Live Streaming on YouTube

What is it?

Google offers a free service that allows live streaming to your YouTube channel via Google+. The process is easy and uses consumer equipment like your laptop and a webcam, and will automatically save your live stream when you're finished to your YouTube channel as a standard YouTube video. This service is perfect for instructors who might want to stream or record special lectures, Powerpoints, presentations, etc. without the need for costly equipment or extra staff. While you will not get a broadcast TV quality product, the product is good, and is a great alternative to simply providing text like journal articles or handouts.

The advantage to YouTube is that it is a completely cloud-based service that's easy to use, and is scalable based on the viewer’s hardware. If the student is able to watch any standard YouTube video, they will be able to watch your live stream with no issues.

What you’ll need to get started:

1. Laptop or desktop computer – you could use the podium computer in the classroom or provide your own laptop.

2. Webcam – an external HD webcam can be borrowed from the Educational Technology department. These webcams are likely of higher audio and video quality than a built-in webcam. If you prefer you are more than welcome to use your own.

3. A YouTube/Google account (covered in Step 1 below.)

Usage guidelines:

1. Wilmington University Code of Conduct – remember that this broadcast will be going out live on YouTube, to anyone on the Internet who might stumble across it. Remember that you are representing Wilmington University. (After the live stream is finished and archived you will have the option to change the saved video file to private or unlisted, if you prefer.)

2. Copyrighted material – using copyrighted material online, outside of the Fair Use doctrine, could result in removing of your files from YouTube, or suspension or termination of your YouTube account.
3. Broadcasting students – The Educational Technology department requires that if this service is used to broadcast or record students in any way that the students sign a release form. (located below)

4. Although detailed instructions are below, it is strongly advised that any faculty member wishing to use this service schedule 1-on-1 training with Russ Lichterman. russell.j.lichterman@wilmu.edu 302-295-1149.

**Best Practices:**

1. Position the camera as close to the presenter as possible. You will be able to see what the shot looks like to the viewer at the bottom of the screen. Since the microphone is generally built into the webcam, positioning the camera as close as possible will provide the best audio possible.

2. If you are answering questions, repeat the question back before you answer, since the viewers will not be able to hear the questions from the audience in the video.

3. Use a hard-wired Internet connection, NOT wifi. If you’re using the podium computer they will already be hardwired in the classroom. If not, there are Ethernet jacks in most (if not all) classrooms. Use a CAT-5 cable to connect your computer to the Ethernet jack instead of wifi. CAT-5 is the standard Ethernet cable, if you don’t have one already they can be found everywhere, even most dollar stores.

4. Make sure your default recording device is set for your webcam:
Note that your microphone might show a different brand of webcam, or even a generic USB audio device, depending on what webcam you use. The audio meter to the right will show green bars to indicate that the webcam is receiving audio, this will help you determine that you've picked the right device.

5. Test everything in your setup in advance of your planned event – remember, practice makes perfect! The more you test the better your broadcast will be in the end.

6. Recommended – Verify your YouTube account so you can store videos longer than 15 minutes. (See Addendum below.)
ONLINE APPEARANCE RELEASE FORM

I authorize the undersigned Instructor and Wilmington University to make use of my appearance on:

COURSE NUMBER & TITLE: _______________________________

INSTRUCTOR’S NAME: _______________________________

DATE OF TAPING: _______________________________

I, ___________________________________, hereby certify that I am of legal age and have every right to contract in my own name. I consent that still/film photography and/or electronic media recording made of me by Wilmington University may be used for broadcast on the Internet, including but not limited to YouTube, Blackboard, and the University website.

I understand that I am to receive no compensation for this appearance. Wilmington University shall have complete ownership of the program. I give Wilmington University the right to use my name, likeness and biographical material to publicize the program and the services of the University.

I hereby release Wilmington University, their employees and agents and any publisher of the materials (and their respective licensees and assigns) that include the above mentioned recordings, from any claims arising out of, or related to, any publication, distribution, broadcast transmission, or any other use of such materials.

The Instructor and Wilmington University may:

1. Photograph me and record my voice and likeness for the purpose of the production mentioned above, whether by film, videotape, magnetic tape, digitally or otherwise;

2. Make copies of the photographs and recordings so made;

3. Use my name and likeness for the purposes of education, promotion or advertising of the sale or trading in the photographs, recordings and any copies so made.

I further understand the content remains the property of Wilmington University and that there will be no restrictions on the number of times that my name and likeness may be used.

Name (please print)_____________________________________ Date: _____________

Address ________________________________________________________________

City ________________________ State ________ Zip Code ___________

Talent Signature (Parent or Guardian if under 18 years of age)

____________________________________________ Date: ______________________
Live Streaming for free on YouTube (via Google +)

**Step 1** – sign up for a YouTube account (or sign in if you have one.) It’s good practice to verify your account as well, though it’s not required. (See Addendum at the bottom of the document.)

By signing up for YouTube you automatically have a Google account which includes Gmail, Google+, etc.

**Step 2** – Once you’ve signed up/signed open up [www.google.com](http://www.google.com) – you’ll notice a + followed by your username – this is how you access your Google + account.

**Step 3** – You don’t have to set up your profile or use any other features of Google + (unless you want to.) The only aspect of it you need for live streaming is Google Hangouts (on the right side of your Google + screen.) Click the *Start a Hangout* button to begin.
**Step 4** – The aspect you need for live streaming on YouTube is *Hangouts On Air*, so make sure that box is checked. You’ll have to agree to the live stream terms by clicking *Okay, got it!* You also have to name the hangout (this will be the name of the live stream in YouTube.)

Your interface for the live stream is the Google + Hangout Screen, but you can share it to everyone else through YouTube. **No one else needs to use Google + to watch the stream.** You should see your webcam in the Hangout window. (don’t worry that the text is backwards – you haven’t started broadcasting yet.) Before you start broadcasting there are a few items you’ll want to explore.
**Step 5**- You’re able to share your desktop as well as your webcam video in your live stream. Click the *Screenshare* button on the left to select a window or your desktop to share.

Instead of sharing your whole desktop, Hangouts offers you to pick from any open window or screen in addition to your desktop. For example, you can share a Powerpoint presentation, your web browser, or anything else on your computer instead of your whole desktop. (That is also an option of course.)

*Pro Tip:* If you’re sharing a PowerPoint, remember that it opens in a new window when you view the slideshow, so unless you’re using a dual monitor setup, you’ll want to select *Desktop* or *Fullscreen* to share, then view your PPT as normal in PowerPoint.
Step 6 – Clicking the *Screenshare* button will toggle back and forth between your camera feed and any window or desktop you want to share.

![Screenshare button](image)

Step 7 – Make sure your video and audio devices are configured correctly. If you’re seeing your webcam in the Hangouts window your video is already good. You should also see the audio meter lighting up when you talk (series of dots next to the *Start Broadcast* button.) Either way, you’ll want to click on the gear icon in the top right corner to check your settings.

![Settings](image)

If you’re using a different camera, headset, microphone, etc. you might need to select the appropriate device from the menus. When you’re done click *Save Settings*.

Step 8 – When everything is ready, click the *Start Broadcast* at the top of the Hangout window.

![Start Broadcast](image)

Clicking the *Embed* link next to the *Start Broadcast* button will give you a direct YouTube link you can share with your students so they can watch your live broadcast on YouTube. Or you can give them the link to your YouTube channel and your live broadcast will appear automatically in your video list.
Step 9 – Google will remind you that you’re about to start broadcasting publically live on YouTube. **You are still bound by YouTube’s policies on Copyright – do not broadcast copyrighted material!** When you click OK your broadcast will start streaming on your YouTube channel. You’ll use the Google + Hangout window as your interface, to switch between Screenshare and camera, but everyone else in the world can watch live via YouTube – *Google + is not needed for anyone else.*

This is what your stream will look like on your YouTube channel:

And this is how it looks to your viewers when the click on the video for the live stream: (notice that the text has oriented itself correctly – it is only the Hangout preview window that is reversed)
You will have all the same tools with the live streaming video that you would have with any YouTube video, sharing the link embedding, etc.

When you’re finished streaming you can stop the broadcast by pressing the same button in the Hangout window that you used to start the broadcast. YouTube will automatically process the live stream and archive it to your YouTube channel. When it’s done processing you’ll be able to access it through Video Manager, just like any other video you upload to YouTube.

You can change the privacy settings, upload a caption file, do some minimal editing (using YouTube’s built in video editor) download the video as an mp4, or delete the video completely. **One the live stream is finished the video is exactly like any other video on YouTube! Did I mention that this is all free?**
ADDENDUM - You need a “verified” YouTube account to host videos longer than 15 minutes. Verifying is easy, and it’s a good idea to verify before you do any live streaming or uploading.

**Step 1** – Click on the *Upload* button in YouTube after you’ve logged in. (You don’t have to upload anything.)

![YouTube Upload Button](image1.png)

**Step 2** – Click the link at the bottom of the screen that says *Increase your limit.*

![Increase Limit Button](image2.png)

**Step 3** – Put in your mobile phone number and follow the directions.

![Account Verification](image3.png)

YouTube will text a code to you, once you enter the code you will be able to upload videos up to 12 hours in length. **Remember not to upload any copyrighted content or you could lose your Verified status.**