



Video Styles and Learning

David Beckley^{1,2} and Jeremy Marshall¹

¹Department of Entomology, College of Agriculture, Kansas State University

²Department of Industrial and Manufacturing Systems Engineering, College of Engineering, Kansas State University



Abstract

With the current prevalence of online and distance learning, videos are becoming a larger part of our education system. It is important that we be able to fully utilize the potential of videos as education tools. Videos make use of more senses than just printed materials, and provide greater flexibility for both teachers and students (Bevan). What qualities make a good educational video? We believe that to be effective at teaching a video needs to be interesting enough to students' attention and have enough information to be useful. By surveying a number of college students, we were able to support my hypothesis. With this information, we will be able to better select and create instructional videos both in academia and in the world at large.

Purpose

The purpose of this research is to identify the style of videos that are most effective for teaching students outside of the classroom.

Questions, Hypotheses, and Predictions

Question: How does a video's presentation impact its educational value?

Hypothesis: If an informative video is also entertaining, then students will learn more from that video.

Prediction: The video that is the highest combined informative and entertainment score will be the one students would learn the most from.

Methods and Experimental Design

First, we found a collection of videos about a single subject, World War 2, that represented a variety of different styles. Using these videos, we created a survey that asked each participant to rate each video on a scale from 1 to 5, with 5 being the most and 1 being the least, on how entertaining and how informative the video was. To save time, we asked each respondent to only watch a small portion of each video.

At the end of the survey, participants were instructed to select a single video style for each of the following questions:

- Which video style would you EXPECT to be required to watch for class?
- Which video style would you PREFER to be required to watch for class?
- Which video would you LEARN the most from?

Style A

Very entertaining. Large scope and not very in-depth. Not intended to be taken seriously.



Style C

Facts presented visually with an instrumental soundtrack.



Style E

A recording of a live lecture. There are no visual aides. The information presented is very in-depth and detailed.



Style B

Part of the popular "Crash Course" series. Moderate levels of humor. Summarizes a single period of history. More serious than Style A.

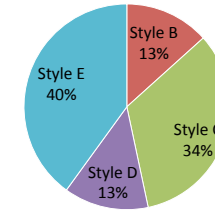


Style D

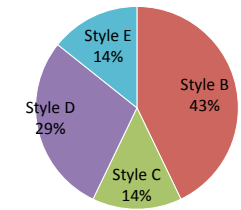
Detailed information is presented verbally while the narrator indicates key locations and terms on a map.



Which video style would you EXPECT to be required to watch for class?



Which Video Style would you learn the most from?



Conclusions

Videos are becoming a critical tool in teaching students across all disciplines. However, the style of video that both engages students and helps teach the focal concept is not clear. Here, we show that humor and other engaging approaches mixed with accurate, but focused content is the preferred video type of students. In short, videos that simply utilize "content visuals" and music are not enough to fully engage students.

Future Directions

The next step in this research would be to perform an experiment to verify the results of my survey. Ideally the experiment would actually test how effective various video styles are at instructing students by performing a series of memory tests over time. The survey only identifies what students believe to be effective instructional videos. An experiment would either support or dispute this claim with empirical evidence.

References

- "Beginning of World War II." *YouTube*, Khan Academy, 12 May 2015, youtu.be/-kKcJwNvNkQ.
- Bevan, Max. "Why Videos Are Important in Education." *Video Production Company in Oklahoma*, Video Production Blog, 1 Feb. 2017, www.nextthoughtstudios.com/video-production-blog/2017/1/31/why-videos-are-important-in-education.
- "Deconstructing History - Sherman Tank." *YouTube*, YouTube, 24 Mar. 2015, youtu.be/0DZxl2Hj5W0.
- "Why World War II Matters." Performance by Victor Davis Hanson, *YouTube*, YouTube, 16 Sept. 2016, youtu.be/opDw4OZ3QI.
- "World War II: Crash Course World History #38." Performance by John Green, *YouTube*, YouTube, 11 Oct. 2012, youtu.be/Q78COTwT7nE.
- Wurtz, Bill, director. *History of the Entire World, I Guess*. *YouTube*, YouTube, 10 May 2017, youtu.be/xuCu8ux2gbs.

Acknowledgements

We would like to thank everyone who completed the survey. Without them, this would not have been possible. I would also like to thank my roommate Nathan Dowell, who patiently listened to me talk through my ideas and hurdles.

Results

The video style that has the highest combined score is Style B. Style B was also the video style was most often identified as the style that students would learn the most from. This supports our hypothesis.

