Online Courses

UsingVideo to Create Impactful Training

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Introduction

In American and international educational institutions, online teaching is becoming more common. It is increasingly the format of choice for many academic programs. Schools are more frequently offering instruction in online education on platforms including web conferencing, virtual classrooms, and computer-based training (Rudd & Rudd, 2014). Several institutions of higher learning and educational technology businesses, such as Coursera, Udacity, EdX, and Khan Academy, are embracing video lectures as a primary self-study medium or as a tool to facilitate the learning process (Vieira et al., 2014).

In line with this, information technology-enhanced learning is becoming more popular. As a result of intense competition and globalization, there is a demand for a decrease in time to compete in the knowledge-based economy (Zhang et al., 2006). This type of learning is becoming necessary as the continuous development and involvement of the Internet in different businesses exist. To ensure that employees and business partners quickly develop new expertise, companies must provide them with excellent training. In the academic world, distant students who cannot physically reach the school must receive their education (Zhang et al., 2006).

Among the tools at the disposal of instructors, videos are one of the most famous. Lecture videos have become increasingly common in higher education institutions in recent years. They are thought to be effective teaching tools when used effectively (Mosley, 2017). According to Scagnoli et al. (2XXX), a lecture video is a video recording of a lecture, conference, or presentation given by an instructor to explain essential ideas and provide context or samples to assist learners. Less expensive lecture video technology, better accessibility of internet bandwidth, and improved student access to computers and smart mobile devices are all variables that have permitted modifications in the direction and regularity of lecture video use (Mosley, 2017).
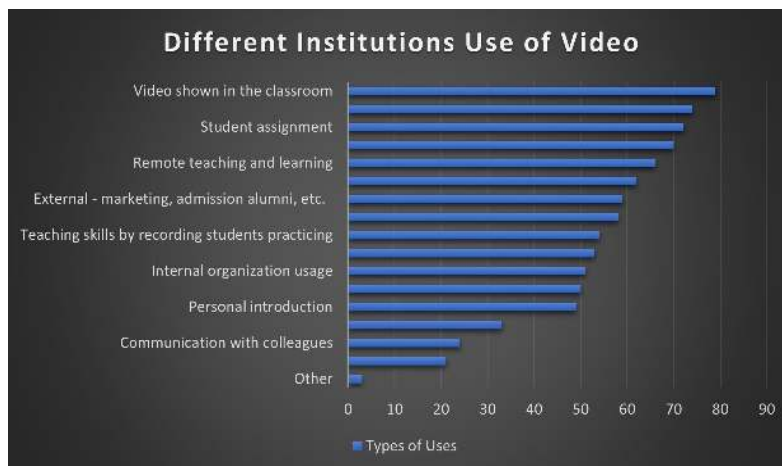
Based on the online survey conducted by Kaltura, the major uses of video in instructional settings include videos for classroom instruction, student assignment, remote teaching and learning, internal organizational usage, communication with colleagues, externals, and many more. It can be observed that the significant use of the video is for instructional purposes.

Synchronous Forms of Video

Synchronous videos include feeds that are broadcast simultaneously from an instructor to a student and from a student to an instructor. Students can interact with the teacher, pick up on nonverbal signs, and imitate a conventional classroom setting. Instantaneous exchanges between students and teachers are made possible via live video feeds that are a component of a virtual classroom or web conferencing system. These interactions are akin to those in traditional lecture-based formats (Rudd & Rudd II, 2014).

Web Conferencing

RingCentral (n.d.) defines web conferencing as any online gathering with two or more participants in separate locations. These participants could be anywhere in the world. They could see, hear, and speak to each other in real time with conferencing software and a dependable internet connection.

Web-conferencing enables people to communicate with the instructor and other learners in real-time through a camera, microphone, and chat (message) box. Learners are provided a unique URL for the course site ahead of the start of instruction. Students and instructors both log on to the course website. Guests could register as guests, but only with the instructor's permission (Ellingson & Notbohm, 2012).

Virtual Classrooms

A virtual classroom is an online avenue where learners and instructors can engage and discuss their courses. The main characteristic of a virtual classroom is its synchronous environment. The teacher may opt to present new ideas, or the learners can share their insights. They can also collaborate in this space if the course requires them. Moreover, it gives opportunities for learners and instructors to communicate.

Asynchronous Forms of Video

Asynchronous learning involves interactions that occur over time. A forum platform is widely used to establish an interactive atmosphere for learners. Instructors submit questions, conversations, and other exercises, and learners respond to these activities over time at their own pace (Rudd & Rudd II, 2014).

Computer-based training (CBT) is any course of education that uses a computer as its principal mode of delivery. CBT is self-paced and occurs over time by design. This is an example of an asynchronous video. Prerecorded software demonstrations, recorded classes, and lectures are the most popular asynchronous videos.

## Impacts of Using Videos for Online Instruction

Recorded videos offer flexibility for learners

From their study, Owston et al. (2011) concluded that learners value lecture capture in large undergraduate courses because it allows them to choose whether or not to attend classes. They find it convenient to revisit lectures while they are studying, they can make up missed assignments, and they are relieved of the responsibility of taking meticulous notes in class since they can examine the lectures later.

This situation is highly similar to working professionals taking additional courses to develop their skills further. Their current workload might be too heavy and time-demanding during the busy hours that they cannot afford to attend a synchronous class. Recorded training videos that are carefully constructed for working professionals are great solutions to this problem.

Application of Job-specific skills

Tan et al. (2011) conducted a study to determine the forms, depth, and extent of pre-service instructors' evaluation utilizing micro-skills training videos combined with e-learning self and blogs. This is done by analyzing the reflection entries of the instructors after they have finished watching the training videos given to them. Their reflections are categorized into four levels: pre-reflection, surface, pedagogical, and critical. Some of the results from the study are depicted in the chart below.
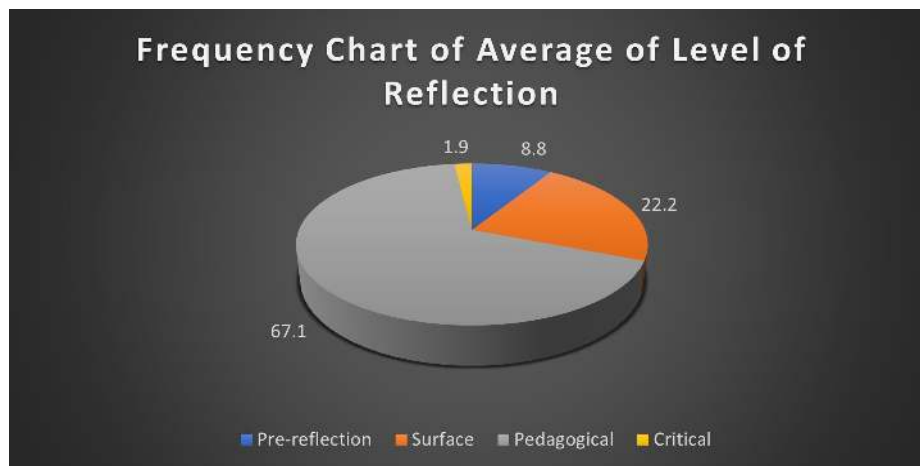
As observed from the data, 67.1% of the reflections reached the pedagogical level. This denotes that almost two-thirds of the instructors focused on how the multiple teaching methods and approaches featured in the video materials affect student learning and how these techniques can be used to improve the teaching and learning experience.

This study is one of the proofs that video learning materials have the potential to transfer job-specific skills to learners. This study is done with teachers, but the same effect can be assumed to manifest in different scenarios, for instance, in the workplace. Various video learning materials highlighting the crucial skills the company needs for its employees to master can prove helpful in training.

Influences positive perception of online learning

It is no question that there are learners who are not enamored with online learning. A load of repetitive files they need to read or work on can adversely affect their enthusiasm and motivation to complete the class. A paper by Ellingson & Notbohm (2012) stated that using video for learning (web conferring for their study) in an MBA Accounting course has received some positive feedback from the learners.

Live web-conferencing training enables learners to develop a greater interest in the course. Weekly live class meetings promote consistent attendance and motivate learners to stay on top of the curriculum and prepare for class. Group discussions and presentations encourage involvement while holding students accountable to their peers and professors (Ellingson & Notbohm, 2012). These are just some of the positive developments that are observed in online learning due to the utilization of videos.

Viewing patterns are good data for course improvement

There is no such thing as perfect course material. As time progresses, new demands and needs from learners arise as new technologies and strategies are used for instruction. Owston et al. (2011) study have exciting data on learners' viewing behavior on video learning materials, where numerous inferences can be drawn.

The table shows that most of the students watched the videos, but only 8% did not, and those individuals managed to get the second-highest mean grades. However, the group with the highest mean and the third highest mean grades did watch the videos. Both groups have relatively similar viewing behavior. They fast-forwarded to sections. This data can give insight into which parts of video learning materials helped the learners the most they needed to fast-forward into those sections. They are parts that a course designer might want to highlight if revisions to the learning materials are to be made. The features that they skipped can be considered sections that needed improvements or sections that can be removed entirely.

Viewing Behavior

Variable	Did not view lecture recording	Watched recording once	Watched recording multiple times	Watched the entire recording once and sections multiple times	Fast-forwarded to sections and watched them once	Fast-forwarded to sections and watched them multiple times
Frequency (%)	37 (8)	118 (27)	63 (14)	150 (34)	32 (7)	39 (9)
Mean Grades	5.92	5.84	4.63	5.43	6.75	5.90

Challenges in Using Videos for Online Instruction

It is also interesting from this data that those who watched the videos once had higher mean grades than those who watched the videos multiple times. Owston et al. (2011) suggested this data implies that the higher performers used the videos to explain or revisit specific subjects rather than the entire course, while the lowest scorers were individuals who viewed entire videos many times.

There are numerous challenges that can be encountered in using videos for online instruction. For instance, in asynchronous video learning, learners do not have the opportunity to raise their questions in real-time (Mosley). They will need to send their messages to their instructors and wait before they get a response or save them until the next synchronous meeting if one is scheduled. Appropriate technology training is essential for success, and without it, the inverse result of training ensues (Mosley, 2017; Rudd & Rudd II, 2014). Technical difficulties might potentially degrade the overall experience. Software, bandwidth, and communication flaws can turn an otherwise perfect lesson into a nightmare (Rudd & Rudd II, 2014`).

References

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