Producing high quality media whilst working remotely
A guide from FutureLearn Studio

How do you create high quality media for online courses during the COVID-19 lockdown?

In this article, Richard Banks (Head of Studio at FutureLearn) provides some practical tips and guidance on how to create high-quality audiovisual media for online courses when you can't meet with educators and subject matter experts in person to film or record their contributions.

Are you sure video is really necessary?

Even though video is expensive and time consuming to produce compared to other media, it remains widely used. With the context many educators find themselves in, it's more important than ever to think to yourself, 'does this really need to be a video?'

All too often, online courses feature educators talking in an un-engaging way, for too long, about one concept and with no other visuals. This is an expensive and inconvenient way to present information. Not only is it costly for you to produce, it's also potentially costly for your students to watch (think about those on a limited mobile data connection).

So before you even begin thinking about how to film and edit a piece to camera, consider whether the material really warrants being a video at all. Will it be possible to absorb the information in the video without watching it, by listening to the audio only, or by reading the transcript? If so, consider making it an audio or text resource instead of a video.

Follow the Six S's

OK, let's assume you've identified a valid use case for video in your course, and you're contemplating the practicalities of recording yourself, or recording a remote contributor, under lockdown. What's your approach? I'd suggest keeping these Six S's in mind:

- **S**imple
- **S**hort
- **S**table
- **S**ound
- **S**cript
- **S**etting

Let's tackle these one at a time…

Simple

Let's be honest - learners are likely to be far more accepting of lower production values during this period. If your video is a little rough around the edges, that's probably OK.

Today I watched a weather forecast where the presenter appeared via Skype. If it's good enough for primetime television news, it's probably good enough for an online course. For now, don't worry about fancy visuals, tracking shots, pans, zooms and multi-camera shoots – just keep it simple and stick to the basics.
The less kit you use, the less chance there is of something going wrong and the more time you'll have to concentrate on your message and delivery.

Remember – **a course with no media or simple media is more useful to learners than no course at all**, and you can always add or improve your media for subsequent repeat runs of your course.

Short

The same rules still apply even in times of lockdown: lengthy videos are less effective in online courses[1]. Our own data has shown that after six or seven minutes, learners are more likely to lose focus, stop paying attention and skip ahead (or worse, close their browser tab and end their learning session).
If your piece is longer than this, find a way to chunk it up thematically and deliver it over separate steps. If you have a script and you want to estimate how long it will take to read, here's a handy script timer.

Stable

Holding your camera by hand is likely to result in shaky footage that disorientates or distracts learners from the points you're trying to deliver. Whether your camera is a mobile phone, a tablet, a D-SLR or simply the webcam in your laptop lid, rest it on a stable surface or use a tripod. An inexpensive option is using tabletop or travel tripods, easily available online.
If your idea does require you to move around or recompose your shot, consider investing in some kind of gimbal to keep your shot stable. Don't be tempted to move around too much or too quickly. This week, BBC News shared a useful 'five second rule' for citizen journalists: shoot for five seconds, move for five seconds, hold for five seconds.

As well as stabilising your camera, you'll need to consider composition - in other words, how you want to position yourself (or your contributor) in the shot and what else is visible.
A simple 'head and shoulders' shot is a safe bet here, and Penn State provides some easy-to-follow tips on how to compose your shot so that the subject is framed nicely.

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[1] https://emporiastate.blogspot.com/2018/04/video-length-in-online-courses-what.html
https://www.linkedin.com/pulse/video-learning-15-things-research-says-some-may-shock-donald-clark/

Sound

We're more likely to persevere when watching a poor quality video if it has good quality audio, than when we encounter a high-quality video with terrible audio. But when it comes to achieving a good quality sound recording, your **environment** is just as important as your **equipment**.

Before you start recording, do everything you can to minimise background noise. Turn off the washer/dryer/dishwasher, mute every device you own, turn off air conditioning, unplug the telephone - whatever it takes to give yourself a controlled environment. Find the quietest part of your home, usually somewhere equidistant from the road and the garden (if you're lucky enough to have one).

You should also try to 'dampen' the area where you're going to be recording by reducing the number of hard surfaces around you (which cause sound waves to bounce back). In the FutureLearn Studio team, Richard and Denise surrounded themselves with cushions for a home recording test:

Now consider your **microphone**. Sadly, the one built into your laptop isn't very good quality, and nor is the one in the average phone or tablet, so if the option is available to you, an external microphone is probably the single best investment you can make at the moment.

In the FutureLearn Studio team, we've invested in a few Rode smartLav+ microphones. These are relatively cheap (around £45), good quality and relatively foolproof to use[2]. You can plug this model into most laptops and it will be recognised as a mic (though Rode also sells certain adaptors). What's more, you can plug it into a phone's headphone jack and record straight on your mobile using whatever voice memo recording app you like.

[2] This particular model is also small enough to post out to your educators or contributors (though I would recommend some kind of case - maybe something as simple as a tupperware box with some padding inside?).

Clipping on a lavalier (lapel) mic has many advantages: it leaves your hands free to gesture for emphasis; it means you can move around without the sound levels changing as you get closer or further from the microphone; and if you're sitting at a desk in front of a camera, it's less likely to pick up the little bumps and clicks from your desk or laptop as you record. If it sounds a little quiet when you listen back, try clipping it a little higher on your collar, and vice versa. Simple.

Finally, pay attention to the recording levels (also referred to as gain or sensitivity). It's straightforward to boost sound levels if they've been recorded a little too low, but if the sound is too loud and becomes distorted, it's almost impossible to salvage the recording. Always do a test recording first!

When it comes to recording software, here are a few pointers:

- At FutureLearn, we're experimenting with RINGR which records both ends of a live conversation over the web at high quality and then stitches them together (or allows you to download each side as a mono file on its own).
- Windows 10 comes with its own built-in audio application - here's a detailed guide to using Voice Recorder.
- Audio Hijack and Piezo (Mac OSX) allow you to record any audio that's coming out of your Mac, so could be useful if you want to record a Zoom call.

Script

If there's one thing that will enhance your media, it's a decent script. If you're a seasoned lecturer and can way lyrical about your subject without repetition, hesitation or deviation, then go for it! For the rest of us, a script will make a huge improvement to the coherence of your audio or video piece.

You could fully script your piece and then read it out loud using a teleprompter app. Cueprompter.com is free and easy to use, and there are a number of free auto-cue apps available for tablets.

If you find that reading from a prompter doesn't sound natural, try to learn your script off by heart instead, or put some bullet point prompts in front of you so that you don't lose your way.

Whatever you do, don't film yourself reading from a piece of paper, or looking down at a script in your lap; it's extremely off-putting for viewers and means you will appear less confident and convincing.

Setting

Before you start to film, consider your location carefully. Choose a spot that's free from clutter, where there won't be anything moving around in the background.

No-one expects studio quality lighting at home, but you can aim for *consistent* lighting. If the weather's looking very changeable, don't shoot outside or near the windows. Otherwise, your

shot is going to be brighter or darker from one take to the next and continuity will become a problem when you come to the editing stage.
Don't position yourself with the camera in front of you and a window directly behind you – this kind of backlighting means you'll just become a silhouette.

Source: http://www.open-channels.eu/tutor/film/backlighting.html

Instead, try using window light to illuminate your face by putting the camera between you and the window (watch from 01:30).

Whatever room you film in, ensure the background is tidy and free from distractions. You could shoot in front of your bookcase in time-honoured fashion, but if you're short on options a plain wall or any block colour is equally good. Try to remove any prominent brand logos from the shot. This article gives some useful insights into backgrounds.

Cameras

At this point, you might be looking for advice about what video camera to purchase in order to film at home. Our advice is: you may not need to.

In all likelihood the camera on your phone or tablet will be good enough if you bought it in the last 18 months or so.

You could consider kitting out your mobile or tablet with accessories for recording better quality audio and video. With the addition of some form of stabilisation and an external mic, you've got a pretty passable mobile journalism solution in your pocket.

Filming on a mobile or tablet

If you've prepared yourself in accordance with the Six S's above, you should be well on your way to a good quality recording. Before you hit the big red record button on your phone or tablet, there are some essentials you absolutely must check.

Remember the cardinal rule: always shoot in **landscape**! Here's a light-hearted take on why vertical videos are bad.

Source: University of St. Andrews
https://digitalcommunications.wp.st-andrews.ac.uk/2016/03/23/8-tips-on-recording-professional-video-with-a-smartphone

Check you have enough **storage space** - there's nothing worse than realising the last 3 minutes haven't been recorded because your phone filled up and ran out of storage. If your phone accepts external storage, invest in a micro SD card with 64gb or more, and choose the fastest card you can afford. There's a lot of confusing jargon in the SD card market. Look for a Class 10 / U1 / V1 card as a minimum.

Set the **resolution/quality** - pick for the highest resolution possible. If your device can film in 4K, that's great! It means you'll be able to crop or zoom in whilst editing without losing too much quality. Otherwise, full HD (1920 x 1080) is what you should be aiming for.

Clean your lens - if you're shooting on your phone, remember the lens spends most of its life gathering lint in your pocket/bag or getting sticky fingerprints on it (especially true for parents, am I right?). Give the lens a wipe and polish with a cloth before you start filming.

What if I simply can't record at home?

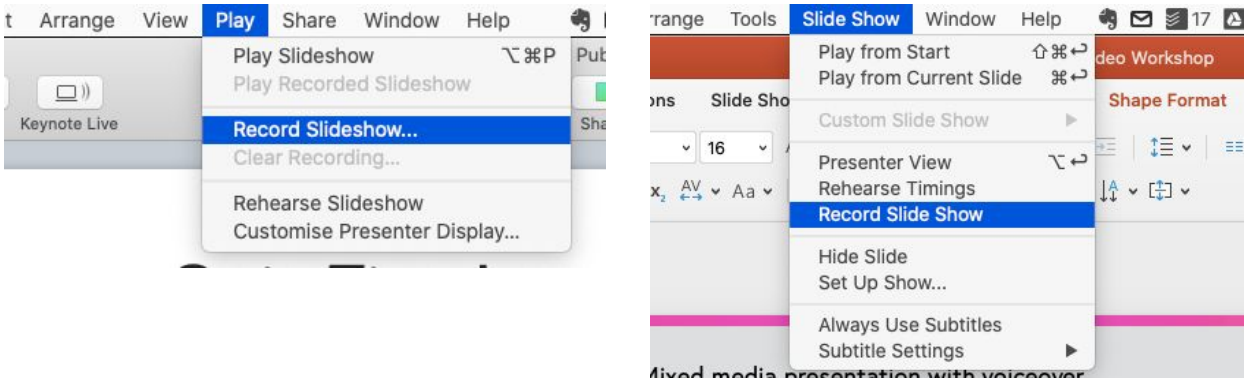
If you've tried creating your media at home and it's just not working out, put the camera down and take a breath. Filming and recording can get really frustrating at times!

You might find it helpful to think of a different style/format for your video. There's one particular style of educational video that's worth considering if you're making media under COVID-19 lockdown: **presentation slides with voiceover** (aka 'slidecast'). This is a lo-fi format that is still very effective.

It allows you to explain complex subjects with **diagrams**, **photos** and **illustrations** on your slides and to emphasise or define key terms with **bullet points**.

- Reduce text on slides to a minimum - learners may find it difficult to read the slides and listen to your voice at the same time.
- Make sure any text on your slides is large enough to read on a mobile screen (font size 18+ recommended).
- Supplement your slides with stock video and photos to add visual interest. You can use sites like Pexels, Unsplash, Freeimages and Pixaby to find rights-free images or take a out a subscription for a service like Getty, Shutterstock, Storyblocks or Pond5 (we use Pond5 in FutureLearn Studio - they assigned us a UK-based Account Manager who has been very helpful).
- In fact, it's entirely possible to tell a compelling story using only stock images and a great narrative voiceover - here's an excellent example from Coventry University Online's healthcare MSc.
- Remember to check that you have cleared the rights to use any images you're putting into your presentation.

Once you have prepared your presentation visuals in Powerpoint, Keynote or even Google Slides, you can turn your attention to the **voiceover**. Keynote and Powerpoint both have a built-in feature to record audio while you're clicking through slides:



Recording your slideshow presentation with audio voiceover in Keynote (left) and Powerpoint (right)

Follow the advice above to write a **script** and record **high quality audio** on your computer - ideally using an external microphone.

Here are some quick tips for slidecast voiceovers:

- Don't just read out the text on your slides.
- Keep your pacing as natural as possible - pause for breath
- Vary your pace, pitch, register and timbre - here's Julian Treasure's TED Talk on how to speak so that people want to listen

Editing and exporting

We can't cover editing in any detail here. But once you have your slides/images and your voiceover audio, you can combine the two together using iMovie (Mac) any of these free video editing applications. Windows also has a built-in video editing tool but it's less flexible and a little hidden; this article explains how the Photos app in Windows 10 can be used to automatically create videos.

When you're ready to export your video file, look for the highest quality setting you can pick. Ideally, export at Full HD (1920 x 1080) as a .MOV or .MP4 file. If you are given the option to set the 'bit rate' (often under the 'Advanced' settings), go for at least 2 Mbps (2,048 kbps) or higher. That will ensure your video looks crisp and enables the HD option on FutureLearn's video player.

Accessibility is still paramount

Please remember that COVID-19 doesn't change anything as far as accessibility rules are concerned. If anything it's even more important now to provide transcription for deaf or hearing impaired learners, as more and more users find themselves unable to access face-to-face education.

It can take one minute to record a one minute video, but it can take 20 minutes or more to transcribe and add subtitles. So video shouldn't be considered a quick 'shoot and upload' option. If you need to transcribe a piece of audio or video at short notice, you could try Otter, an AI-powered transcription app which we found to be remarkably accurate and easy to use.