Best Practices for Using Zoom on a Chromebook

I've heard from some teachers that Zoom does not work well on Chromebooks. While it's true Zoom can sometimes overwhelm your Chromebook, there are several things you can do to improve your Zoom experience. As you'll learn, your "Zoom issues" may have nothing to do with Zoom or your Chromebook at all. These tips are useful for both teachers and students, but I geared them more towards teachers since they often have more control of their Chromebook than students. Even if all teachers were using Windows laptops, students would still be using Chromebooks. So let's take a look at some best practices for using Zoom on a Chromebook.

Reboot Your Chromebook

It's been the number one question asked by the tech support field since the beginning of time. Have you tried turning it off and back on again? Asked another way, have you rebooted your device? It's in every troubleshooting manual. One reason it has stood the test of time is because it often works to resolve the issue. This holds true for using Zoom on a Chromebook too.

Rebooting or shutting down your Chromebook is not the same as closing the Chromebook lid. Typically closing the lid just puts the Chromebook to sleep which helps with battery life. To completely turn off your Chromebook, make sure it is on and then hold the power button down until the screen goes completely black. Then press the power button again to turn it back on. The whole process, from shutdown to logon screen should take less than 15 seconds.

- You can quick reboot (turn off > turn on) your Chromebook by pressing the power button followed by the reload button. The reload button is typically above the number keys and looks like a circle that ends with an arrow. Trust me, you'll know it when you see it.

Chances are you open multiple tabs in Chrome on your Chromebook. You may even have multiple Chrome windows open, whether you realize it or not. Most of us don't turn off our Chromebooks when we are finished with them. We just close the lid. The next time you use your Chromebook, you likely don't close everything out. Even without all of the tabs, windows, and

apps open on your Chromebook, there are likely background processes running that you don't even realize, and why would you. All of this stuff is using your Chromebooks's memory and CPU. Often this doesn't leave much room for a CPU intensive program like Zoom.

So before your Zoom meeting, reboot your Chromebook. If Chrome asks if you want to restore the webpages you previously had opened, say no. You weren't looking at most of them anymore anyway.

While in your Zoom meeting only open websites, docs, and other applications that you will NEED during the Zoom meeting. Remember each one uses at least a little memory and CPU.

Turn Off All of Those Wonderful Extensions

If you've been using a Chromebook for awhile or even Chrome on Windows, you undoubtedly have accumulated a lot of useful extensions. However, you don't need those extensions running all the time. Like websites and apps, extensions use your Chromebooks memory (RAM) just by running in the background.

The good news is, you don't need to uninstall those extensions that you have spent years gathering. You can turn them off by going to chrome://extensions. Just slide the blue button to the left to turn off any extension.
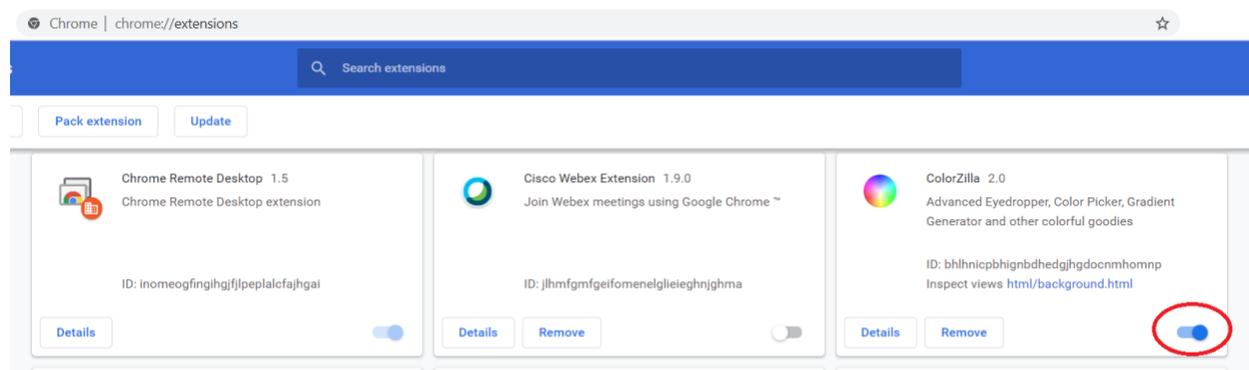
There are likely some extensions that you cannot turn off. These extensions are probably being pushed by your school or the school district. An example of this type of extension is often a web

filter extension. For example, we use Relay for web filtering. The slide bar to turn off this extension is greyed out.
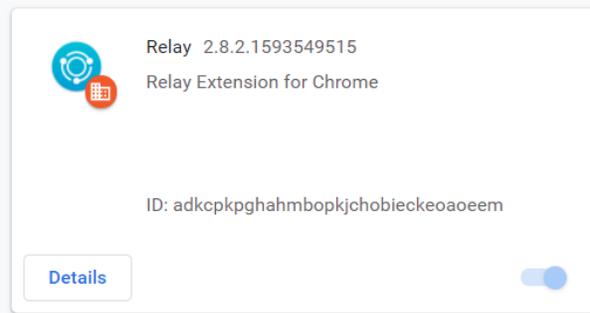
While you can disable extensions you have installed by going to chrome://extensions, that can be a pain. I prefer to manage the on/off status of my extensions by using an extension. [Extensity](#) is my favorite extension for managing extensions. It allows you to quickly toggle extensions on and off from the extension area in the top right corner of Chrome. I made a [quick two minute video](#) a while back that shows you how it works.

Turn Off Your Video in Zoom

I admit I would much rather see everyone in a Zoom meeting than just hear them. However, if one person is presenting their screen, you aren't seeing many faces and the ones you do see are pretty small. You can save some processing power by turning off your video.

Sometimes the issues you are having with Zoom have nothing to do with the device you are using but have everything to do with your internet connection. Now, I'm not going to turn this into a deep ISP (Internet Service Provider) lesson, but I do what to clear up a few myths.

My Chromebook shows an excellent wireless connection. The problem can't be on my end.
The Chromebook is showing your connection to your wireless AP or wireless router within your house or school. That doesn't mean you don't have an internet connection issue or a slow internet connection.

I signed up for a 20MB connection from my ISP. So speed can't be the issue.

When the stars align just right, you might get to use that full 20MB connection. Though typically your connection will be at least a little slower. Here are a few things that could be affecting your internet speed.

- Other people using your internet connection. Are others streaming TV and movies while you are using Zoom? Is anyone in the house playing video games online? You are sharing that 20MB connection with everyone and every other internet connected device in your house. These devices can have an even larger impact if, like you, these other users are connected wirelessly.

- There could be an issue with your home's internet connection. This issue could just be affecting you or it might be affecting your whole neighborhood. You can check your current internet speed at speedtest.net. Once you open the site, click on **Go**. This test will show your current upload and download speeds.
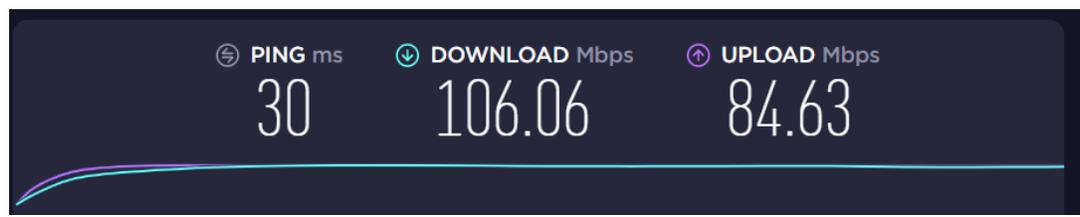

- Most of the time we focus on download speed, but keep in mind that when you are streaming TO the internet, like you do when showing you video on Zoom, that is utilizing your upload speed. When we first began working and schooling from home I had to change my ISP. My previous ISP had a decent download speed, but my upload speed was consistently between 1 and 2 Mbps. That's not really enough bandwidth for one person on a virtual conference call. In our house myself, my wife, and my kids all needed to join multiple overlapping video conference sessions during the day.

If you find you are having trouble with garbled audio or your video or others' video freezes, the first thing I would do is turn off your video. It takes more bandwidth to use video than it does audio. Often this can make enough difference for the audio to sound better.

Share Files Instead of Screen Sharing

As a teacher it can be common for you to have 20 to 30 students connected to your Zoom session. Now I don't know the exact odds, but I'd imagine that the odds of you and everyone of your students having just the right amount of bandwidth (internet speed) at any given time isn't very good. Now this post is about Zoom specifically, but any virtual conferencing platform is going to struggle with some users on hotspots, some on shared connections with 3 other siblings at the same time, etc...

There are some things you can do to set your Zoom session up for success. Top of my list would be to only share your screen with a large group when necessary. The number of users doesn't affect your side of the screen share, but the higher the number, the more likely someone, anyone, is going to have problems. Then you'll spend your time listening to complaints rather than teaching.
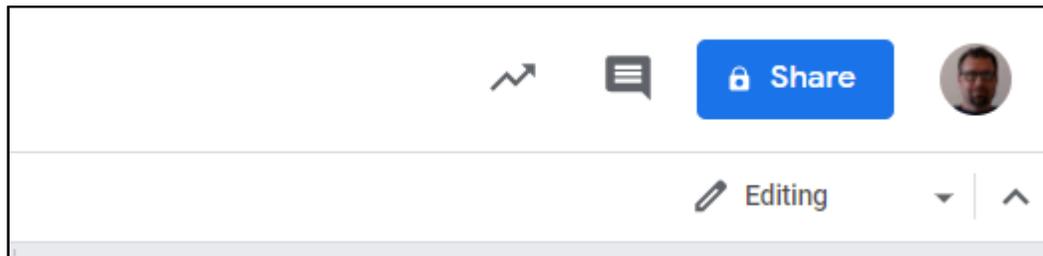
So, ask yourself is what you want to share something the students could open on their own? Perhaps its a website or a Google doc they could have read only rights to or edit rights for collaboration. The benefit of the students opening the website or file, is it cuts down on the processing power needed for the meeting for you as the presenter and for those participating in the Zoom meeting.

Minimize Your Zoom Window⊤

If all you need to do is hear the audio from Zoom, try minimizing Zoom. When Zoom is minimized, it doesn't have to render any graphics, your students will still be able to hear you, but Zoom will be less processor hungry. This works great if you are looking at a shared file or taking notes during a lecture.

Alternatives To Zoom

Zoom has become a household name over the last several months. I'm sure you have lost count of how many Zoom meetings you have been in. It's been Zoom, Zoom, Zoom, all day everyday for many. However, Zoom is not the only virtual conference software you can use.

Zoom has a lot of bells and whistles which are fantastic, but do you always need them? Another video conference software all FCPS teachers have access to is Google Meet. Meet allows you to teach your entire classroom just like Zoom. You can screen share, chat, and see everyone's video as well. Google who is behind Meet and Chromebooks has a vested interest in the two working well together.

Now even with Meet, you can have issues, especially when low bandwidth comes into play. However, in my opinion, Meet performs better in those situations than Zoom.

Another option is to skip the video conferencing all together. Now depending on your school's requirements this may or may not be an option. Rather than present live, you could record your lesson and then upload it to Google Drive. There it could be linked to an LMS like Canvas or Google Classroom. The biggest advantage to this is you can record using the camera app on your Chromebook in HD for picture perfect quality.

Run Zoom on Your Phone Instead

Depending on the type of meeting, I often run Zoom on my phone while using my laptop or Chromebook to take notes or collaborate on a document. When connected to my work or home WiFi I don't need to worry about how much data I'm using on my phone. I have had a good experience of using my phone with Zoom. Unless docked at my desk, my Chromebook only has 1 screen. Using the phone gives me the ability to see and interact with the Zoom participants while accessing documents on my Chromebook.

I would not recommend using Zoom on the phone if presenters will do a lot of screen sharing. You can zoom in on what they are presenting, but having to constantly adjust your phone limits the benefit of using two devices.

Conclusion

If you only take away one thing from this, remember to reboot your Chromebook before starting a Zoom meeting. It is the one thing you can do that has the best shot of providing you with a good Zoom experience. Besides if you wind up calling the Help Desk, they are just going to tell you to do it anyway.