

THE USE OF D2L'S VIDEO NOTE TO PROMOTE ENGAGEMENT IN ONLINE GENERAL EDUCATION COURSES

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ABSTRACT

This study examines faculty use of D2L's Video Note as a tool for increasing student engagement. Instructor-created videos were used in online general education courses to promote student engagement at a fully online university with a predominantly adult, active military, and veteran student population. Upon course completion, students were asked to complete a survey on their perceived effectiveness of these instructor-created videos. Participating faculty were also surveyed about their experience with video note and its potential to increase student engagement. Student participants felt the instructor-created videos had an overall positive impact on their learning experience. Faculty indicated Video Note is simple-to-use and may contribute to greater student engagement; however, the purpose and placement of instructor-created videos needs further consideration. Keywords: instructor-created video, video note, D2L, general education, student engagement distance education, online learning

INTRODUCTION

The use of videos in online courses is frequently cited as a method to increase student motivation, engagement, and instructor presence (Borup, et al., 2012; Brame, 2016; Rottman & Rabidoux, 2017). Students often feel isolated in online courses and desire more instructor involvement (Ali & Smith, 2015). The online environment can create significant barriers to creating effective student-faculty relationships; however, connections with students using instructor-created videos may ease some of this social isolation (Draus, et al., 2014).

Instructors can use videos to explain topics, provide feedback or develop a sense of community. Students often perceive this type of faculty involvement as more engaging and important to their understanding of the course material (West & Turner, 2016; Griffiths & Graham, 2009). Faculty also note the benefits of greater student engagement when adding personalized video or audio content to their courses (Glazier, 2016).

While most online faculty understand the value of engaging students using technology, the time required to learn and use these tools in the online classroom can present a significant barrier. Technology that is easily accessible and does not require a steep learning curve may encourage greater use by faculty. Instructors can quickly and easily create short videos using the Video Note tool in the Learning Management system, Desire2Learn (D2L).

D2L is a commonly used learning management system for distance education which provides a platform for instructor and student engagement through lectures, discussion boards, assignments, and feedback. D2L also provides technology for easy recording of videos through its Video Note tool. Instructors can use Video Note to record short video lessons, provide feedback to students or create an announcement. Students can also create and embed videos using Video Note (Desire2Learn, 2020).

LITERATURE REVIEW

One of the easiest ways for instructors to create an online presence is using introductory videos. Students can gain a sense of their instructors as a person though welcome videos which may include a biography of the instructor or helpful tips for getting started. Sharp and Schultz (2013) found that students in online courses were just as likely to



report they "know" their instructor when introductory videos are used as compared to students taking the face-to-face version of the same course (p.38).

Borup et al. (2012) reported that videos make instructors appear authentic which is important when establishing a sense of community among online learners. A similar study using quantitative data did not show a significant difference between the use of asynchronous video versus text communication in online courses; however, the authors acknowledged that qualitative data was needed in order to fully understand how video introductions establish instructor presence (Collins et al., 2019). Qualitative data can provide researchers with a deeper insight into the student-perceived value of video-based communication, including its benefits and disadvantages.

D'Aquila et al. (2019) found that instructor-created YouTube videos improved student performance in online classes. Accounting and finance majors were the most likely to view videos in the courses studied, especially those geared toward exam preparation. Students were also more likely to view exam preparation videos despite their extended length (approximately 15 minutes). This could indicate students are more motivated to watch videos that could directly impact their final course grade. While this may provide some direction for instructors in terms of what type of video content to include in online courses, it is important to consider the specific student population when providing video lessons or feedback.

West and Turner (2016) found that most first-year undergraduate students (61%) preferred to receive assignment feedback in video form versus text. When evaluating third-year students an even stronger preference for video feedback was noted by these authors. Martin (2019) suggested shorter video clips can be effective for sharing common errors among the class and could be used across multiple assignments to support assignment feedback.

Video Media Players and Online Education

The existing literature on the use of videos within online courses primarily focuses on online lectures. Online lectures can take place through live streaming or as a pre-recorded lecture that can be accessed multiple times. Live video streams allow for immediate class engagement and discussion, while allowing students to ask instructors a question or receive immediate feedback. Pre-recorded videos allow for students to pause, play, control lecture speeds, and reply to lectures at the student's convenience. The ability to control recorded lectures in this way benefits students by engaging them with the course material in ways that maximize individual learning for each student (Wieling & Hofman, 2010). While videos in distance education appears to have many advantages, it is important to consider factors related to the content presented, length of recording and type of student population.

Video Notes

Video Notes are different than traditional online lectures. Traditional online lectures are predominantly used to present material in significant detail, oftentimes causing videos to last longer than 10 minutes in duration (Spickard, et al., 2002). More recent approaches to using media within online courses involve moving toward microlectures. Microlectures are simple, short presentations that focus on one concept or skill. Cognitive science supports the use of short lessons to avoid overwhelming short-term memory with too much information (VanderMolen, 2014). Video Notes are an effective tool for sharing short comments, ideas, introductions, instructions, or video-based feedback, that last no longer than three-minutes. Recent updates to the video note tool allow for recording up to 30 minutes in length, however this extended time limit was not available until after this study was completed. Limitations to Video Note include short-term storage (videos are deleted after 6 months) and the inability to embed or download the videos. However, instructors can re-use their existing videos across courses by searching the Video Note repository and selecting the desired pre-recorded video (Desire2Learn, 2020).

The tool is meant to be an easily accessible way for instructors to embed video-based feedback to engage students within the D2L platform (Desire2Learn, 2020). The tool can be accessed at any time and replayed by students throughout the duration of the course. The current study examines the impact of Video Note on the learner experience within a fully online university. This study primarily used Video Note to provide short instructor introductions and assignment feedback for students.

Adult Learners and Distance Learning

The current study focuses on the learner experiences of adult, non-traditional students at a fully online university. Most students enrolled in the University are either currently serving in the military or maintain veteran status. Adult learners are nontraditional learners typically characterized as being 25 years of age or older, working full-time, being a single parent, or having delayed college enrollment after high school (Chen, 2017). Studies surrounding



adult learner experiences with Video Note and online lectures were difficult to find. The majority of the literature explored topics on adult learning styles (Youde, 2018; Thompson & Deis, 2004; Moore & Shemberger, 2019), adult learner experiences and performance with distance learning (Bin Mubayrik, 2020; Gravani, 2019; Iloh, 2019; Kuo & Belland, 2016), and adult learner motivation in a distance learning format (Lyng, 2018; Lucey, 2018). This study seeks to build upon the existing literature surrounding the military adult learner experience in distance education, with specific focus on their experiences with Video Note in D2L.

Military Students and Multi-Media Experiences in Distance Learning

Military students share many commonalities with other adult and nontraditional learners, however, they are a unique student segment in higher education for some key reasons. For example, military students bring with them military service and experiential education that enhances classroom learning experiences, international/intercultural awareness, high levels of motivation and organizational commitment. Military students are also subject to unique challenges like unexpected work demands, little control over one's schedule and internet accessibility challenges (Starr-Glass, 2011).

Military students are further characterized into active duty, reserve, and veteran student populations. Active duty military are individuals who are currently serving within any branch of the military on a full-time basis. Reserve military are trained individuals who are available for active duty service when needed. These individuals participate in training drills one weekend a month and two weeks a year. Veterans are individuals who served in active military and then released by any condition except dishonorable (Department of Veterans Affairs, 2012).

Members of each military affiliation share important similarities in mindsets and approaches to education, but experience different personal, professional, and personal demands. For instance, most military students will experience similar challenges when transitioning into a traditional university (e.g. finding community, resetting academic expectations, balancing competing priorities, navigating institutional support services, negotiating financial requirements, etc.) (Bell, 2017; Lim, et al., 2018; Kloskowski, 2019). Differences exist, however, in time requirements and military obligations of the students (Department of Veterans Affairs, 2012). These differences influence the student experience in different ways, especially as it pertains to how military students engage with multi-media instruction such as Video Note, virtual lectures, audio files, etc. For example, students who are active duty may have internet access, bandwidth challenges, and potential disabilities that veterans and reservists do not (Starr-Glass, 2011; Auh & Choi, 2017). These considerations must be considered for this distinct student population while employing Video Notes and other multi-media resources.

THE STUDY

The purpose of the following study is to examine both student and faculty perceptions on instructor-created videos using Video Note in undergraduate, online, general education courses. The following questions guided our inquiry into the use of Video Note and its potential impact on the learning experience.

1. How do students perceive the impact of instructor-created introductory videos on their learning experience?

2. How do students perceive the impact of instructor-created videos on assignment feedback?

3. How do faculty perceive the impact of D2L's video note on the student's learning experience?

We exposed students to instructor-created videos using D2L's Video Note in five different online general education courses (Introductory Business, Business Communication, Health Technology, Microbiology and Stress and the Human Body) [see Table 1]. Each course was eight weeks in length and new sections begin each month. The January and February sessions were used to evaluate the impact of Video Note on student engagement. The same instructor taught each subject in the January and/or February session.



Faculty	Course(s)	Jan session	Feb Session	Control (no video)	Intro Video	Feedback Video
Faculty 1	100-level Introductory Business	Х	Х		Х	Х
	300-level Business Communication (section 1)	Х	Х		Х	
	300-level Business (section 2)	Х	Х	Х		
Faculty 2	Health Technology	Х				Х
Faculty 3	Microbiology	Х	Х		Х	Х
	Stress and the Human Body				Х	
Faculty 4	Stress and the Human Body	Х		X*		

Table 1: Placement of instructor-created introductory and/or assignment feedback videos within each general education course.

*Note: Only the audio capability in Video Note was used by Instructor 4.

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Participants were undergraduate online students attending a private, for-profit institution. The benefits and limitations of instructor-generated videos using Video Note were collected from anonymous student surveys and course reflection assignments. Participating faculty were also asked to complete an informal email survey on the use of Video Note and their perceptions of their videos (or audio) on student engagement. The anonymous student survey was conducted using SurveyMonkey.

Each course at the University also includes a graded discussion board for student reflection in the final two weeks of the course. While students are not specifically asked about video engagement in the reflection boards, these assignments are open-ended regarding overall course design and student experience. This provided an additional layer of unbiased qualitative data to complement the survey information. Student comments within the reflection exercise were gathered from each of the five studied courses. Three student reflections specifically mentioned the use of instructor-created videos.

A total of 374 students across all five courses were invited to complete the survey. Additionally, reflection discussion boards were reviewed for all five sections. Ten out of 374 students responded to the anonymous survey regarding the use of instructor-created videos using Video Note. A total of 232 students (62%) are considered military (e.g. active duty; National Guard, Veteran, and Reservist). One hundred thirty-seven (36%) students self-disclosed as active-duty military. Six students were enrolled in more than one course within the study.

Most respondents (9/10) were well-versed in distance learning, having completed five or more online courses. Most students were majoring in business or leadership (7/10). Other majors included Health Care Management (1/10) and Homeland Security (1/10). The remaining students were non-degree seeking (1) or unknown (1). Ages ranged from 26 years of age to 50+ with most students falling in the 26-41 age range (7/10).



Instructors were asked to post an introductory video, provide video feedback on one assignment or both using Video Note during each term. One 300-level business communication course was used as a control and did not receive any instructor-created videos. One instructor used only the audio capabilities in Video Note due to not having an available webcam. Table 1 demonstrates the term, course and type of engagement used by each instructor.

RESULTS

Student Surveys

Most students believed the videos were useful and made an impact on their learning experience. Almost all students recommended the use of instructor-created videos in future courses (8/10). Two students indicated no benefit from future videos and one student did not respond.

Student perceptions of introductory videos

Five students ranked the introductory videos as impactful to their learning experience, three remained neutral and two students did not find them valuable (see Figure 1).

Figure 1: Results from student survey in the January and February sessions asking for student feedback on instructor-created videos.

Student perceptions of feedback videos

Six out of ten students found the video feedback impactful to their learning experience (Figure 2). Students that ranked video feedback highly (4/5 or 5/5) did not provide additional detail in the open-text section of the survey. One student that ranked the video feedback as neutral commented on the positive benefits of seeing their instructor on camera, however emphasized the need for text feedback as well (see Open-Ended Responses).

Figure 2: Results from student survey in the January and February sessions asking for student feedback on video assignment feedback.

Open-ended responses

Students were provided with an opportunity to provide open-ended feedback on the use of instructor-created videos as part of the survey. One student taking the 300-level business course rated the assignment feedback video as having little impact (2) but provided the following positive comment:

"This is a neat concept and helped put a name to the face. I do not mind reading instructor feedback. I would also prefer two-way communication in the event it was needed for feedback".

A second student ranked the Introductory video in Microbiology as being impactful (4) and the video feedback being very impactful (5) with the following comment:

"I preferred the video feedback provided by the instructor. This gave me a chance to relate to the instructor as a person rather through written correspondence, which leaves you to your imagination. The video allowed me to pick up tonal and nonverbal nuances through the communication, thus solidifying positive or negative academic performance".

Self-Reflection Assignment

At the end of each general education course, students complete a self-reflection on their overall experience with the course and instructor. This discussion board activity is completed in the final module of the course for a grade. This area was reviewed in each course for specific comments relating to instructor-created videos. One student included the following comment regarding the specific use of instructor-created videos in Microbiology:

"You provided video feedback for our discussion posts which was new for me. Also you provided timely and constructive feedback for every assignment, which I realize in today's world we are extremely busy with life events, but you provided grades and feedback practically within 24 hours of assignment close out. Timely feedback is especially helpful as we are able to immediately adjust for the next assignment".



Faculty perceptions on Video Note and Student Engagement

Participating faculty were asked to complete an informal survey via email describing their experiences using Video Note and their perceptions of instructor-created videos (or audio) to improve student engagement. Faculty liked the simplicity of video note but noted the significant time requirement for creating a quality recording. There was also a desire by faculty to better understand how students were using the videos (or audio messages) and whether they were effective for improving student engagement. The following comments were made by two instructors regarding use of Video Note in future courses:

"I think it could be good, but not sure if it would be "more" engaging at this point. I do think the more it's used, the more the students will watch/listen and then it could be very effective".

"At this point, I am not sure how this approach [videos] would be helpful and I would like to use it in more classes with more students".

A third instructor indicated the potential for video note to introduce discussion topics. This could be an innovative approach to engaging students since they can also use Video Note; however, this was not explored in the current study:

"I believe that video feedback might be more effective to facilitate discussions rather than on assignments. I have not received any feedback from students nor have I experienced a noticeable difference in engagement on the use of video notes".

CONCLUSIONS

The overall impact of instructor-created videos seems to be positive according to student perceptions. Although some students ranked the videos as less impactful, most felt the videos were useful and would like to see additional videos in future courses. One student underscored the value of having both text and video to fully appreciate the instructor's feedback. Students feel video and audio feedback is valuable because these methods improve their understanding of the instructor's written comments through more than one modality. Many studies recommend a personalized approach to assignment feedback that includes the instructor recording his or her voice in the process of reviewing the student's assignment (Martin, 2019). Dinmore (2019) suggests having both text and images during video feedback to support increased learning for students versus text alone.

More advanced recording tools would be suitable for assignment feedback by allowing simultaneous video or audio feedback while displaying the student's assignment. This type of feedback demands more instructor time to complete which can be challenging in large courses. At the time of this study, Video Note recordings were limited to 3 minutes. However, recent updates to Video Note have extended the time limit to 30 minutes.

In the current study, Video Note showed promise for brief, targeted student engagement with an introductory video or presentation of a single course topic. Studies show that students benefit from instructor interaction and getting to know him or her as a person. Presenting brief concepts or introducing assignments could be suitable for improving student learning or engagement. When new information is presented, students often benefit from more than one instructional method, making video or audio especially helpful to first-year students. Additionally, segmenting videos into shorter clips may be more effective and digestible for students versus presenting one long continuous lecture.

Although many studies support the use of videos to engage online students, some challenges remain with their use as noted by the faculty in this study. These challenges align with many of the same issues found in the literature regarding the use of instructor-created videos. The greatest obstacle is the time commitment needed to create a quality video, especially if it is designed to be personalized for each student. Faculty, did however note the simplicity of the tool, citing no technical issues with the use of video note.

Limitations and Future Directions

The current study has multiple limitations. Future studies concerning Video Note should consider these limitations in order to increase understanding on this topic. Firstly, the small sample size in this study prevented a complete assessment of student perceptions regarding video or audio feedback. This presents some challenges to generalizing the results of this study to students outside of the general education department at this institution. Future studies should consider a broader range of courses to determine the impact of Video Note throughout key stages of the



student lifecycle (e.g. first year experience courses, general education courses, upper division programmatic courses, graduate level courses, etc.). Additionally, the inclusion of multiple departments and course sessions could further support the strategic use of instructor-created videos to increase student engagement.

The current study surveyed a convenience sample of adult, non-traditional, and military student populations at a fully online university within the United States of America. These findings present important insights into how students from these specialized student groups respond to Video Note but leave out other unique student populations. The current study excludes traditional students, leaving a gap in the understanding of the impact of Video Note on this student population, which is especially important with the rise in popularity of online courses for traditional-aged students (Umpstead, 2009; Thompson, 2016). Future studies should examine the perspectives of Video Note on other specialized student populations and intercultural experiences (e.g. gender differences, racial differences, international student experiences, etc.). This approach will help researchers better understand specialized student populations experiences with Video Note.

The current study primarily explored student perspectives on the use of Video Note in the introduction, discussion, and assignment grading areas of the online course. Although this is a good initial step in gauging the general receptivity of students on Video Notes, additional research is needed to exam other strategies for using Video Note within the online classroom (e.g. micro-lectures; assignment instructions, motivational nudges, etc.).

Future research exploring the type and nature of instructor-created videos is warranted. In addition to survey data, quantitative data on the number and frequency of video views, student satisfaction rates, retention rates, log-in data, and grades would be valuable to study. Despite these limitations, this study provides a starting point for the design and use of instructor-created videos to improve the online undergraduate student experience.

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