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Exploring student perceptions of asynchronous video in online courses

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ABSTRACT

Research suggests that video can improve social presence in online courses. Video, though, is not a panacea; rather the success of video use depends in part on how and when it is used. Online instructors are increasingly using video in various ways, but questions remain on which types of videos students value most when it comes to establishing social presence. Given this, this mixed-methods sequential explanatory study explored student perceptions of three types of asynchronous video: video announcements, instructional videos, and video feedback. The results suggest that while video has the potential to improve social presence, it ultimately depends on both how the video is used in the online classroom as well as students' individual preferences. Students in this study preferred instructional videos the most, followed by video feedback, and then video announcements. The paper provides implications for future research and practice.

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Introduction

Students drop out of online courses at a higher rate than they drop out of face-to-face courses (Angelino et al., 2007; Cochran et al., 2014; Mubarak et al., 2020). One reason for this is feelings of isolation and loneliness that can develop in online courses (Ali & Smith, 2015; Jun, 2005; Kanuka & Jugdev, 2006; Laing & Laing, 2015; Weidlich & Bastiaens, 2018). One way to address these feelings is through the development of social presence (Bissonette, 2017; W. Boston et al., 2009; W. E. Boston et al., 2011). Social presence has been defined in various ways over the years (Kreijns et al., 2022; Öztok & Kehrwald, 2017; Weidlich & Bastiaens, 2019). While some researchers have conceptualized social presence in terms of perceiving others (and/or projecting oneself) as "real" and "there," others have conceptualized social presence in more emotional terms, such as perceiving a sense of support, belonging, and even a sense of connectedness and community in online courses (Lowenthal, 2010; Lowenthal & Snelson, 2017). In this study, social presence was conceptualized simply as the sense that others are real people and there in terms of being present (though not necessarily in a physical sense) when learning online (see Lowenthal & Snelson, 2017).

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Research has shown that developing a sense that an instructor and fellow students are real people and there can help students feel less isolated and alone and in turn persist in their online courses (Collins et al., 2109; Kaufmann & Vallade, 2020; Weidlich & Bastiaens, 2019). However, there is relatively little empirical research on the best ways to establish social presence in fully online courses (Fiock, 2020; Lowenthal & Dunlap, 2018). Most research instead focuses on students' general perceptions of social presence in online courses rather than on specific teaching presence strategies instructors can use to improve students' perceptions of social presence (Lowenthal & Dunlap, 2018, 2020).

Online instructors have predominantly relied on asynchronous text-based communication to interact and communicate in online courses. This type of communication has been criticized in part due to the lack of nonverbal cues which many have argued can limit the development of social presence (Lowenthal et al., 2021; Rovai, 2000; Tang & Hew, 2018). While research has shown that a sense of social presence can develop with asynchronous text-based communication (Lowenthal et al., 2021; Rourke et al., 1999), there still has been a growing interest in using more video communication because of its media richness and ability to share nonverbal cues, and in turn, possibly improve social presence in online courses (see Belt & Lowenthal, 2021; Borup et al., 2012, 2013; Collins et al., 2019; Lyons et al., 2012; Pacansky-Brock, 2014; West & Borup, 2021a, 2021b). Despite its affordances, though, video is not a panacea (Belt & Lowenthal, 2021). In fact, research on social presence suggests that it is not the inherent capabilities or affordances of a medium that make the difference as much as when, how, and why one uses it (Lowenthal & Mulder, 2017; Whiteside et al., 2017). Therefore, practitioners and researchers must continue to investigate more effective ways to use video to improve social presence, engagement, and ultimately learning in online courses (Lowenthal et al., 2021; West et al., 2017; West & Borup, 2021a, 2021b).

To address this gap in the literature and need in the field, I investigated student perceptions of three common ways to use online video (i.e., video announcements, instructional videos, and video feedback) in online courses to see how these different uses influenced student perceptions of social presence. In this paper, I report the results of a mixed-methods exploratory study into student perceptions of online video and social presence and conclude the paper with implications for future research and practice.

Literature review

The theory of social presence was developed during the 1970s in London. Short et al. (1976) reported that it was developed to describe the effect media—and primarily telecommunications—have on communication. Short et al. saw it as the degree of salience between people using a communication medium. They theorized that some media, like video, have more social presence than other media. Based on a series of experiments, outlined in their book *The Social Psychology of Telecommunications*, they concluded that people perceive media with more social presence as being more sociable, warm, and personal, than media with less social presence.

With the increased use of email during the 1980s and 1990s, researchers argued that computer-mediated communication was impersonal because it lacked nonverbal and relational cues (Daft & Lengel, 1984, 1986; Rutter, 1984, 1987; also see Lowenthal, 2010; Walther, 1996). Over time, as educators began using computer-mediated communication (e.g., email and asynchronous discussion forums) for educational purposes, they found that it could be social and interpersonal and used effectively for learning at a distance (Gunawardena, 1995; Rourke et al., 1999). As a result, researchers like Gunawardena (1995) and Rourke et al. (1999) concluded that it matters more how one uses a communication medium than its essential characteristics. Further, and more importantly, they concluded that online learning can be a rich, personal, and social learning experience.

During this same time, educators began to place an increased emphasis on the role of social interaction. In fact, Garrison et al. (2000, 2001) placed social interaction at the center of their community of inquiry framework. Garrison et al. (2000) developed their framework to explain how learning takes place through social presence, teaching presence, and cognitive presence. Social presence has been studied the most of these three presences. Over the years, researchers have found an association between social presence and satisfaction (Borup et al., 2012; Öztok & Brett, 2011; Richardson et al., 2017), social presence and interaction and communication (Rourke et al., 1999; Öztok & Brett, 2011), social presence and community development (Kyei-Blankson et al., 2019; Pollard et al., 2014; Whiteside, 2015), and social presence and perceived learning (Richardson et al., 2017; Scollins-Mantha, 2008). As mentioned earlier, online educators dissatisfied with relying solely on text-based communication, have explored using rich media like video in online courses—largely to establish, maintain, and improve social presence (Lowenthal & Mulder, 2017; Oregon et al., 2018; Oyarzun et al., 2018). Research on students' perceptions of how rich media—specifically video—improves social presence is nascent.

Borup et al. (2012, 2013) conducted a series of studies on video and social presence. In the first study, they focused on student perceptions of asynchronous video in three different courses (Borup et al., 2012). Faculty teaching these courses used VoiceThread or YouTube for asynchronous video discussions. Borup et al. concluded that asynchronous video influenced an instructor's ability to establish their own instructor social presence. Students also reported that asynchronous video helped establish social presence of their fellow classmates but to a lesser extent; this was in part due to feelings that their peers were not viewing their comments as well as possibly due to the reality that many of them had face-to-face courses together. After that, Borup et al. (2013) conducted a follow-up study that focused on four different types of online learners (i.e, an extrovert, an introvert, a student with low self-regulation, and an English language learner). They conducted interviews with each type of online learner; they found that different types of learners valued different things with asynchronous video and as a result, their perceptions varied. They explained that while the extrovert enjoyed making the videos, they did not value viewing the videos made by others. They also reported that the discussion prompts (i.e., how the video is used) can influence students' perceptions and use of asynchronous video.

Lyons et al. (2012) investigated the use of adding videos of instructors to online lectures. They had students randomly watch "video lectures with (or without) a

video of the instructor at the top left of the screen" (p. 183). They found that adding a social presence cue of the instructor actually negatively affected students' perceived learning and interactivity, especially those with lower technological efficacy. They suggested that this was likely due to cognitive overload; thus, they recommended not adding this additional social presence cue to recorded lectures in online courses.

More recently, Lowenthal and Dunlap (2018) investigated students' perceptions of using various instructional strategies to establish social presence and then maintain it throughout an online course. Students identified the use of feedback, and specifically video feedback, as well as digital storytelling as two of the top instructional strategies to establish social presence of the instructor as well as peers. Lowenthal et al. (2022) then conducted a follow-up study on students' perceptions of video feedback from their instructor as well as their peers. They found that students in their study were more satisfied with video feedback from their instructor than with receiving or giving video feedback to their peers. Overall, though, the results suggested that video feedback contributed to students' satisfaction, perceived learning, and perceptions of social presence in the course.

Overall, a growing body of research suggests that the use of video might have some specific affordances, including the ability to improve social presence, which should be leveraged in online courses (Borup et al., 2014; Borup et al., 2015; Fiock, 2020; Lowenthal et al., 2020; Lowenthal, 2021). However, more research needs to be conducted to identify better ways to use online video to improve social presence in online courses. For instance, should instructors use more synchronous video or more asynchronous video? If instructors decide to use asynchronous video, which uses are more effective than others? The literature suggests that video announcements (Belt & Lowenthal, 2021; Benton & Prejean, 2010; Bialowas & Steimel, 2019; Joyce et al., 2021; Miller et al., 2019), instructional videos like video lectures and/or screencasts (Chen & Wu, 2015; Lyons et al., 2012; Samsonov, 2022; Wong et al., 2021), and video feedback (Bahula & Kay, 2020; Lowenthal, 2021; Lowenthal et al., 2022; Mahoney et al., 2019; Thomas et al., 2017) are three increasingly common ways that online instructors are using video in their online courses. Questions remain, though, whether students value each of these uses and whether one type of video might be more effective at establishing social presence than another.

Method

Research design

I used a mixed-methods sequential explanatory research design (Creswell & Creswell, 2017; Ivankova et al., 2006) to investigate student perceptions of video announcements, instructional videos, and video feedback, and specifically how students thought these different uses impacted their perceptions of their instructor's social presence. This exploratory study consisted of two phases—a survey phase and a follow-up interview phase—to answer the following research question: What are student perceptions of three types of online video in a fully online course?

Context

The participants in this study were enrolled in a fully online graduate program in educational technology in the Western United States of America. The participant pool consisted of 250 students enrolled in one of nine sections of three different online courses taught by the same instructor. The instructor used video announcements for a few weeks, instructional videos (i.e., screencasts) throughout the course, and video feedback on major assignments in similar ways across all three courses.

Data collection

I began the study after receiving approval from the institutional review board. Researchers continue to debate the best way to measure social presence (Dempsey & Zhang, 2019; Kim, 2011; Kreijns et al., 2020; Kreijns et al., 2021; Redstone, et al., 2018; Rourke et al., 1999). The most popular instrument used to measure social presence is the Community of Inquiry Questionnaire (Arbaugh et al., 2008). However, putting weaknesses of this instrument aside (see Lowenthal & Dunlap, 2014), given that this instrument focuses on online communication in general and does not take into account differences between various communication technologies as well as the exploratory nature of this study, I decided to create an online survey to align with the study goals and the overall literature. The survey specifically focused on student perceptions of social presence in general and specifically the use of video announcements, instructional videos (which were screencasts), and video feedback (see the Appendix for the common questions used across all sections of the study). The survey consisted primarily of Likert-style questions (on a 5-point scale) and optional open-ended questions. The online survey was emailed to students after grades were finalized, at the end of the course over 3 semesters. Of the 250 possible students, 101 students or 40.4% completed the survey. Of these students, almost 60% were female and they all had prior experience with online learning (see Table 1).

During the second phase of the study, six participants were randomly selected from the last three sections of the courses and invited to take part in follow-up semi-structured interviews. The interviews were used to better understand students' perceptions

Table 1. Participant background and demographics.

Demographics	Results
Female	58 (57%)
Male	43 (43%)
Number of online courses completed	$M = 9.78$
Satisfied with online course*	$M = 4.59$
Perceived learning with online course*	$M = 4.58$

*5-point scale from 0 = *disagree* to 5 = *strongly agree*

Table 2. Descriptive statistics of general perceptions of video and social presence.

Survey question	5 Strongly agree	4	3	2	1 Strongly disagree	*M*
I sometimes feel alone or isolated when taking online courses	9 (8.9%)	34 (33.7%)	17 (16.8%)	27 (26.7%)	14 (13.9%)	2.97
It is important to perceive my instructor as "real" and "there"	55 (55.0%)	36 (36.0%)	2 (2.0%)	4 (4.0%)	3 (3.0%)	4.36
It is important to perceive my classmates as "real" and "there"	25 (24.8%)	47 (46.5%)	18 (17.8%)	8 (7.9%)	3 (3.0%)	3.82
I like it when instructors use videos	51 (50.5%)	40 (39.6%)	8 (7.9%)	0 (0.0%)	2 (2.0%)	4.37
I learned a lot in this course	61 (63.5%)	30 (31.3%)	5 (5.2%)	0 (0.0%)	0 (0.0%)	4.58
I was satisfied with this course as a learning experience	55 (57.3%)	36 (37.5%)	5 (5.2%)	0 (0.0%)	0 (0.0%)	4.52
Videos in online courses can help establish an instructor as a "real" and "there"	46 (45.5%)	46 (45.5%)	7 (6.9%)	1 (1.0%)	1 (1.0%)	4.34
I like it when my instructor uses instructional videos	55 (54.5%)	43 (42.6%)	3 (3.0%)	0 (0.0%)	0 (0.0%)	4.51
I enjoyed the use of video in this course this semester	54 (54.0%)	39 (39.0%)	6 (6.0%)	1 (1.0%)	0 (0.0%)	4.46
I know my instructor better because of his use of video	41 (40.6%)	32 (31.7%)	22 (21.8%)	4 (4.0%)	2 (2.0%)	4.05
How would you rate these types of communication media in their ability to establish someone as "real" and "there" when communicating with someone else?						
Text-based electronic communication (e.g., email or discussion forums)	13 (13.1%)	34 (34.3%)	38 (38.4%)	13 (13.1%)	1 (1.0%)	3.45
Audio communication (e.g., phone or recorded message)	14 (14.0%)	40 (40.0%)	32 (32.0%)	13 (13.0%)	1 (1.0%)	3.53
Video communication	50 (51.0%)	28 (28.6%)	14 (14.3%)	5 (5.1%)	1 (1.0%)	4.23

of video in online courses and specifically video announcements, instructional videos, and video feedback. They included questions such as:

- Students overwhelmingly report that they watch video announcements, but the video analytics suggest that most students actually do not. Did you watch all of the video announcements? Why or why not? Why do you think other students do not watch video announcements?
- What do you like or not like about video feedback?
- What are your thoughts about an online course that relies heavily on videos (like Lynda.com videos) created by a company and not your instructor?

The interviews were conducted online in Adobe Connect by a graduate assistant. They lasted 30–40 minutes. The interviews were recorded and transcribed.

Data analysis

I downloaded the quantitative data from the survey. I calculated descriptive statistics and frequencies in SPSS. I then analysed the qualitative data from the open-ended questions as well as from the interviews using a constant comparative technique (Leech & Onwuegbuzie, 2007), which consisted of using a multistage coding process in NVivo (Saldana, 2016). During the first stage, I identified initial codes in the data. Then during the second stage of coding, I used pattern coding to group codes and identify themes. I then shared the themes with participants to improve the credibility and trustworthiness of the analysis. (Lincoln & Guba, 1985).

Results

Participants in this study were experienced online learners who reported high levels of satisfaction and perceived learning (see Table 2). They strongly agreed as a group that it was important to perceive their instructor as "real" and "there" ($M = 4.36$). They did not find it, though, as important to perceive their fellow classmates as "real" and "there" ($M = 3.82$). In other words, they reported that it was more important to perceive their instructor's social presence than their peers. Then when asked about their general perceptions of communication media, they reported that they thought video ($M = 4.23$) was better than audio ($M = 3.53$) and text ($M = 3.45$) at establishing social presence. They also reported that they liked it when instructors used video in online courses ($M = 4.37$). After being asked general questions like these (see Table 2), students were then asked specifically about their perceptions of video announcements.

Perceptions of video announcements

Text and video announcements were used throughout these online courses. The announcements (whether text or video) were simply a time to check in with students about the course and course logistics. Typically, 4–8 video announcements were posted in each course; they tended to be 2-5 minutes in length. The video announcements were hosted on YouTube, but a URL to the video was posted in the discussion forum titled

Table 3. Student perceptions of video announcements.

Survey question	5 Strongly agree	4	3	2	1 Strongly disagree	*M*
I like video announcements	32 (34.0%)	32 (34.0%)	24 (25.5%)	4 (4.3%)	2 (2.1%)	3.94
I prefer video announcements over text only announcements.	14 (14.3%)	30 (30.6%)	36 (36.7%)	14 (14.3%)	4 (4.1%)	3.37
I read every announcement my instructor posts	35 (35.4%)	50 (50.5%)	9 (9.1%)	5 (5.1%)	0 (0.0%)	4.16
I watched all video announcements	31 (37.3%)	35 (42.2%)	10 (12.0%)	7 (8.4%)	0 (0.0%)	4.08
Video announcements can establish an instructor as being perceived as a "real" person & "there"	43 (43.4%)	42 (42.4%)	9 (9.1%)	3 (3.0%)	2 (2.0%)	4.22

"Announcements" in the learning management system (after which an email was sent to students notifying them of the announcement). Overall, students reported that they like video announcements ($M = 3.94$) and that they believe video announcements help establish social presence ($M = 4.22$), but they did not all prefer video announcements over text announcements ($M = 3.37$; see Table 3). In fact, while participants reported that they tended to read or watch all course announcements ($M = 4.16$), video analytics on YouTube revealed that often less than half of students in the courses watched the video announcements. Further, when asked what they did when given a transcript with a video announcement, almost half (45%) reported that they watched the video instead of reading the transcript. However, almost a third of participants (31%) said they read the transcript as well as watched the video. But almost a quarter (24%) of participants said that they read the transcript rather than watched the video. Also, when asked what influences them to watch a video announcement, students mentioned things like:

- "I always watch the video announcements because they are critical to the success in class";
- "If there is instruction, I watch. If it is simply an announcement, I will not watch";
- and, "if I have time".

Perceptions of instructional videos

The participants in this study were taking courses that used commercially available instructional videos (i.e., Lynda.com)—sometimes called screencasts—as well as instructional videos created by the instructor. Students stated that they liked instructional videos ($M = 4.53$), they thought instructional videos were a good way to learn ($M = 4.49$), and that when given instructional videos, they watched most of the videos ($M = 4.53$). They preferred when instructors created their own instructional videos. They did though still see value in videos created by others (see Table 4).

Perceptions of video feedback

Students received individual video feedback on at least 1 or 2 assignments throughout the semester; students struggling with learning the course content, though, often

Table 4. Student perceptions of instructional videos.

Survey question	5 Strongly agree	4	3	2	1 Strongly disagree	*M*
Like it when my instructor uses instructional videos	55 (54.5%)	43 (42.6%)	3 (3.0%)	0 (0.0%)	0 (0.0%)	4.51
Instructional videos are a good way to learn	51 (51.0%)	46 (46.0%)	2 (2.0%)	0 (0.0%)	1 (1.0%)	4.46
Prefer instructors use videos they created	20 (19.8%)	26 (25.7%)	47 (46.5%)	8 (7.9%)	0 (0.0%)	3.57
Instructional videos created by others add value	18 (17.8%)	65 (64.4%)	15 (14.9%)	3 (3.0%)	0 (0.0%)	3.97
I watched most of the instructional videos created by my instructor	60 (59.4%)	35 (34.7%)	4 (4.0%)	2 (2.0%)	0 (0.0%)	4.51
Viewing instructional videos help establish an instructor as / being perceived as a "real" person and "there"	38 (37.6%)	50 (49.5%)	10 (9.9%)	3 (3.0%)	0 (0.0%)	4.22

Table 5. Student perceptions of video feedback.

Survey question	5 Strongly agree	4	3	2	1 Strongly disagree	*M*
I like video feedback	22 (32.8%)	29 (43.3%)	11 (16.4%)	3 (4.5%)	2 (3.0%)	3.99
I watched the video feedback	34 (55.7%)	17 (27.9%)	10 (16.4%)	0 (0.0%)	0 (0.0%)	4.39
Helpful to view video feedback others received	5 (5.9%)	30 (35.3%)	24 (28.2%)	22 (25.9%)	4 (4.7%)	3.12
I would watch video feedback instructors gave other students	5 (5.6%)	27 (30.3%)	25 (28.1%)	24 (27.0%)	8 (9.0%)	2.97
Video feedback helps establish an instructor as "real" & "there"	39 (43.3%)	35 (38.9%)	9 (10.0%)	6 (6.7%)	1 (1.1%)	4.17

received more video feedback. Students reported that they liked video feedback ($M = 3.98$) and that when given video feedback they watched all of it ($M = 4.35$)—sometimes even more than once (see Table 5). Video feedback was sometimes posted "publicly" in the course for other students to view. Students, though, were split on the value of watching video feedback provided to other students (see Table 5).

Perceptions of different uses of video

The last few questions of the survey focused on students' general perceptions of video as well as ways media can be used in online courses (see Table 6). Students reported that they strongly agree that video in general ($M = 4.34$) as well as video announcements ($M = 4.22$), instructional videos ($M = 4.22$), and video feedback ($M = 4.17$) can all help establish instructor social presence. However, when asked which type of video they valued the most, 72% of students reported that they valued instructional videos the most. Further, when asked, the majority (87%) stated that they preferred asynchronous over synchronous video. Students also reported that they prefer individualized videos (e.g., video created just for them) more than videos created for an entire class.

Table 6. General perceptions of online video use to establish social presence.

Survey question	5 Strongly agree	4	3	2	1 Strongly disagree	*M*
I enjoyed the use of video in this course	54 (54.0%)	39 (39.0%)	6 (6.0%)	1 (1.0%)	0 (0.0%)	4.46
I know my instructor better as a result of his use of video	41 (40.6%)	32 (31.7%)	22 (21.8%)	4 (4.0%)	2 (2.0%)	4.05
Video can establish instructor presence	46 (45.5%)	46 (45.5%)	7 (6.9%)	1 (1.0%)	1 (1.0%)	4.34
Video announcements can establish instructor presence	43 (43.4%)	42 (42.4%)	9 (9.1%)	3 (3.0%)	2 (2.0%)	4.22
Video feedback can establish instructor presence	39 (43.3%)	35 (38.9%)	9 (10.0%)	6 (6.7%)	1 (1.1%)	4.17
Instructional videos can establish instructor presence	38 (37.6%)	50 (49.5%)	10 (9.9%)	3 (3.0%)	0 (0.0%)	4.22

Finally, students were able to leave any additional comments at the end of the survey. The following are three comments that capture students' additional comments:

> Video, audio, and text are all tools for distance communications. Other factors … contribute to the feeling of a real person. Most critical for me is the timeliness of the communication. I'd rather have a more immediate text reply than suffer digital silence—even if the communication after the delay is in a high-quality video format.

> The courses where there was … video communication helped me to feel more connected to the instructor … I do not feel connected to my instructors who have not used any form of video communication.

> When videos are … short and focused they can be a very effective tool for learning. [But] not all information needs to be presented in a video.

Follow-up interviews

Six students took part in the follow-up interviews. They were asked specific questions about video announcements, instructional videos, and video feedback. The interviews overall supported and simply elaborated on the results from the survey. The following themes emerged from the interviews.

Student isolation is largely student dependent

Participants pointed out that online students today might still feel isolated and alone in online courses, but the participants thought that when and if this happens that it is largely due to the student's personality and/or choices. They described how they thought there are multiple ways for students to interact with their instructors and fellow students in online courses today. They did, though, describe how they thought that instructor videos could help students see things that might be lost in text-based communication (e.g., mannerisms, personality).

Video announcements can be helpful when short and add something new

When asked about video announcements, participants acknowledged that it takes longer to watch a video than to read a text-based announcement. They described how

video announcements can be useful when they are short and offer something new (i.e., they do not simply describe what is already written in the module). But they liked it when transcripts were included with video announcements to give them the choice to either watch the video or read the announcement.

Video feedback is personal and can be educational when short

Participants liked it when their instructor gave video feedback though a few mentioned it happens infrequently throughout their program of study. They described how when it was done, it made them feel valued that their instructor took the time to give them video feedback. However, they expressed concerns when instructors "ramble on" and mentioned how more efficient text-based feedback can be. They described how they would sometimes watch video feedback provided to students they "admire," but one student expressed privacy concerns with watching video feedback provided to other students, and another student simply did not seem to like video feedback much.

Instructional videos, whether instructor created or not, serve a purpose

Students mentioned that they liked instructor-created as well as non-instructor-created videos. They acknowledged that third party videos are sometimes more professional and polished and that they recognized that it does not make sense for their instructors to create a video if another video already exists. However, they also pointed out that they still like to see some instructor created videos and that they especially like it when an instructor created an instructional video on the fly, to improve their individual learning and/or the immediate needs of the class as a whole; they felt these videos sent the message that the instructor is engaged and cares about the class.

Discussion

Online educators regularly promote the use of video in online courses due in part to its ability to communicate richness in ways that text alone often cannot (Fiock, 2020; Martin et al., 2018; Mulder, 2018). However, as mentioned earlier, video is not a panacea. Rather the effectiveness of using video as a communication tool depends largely on when, how, and why it is used (Belt & Lowenthal, 2021). I use video in several different ways in the courses I teach (e.g., video announcements, instructional videos, and video feedback). I set out to investigate student perceptions of online video, and particularly its ability to establish instructor social presence, because I noticed that some of my video announcements were only being watched by about 25% of the class (based on the analytics). I wanted to get a better idea of the types of video that students value the most, both in terms of developing instructor social presence as well as perceived learning, and where instructors like myself should focus their efforts.

Like other studies (Lowenthal et al., 2022; Phirangee, 2016; Sheridan & Kelly, 2010), students in this study reported that it was more important to get a sense of their instructor's social presence ($M = 4.36$) than their fellow classmates ($M = 3.82$). Students also reported that video can help establish an instructor's social presence ($M = 4.34$) and that they got to know their instructor better because of his use of video

($M = 4.05$), which supports the research of Borup et al. (2012, 2013). They also reported that they thought video communication was better at establishing a person's social presence ($M = 4.23$) than audio ($M = 3.53$) or text-based communication ($M = 3.45$), which also aligns with the literature (see Fiock, 2020; Lowenthal & Mulder, 2017). However, in line with other studies (see Conklin & Dikkers, 2021; Lowenthal & Dunlap, 2018), students seemed mixed about the value of video announcements. For instance, when specifically asked, students reported that they like instructional videos ($M = 4.51$) better than video announcements ($M = 3.94$) and video feedback ($M = 3.99$). Further, when directly asked about the degree to which they agree with the following statement, "I prefer video announcements over text-only announcements," almost 37% were neutral ($M = 3.37$). Students generally liked video feedback and thought it helped establish the instructor's social presence but expressed some concerns like students in Borup et al. (2015) about the length of video feedback and the overall efficiency compared to text-based feedback. However, like students in Conklin and Dikkers' (2021) study, students preferred instructional videos and they specifically liked when their instructors created individual instructional videos when they were struggling, which aligns with earlier research of Lowenthal and Dunlap (2018).

Conclusion

Instructors, especially those new to teaching online, often report that teaching online feels like it involves more work than teaching a traditional face-to-face class (Bailey & Card, 2009; Kenny & Fluck, 2017). As more instructors find themselves teaching online with COVID-19, it is critical that online educators find efficiencies wherever they can. Research, like the results in this study, suggests that students generally like video and that they think it helps establish not only their instructor's social presence but also their perceived learning. However, students seem to prefer certain types and uses of video more than others.

Students are diverse. While some students liked video announcements, other students preferred video feedback and instructional videos. Students in this study, as a whole, preferred asynchronous video over synchronous video, as well as individualized one-on-one videos over more general videos. However, the use of synchronous video (i.e., in the form of web conferencing sessions in Zoom) was minor and not required. Additional research is needed, especially as a result of the increased use of synchronous video during COVID-19, on not only students' general perceptions and preferences of asynchronous vs. synchronous video but also on the specific ways these different types of video are used in the online classroom.

These results should not be generalized to all online learners. The small sample size, the population of the students (i.e., graduate students completing a graduate degree in educational technology), and the ad hoc survey used during the first phase of the study all limit the results to a degree. Future research should investigate how the age of the student or the subject matter of the course might influence student perceptions and preferences of asynchronous video. Additional research also needs to be conducted to see how different uses of video influence student outcomes.

While keeping in mind these limitations, I have changed my own use of video in the courses I teach. For instance, I have tried to be more strategic when and if I create a video announcement in my own courses. I have also, for the most part, stopped posting video feedback in the learning management system for all students to watch due to both students' lack of interest and general privacy concerns; however, I still believe in the value of public feedback in other ways (see Lowenthal & Thomas, 2010). Finally, I try to ensure that my instructional videos are regularly updated, kept less than 20 minutes, and captioned.

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Notes on contributor

Patrick R. Lowenthal, PhD, is a professor of educational technology at Boise State University. His research focuses on how people communicate using emerging technologies—with a specific focus on issues of presence, identity, and community—in online learning environments.

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Appendix: Survey questions

Part 1: General questions about video and social presence

To what degree do you agree with the following statements (5 *strongly agree* – *strongly disagree* 1)

- I sometimes feel alone or isolated when taking online courses
- It is important to perceive my instructor as "real" and "there"
- It is important to perceive my classmates as "real" and "there"
- I like it when instructors use videos
- I learned a lot in this course
- I was satisfied with this course as a learning experience
- Videos in online courses can help establish an instructor as a "real" and "there"
- I like it when my instructor uses instructional videos

How would you rate these types of communication media in their ability to establish someone as "real" and "there" when communicating with someone else?

- Text-based electronic communication (e.g., email or discussion forums)
- Audio communication (e.g., phone or recorded message)
- Video communication

Part 2: Perceptions of Video Announcements

To what degree do you agree with the following statements (5 *strongly agree* – *strongly disagree* 1)

- I like video announcements
- I prefer video announcements over text only announcements.
- I read every announcement my instructor posts
- I watched all video announcements
- Video announcements can establish an instructor as being perceived as a "real" person & "there"

Part 3: Perceptions of instructional videos

To what degree do you agree with the following statements (5 *strongly agree* – *strongly disagree* 1)

- Like it when my instructor uses instructional videos
- Instructional videos are a good way to learn
- Prefer instructors use videos they created
- Instructional videos created by others add value
- I watched most of the instructional videos created by my instructor
- Viewing instructional videos helps establish an instructor as / being perceived as a "real" person and "there"

Part 4: Perceptions of video feedback

To what degree do you agree with the following statements (5 *strongly agree* – *strongly disagree* 1)

- I like video feedback
- I watched the video feedback
- Helpful to view video feedback others received
- I would watch video feedback instructors gave other students
- Video feedback helps establish an instructor as "real" & "there"

Part 5: Perceptions of different uses of video and social presence

To what degree do you agree with the following statements (5 strongly agree – strongly disagree 1)

- I enjoyed the use of video in this course
- I know my instructor better as a result of his use of video
- Video can establish instructor presence
- Video announcements can establish instructor presence
- Video feedback can establish instructor presence
- Instructional videos can establish instructor presence