Seven Research-Backed Tips for Creating Engaging Online Videos

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Researchers from MIT, edX and the University of Rochester were curious.[1] They knew that most online courses followed a similar format: you watch an instructional video, and then you complete an activity such as a worksheet. Then you watch more videos, then another worksheet.

It's a common structure that because, as we all know through experience, we learn best when we actually take action. But we also know through experience that the vast majority of online learners are content to passively consume content, and will NEVER take action.

But what these researchers wanted to know is if there was a certain type of video that would help combat this issue; if some sorts of videos are more likely to engage students to watch it all the way through, and then do some post-video activities.

Here's what they found.

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[1] http://pgbovine.net/publications/ edX-MOOC-video-production-and-engagement_LAS-2014. pdf

What 6.9 Million Video 'Sessions' Reveal About Creating Engaging Videos

The first thing that the researchers needed to do was to figure out what exactly they were dealing with. What sorts of variables could account for a video's engagement level? Specifically, what could happen in the video production process that would make it more or less engaging?

They arrived at a list of four main decisions made during the video production process to focus on:

1. **Video length**—how long is the runtime of the video in minutes?

2. **Speaking rate**—how fast (or slow) is the speaker's rate in words per minute?

3. **Video type**—is the video structured as a lecture / presentation, or as a tutorial / walk-through?

4. **Production style**—is the video comprised of slides, a screen recording, a Khan Academy-style digital whiteboard, a live classroom

recording, a studio recording, or an office desk / 'talking head' style presentation, or a mix?

Equipped with these key variables, they then studied 6.9 million video watching 'sessions' of YouTube videos that were part of four courses offered by edX to see what patterns emerged. In the end, they identified seven key characteristics of videos that led to students watching more of the video, and attempting the exercises that followed.

1 Shorter is better

By far, the biggest factor in engagement is the length of your videos.

Just like bite-sized content is more likely to be read, shorter videos are more likely to be watched in their entirety. For videos up to 3 minutes in duration, the vast majority of students (75%) watched at least three-quarters of the video. At the other extreme, most students made it less than half-way through videos that lasted 9 minutes or longer.

Even more interesting was the number of students that engaged with the problem-set after the video was done:

VIDEO LENGTH	% OF STUDENTS ATTEMPTING THE ACTIVITY
0-3 mins	**56%**
3-6 mins	**48%**
6-9 mins	43%
9-12 mins	41%
12+ mins	31%

In other words, ultra-short videos resulted in nearly 2×the rate of activity attempts, and even 3-6 minute videos saw a 1.5×improvement over long-form videos.

The researchers' data suggested that the sweet spot for maximizing engagement is with videos is to keep the duration at no more than 6-minutes.

2 Show your face

While most of the videos the researchers examined featured slides with voice-over or screen-recording presentations, some of the videos were also edited to cut away periodically to some "talking head" shots of the instructor.

For short videos up to 6 minutes in length, there was no appreciable difference in whether students watched through to the end of the video or not. However, if the video exceeded 6 minutes in length, then the students were more likely to watch to the end if the visuals included the instructor's "talking head."

The "talking-head" videos also saw 1.4×higher problem attempts, with 46% of students opting to try the activities (compared to only 33% for slide-only and screencast-only videos).

3 Skip the studio

When the researchers were looking at the talking-head videos mentioned in tip #2, they noticed that some of the videos had a significantly higher watch-through and engagement rate than others. One

set of videos was filmed in a multi-million dollar TV production studio, with the instructor standing behind a podium like you would see in a more traditional lecture.

The other was filmed with the instructor sitting at his office desk, "up close and personal", making direct eye contact with the camera.

The data showed that the students watched the informal videos for 2-3×longer than the ones shot with higher production value in the video studio.

While the researchers weren't able to conclusively determine why the informal videos were preferred, they interviewed experienced edX production staff who suggested it was possibly because it made the video seem more personal and comfortable.

4   Show your work, long-hand

For tutorial-style videos, the researchers wanted to know which type of step-by-step problem solving walkthroughs were more effective. In particular, they looked at programming tutorials where the instructor would work through the problem on a 'digital whiteboard' (like you would find on a site like Khan Academy) and compared them with those that used slides and/or screen recordings of the instructor solving the problem.

Here, they found that the Khan Academy style videos came out on top. The watching sessions were 1.5X-2×longer, and the rate of students attempting the problems themselves increased from 31% to 40%.

The researchers also suggested that it might be possible to find a middle-ground between the two approaches by sketching over slides / screencasts with annotations, but had no data to support these assertions.

In other words: though human handwriting may seem messier and harder to follow, the freehand sketching and natural motions of human handwriting led to higher student engagement overall.

5   Keep video in mind when filming live

A lot of online courses actually start as 'live' events—online or offline—which are filmed and then delivered as stand-alone products later.

This method incorporates some of the best aspects and features of the previous tips: it shows the instructor, allows for handwritten explanations and is very informal. Where it becomes challenging is in achieving the short, snappy video clips that are key to high engagement; lecture videos have to be edited to gain the benefits.

If the lecture is planned ahead of time to be used in this way, editing is easier: the lectures can be planned as a series of short, discrete 'chunks' that could be split apart later, with clear demarcations between topics.

But does doing this actually make the videos more engaging?

The answer is yes. When the live presentations were pre-planned and given with the specific in-

tention of being moved to edited videos later, they resulted in both longer play-throughs and higher activity attempts.

6 Don't worry about talking slowly

When you're presenting "live", a common recommendation is that you try to speak at a comfortable clip of 160 words per minute. This is so that students have time to really absorb what you're saying. It also can be hard to do, especially when you are nervous, passionate or excited (all of which naturally increase speech rates).

The good news is that for video courses, the researchers found that a higher speaking rate actually increased engagement by a factor of 2X.

The reason? It's much harder to convey enthusiasm and passion through video; by not forcing themselves to slow their speech down, the instructors were able to bring some of that passion through. Plus, since students have the ability to pause and replay video, there is no need to artificially slow down speech. Even at a rate of 250 words per minute, instructors on video were easily understood, especially when there was reinforcing material such as slides.

7 Treat lectures and tutorials differently

Finally, the researchers examined whether students engagement changed based on video type: whether it was a conceptual lecture, or a how-to tutorial.

Regardless of the length of video, they found that students really only watched 2-3 minutes of a tutorial video no matter how long the video was as a whole. However, they tended to pause, skim through and re-watch the tutorial videos more often than they did lecture videos.

On the flip side, lecture videos—which we expect from experience to involve a more continuous flow of information—tended to have lower re-watch rates, though they were watched for longer the first time.

(Of note, both lecture and tutorial videos did have higher re-watch sessions the longer their overall duration.)

The takeaway that the authors provided here was that lecture-style videos which are focused on sharing conceptual information should be optimized for a single watching session. Tutorials, on the other hand, benefit from being made highly re-watchable through things like bookmarks or visual signposts such as transition screens between steps.

Now it's your turn

When it comes to creating and using video online, there are two things that matter more than anything else.

You need to make sure that people are actually going to watch the video all the way through; that's the first step.

After all, you can have the best videos in the world, the highest production values, the crunchiest content, the fastest video host … but if no one actually watches it, all you've done is waste your time.

But the second step is the one that most people miss: if you want to use video to grow your business, whether it's in a course, on your site or in your blog, you need to get them to follow-up the video by taking action.

That's why this study is so important for online video teaching; it demonstrates that just making a few different choices when planning and producing your videos can create dramatic results.

Breanne Dyck, founder of MNIB Consulting, helps online training businesses to scale their impact, their team and their revenue by blending operations management, learning and product strategy, and business model development. Read more from Breanne, or connect with her and her team at http://mnibconsulting.com.