

Engaging Zoom Classes & more importantly: Applying the Technology to Future Live Streamed Concerts

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For HYPERLINKS in this Document:

<https://tinyurl.com/techhill2022>

Overview

The pandemic has taught us a lot; however, will Soundtrap, Upbeat Music or virtual ensemble videos survive beyond? What skills are important NOW & also relevant in the future? **Live Streaming.**

Live streaming has been growing and around for a long time. It has brought millions of people concerts they wouldn't otherwise have been able to attend in person due to proximity or accessibility.

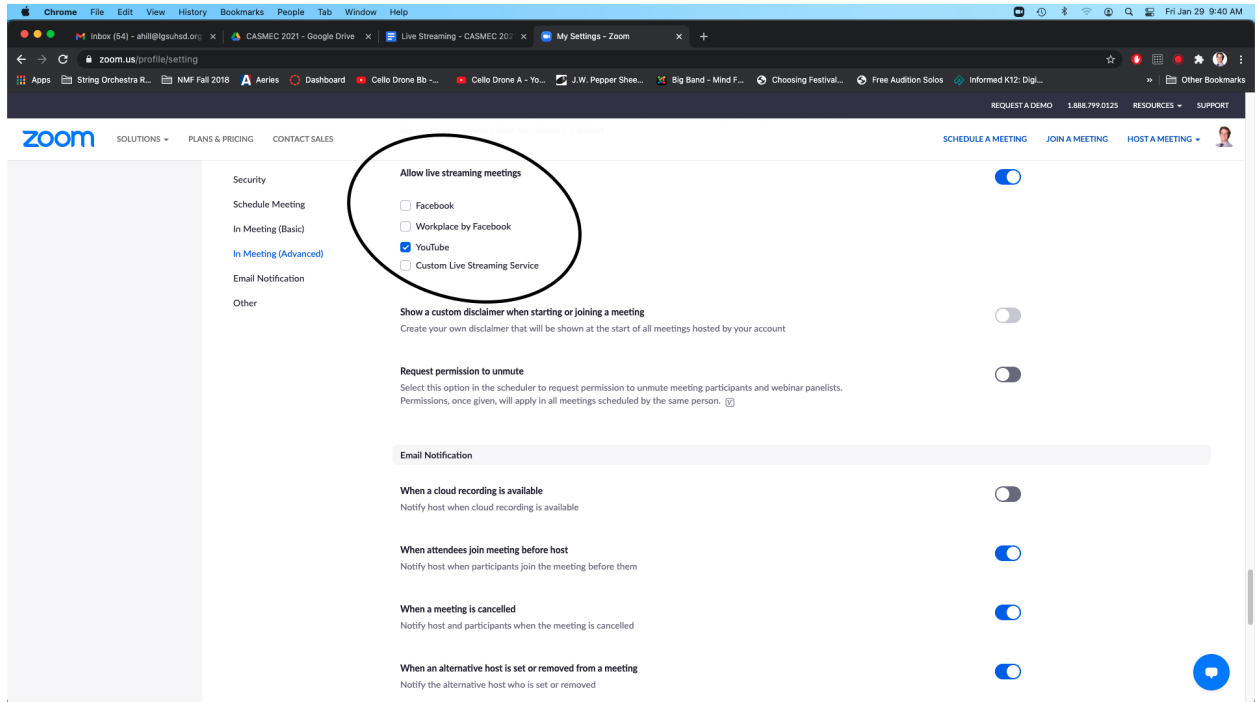
Using Zoom to Live Stream (Tech Level: Easy, Beginner)

You have most likely already been using Zoom for a while now and if you're not interested in learning new tech, use this to create a basic but easy live stream experience!

Step 1: Integrate your Zoom to live stream to a YouTube channel (preferably your music programs YouTube Channel). If you have never done this before - you may have to visit your master settings on your account online (not on the Zoom app). See below:

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*Note: This handout is better utilized digitally as it has embedded links.



Step 2: Turn on Original Sound, High Fidelity Music Mode & Stereo Audio in the Audio Settings.

Step 3: Plug in an External Microphone to enhance audio! [Here is a list of recommended mics.](#)

Step 4: (optional): Plug in External Camera to enhance video quality. Your laptop built in camera will be sufficient if you are on a budget or do not have time or interest in learning more technology.

This can be a great way to get into the live streaming world. Your video quality will be 720p which is not HD, but good enough to have a clean stream with decent audio quality. Here is an example of what this looks like: [Intro to Live Warm Ups.](#)

OBS or Streamlabs OBS to Live Stream (Tech Level: Advanced)

Technology suggestions (there are many options, but here is what I use):

-[Blackmagic Design 4 Channel Video Switcher](#) (this plugs into your computer & integrates with YouTube, Zoom, OBS, Facetime, Google Meet everything)

Cameras (minimum 1, maximum 4) *(TIP: If you are buying 4, buy identical cameras, it will help the quality look exactly the same as you switch angles.)

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-Zoom Q2n 4k Camera (Cheapest with Best Quality)

-Canon HD Vixia Camera HF R800 (Entry Level)

-Canon HD Vixia Camera HF G40 *(Higher Quality; What I am using for this presentation but is not available as easily)

-Blackmagic Pocket 4K Cinema Camera (Highest Quality)

Sound Mixer (your program probably already has one that will work!)

If not: **Mackie Pro FX 10v3**

-4 Mic Inputs minimum

-1 ¼ Inch Dual Stereo to 3.5 MM Cord to connect to video switcher

-2+ Mics (Shure SM 58 standard, or other equivalents)

-Headphones to plug into Mixer for monitor

Solid Computer plugged into Ethernet

-8 GB of Ram, nice processor, something that will run your stream well and ALSO ETHERNET (get an adapter if your computer doesn't have an ethernet port)!

-I use a 2020 MacBook Pro Intel Core i5 1.4 GHz processor with 8GB of Ram OR my 2020 Mac Mini M1 Desktop with 16 GB of Ram.

Software ----> Streamlabs OR OBS

I use Streamlabs and the following will be about that program only.

Streamlabs!

1. Download the software [here](#).
2. [Watch this video](#) on setting up your software & settings!
3. Start building your concert interface. For live streams that I am doing now, I like to have 3-4 pages:
 - a. Loading Page
 - b. Live "Broadcast" Screen for announcements
 - c. Live Scene for Main Video
 - d. Intermission Scene
 - e. End Screen

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4. Content is layered on Streamlabs & you can layer it to include anything you'd like, website info, QR code for donating, text thank yous, photos etc.
5. Configure appropriate settings based on internet speed for audio/video bitrate & quality etc. [Video on how to do this.](#)
6. Integrate it with your YouTube channel & schedule a stream.
7. Delegate all the tech to student leaders/parents/other staff if you have some.
 - a. Audio Person to run the mixer
 - b. Video Person to switch camera angles, edit transitions & Fade to Black
 - c. Computer Person to run Streamlabs & YouTube Live.
 - d. Two people to help set it up & tear it all down (LOTS of wires!).
 - e. Disable comments on your programs YouTube channel OR add **moderators** of trusted students or parents to help moderate the Live Chat while it is going to delete negative or inappropriate comments. [Here is a video on how to add moderators](#) (you will need the student or parents youtube channel account URL).
8. [Here is a video](#) of what this looks like in the virtual world from my program.
9. [A video of what this looks like in a real concert setting.](#)