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How To Not Disappear Completely: Using Video-based Discussions to Enhance Student Social Presence in an Online Course

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How To Not Disappear Completely: Using Video-based Discussions to Enhance Student Social Presence in an Online Course

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Abstract  
This paper proposes a video-based discussion learning exercise to consider in addition to the traditional online discussion board format. While the traditional written interaction between students in an online classroom is beneficial, the mass adoption of video technology, along with limitations associated with online discussion boards, led to the development of a new way to facilitate group communication using video communication technology. Utilizing the theory of social presence, we demonstrate the effectiveness of this video discussion format, allowing students to virtually "get to
know" each other and collaborate in an environment that more closely resembles a traditional face-to-face classroom experience. Following multiple trials of online synchronous video discussions across both small and large class sections, results demonstrate students' preferences for the video-based discussion format over the traditional, text-based discussion boards supported by their institution's learning management system. Findings from two studies support that the video-based discussions enhance learning outcomes and foster a sense of classroom community.

An opening question. Active participation. An engaged community of students providing their thoughts and opinions while learning about other peer viewpoints. A chance to deepen the understanding of course concepts through an exchange of information. As educators, these scenarios, which promote active participation in class, are the hallmark of a modern college classroom (Bigatel, Ragan, Kennan, May, & Redmond, [2]). However, the transition of most institutions to online learning due to COVID-19 leaves both professors and students with limited options for facilitating online discussions; namely, they have the online discussion board. Given the need to develop something new with technology that until recently was not widespread in collegiate classrooms, we have recreated many of the benefits of a synchronous, in-person discussion through video communication technology (e.g., Microsoft Teams, Zoom, WebEx).

Feeling that the traditional online discussion board format within their learning management system (LMS) was lacking in facilitating a strong sense of community in their online marketing courses, we saw an opportunity to develop a new discussion method that would be seen favorably by students. In particular, we incorporated video-recorded, small group discussion activities that allowed students to interact synchronously with each other while simultaneously learning modern skills that will serve them well in a post-COVID workplace. Student video discussions were completed in multiple marketing courses – at both the undergraduate and graduate level – and the data collected from student participants confirms students' preference for synchronous video discussions over asynchronous discussion boards. We found the video discussions enhanced relationship-building while also adding depth to the level of conversation usually observed in a traditional, text-only discussion board in their LMS.

Traditional online discussion boards, housed within an institution's LMS and limited primarily to text-based discussions in an asynchronous format, can be a polarizing topic among educators and students alike. While negativity toward discussion boards may come as a surprise to some educators (Ally, [1]), we question whether this pedagogical method maximizes educational opportunity, stemming from many conversations with students and faculty. A Google search for "discussion board memes" results in over 38 million results. Notable comedic examples include "I love bread" and "2 + 2 = 4" ("Discussion Board Memes, [8]). An academic review of asynchronous discussion boards provides evidence that the method is not seen as universally positive. In a review of face-to-face versus online discussion forums, Wang and Woo observed the following negatives associated with online discussions: additional time needed to respond to posts throughout the assignment window, increased aggression through negative posts, minimal engagement between student groups, and students copying and pasting older posts rather than providing new content for each assignment (Wang & Woo, [21]). We have attempted the traditional discussion board format in previous courses and have experienced comments similar to the aforementioned research and memes.
While certainly not the case for every student, it appears many students view discussion board assignments as less of a valued learning exercise and more of a "game," attempting to fashion posts that use appropriate vocabulary but end up using circular reasoning or restating similar answers in different ways. There is a common joke among instructors that students never agree so much in real life as they do in an online discussion board. While certainly some students dig into the learning activity, we have anecdotally found that most students view posting on the discussion boards as an item to check off a list a certain number of times by a certain time and that fruitful discussion is minimal.

Through this research, we seek to capitalize on the recent emergence of video discussion technology in the online college classroom to create a value-added discussion method that enhances learning while allowing students to communicate organically with peers. Results from the implementation of this exercise across multiple classes provide evidence of the validity of this format as an effective communication tool in online classes.

**Marketers as Communicators**

Developing effective communication skills in students is paramount for marketing educators, perhaps more so than in any other discipline in a business school (Yeoh, [25]). Additionally, allowing students to practice their communication skills while interacting with other students can provide them with an opportunity to build soft skills required by employers (DeLong & Elbeck, [7]). The marketing discipline is based in communication, and the increased prevalence and adoption of video communication presents an opportunity for all parties to gain valuable experience with a tool that will be used for interviewing (Weed, [22]), internal meetings (Frisch & Greene, [9]), and external client conferences and calls (Price, [16]). Given the dramatic rise in video communication during the COVID-19 pandemic, it is clear that this format remains relevant. Accordingly, collegiate educators need to train students on how to set up a virtual meeting, lead others in a conversation, generate fruitful dialogue for all involved, and present their ideas using video-based technology.

We understand the importance of incorporating discussions in an online marketing classroom. Students often have marketing-related experiences as either consumers or employees that can bring academic theory to life. What better way to expand on marketing concepts like the marketing mix than with a lively discussion on how a company executes each component to meet their strategic goals? Allowing students to share their adventures in marketing can enhance the class by allowing the formation of connections between students (as they learn from each other) while increasing retention of course concepts (Bouwmeester et al., [3]).

**Social Presence Theory**

Students often cite the interaction with others as their favorite part of the classroom experience (Burch, Heller, Burch, & Heller, [4]). One of the drawbacks of asynchronous online learning is that community is not built as naturally within the classroom environment as it is in a face-to-face format. Given that students can engage the course (through the LMS) at different dates and times, the online classroom experience can be a lonely endeavor for many (Cunningham, [6]).
Garrison, Anderson, and Archer conclude that three elements are vital to an effective educational experience: social, cognitive, and teaching presence (Garrison, Anderson, & Archer, [10]). They define three categories of social presence — emotional expression, open communication, and group cohesion — as keys to a successful classroom environment. Building on Garrison et al.'s categories, social presence theory provides a model that helps define the concept with five elements: affective association, community cohesion, instructor involvement, interaction intensity, and knowledge and experience (Whiteside, [23]; Whiteside & Dikkers, [24]). Affective association focuses on the level of connection between participants. Community cohesion looks at the social ties between members of the learning environment. Instructor involvement considers the role the faculty member plays within the community. Interaction intensity measures the depth of the interaction through "agreement, disagreement, compliments, and questions" through the group's interactions (Whiteside, [23], p. 65). Thus, we posit that video-based discussions meet the expectations posed in this extended definition of social presence theory.

The proposed pedagogical technique of video discussion aligns well with the theory of social presence. The theory originated through the work of Short, Williams, and Christie ([18]), who determined that participants communicating through telecommunications can have rich, meaningful relationships despite the lack of face-to-face communication. This theory can be extended to include various forms of new media — e.g., video conferencing — to show that humans can have rich social relationships through various forms of modern communication media (Lombard & Ditton, [14]). Purinton and Burke ([17]) note that the online class of the future should include a focus on social presence. When analyzing the effectiveness of social presence in an online classroom, Cunningham found that students felt most acquainted with a class and students in an online format when they were working on a group assignment and participating in sessions where peers could provide feedback (Cunningham, [6]). Given these types of engagement and preferences for the learning experience, the proposed video discussion exercise can provide students with the positive feelings associated with social presence. Additionally, while tested in several marketing class, the technique can be utilized in any course.

Introducing Video Discussion Exercises

One of the predominant methods currently employed to allow students to engage with each other in an online environment is discussion boards. In the traditional discussion board format, the professor poses a question, topic, or prompt to the students. Each student must respond to the topic in written form — often with a minimum word count — to the discussion board by a certain date. Other students will then be asked to read the comments from the initial student, post a response (or some predetermined number of responses), and respond to any comments made on their own initial post. This results in waves of comments, frequently right before the deadline.

While discussion boards are meant to somewhat mimic a traditional in-class discussion and engage students in working together to explore topics, our experience has found that the text-based conversations in traditional online discussion boards often fall short of that goal. First, the original posts and responses often come across as fake or strained, as students are simply trying to meet the professor's expectations of a "good post" (by going beyond "I agree" or by having to meet their own word count requirement) rather than having an authentic back-and-forth dialogue. The contents of the posts often consist of filler, as many students are looking simply to meet the minimum requirements to
earn full points for the assignment. Additionally, students must constantly monitor the discussion throughout the week. If the posting schedule is Sunday-Wednesday-Saturday (initial post due Sunday; respond to initial posts by Wednesday; respond to posts to the initial post by Saturday), students will be devoting multiple chunks of time throughout the week to this one assignment and hoping enough of their classmates have posted relevant content for them to offer a reply. This can also prove to be difficult for the instructor to assess, who has to monitor posts and reposts to determine both the completion of the assignment as well as the content of the post.

We propose a modernization of the traditional discussion post writing assignments that are frequently found in online classes; the recommended assignment enhances the opportunity for engaging conversation, improves social interaction, and more closely simulates a traditional face-to-face activity. Rather than using the traditional discussion method (question-post-repost), the proposed activity has student teams answer discussion questions (developed by the professor) using a video communication tool over the course of a recorded, synchronous 20-minute video call. Students can complete the video-based discussions in small groups, and the intensity of the interaction allows for improved social relationships and cohesion of the learning community.

The idea of video-recorded activities is not new, as courses in professional sales frequently include video-recorded sales call role plays so students can watch themselves and manage their progress throughout the semester. In sales classes this method creates a more efficient learning experience, as students can record their role plays on their own time and receive individualized feedback from their instructor (McDonald, [15]). McDonald ([15]) suggests sharing all videos with the full class so students can watch each other’s recordings and learn from their peers (sometimes with peer critique, sometimes just watching); additionally, to reduce the burden of time-consuming grading, McDonald recommends asking professionals from industry to watch the videos and offer feedback to the students. While certainly the sales call role play videos have a different aim than the video-based group discussions, the idea of having students prepare for a video-recorded conversation is not entirely novel.

Every pedagogical technique comes with trade-offs, and instructors must carefully consider what best fits their teaching style and learning environment. While some topics and audiences may be well-suited for traditional written discussion boards, other topics or audiences may benefit from enhanced or synchronous communication. In particular, traditional-aged college students who have pivoted from traditional, face-to-face learning experiences to online learning in the midst of a pandemic seem to be searching for a sense of community. We believe the video discussions answer that call, as they enhance the learning related to many marketing topics since students brainstorm together. To assist faculty in considering both approaches more objectively, Figure 1 provides an overview of the pros and cons of each discussion style.

Figure 1. Advantages and disadvantages of traditional discussion boards and video-based group discussions

<table>
<thead>
<tr>
<th>Traditional Text-Based Online Discussion Boards</th>
<th>Video-Based Group Discussions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Disadvantages | Conversation is typically not very in-depth or substantive (Kim, 2013; Swan, Shen, & Hiltz, 2006)  
|              | Students must plan multiple sessions to post or reply (Kim, 2013)  
|              | Confusion or debate cannot be remedied in real time (Wang & Woo, 2007)  
|              | Discussions are asynchronous (Cunningham, 2015)  
|              | Format does not allow for body language interpretation (Smith, 2020) |
| Advantages   | Allows for real-time discussions where students can engage in a rich dialogue (Burch, Heller, Burch, & 2016)  
|              | Allows students to see and hear each other, which more closely replicates in-class experience and builds relationships as they engage with each other (DeLong & Elbeck, 2018; Short, Williams, & Christie, 1976)  
|              | Replicates modern meeting format, allowing students to develop skills that will be applicable for their career (Yeoh, 2019; Whiteside, 2015; Castleberry, 1989)  
|              | Enables faculty to get to know personalities of their students better (Prensky, 2007; Chandler & Hanrahan, 2000)  
|              | Students can utilize the “share screen” function to view content together in real time, watch a relevant video, or type up an overview of the group’s discussion for review (Cunningham, 2015) |
| Disadvantages | More reliant on technology, which may be temperamental (Bitner & Bitner, 2002)  
|              | Can take longer to review and grade the exercise (McDonald, 2006)  
|              | While they only need to meet once, the video discussion requires availability at the specific meeting time (Bacon, 2005)  
|              | Some students may feel pressure to think on their feet (Madison, 2007) |

**The Video Discussion Activity**

The proposed pedagogical approach to the modern discussion board can be incorporated into any course in any modality, but we utilized it in marketing courses that were being taught online in an asynchronous fashion and found it to be especially fruitful. Students were assigned to complete one weekly video discussion in a small group through a software such as Microsoft Teams, Zoom or WebEx. Student discussion groups in our classes were randomized using the LMS' "group" functionality, but future classes may have the option to choose their own groups. Groups were comprised of between four to six students.

For each week when a video discussion was scheduled, each group assigned a leader to schedule a 15-to 20-minute discussion meeting, record the meeting, and upload either the link to the video or the video file in its entirety to the LMS. It was the responsibility of the students to determine when they would meet and to set up the virtual meeting; as an added task in developing professionalism,
students were instructed to send electronic calendar invitations for the meeting. The students were provided a rubric in advance, which they could use as a guide in preparing for the conversation. The rubric allowed for some flexibility related to examples that may arise in the discussion, as we wanted the conversations to be as natural and free-flowing as possible, while having some structure to provide a strategically targeted conversation.

Each video discussion included two question prompts for the students to expand on for the assignment (e.g., "In your discussion groups, provide examples of product that meet each one of the following needs – functional, symbolic, and hedonic. Why does each product you chose represent that need?"). Students were encouraged to verbally discuss the questions for the week, and to create, debate, and discuss their thoughts as a group while video recording. No editing of the videos was required, and students were encouraged to simply have a conversation. The leader of each discussion group was also encouraged to be cognizant of creating opportunities for every student to participate and be heard, while discouraging any one student from dominating the conversation. Once the videos were uploaded to the system, the professor viewed each video, grading students on their attendance, participation, and quality of comments throughout each discussion.

Methodology
The video discussion activity as described earlier was included in marketing courses during several semesters. Data assessing student perceptions of this pedagogical technique were collected during two semesters, identified separately in this paper as Study 1 and Study 2. All video discussions were facilitated through Microsoft Teams as described above and then each group’s recordings were uploaded to the LMS for the instructor to access.

Study One
Video discussions were integrated into three online marketing courses during the summer session at a private university in the Midwest. Two courses were at the undergraduate level (Consumer Behavior and Professional Sales), and one course was at the graduate level in an MBA program (Consumer Behavior). All three classes were condensed summer courses, and five total discussions were assigned, one per week over the six-week period.

Data from an online survey administered via Qualtrics at the end of the semester provide insights on the positive impact of utilizing Teams for these courses. In total, 55 students completed the survey (100% response rate), with class sizes ranging from 17 to 21. The survey asked students to rate their agreement with seven scale items on a Likert-style agreement scale where 1 = strongly disagree and 7 = strongly agree. The seven items measured whether students enjoyed the video-based discussions, would recommend the use of video-based discussion, preferred video-based discussion over traditional discussion boards, felt more connected to other students, had their learning enhanced by the use of video-based discussion, and would recommend an online class that uses video-based discussion over a class that uses traditional discussion boards.

Study Two
After preliminary results found the video-based discussions to be well-liked by students, a direct comparison was made between traditional text-focused discussion boards and the video-based
discussions in a marketing course. In particular, during the first three weeks of the spring semester, 110 undergraduates enrolled in an online, asynchronous Introduction to Marketing class at a private university in the Midwest. The students completed two different discussions in groups. One discussion activity utilized the traditional discussion board found within the LMS, requiring groups of students to interact at least three times during the week with the question prompts by building out a dialogue. In the other discussion activity, the student groups discussed the week's question prompts while recording their discussion via Microsoft Teams using the process described previously. After completing both discussion activities, 101 students (91.82% response rate) completed an online survey in Qualtrics to share their insights on each method.

For Study Two, students' agreement with the nine statements that built off of Study One's survey were assessed, relative to the video-based discussion in Teams and then also the traditional, written-text discussion board in the LMS. For each discussion technique, the nine scale items were measured on a Likert-style agreement scale where 1 = strongly disagree and 7 = strongly agree. In this study, the scale items (shown in Table 2) were measured for each modality, where [modality] can be replaced with either video-based discussion or traditional discussion board.

Table 1. Participants' mean perceptions of incorporating discussion via MS teams in an online course setting

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Consumer Behavior (Undergrad)</th>
<th>Professional Sales (Undergrad)</th>
<th>Consumer Behavior (MBA)</th>
<th>Overall Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you agree with the following statements ...</td>
<td>n = 21</td>
<td>n = 17</td>
<td>n = 17</td>
<td>n = 55</td>
</tr>
<tr>
<td>Overall, I enjoyed the video-based discussions.</td>
<td>5.90</td>
<td>6.06</td>
<td>6.18</td>
<td>6.04</td>
</tr>
<tr>
<td>I would recommend professors use video-based discussions in online classes rather than traditional discussion boards (i.e., type responses, post to other responses, post to your responses).</td>
<td>5.95</td>
<td>6.00</td>
<td>6.29</td>
<td>6.07</td>
</tr>
<tr>
<td>I think that video-based discussions are better than traditional discussion boards.</td>
<td>5.71</td>
<td>6.00</td>
<td>6.18</td>
<td>5.95</td>
</tr>
<tr>
<td>Using video-based discussions makes me feel more connected to students than using traditional discussion boards.</td>
<td>5.90</td>
<td>6.29</td>
<td>6.35</td>
<td>6.16</td>
</tr>
<tr>
<td>Using video-based discussions enhanced learning outcomes more than traditional discussion boards.</td>
<td>5.67</td>
<td>5.82</td>
<td>5.76</td>
<td>5.75</td>
</tr>
<tr>
<td>I prefer the video-based discussion to traditional discussion boards.</td>
<td>5.81</td>
<td>5.71</td>
<td>6.47</td>
<td>5.98</td>
</tr>
<tr>
<td>I would recommend an online class to other students if the professor used</td>
<td>5.71</td>
<td>5.82</td>
<td>5.94</td>
<td>5.82</td>
</tr>
</tbody>
</table>
video-based discussions rather than traditional discussion boards.

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>[video-based]</th>
<th>[traditional]</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you agree with the following statements ...</td>
<td>mean</td>
<td>mean</td>
</tr>
<tr>
<td>1. Using the [modality] method was impactful.</td>
<td>5.65</td>
<td>4.71</td>
</tr>
<tr>
<td>2. Using the [modality] method helped me learn the material from the</td>
<td>5.47</td>
<td>5.04</td>
</tr>
<tr>
<td>discussion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I enjoyed the [modality] discussion activity.</td>
<td>5.60</td>
<td>4.62</td>
</tr>
<tr>
<td>4. I would recommend faculty members use the [modality] discussion method</td>
<td>5.38</td>
<td>4.64</td>
</tr>
<tr>
<td>for future group activities. (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Using the [modality] method made me feel connected to the other</td>
<td>5.72</td>
<td>4.03</td>
</tr>
<tr>
<td>students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Using the [modality] method enhanced the learning outcomes of the</td>
<td>5.46</td>
<td>4.74</td>
</tr>
<tr>
<td>activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I learned more in the activity using the [modality] method than I did</td>
<td>5.11</td>
<td>3.66</td>
</tr>
<tr>
<td>in the activity using the [other modality].</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I think that using the [modality] method is better than using [other</td>
<td>4.97</td>
<td>3.66</td>
</tr>
<tr>
<td>modality].</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I would recommend an online class to other students if the professor</td>
<td>4.82</td>
<td>4.45</td>
</tr>
<tr>
<td>used the [modality] method for group activities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assessed on a Likert-style scale where 1 = Strongly Disagree and 7 = Strongly Agree

To further distinguish between students' preferences, this survey also asked students one question where they could make a simple recommendation between the two discussion modalities. Similarly, the survey allowed for an open-response question where students could share feedback. Their written comments were overwhelmingly favorable toward the video-based discussions.

Additionally, as we anecdotally noticed a stronger sense of community felt by our students when using the video-based discussions during Study One, we also assessed the Introduction to Marketing students on measures associated with social presence theory in Study Two. In particular, we adapted the scale developed by Gunawardena and Zittle ([11]) to identify social presence as a predictor of satisfaction within computer-mediated conferencing environments. Providing a more modern version of this scale, we borrowed their measures and adapted the focus from GlobalEd to video-based discussions. Gunawardena and Zittle ([11]) scale had 14 items; we removed one item, which was specific to how moderators facilitated dialogue at a conference, and we were left with 13 remaining items. Our adapted social presence scale for video-based discussions included items such as "Video discussion on Microsoft Teams is an excellent medium for social interaction," "The video discussions enabled me to form a sense of online community," "I felt that my point of view was acknowledged by other participants in the video discussion," and "I was able to form distinct individual impressions of group members as we communicated via a video-based medium." All of these items were again scored on a Likert-style scale where 1 = Strongly Disagree and 7 = Strongly Agree.
Results and Discussion

Study One

Results of data analysis are presented in Table 1. Mean agreement levels are shown for each individual course, as well as for the entire sample. Looking at the full sample, students overwhelmingly (mean = 6.04), reported enjoying the use of Microsoft Teams to facilitate written discussions within their online course. Students have a strong preference for Teams over traditional discussion board methods (mean = 5.98), they view Teams as a better discussion board option (mean = 5.95), and they recommend faculty members utilize Teams over traditional methods (mean = 6.07).

Additionally, an unexpected but impressive result was the level of connection students felt when their discussions were facilitated through Microsoft Teams; with a mean of 6.16, this new technology aided students in connecting with each other better than traditional discussion boards. During a global pandemic that limits physical interaction, this finding is incredibly noteworthy for professors looking to enhance their learning environment. In addition to improving the learning environment, students felt the use of Teams also enhanced their learning outcomes (mean = 5.75). Students even went so far as to say they would recommend an online course to other students if the professor used Teams instead of traditional discussion boards (mean = 5.82).

The average scores reported here refer to the overall means of all respondents. Yet, as shown in Table 1, the use of Teams is highly favored in a variety of online marketing courses and at multiple levels. Students' perceptions of discussion using Teams were overwhelmingly favorable in online consumer behavior classes at both the undergraduate and MBA level, as well as an online, undergraduate professional sales course. Below we provide student comments that reinforce the statistical results:

- It was a better discussion and didn't feel forced. Traditional discussion boards aren't taken very seriously, but I feel like this was. It was nice to interact live with my classmates.
- I enjoyed how interactive the MS Teams discussions were and how connected I felt with my other classmates. This was definitely more entertaining and interesting to take part in, in comparison to traditional discussion boards.
- I think it feels much more interactive than a traditional post and response format.
- I liked the interaction. With everything happening in the world, it was nice to see other people and interact with them via teams. The Teams discussions were effective in simulating the class experience. Overall, I got much more out of these discussions than a normal discussion post via D2L because of the video aspect, the live aspect, and coming with ideas and discussions rather than writing something.
- It made feel more connected to classmate than just posting discussion on D2L.
- Idea sharing is more fluid and honest compared to the written discussion groups.
- They were lively conversations rather than bland text discussion responses.
- It was nice to interact with people and discuss things live, rather than having to focus on word counts, spelling, and grammar.

Study Two

In total, nine scale items were designed to build off of the measures in Study One and to further assess each discussion modality (video-based discussion and traditional discussion boards). Based on the
initial reporting of means, paired-sample $t$-tests were run on the Introduction to Marketing class' survey measures to determine the significance of their preference for video-based discussion. Of the nine measures, eight items were significantly in favor of the video-based discussion over traditional discussion boards with a 95% confidence interval and the ninth item was marginally significant. Specific results showing students' favorability of video-based discussion are depicted in Table 2, with paired-sample $t$-test results shown in Table 3.
Table 3. Paired samples T-tests for introduction to marketing students

<table>
<thead>
<tr>
<th>Comparison Scale Item</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error Mean</th>
<th>Lower</th>
<th>Upper</th>
<th>T</th>
<th>DF</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1 Video-Based – Traditional</td>
<td>0.945</td>
<td>2.107</td>
<td>0.211</td>
<td>0.527</td>
<td>1.363</td>
<td>4.485</td>
<td>99</td>
<td>0.000</td>
</tr>
<tr>
<td>Item 2 Video-Based – Traditional</td>
<td>0.435</td>
<td>1.922</td>
<td>0.192</td>
<td>0.054</td>
<td>0.816</td>
<td>2.263</td>
<td>99</td>
<td>0.026</td>
</tr>
<tr>
<td>Item 3 Video-Based – Traditional</td>
<td>1.005</td>
<td>2.413</td>
<td>0.241</td>
<td>0.526</td>
<td>1.484</td>
<td>4.166</td>
<td>99</td>
<td>0.000</td>
</tr>
<tr>
<td>Item 4 Video-Based – Traditional</td>
<td>0.750</td>
<td>2.436</td>
<td>0.244</td>
<td>0.267</td>
<td>1.233</td>
<td>3.079</td>
<td>99</td>
<td>0.000</td>
</tr>
<tr>
<td>Item 5 Video-Based – Traditional</td>
<td>1.725</td>
<td>2.434</td>
<td>0.243</td>
<td>1.242</td>
<td>2.208</td>
<td>7.086</td>
<td>99</td>
<td>0.003</td>
</tr>
<tr>
<td>Item 6 Video-Based – Traditional</td>
<td>0.735</td>
<td>2.050</td>
<td>0.205</td>
<td>0.328</td>
<td>1.142</td>
<td>3.585</td>
<td>99</td>
<td>0.000</td>
</tr>
<tr>
<td>Item 7 Video-Based – Traditional</td>
<td>1.455</td>
<td>3.137</td>
<td>0.314</td>
<td>0.833</td>
<td>2.077</td>
<td>4.639</td>
<td>99</td>
<td>0.001</td>
</tr>
<tr>
<td>Item 8 Video-Based – Traditional</td>
<td>1.320</td>
<td>3.645</td>
<td>0.364</td>
<td>0.597</td>
<td>2.043</td>
<td>3.621</td>
<td>99</td>
<td>0.000</td>
</tr>
<tr>
<td>Item 9 Video-Based – Traditional</td>
<td>0.375</td>
<td>2.104</td>
<td>0.210</td>
<td>−0.042</td>
<td>0.792</td>
<td>1.782</td>
<td>99</td>
<td>0.078</td>
</tr>
</tbody>
</table>
To further distinguish students' preferences, the Introduction to Marketing students were asked to answer, "If a professor were to use only one of these methods for all group discussions in a course, I would recommend ..." with the option of video-based discussion or traditional text-based discussion. One hundred students answered the question, with 65 favoring the video-based discussion and 35 recommending the text-based discussion. While each pedagogical approach may play a unique role in course interactions, this result further supports the opportunity faculty members have to utilize a unique and seemingly superior method.

To assess how the video-based discussion board might enhance students' social presence in the classroom, the adapted social presence scale entailed 13 items with a Cronbach's alpha of .799, demonstrating high reliability. Full results are shown in Table 4, but a few notable results include how the video-based discussion was viewed as an excellent medium for social interaction (mean = 5.50), the comfort students felt participating in the video discussions (mean = 5.87), that the video-based discussions enabled students to form a sense of online community (mean = 5.44), and that students felt their point of view was acknowledged by other participants (mean = 5.95). These were strong results for students having only completed one week of video-based discussion. Future research should identify how students might foster an even greater sense of community if they use this new discussion method on a weekly basis throughout the entire semester (as they did in Study 1).

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video-based discussion was impersonal.</td>
<td>3.60</td>
</tr>
<tr>
<td>Video-based discussion is an excellent medium for social interaction.</td>
<td>5.50</td>
</tr>
<tr>
<td>I felt comfortable conversing through this video-based discussion.</td>
<td>5.74</td>
</tr>
<tr>
<td>I felt comfortable sharing my thoughts via video discussion.</td>
<td>5.65</td>
</tr>
<tr>
<td>The video discussions enabled me to form a sense of online community.</td>
<td>5.44</td>
</tr>
<tr>
<td>I felt comfortable participating in the video discussions.</td>
<td>5.87</td>
</tr>
<tr>
<td>Video discussions using tend to be more impersonal than face-to-face discussions.</td>
<td>4.71</td>
</tr>
<tr>
<td>Discussions using the medium of video discussions tend to be more impersonal than face-to-face discussions.</td>
<td>4.56</td>
</tr>
<tr>
<td>Video discussions are more personal than audio-only teleconference discussions.</td>
<td>5.77</td>
</tr>
<tr>
<td>Video discussions are more impersonal than text-only discussions.</td>
<td>3.79</td>
</tr>
<tr>
<td>I felt comfortable interacting with other participants in the video discussion.</td>
<td>5.77</td>
</tr>
<tr>
<td>I felt that my point of view was acknowledged by other participants in the video discussion.</td>
<td>5.95</td>
</tr>
<tr>
<td>I was able to form distinct individual impressions of group members as we communicated via a video-based medium.</td>
<td>5.50</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha = .799

Time is the most critical consideration for faculty considering different discussion methods. As mentioned, 65% of respondents preferred the video discussion, yet 41% of total respondents acknowledged that it was challenging to find a time to meet. Specifically, 28 of the 65 respondents who favored video-based learning specifically mentioned the aspect they disliked was finding a convenient time for the group to meet for the video discussion. Of the 35 who favored text-based discussion, the chief complaint about the video-based discussion for 13 respondents (37%) was finding a convenient time to meet outside of class time to complete this assignment.
Similarly, after analyzing the qualitative responses about what students did appreciate in the text-based discussions, 42 of the 100 students (42%) referenced that they liked the flexibility with respect to time. Specifically, they liked that they could interact with the discussion board content when they had time, that they had more time to think through their responses, and that they could focus their time on interacting with posts about topics where they felt most passionate (as opposed to the single conversation occurring in the video chat). Additionally, several students had a clear preference for the text-based discussions because they could interact with opinions from the entire class (rather than just the 5–6 in their video group), and they could take time to formulate meaningful responses. Instructors who wish to integrate video discussions into their classes should consider dedicating some class time for this or form groups based on mutual availability of schedules. Forming smaller groups of 3–4 students could also ease the challenge of conflicting schedules.

Considering the preferences of students regarding time constraints and learning styles a faculty member might, if it is feasible, consider allowing students to choose which discussion format they prefer to use over the duration of the semester and then form groups accordingly. In addition to complementing different learning styles or preferences, it may also be a more feasible option for students who are living in varied time zones while taking online courses (for example, one student in this study was located in China, which several group members located in the U.S. brought up as a difficulty regarding scheduling of the video discussion).

Further enhancing our emphasis on social learning theory, comments in favor of the video-based discussion overwhelmingly centered around how students liked interacting with others, having an ongoing conversation (versus waiting on a written reply that might come days later), getting to know their classmates, and sharing ideas. Many students also praised the instant responses they got and how they felt the video discussion was a much more efficient use of their time (even though they expressed difficulty in finding mutually-available time for the discussion). While this is likely to be a favorable component of video-based discussion in any semester, it is especially notable as an advantage during a global pandemic when many students are isolated away from campus and their peers.

Providing further support for the importance of the social connection for these students, most qualitative comments align well with the following direct quotes from the Introduction to Marketing students:

- I really liked how it connected us with other students in the course, gave us an opportunity to learn about other student’s perspectives, and have a natural conversation.
- One thing I liked about the video discussion was you were able to get the discussion done and turned in within the course of 20 minutes vs the D2L discussion posts where you have to wait for other people to write posts in responses over the course of a few days. I also enjoyed getting to see my classmates’ faces and it felt more like a classroom personal type conversation.
- Felt more personal and I think it made me understand the material better.
- I think it improved our learning community. I liked actually seeing and talking to other students.
- It simulated being in an in-person class again, which I enjoyed. It also allowed for real time responses and reactions to my point on views.
• I liked that it took less time than doing an online discussion. Every group member was able to share solid points and feel heard, but it didn’t take as long as typing a response and then responding. It also felt more authentic than a [LMS] discussion post. It also was nice to meet/see some faces of people that are also in the course because it is such a big class it can be hard to feel connected to other students.

• It was more fun and created a sense of we are in this together. In a time when we need to feel we are in all this together, I felt good. It also helped to hear others points of views and share ideas. It is also faster to answer and ask questions.

Additionally, the video-based discussions provide excellent preparation for students before they join a professional business environment where many virtual meetings will occur. Related to the actual learning experience itself, qualitative feedback from participants indicates that the video discussion is something students take seriously and something they must prepare for, not simply a conversation to attend or observe. This experience and awareness will serve them well in future business meetings. Additionally, they need to feel comfortable with their group to speak up and share their personal perspectives. A few students mentioned it was awkward talking to a screen or that they were hesitant to speak as boldly in a virtual conversation as they would have in a discussion board post when they could proofread what they were typing before posting. The downside of video discussions, as noted by one student, is that there are no do-overs; so, students must be prepared and ready to engage in a hearty dialogue in order to maximize value from the experience.

General Discussion
Posting to discussion boards has long been a portion of the online course environment that has received much criticism. While discussion boards have ideal goals of coordinating a dialogue, broadening students' understanding of a topic, and transferring some of the responsibility of posting relevant information from the professor to the students, they are often lackluster in achieving these aims (Kim, [13]; Wang & Woo, [21]). The Teams video discussion activity seems to drastically improve the experience for both students and professors, as well as the overall learning culture.

The notion that video-based discussion enhances the social component of the course was reiterated throughout the students' open response to the qualitative questions. In fact, the only consistently negative feedback about the video-based discussions was that it was difficult for students to coordinate a meeting time with mutual availability for the video call. In future semesters when teaching an asynchronous course, we will allow students to choose their group based on preferred meeting times to alleviate this concern.

Specifically, implementing video-based discussions enriches the classroom experience. Students enjoy it, they feel comfortable with it, and they acknowledge that they invest more thought into a video-based dialogue with a group than they do with their individual written posts on a traditional discussion board. Further, the group nature of the prescribed video-based discussions creates a synergy that can be replicated in any size of class, as we have statistically demonstrated its impact in class sizes ranging from 15 students to 100. While it may not be feasible for every asynchronous course setting, video-based discussions should be considered as a viable option for the modern online classroom.
Additionally, future employers of these students will appreciate their technologically savvy skills for initiating and running virtual calls using video-based methods.

Incorporating video-based discussions into the classroom community enhances the opportunity for social connections to be made. This modern approach seems to mimic the benefits of social interactions in classrooms found by Hurst, Wallace, and Nixon ([12]), p. – specifically, that students learned from each other, social interaction created a positive learning environment, and the social interaction created a way for students to consider a variety of perspectives and enhance their critical thinking and problem-solving skills.

Limitations and Future Research
While the results of the current study show promise, there are a few factors that should be discussed when considering further expansion within a marketing course. Differences in how universities use video and streaming platforms, along with their integration within learning management systems, may impact the ease of use of this video discussion format. Additionally, there is a learning curve for both faculty and students which may require a more detailed instruction document or a stand-alone session prior to beginning the discussions. This exercise is also dependent on technology, which is often out of a professor's control and can be subject to upgrades that may change the implementation of the format; however, this is also true of any online course component.

As some universities have taken a stance against requiring students to utilize webcams during course activities, each instructor will have to find the bounds that fit their audience and intended learning goals of the exercise. If students have "camera fright" they may find the practical suggestions in Castleberry's ([5]) paper on videotaping classroom activities to be helpful. Because we emphasized the learning impact of the video discussions on preparing students for their future career options, our students did not resist the video-based discussions; however, allowing students to choose their own groups may reduce camera fright and minimize hesitations that could occur about engaging in video-based discussions.

When evaluating how to implement the proposed assignment into a curriculum, professors need to consider the total number of discussions for the semester, how many students to place in each group, whether the teams should be formed by students or randomly, along with what percentage of the overall course the discussion exercise should comprise. Assessment of the video-based discussions requires development of a specific rubric, as the free-flowing conversation can often venture into tangents, and instructors must consider the desired breadth and depth that they expect from this discussion method. Additionally, the instructor might consider hosting and facilitating one live discussion at the beginning of the semester as a way of setting the standard for the amount of depth students should strive to attain. Training students in this way will not only result in higher quality, video-based discussions, but it will also better prepare students for how to converse in their future business meetings. Additionally, this provides an opportunity for the instructor to address different learning styles and preferences, relating them to how students might best complete a video discussion.

In our experience, grading the video-based discussions is much more enjoyable but takes a bit longer than grading text-based discussions, as it requires precision and attention to detail since the instructor must recognize which student is talking when to award individual points for contribution consistently.
as opposed to a group discussion grade, which is another viable option). Utilizing closed-captioning options in the recording software is recommended to facilitate more efficient grading.

Social presence is also related to the concept of media richness, which can be a topic to explore in future research. Media richness theory seeks to match the medium used (e.g., sending a message through text versus over video) with the task performed, where concepts such as senses used and the necessity of having real-time feedback are factored in when considering what communication tool to use (Lombard & Ditton, [14]). Examples would include using an e-mail to convey a brief message versus a face-to-face meeting to communicate more complex themes (Suh, [20]). Additionally, further analysis can explore how the online communication methods (text and video) relate to the five elements of the social presence model. It is conceivable that the richness of a video-based discussion – specifically sensory depth and sensory breadth – may reinforce learning, but that should be tested.

Conclusion
One main benefit of the proposed activity is how easily it can be implemented across marketing courses. For a course that meets remotely but synchronously, the video discussions can be used to allow students to expand on course principles. If the course is taught asynchronously online, video discussions can be used to allow students to interact in a way that not only focuses on core course content, but also recreates the social elements of the in-class social experience. Moreover, allowing students to gain familiarity with video communication methods can enhance their employment opportunities. In a recent Wall Street Journal article, the ability to positively display charisma through a video conference can enhance future job prospects (Smith, [19]). By providing opportunities for students to develop these skills in a classroom environment, marketing educators can continue to help their students prepare for business communication post-COVID19.

Disclosure Statement
No potential conflict of interest was reported by the authors.

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