Current Methods and Trends in Video Production for Educational Purposes

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ABSTRACT

Video has become more popular in recent years as a communication medium, overtaking both audio and print. This paper intends to discuss the various ways in which this format can be beneficial when applied under educational circumstances, both as a tool to teach and a tool to learn. It will explore the applications for educators to create video lectures, how both educators and students use video conferencing to establish and maintain a direct line of communication with one another, and the concepts and studies behind using video production as a learning device.

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Current Methods and Trends in Video Production for Educational Purposes

Online education has become increasingly popular over the past decade, with many people opting to obtain degrees and certificates remotely, rather than attending classes in-person. This may be for a wide variety of reasons, but a major factor is convenience. This paper will discuss how video production has aided in the advancement of online education, how crucial to the distance learning process video production has become, and what may be expected of a student and their teacher in an online-only environment.

What is Distance Learning?

Distance learning can be most easily defined as “education occurring in different places” (Simonson, Smaldino, & Zvacek pp. 9, 2014). This means that the student is in an alternate location compared to the teacher and fellow students. Many distance learning programs involve a combination of pre-recorded lectures, asynchronous discussions, and live (synchronous) video conferences where attendees participate from various locations, usually with a microphone and webcam in order to interact with others in the video conference (Simonson et al. pp. 10, 2014).

Why is Distance Learning Important?

With the increased accessibility provided by the World Wide Web, as well as faster Internet connections, students at any level can now attend classes from anywhere in the world. Resources are available to a wider potential audience who may not otherwise have a university or qualified instructors available to teach them what they want to learn. According to Michael Simonson et al. (2014), soon enough “the concept of distance will disappear as insignificant, and the idea of interaction will replace it” (pp. 26). Figure 1 (below) illustrates the percentages of reasons why students choose distance learning.

Figure 1.

Reasons students choose distance learning (BestColleges.com 2019).

Additionally, due to current global circumstances, distance learning has become integral to maintaining some level of normalcy in the educational system. Many schools have migrated their in-person classes to online formats as a preventative measure against the current pandemic. This process has involved creating video lectures and holding video conferences in order to stay on schedule while keeping people safe.

Video Lectures

Woodward and Reid (2019), of the University of Mount Union in Ohio, created a series of "pre-lecture videos" for their organic chemistry students, which were uploaded to YouTube and made available two days before each class. Those students were then quizzed upon their arrival, based on the information provided in the video, as well as whether they had opted to view the video before the start of class. Because of the "survey style" of the quizzes (they did not affect the students' grade in the class), the first semester this was offered as an optional task received only

a 79% participation rate. Each semester they added email reminders, as well as offering homework online, and saw a drastic increase in participation, up to 95% (Woodward & Reid, 2019). Students began to understand the benefit of learning outside the classroom through these pre-lecture videos.

For classes that are entirely online, video lectures are a crucial part of the curriculum. They provide the student with the information needed that would only be otherwise gathered via in-person lectures. Video lectures are often comprised of the teacher reading a pre-written script while slides containing the information are displayed on the screen (Simonson et al. pp. 3, 2014). This format allows the student to be able to pause to take notes, or rewatch pieces of the lecture to affirm information they may not have initially understood. Additionally, the educator can communicate the necessary information they want to convey without any distractions, such as those that may happen during in-person lectures. This helps to assist both the student and the educator to understand exactly what is being communicated.

Video Conferencing

Video conferencing is considered “synchronous learning” by Simonson et al. (pp. 7, 2014). It involves the use of software by the educator and students in order to have a live interaction in real time. Table 1 (shown below) lists the best free and paid video conferencing software according to TechRadar (Drake & Turner, 2020). This is beneficial for clarifying information, asking questions, and is usually more casual than a video lecture. A drawback to video conferencing is the technology it requires, such as hardware (usually a microphone and/or webcam) and a reliable Internet connection. However, it can be a useful tool for discussions and check-ins to make sure that everyone understands the material.

Table 1.

Best Video Conferencing Software 2020 (Drake & Turner, 2020).

Free	Paid
Zoom Meeting	GoToMeeting
Skype	CyberLink U Meeting
FreeConference	Zoom Meetings
Google Meet	BlueJeans
Cisco Webex Meetings	Google Meet

Video Production as Elementary Education

In addition to using video as a communication tool for myriad subjects, producing video itself is educationally beneficial as well. Students as young as elementary school-aged are being tasked with creating videos in order to not only learn technical skills, but also problem solving, communication, and collaboration (Gaston & Havard, 2018). In their study, Gaston and Havard (2018) explored the benefits and detriments of this type of production with students in grades two through five. They gave the students proper training for use of the equipment, and teachers were assigned to different groups to help them produce a video on the topic of their choosing (Gaston & Havard, 2018). Students were tasked with each stage of the video production process, from brainstorming to storyboarding to filming, while the teachers were to edit the final videos.

Afterward, a survey was conducted for the students to communicate their level of perceived learning as well as their interest in the production assignment. Most of the students not only learned more about the subject of each video, but also how to work as a group to create a final product. This level of interaction proved to be a positive experience throughout the entire process of the study (Gaston & Havard, 2018).

According to Gaston and Havard (2018), “the novelty of the activity can help trigger interest for the learner, and thus make the experience more engaging, and in many cases more positive”

(2018). Keeping students engaged and involved in their learning experiences is not a new concept, but with the addition of technology—where they feel like they created the content they are learning—it becomes even more apparent that video production is a worthwhile experience for students of many different ages.

Video Production as College-Level Education

Another study, completed by Chen (2018), sought to develop "digital empathy through video production." Chen describes digital empathy as "the traditional empathetic characteristics such as concern and caring for others expressed through computer-mediated communications" (2018). This study was conducted using participants who were EFL (English as a foreign language) students and involved producing a video regarding their attitudes toward literacy.

Chen began by using a five-step methodology to teach the students about the video production process as outlined by Frisem (2016): "screenplay writing, preproduction, production, postproduction, and screening" (Chen, 2018). Participants were instructed to create a video that would engage the audience and cause them to feel empathetic about the subject matter and message. They chose to make videos covering subjects such as cyberbullying, accidents, and other unfortunate circumstances. Much like the elementary school students mentioned above, they needed to work collaboratively in order to produce the videos.

The students were then surveyed about their experience, with questions about "video production skills, teamwork, active listening, learning about different perspectives and others' emotions, peer comments on the videos, and ideas for future implementation" (Chen, 2018). Overall, the study results proved to be inconclusive regarding students' ability to use video to convey digital empathy, but nearly all of the participants responded well to the concept of using collaborative video production as an educational tool (Chen, 2018).

Video Production for Educators

As the popularity (and necessity) of distance learning grows, it is integral for educators to stay informed about technology (Watt, 2019). Diane Watt of the University of Ottawa posits in her

2019 study that with the increasing growth of classroom diversification and growing significance of video as a preferred method of communication, educators need to be familiar with the creation of video lectures for their students, as well as technologies related to video conferencing (2019). Offering children educational aspects of technology with which they are already familiar, often outside of the classroom, can help engage them and help them to succeed academically (Watt, 2019).

Watt's study involved participants who work as educators creating educational videos for their students. The study was done over the course of two years, with the participants learning the concepts of video production and implementation into their respective curriculums (Watt, 2019). The results were overwhelmingly positive, with teachers feeling confident in the possibilities these skills developed for more effective teaching (Watt, 2019).

Conclusion

With the accessibility of the technology needed to record and edit video, many educators have begun to use video lectures in order to teach their students new material or reiterate information communicated in-person in a format that makes it easy to pause and repeat points for better retention. Additionally, with the advent of video conferencing, students and teachers can maintain a line of communication in real time and across vast distances. Moreover, educators have begun using video production projects with students of all ages to better their planning, problem solving, and cooperation skills. All three of these current trends punctuate the necessity for modern educators to learn, expand, and exercise their abilities in visual communication through video.

Video has quickly become one of the most effective forms of communication for educators, as well as a valuable learning tool for students. Now more than ever, the equipment and technologies are available to help those at every level of academia to share ideas, learn new skills and information, and stay connected.

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