The Professor's Guide to Creating Video with a PC

Webcam and screen recording, lecture capture and video assignments





Why create your own video content?

Whether you're practicing flipped or blended learning in your classroom, set the occasional video assignment, or have just observed that your students are part of the Netflix generation, you've likely seen what a powerful tool video can be for teaching and learning.

And, while there's certainly a wealth of great educational content available online, sometimes you — and your students — will want to create your own. Terrific news: It's never been easier to create great video content!

We know that quality matters; viewers rarely find shaky, inaudible and poorly lit video terribly engaging. But, an understanding of commonly available software, tools and basic production techniques is all you (and your students) need to create great quality video content. Best of all, you probably have most of the tools you need sitting on your desk right now.

In this guide we'll cover everything you need to know to produce educational and instructional videos using your PC and webcam.

Contents

02 What you need to get started

- 03 Webcam and screen recording software
- 04 Upgrading your microphone
- 05 Upgrading your camera
- 05 Recording video on a smartphone or tablet

06 Production

- 06 Planning your video
- 07 Recording crystal-clear sound
- 08 Getting the most out of your webcam

09 Post-production

- 10 Adding titles
- 10 Adjusting volume levels
- 10 Removing background noise and fine-tuning your voiceover
- 11 Adding closed captions for accessibility

09 Saving and sharing your video



What you need to get started

Software and equipment

Exactly what tools and software you'll need to get started depends on what kind of video you want to create. Creating 'screencasts' and webcam recordings is a popular, easy and effective way to create instructional video content. This guide illustrates how to record activity on your PC's screen, webcam — or both.

We've also included some tips and links to more advanced advice if you do want to go a few steps further, and are recording a lecture, presentation or other video project.

If your laptop or PC has a built in webcam and microphone, you're good to go! If not, or if you're interested in upgrading either to produce higher quality content, read on for our external webcam and microphone recommendations.

Webcam and screen recording software

There are a number of free and affordable apps available that make it easy to record your screen and webcam, and even add titles, transitions and make other edits to your video.



MediaCore Capture

Mac, PC & Chromebook

The easiest way to record your screen or webcam: Record with a few clicks, seamlessly upload to MediaCore or save your video file for editing.

Download for free



QuickTime

Mac

Apple's QuickTime is a simple option for recording your screen, webcam and audio and comes free with every Mac.



Camtasia

Mac & PC

Camtasia (Mac) and Camtasia Studio (Windows) are full-featured screen capture and editing apps by Techsmith.

Learn more



Screenflow

Mac

Similar to Camtasia, Screenflow is another affordable video and screen capture app that also includes video editing features.

Learn more



MediaCore Capture

Easily capture video from your webcam and quickly upload your video to your MediaCore library from any PC or tablet running Windows 8.1.

Download for free

Upgrading your microphone

Being able to record clear, audible sound is vital when producing video. If viewers can't hear the subject(s) voice, they'll rarely stick around to watch the whole thing. If you want to buy one thing to improve your production quality, buy an external microphone to record clearer audio — your audience will thank you!



Blue Nessie

Great for beginners: Aside from resembling its namesake, Nessie automatically applies professional audio processing to your recordings. This results in better–sounding audio that requires no post-production, making it great for beginners.

Learn more



Apogee MiC

We've previously recommended the MiC and are pleased to say nothing has changed: it's a great, studio-quality USB microphone that comes with a simple stand – perfect for screencasting and lecture capture.

Learn more



Audio Technica AT2020

The AT2020 is a great, extremely affordable USB microphone that comes with a desk stand.

Learn more



Clip-on / Lavalier mics

If you're recording a presentation where the speaker likes to be a little more mobile, we'd recommend using a lapel / lavalier microphone.

Read our guide to getting started with lecture capture to learn more.

Upgrading your camera

The cameras built in to modern PC laptops and displays capture good quality video. If you want to record a clearer, higher quality image, there are a bunch of great external camera solutions available.



Logitech HD Pro C920

This webcam has a wide–angle lens and can record high definition video up to 1080p.

Learn more



Genius WideCam F100

An affordable, wide-angle webcam that can record up to 1080p video.

Learn more

Recording video on a smartphone or tablet

Alternatively, you can record video on your tablet or smartphone and transfer it to your PC for editing. If you're feeling creative, check out our guide to creating video with your smartphone and tablet for some ideas.

If you want to shoot and upload straight from your device, check out MediaCore Capture for iPhone and Android.

Learn more









Production

Planning your video, recording your screen and webcam

Before you hit record, take a moment to think about what kind of video you want to create.

Planning your video

Unless you're recording impromptu live action, it's beneficial to plan the content of your video(s): If you're adapting existing material, such as a lecture or presentation, you probably already have a set of slides or know the material like the back of your hand, and probably don't need to do much more. In fact, PowerPoint and Keynote make it really easy to turn any slide deck into a video.

If you're creating new content, preparing a short script or outline will help you gather your thoughts and give you a solid plan to guide you through recording and any editing or post–production and help make sure the final video achieves what you set out to.

Where possible, it pays to be concise: research has shown that students prefer (and are more likely to learn from) shorter, more focused videos.

Read our guide to pre-production for some tips on structuring and planning your content.



Recording crystal-clear sound

As we mentioned above, recording clear audio is vital if you want viewers to stick around and watch your video.

Here's a few easy tips to help you record clearer audio with any microphone:

To record at a stable volume

Make sure the signal your microphone is picking up isn't too low (your voice will be really quiet) or too high (your sound could distort). Technically speaking, you want your voice to be recorded **between -12 and 0 dB**.

In practical terms, a good way to test this is to simply speak into the microphone from the distance you're going to record from and adjust your input until your the visual indicator shows a green signal. Hitting yellow is okay, but avoid entering the red area.



To minimize background noise

Close your door and windows, turn off any air conditioning units, heaters or sources of consistent hum or buzz.

To avoid echo

Record in a smaller room with lots of soft furnishings. A closet makes a great, impromptu recording studio, but an office with a couch will echo less than a glass meeting room, for example.

If you want to get really serious, stack a couple of cushions or pillows behind your microphone or hang blankets in your room to dampen your sound.

Getting the most out of your webcam

There's a few simple things you can do to ensure you don't look dark, washed out or out of focus when recording with your webcam:

For a more flattering angle

Position your webcam slightly above your eyeline. If you're using your laptop's built–in camera, you can elevate your laptop using a desk stand or a good old stack of books.



A typical shot from a laptop webcam

For lighter, clearer video

Face a window or light source and try to make sure your face is evenly lit. A good backup is to use your screen — try turning your brightness up full.

If that isn't enough, you can try using additional light sources or purchasing a specific kit: Videssence make a video chat lighting kit specifically to provide soft, flattering lighting for videochat and webcam recording.

Use software to adjust your image

It's also possible to adjust your webcam's image using software. Our favourite app for adjusting exposure, color balance, and even applying effects and filters, is iGlasses for Mac — which works great with MediaCore Capture.



A change in camera position and opening the blinds can do wonders.









Post-production

Planning your video, recording your screen and webcam

You won't always need to do any post–production work on your video, but if you want to trim the beginning or end, make edits, add titles or other material to your video, several of the apps we recommended above also feature great editing tools.

Both **Camtasia** and **Screenflow** support importing and editing of any video file, which means they work as great companions to **MediaCore Capture**, **QuickTime** and other screen recorder apps.

These apps are specifically designed for editing screen and webcam recordings, and feature robust editing tools.

Dedicated video editors such as **iMovie**, **Windows Movie Maker**, **Final Cut Pro** and **Adobe Premiere** are also great for working on screencast and webcam videos.

If you're new to editing but want to learn the ropes quickly, Lynda.com has the best collection of training materials for all the major video editing apps that we've found.



Camtasia, Screenflow and QuickTime



iMovie, Final Cut Pro and Adobe Premiere Pro



Adding titles

Adding titles or text to your video can be an effective way to clearly define structure (with opening, chapter or section titles), or to reinforce and clarify concepts (using text notes and annotations).

Camtasia, **Screenflow**, **iMovie** and other video editors all offer text tools that allow you to change the size, placement, typeface and colour of text, as well as to set how long it will appear on screen.

Adjusting volume levels

No matter how well you recorded your voiceover, there's a few things you can do to further improve the quality and clarity of your video's sound.

Boost or lower your audio levels so that they are consistently hitting the green area of the visual audio meter in your video editor (usually between -12 and 0 dB). If you've added any background music make sure that your voiceover can be heard clearly above it.

Testing how your video sounds playing back on more than one set of speakers (such as your computer's speakers and some headphones or earbuds) usually give a good indication of the kinds of environments viewers will be watching in.

Removing background noise and fine-tuning your voiceover

Despite your best efforts when recording, your mic may have picked up a little ambient noise. Luckily, all of the video editing apps we recommended feature background noise removal tools.

These can be a lifesaver, but it's usually wise to use these in moderation — applying the effect past a certain point (usually around 30% or so) can start to distort recorded voice.

For more specific instructions, check out the appropriate resource(s) for your editor:

- Audio enhancement tools in Camtasia Studio (PC)
- Screenflow 3.0 Audio Enhancements (Mac)
- Adjusting Audio in iMovie (Mac)
- Adjusting audio in Windows Movie Maker (PC)
- Enhancing audio in Final Cut Pro X (Mac)
- Improving sound in videos using Adobe Premiere Pro CC (Mac and PC)

Adding closed captions for accessibility

Closed–captioning and subtitles are important for accessibility and extremely valuable to hearing impaired viewers. Caption files provide a simple set of instructions, telling the video player to display captions and subtitles at specific points in a video.

MediaCore fully supports closed captioning, and it's simple to add captions to your video in MediaCore: Simply create an **SRT** or **WebVTT** file and upload it alongside the corresponding video in your MediaCore library.

While it's possible to create these files using a plain text editor, there are also several apps available that make the process easier. If you're interested in adding closed captions or subtitles to your video, check out our guide to creating caption files.

Ê



Saving and sharing your video

When you're done, simply export or save your video so you can upload and share it.

Exporting and saving

Most recording and editing software allows you to choose what size to save your video as. Choosing at least 720p resolution will ensure that viewers on desktop and mobile devices can view a clear, high definition video. Choosing 1080p will guarantee that any smaller text and visual details are clearer and easier to see.

Sharing your video

It's easy to share your video with anyone online using public video sharing sites like YouTube or Vimeo. But, often you'll want more control over who can, and can't, access your video.

MediaCore offers advanced privacy and security controls, allowing you choose who has access to your content by sharing it with specific groups and users, such as your students and colleagues.

Learn more about how leading institutions are using MediaCore to organise, manage and share their libraries of educational video, or get in touch to see how MediaCore could help transform teaching and learning with video at your institution.

Thanks for reading!

While it's never been easier to create video, there are so many tools and resources available today that learning the basics for creating high quality content can seem daunting.

We hope this guide helped de-mystify the finer parts of the production process!

About the author

Aidan Hornsby is a filmmaker and photographer with a deep interest in how video can be used to assist and transform teaching and learning.

Aidan helps instructors from institutions around the world to up the production values on the educational videos they're creating for their students.

🔀 Get in touch

Share this book on Twitter

About MediaCore

Video is transforming education, and MediaCore helps hundreds of educational institutions around the world embrace it.

The MediaCore Video Platform puts powerful video learning and sharing tools into the hands of every student and professor – empowering them to easily capture, manage and share video privately and securely across all platforms and mobile devices.

Learn more at MediaCore.com.

