Great Expectations: Students and Video in Higher Education

A SAGE White Paper

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Contents

Background	1
Method	2
Findings	2
Why students watch video	
What makes for a compelling video?	3
How long will students watch a video?	
Where students search	4
Expectations of the library	4
How the library can communicate services to students	6
Conclusion	7
Works Cited	8

There is little doubt that students are accustomed to multiple methods for consuming information, ranging from journal articles, books, and textbooks to lectures, newspapers, blog posts, and videos. They participate in courses that take place live in a classroom on a college campus; they join hybrid classrooms; and they learn via courses that occur asynchronously, with instructors whom they will never meet in person. Their classroom experiences are varied. Students bring their own life experiences with them into the classroom, and they are an opinionated group, regardless of their age or geographic location. Combining previous research on video in higher education, surveys of 1,673 students, and a collection of in-depth interviews, this white paper examines student expectations for use of video within the classroom, how and why students use educational video outside the classroom, how likely students are to watch videos produced by libraries, and what tips students have for libraries about how to reach them.

Key findings from this research are as follows:

- Students are accustomed to watching videos for their classes and coursework in colleges and universities; 68% of students report that they watch videos in their classes.
- In addition to watching videos because they are assigned or shown during class, 79% of students
 voluntarily watch videos to enhance their understanding of a topic, to better understand material
 introduced in class, to learn the steps necessary to do something successfully, to understand the
 practical application of a theoretical concept, and to find a video that they can use during their own
 presentations.
- Students are largely unaware of resources that their libraries are providing access to and instead find videos either because their instructors pointed them out or they searched YouTube and Google. Only 32% of students report searching for videos in the library or on the library's website.

Students look for videos that they can quickly identify as meeting their information needs, as well as videos that will keep their attention. They are drawn to charismatic speakers and are likely to watch more of a video that is off topic but has a good speaker than a video that is on topic but has a boring speaker. They admit to having short attention spans; not only will they watch a video for less than 10 minutes, but they will multitask while a video plays.

All of these findings help to present the environment in which learning takes place in higher education. With a diversity of age ranges and life experiences and with a similar diversity of classrooms types (synchronous and asynchronous, in person and virtual), student expectations for videos—including how their faculty will employ videos—are just as diverse as the campus communities of which they are members.

Background

Employing video in higher education has the potential to improve student learning as well as affect advantages such as containing costs (e.g., textbooks and facilities), recruiting and retaining quality students, increasing faculty accessibility to students, and facilitating an instructor's effectiveness (Barbier, Cevenini, & Crawford, 2012). For students, video can increase their classroom engagement and performance (Bravo, Amante, Simo, Enache, & Fernandez, 2011). Greenberg and Zanetis (2012) state that the impact of educational video on the learner can be explained by three factors:

Interactivity with content—the learner relates to visual content, whether verbally, by note taking or thinking, or by applying concepts

Engagement—the learner connects to the visual content, becoming drawn in by video, whether on demand or in real time

Knowledge transfer and memory—the learner may remember and retain concepts better than with other instructional media.

Furthermore, video empowers students, as they can view videos in their own time frame, managing the frequency as well as how much of a video they desire to watch (Fernandez, Simo, Castillo, & Sallan, 2014).

In one study, students were divided into an intervention group (i.e., received traditional lectures and unlimited access to a medication administration video) and a control group (i.e., received lecture and skills classes only). The students in the intervention group "were more likely to pass the assessment and rate their satisfaction with the teaching significantly higher" (Holland et al., 2013, p. 666). In a similar study, Sowan and Idhail (2014) found that streaming video kept students engaged, decreased their nervousness, readied the students for upcoming assignments, and assisted their comprehension of medication administration. Moreover, students were satisfied with this method of instruction regarding this procedure.

Yet, adding video to a course does not necessarily serve as an instant change agent. One study of nursing students and video uncovered little student engagement; for example, students did not watch all the videos, or they completed other activities online while they watched a video. In addition, technical issues did not influence their watching the videos; instead, "the college students were more likely to complete the video if they perceived it as beneficial" (Park et al., 2014, p. 164).

The notion that students will watch videos that they deem beneficial was also noted in an examination of the relationship among streaming video, educational dialogue, and feedback in an online management accounting class. Students expressed that practical videos and theoretical videos were the most beneficial and that video assisted them in comprehending concepts. Other results from this study included an increase in student motivation, which aided in keeping the students engaged in the online forum. However, the students identified some drawbacks to using streaming video: Some students preferred to use traditional written documents; others felt that the videos impeded their study time because it was time-consuming to watch all the videos to participate in the online discussion (Fernandez et al, 2014).

Utilizing video in the university classroom can lead to a number of positive benefits for students, faculty, and the university at large. Although Giannakos, Jaccheri, and Krogstie (2014) found that research regarding the use of video and its platforms has increased over the last 5 years, they recommended that research continue by focusing on users' viewing behavior and satisfaction levels in relation to streaming educational video.

Method

In addition to a literature review on the use of video within higher education, this research includes three surveys and nine interviews. The surveys were conducted over the span of a year, with some questions asked in each survey and others asked in only one of the three surveys. It was hoped that the shorter surveys would result in students being more likely to take and finish them. For each survey, incentives were provided.

A total of 1,673 students took the surveys, which did not require them to answer every question. Regarding demographics, 49% were undergraduate students, and 33% were graduate or postgraduate students. The remainder of students did not provide demographic information. Students who had graduated were disqualified from the surveys. The surveys were sent to students across the world, with 42% of the respondents coming from North America, 33% from Asia Pacific, 19% from Europe, and <1% from South America.

Findings

According to the surveys, 34% of the students were shown videos in most of their classes, 34% in some of their classes, 20% in a few of their classes, 7% never, and 8% in all their classes. For the students who were shown videos in all of their classes, the majority of their responses indicate that they were distance education students or were studying media/communications. This may be

changing, as some students indicated that they watched videos in almost all their classes in high school and expected to be watching more videos in college. Some students felt that their older professors are not as comfortable with video as their high school instructors were.

The students in this study were assigned to watch a variety of videos-including feature films, faculty-created videos, documentaries, tutorials, case studies, experts speaking (e.g., Ted Talks), interviews with academics, lectures with academics, short definitions, role-plays, conference proceedings, laboratories, and medical procedures. The most frequently assigned videos were documentaries (53%, n = 558students), experts speaking (40%, n = 420), tutorials (36%, n = 384), and case studies (33%, n = 353).

Case study: Karen, undergraduate psychology major

Karen watches video for most of her classes, but wants more advanced topics than what she can find easily when she searches for video.

"The more I get into my degree and the more specialized the concepts are, the harder they are to find because less people are generally talking about them."

She sees video as a way to bring the international community to her device. She is unaware of the library's resources and wouldn't think to ask about them.

What makes for good video?

"I find a lot of the time if someone is talking about the topic and is unenthusiastic, I'm instantly unengaged. But if someone is talking about something and they're passionate about it, the topic could be very boring but it's still engaging."

Do you have any advice for librarians?

"If you want students to know what you have, tell our teachers. They tell us what to use."

Why students watch video

Students were asked why they watched educational videos. They chose from 10 answers (see Table 1) and could add their own reasons. While the main reason that students are watching video is that it is shown during class, it is not the only reason. The top reasons that they voluntarily watch videos are for help in understanding the material that they could not understand during class ("A better explanation than the teacher gave me in class"), to see the steps necessary to do something successfully (as in a tutorial), to see a practical example of a theoretical concept, and to get another perspective. Because of these reasons, the main videos that undergraduate students watch voluntarily are lectures, tutorials, interviews, case study or in-practice videos, and documentaries, especially when the documentaries illustrate a real-life issue that students are trying to understand in a deeper way. Some videos appeal more to students in specific disciplines, however. For example, nursing and medical students are very interested in watching surgical procedures.

Additional reasons for watching videos include to catch up on a class they missed (in one interview, a student not only stated but laughed about the fact that many students did not go to the in-class lectures: "After all, why go when all the lectures are recorded?"), to prepare for a test, and to deepen understanding of a topic ("I often watch or read extracurricular material as I want to learn as much as I can"). One student wrote that he or she likes watching videos because of the ability to watch and rewatch a video—that it offers a feeling of being "in control of the lecture." For students who do not watch videos, it is that they preferred going to classes to learn the material.

What makes for a compelling video?

Comments in the survey and in the interviews show that the most common response for what makes a compelling video is a charismatic or compelling speaker. The students wanted someone who was animated, easy to understand, and interested in the topic that she or he was discussing. The students

Table 1 Why Students Watch Educational Videos					
Question: Why do you watch educational videos? Please select all that apply.					
Answer Options	%	n			
Professor plays it during class	63.4	671			
For help in understanding course material		628			
Assigned as homework prior to class	43.2	458			
Assigned as supplemental material	41.4	438			
To see the steps necessary to do something successfully (like in a tutorial)	34.3	363			
To see a practical example of a theoretical concept	31.8	337			
To get another perspective	29.4	311			
As part of a research assignment	25.1	266			
To illustrate a point in a presentation you are making	17.7	187			
Never had to watch a video for class and don't look for it independently	5.0	53			

disliked monotone speakers, speakers who did not look at the camera, or those who appeared nervous. They also liked the videos to contain real-life examples, to offer something new (there were multiple comments about it being hard to find new information), and to include additional animations, ranging from charts and graphs to sample medical procedures.

The students judged the videos relatively quickly, determining in the first couple of minutes if they would be willing to watch an entire video. While they partly examined videos for fit ("It's a question of topic. If I am very interested in a topic then I will be more likely to watch the whole video"), they also decided if it could hold their interest. Few students were looking to be entertained as they learned, although some mentioned that they liked speakers with a sense of humor. However, an attempt at humor could just as easily turn a student off of a video ("Some people just aren't funny and shouldn't try to be").

How long will students watch a video?

In the survey, students were asked an open-ended question about how long they tended to watch educational videos. Of the 562 comments, only a handful (<1%) mentioned watching an entire video. Most comments gave a range from 5 to 20 minutes depending on the topic and type of video, although some students had a much wider tolerance range. For example, one student wrote that it "depends on the length of the video, if I like its style and if it's 2 hours, I'll watch it all (if it's relevant). Whereas if I hate the style, I probably won't make it to the end of a 2 minute video." For other students, their overall tolerance for video was much shorter and less nuanced; 5% of the students would watch for 5 minutes and 1% for <2 minutes.

Where students search

The most popular place where students search for videos is YouTube, followed by Google and class web pages (Table 2). For YouTube, some students have their favorite channels and regularly search that channel. For students who commented on where else they search, Khan Academy and Coursera were the most mentioned additional places to look for videos.

Expectations of the library

In a separate question, students were asked if they had ever checked out videos or watched streaming videos from their libraries. More college students checked out DVDs from their public libraries than from

Table 2 Where Students Search for Videos					
Where do you go to search for videos needed for classwork?					
Answer Options	%	n			
Class web page	43.3	455			
Library or library website	31.6	332			
YouTube	71.2	748			
Google search	44.8	470			
Other (please specify)	5.5	58			
Answered question		1,050			

their college library, but more college students watched streaming videos from their college libraries than their public libraries (Figure 1).

Some students watched both DVDs and streaming videos from their libraries and used both their public and academic libraries. As one college freshman wrote,

I've borrowed physical copies and streamed videos before. It's easier to stream videos from my college library, rather than the public one, because it's a little difficult to use. I borrow physical copies when I can't spend too much time at college (e.g. have to leave for my job) or the libraries will be closed for a certain day.

A sophomore commented that she normally uses

streaming videos from my library to help with my college coursework because it would further explain concepts that I

Case study: Jeff, graduate student in instructional design

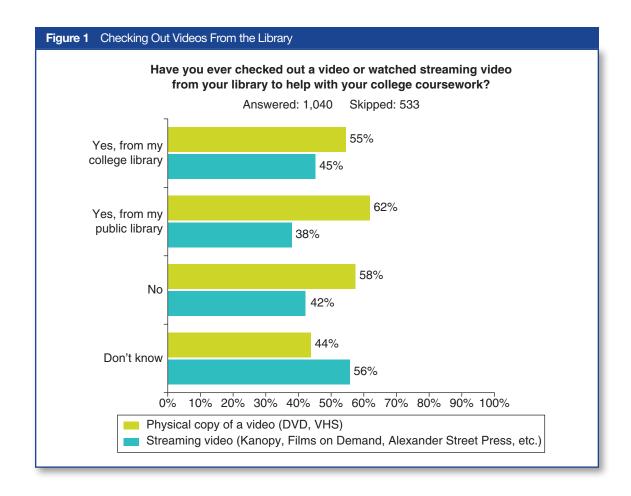
Jeff finds his current program integrates learning theory and technology into the classroom in a way that was not done in his last master's program (creative writing), where video was mostly supplemental, "... whereas in the program I'm in now it's very standardized. There's always video for every type of content. There's at least one demonstration video if you're learning a skill. It's all very scaffolded and structured."

What makes for good video?

"I think that if it's a really complex topic, I would prefer it to be broken down into short segments. That works well, I think, for adult learning theory, in that, if you have something that's really complicated you want to let the learner approach it at their own speed. So let's say that if you have a really complex idea you want to break it down into five parts and then maybe a video for each part. And then at the end, that learner can pause it and sort of think and reflect back on it or re-watch before moving on to the next one. Not everyone is going to sit once. They might, but, they might watch it in chunks, then stop and pause, and get up and do something else."

don't understand in detail. In lectures, the lecturer mainly runs through a huge bulk of content too quickly in a small amount of time, so I have to find other ways (e.g. watch videos) to educate myself.

While some students commented positively about using the library, others showed no interest in trying their library. One student wrote that he had never used the library video resources before and wasn't interested in trying as he expected that the "resources are probably outdated and it is harder to narrow down your search compared to searching on Google or YouTube."



Making the analysis more complicated is that students made it clear that they use their instructors' course pages to find required and supplemental materials, including videos. However, they are unlikely to have noticed if the library had acquired streaming videos on behalf of the campus.

Students were also asked if they would watch library-produced videos intended to give them tips on being better researchers. Only 30% would watch the videos, 43% said maybe, 21% said no, and 6% did not know (Figure 2). Students who were interested mentioned needing help doing citations or just wanting some general help. Other students wrote that they would watch only if it was recommended or if it was compulsory. Students expressed thinking that they did not need help and that the videos would be boring.

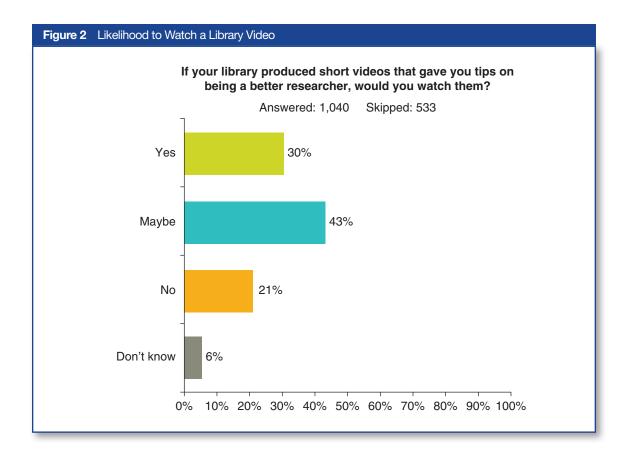
How the library can communicate services to students

In response to an open-ended question about how they would suggest that their library tell them about library services, students had a wide variety of possible marketing channels. Students recommended that the library market to them using the library website, the learning management system, social media (including Facebook), e-mail, touch screens inside the library, and posters on bulletin boards near the entrance to the library. They also recommended that the message be clear and target specific services, rather than a general message about the library. A few students wanted a personalized message to be delivered to them during orientation. In a sampling of their own words, students said,

• "Come up with a more interactive user interface for library monitors that gives clear instructions on how to assess the library's various services."

6

"Currently informed by student emails which is sufficient."



- "Send an email to my school/personal email address or pin it to the bulletin."
- "They could have the information available online or shown on posters around the library."
- "Giving out only information for relevant services so that I would not disregard all mails from the library thinking they are all just general mails."
- "Face to face initially would be nice."
- "I would rather they list it out on the website. I prefer words over videos."
- "Facebook page, website short, snappy posts with links to more information if required."
- "Sign in library, show on front page of school or library website."
- "Don't tell me, especially don't send me emails. If I want, I search myself. If the library wants to inform students, just tell the lecturers to advertise it."
- "Send emails regarding open houses with FREE ITEMS."

Conclusion

Despite the diversity of students' experiences, interests, and information needs, some generalities do exist about students and video. Throughout the course of this research, the desire that students have to increase their learning is clear. Whether students are using videos, textbooks, websites, or other sources, they are looking outside the classroom to make sense of what they are learning in the classroom, to help them prepare for tests, to see if there are practical applications of theories, as well as to increase their understanding of a topic or subject more generally.

Videos can provide a powerful way to bring a topic to life, in part because they can show reality but also because videos bring multiple voices to students in relatable ways. One student deliberately looked for

multiple videos on a single topic, writing that "narration is great, but I also want to hear from other people whether they be other experts, subjects of the film, etc." For some students, video not only brings a topic to life but is preferential because of their personal learning style—namely, calling themselves visual learners.

For faculty and librarians who are concerned that students are not discerning consumers, it is important to note that students evaluate videos not only in terms of production value but also to determine the fit with their information needs, which includes expanding their understanding of different points of view on a topic. As one student wrote, "I watch educational videos to gain a more well-rounded perspective on certain discourses, rather than accepting things at face value. This is something that is extremely important in an area of study like sociology, which happens to be my major."

For librarians, students may present a tough market. Students want more complex and more advanced videos than what they find freely available on the Internet, but they are not thinking to look to the library for educational videos. Following students' suggestions about how to reach them may provide a good starting point, but collaboration between instructors and librarians may provide the most impactful way for librarians to reach students. Students clearly take their lead from professors; if they do not see links to the library's resources on course pages or syllabi and if faculty are not mentioning the library as a resource during class, then students may never open e-mail from the library or approach it in person or virtually to look for videos.

Students acknowledge the power of video. Now it is up to us all—publishers, video producers, faculty, and librarians—to help students find the best videos for their educational endeavors.

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