learning environment. With many schools converting courses in the matter of a few weeks, implementing strategies for engagement may not have taken priority. Though the future of in-person instruction is still unknown, it will be imperative to take online student engagement and social presence into consideration when building the online classrooms of the future.

The connection that a student feels when sitting in a classroom with their peers is not easy to capture. The results of the current study show that students report an authenticity and increased engagement when participating in a video-based discussion. This may influence educators to rely more heavily on tools such as video-based introductory discussion boards or virtual office hours using video technology to maintain that connection that an in-person classroom offers. Providing students time to adjust to this new way of learning and being understanding that not all students may feel comfortable turning on their cameras will be a distinct barrier in the online learning environment.

Setting clear expectations with each video-based assignment will set the tone of the responses from the students. Perfection is not expected, and students should not feel the need to read from a script, as this undermines the purpose of using a video-based discussion. Instructors may find it helpful to start off the discussion with a video of their own, setting an example of what a video-based discussion post should look like. Being clear in the instructions and grading rubric that these discussion boards should be informal and spoken in a conversational tone will lead the student away from the typical format of a post.

Choosing the right technology to facilitate this video-based discussion will also be an important decision instructors will face. This may depend on the learning management system in use, the experience of the instructor, or the budget of the institution for integrating new technologies into the online classroom. With some technologies being more user friendly than others, it may be a

trial-and-error process for the instructor to find the technology that fits best with their instructional style or the purpose of the assignment. Instructors may find it important to evaluate at the end of a course whether barriers to engagement in a video-based discussion existed because of students feeling uncomfortable in front of a camera or due to a lack of experience using a new technology. If the latter is the case, providing additional instruction or tutorials on using the technology will be important.

This leads into the perception instructors may have that the younger generation of students will feel more comfortable using a video-based learning technology because of their prevalent use of social media. It should not be assumed that those who post pictures on social media would be more comfortable showing their faces in a videobased learning technology. Instructors must not make judgments or base instructional decisions on the age of their students until the technology and design of assignments is tested with multiple cohorts. Social presence in a classroom will not be cultivated in the same way as on social media. and it will be the responsibility of the instructor to build an environment where the students feel comfortable sharing in the same way they would on a social media platform.

With the ever-changing educational landscape, consideration should be taken because many students did not start their college-level program expecting to complete their degree requirements in the online environment. Those who did choose to continue their education in the online environment may have very little experience learning in an asynchronous classroom. The use of videobased discussions may be a useful bridge from a traditional in-person classroom to the world of online learning, but only if there is buy-in from the students. Creating guidelines on how to use new technology, setting online learning expectations, and cultivating a safe learning environment will be essential when attempting to create an engaging online classroom.

# Limitations

There are several limitations with this study. While the small sample size of 205 participants can be considered a limitation, it is the largest study to date that compares video-based and text-based discussions. Furthermore, this study included

participants who were mostly from a graduate nursing program; therefore, future studies should include students from various disciplines and levels of education. This would provide insight as to how social presence is perceived from a more diverse population.

This study also used three different types of video-based technology depending on which one faculty selected for their courses. Thus, a confounding factor may be the relative ease or difficulty of using one technology over another as experienced by learners. This may have affected the subject's interpretation of their experience of the video-based software discussion board. The subjects' comfort level as well as the instruction provided on software use should be considered limitations to the study.

### CONCLUSION

As online education in North America continues to grow and colleges are forced to move courses from in-person to online, it is important for educators and researchers to understand the factors affecting students' perceptions of presence and community as it relates to their learning success. While the students in this study felt videobased discussion boards promoted the ability to form connections with their learning community, they ultimately preferred the use of text-based communications for a variety of reasons. These results support the use of differentiated assessment and universal design by instructors to allow for multiple means of participation and engagement.

Ongoing research on students' perspectives of social presence through the use of video tools would be helpful. With the changing educational environment and the increased use of video tools, student perspectives and preferences may change over time. Also, research into instructor perspectives would be interesting to understand what modalities are used in practice and what concerns instructors have with respect to the use of video

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# APPENDIX A

**Social Presence Survey**: Please reflect on the discussion assignments this quarter and then indicate the extent to which you agree or disagree with each phrase as it relates to text-based discussions and video discussions.

	Text-Based Discussions	Video Discussions
Communication in the course was impersonal.	SD/D/U/A/SA	SD/D/U/A/SA
I felt comfortable conversing in the course.	SD/D/U/A/SA	SD/D/U/A/SA
The course discussions enabled me to form a sense of the community.	SD/D/U/A/SA	SD/D/U/A/SA
I felt comfortable participating in the course discussions.	SD/D/U/A/SA	SD/D/U/A/SA
I felt that my point of view was acknowledged by other students in the courses.	SD/D/U/A/SA	SD/D/U/A/SA
I was able to form distinct impressions of some of the students in the course.	SD/D/U/A/SA	SD/D/U/A/SA
I actively exchanged my ideas with group class members.	SD/D/U/A/SA	SD/D/U/A/SA
Collaborative learning in my group discussions was effective.	SD/D/U/A/SA	SD/D/U/A/SA

SD = Strongly Disagree; D = Disagree; U = Uncertain; A = Agree; SA = Strongly Agree

# APPENDIX B

**Directions:** Thank you for agreeing to participate in the research study titled, "The Use of Text-Based versus Video Discussions to Promote the Sense of Community in the Online Learning Environment: An International Mixed-Methods Study." Please complete the following survey, which includes both Likert-style questions and open-ended questions. All results are anonymous. Thank you for your participation!

# Demographic Questions:

Please indicate which course you are currently enrolled in. When taking the survey, please be sure to reflect on your experience in the identified course.

Please indicate your field of study.

Please indicate your current age.

17-22

23 - 29

30-39

40-49

50-59

60 or older

Please indicate your gender.

Male

Female

Non-Binary/Third Gender

Prefer Not to Say

How many online courses have you completed before this course?

0

1

2–4 >5

How would you rate your comfort level with online discussions?

Not comfortable

Somewhat comfortable

Comfortable

Very comfortable

Before taking this course, did you prefer text-based or video discussions?

Test-Based Discussions Video Discussions No Preference

Social Presence Survey: Please reflect on the discussion assignments this quarter and then indicate the extent to which you agree or disagree with each phrase as it relates to text-based discussions and video discussions.

# Open Ended Questions:

For the last discussion assignment, you were given a choice for how to respond, text or video. Which did you select?

Text-Based Video

Why did you select this method of responding for your last discussion?

Which discussion format, text-based or video, did you feel best enhanced the sense of an online community in the course?

Text-Based Video

Why did you feel this discussion format enhanced the sense of an online community?

Thank you for taking the time to complete this survey!