School is going to look a little different this year and Xplornet has what it takes to get students connected!

As more students move to on-line learning, families are starting to question if their Internet is fast enough, and if their plans have enough data. This is especially true for satellite customers on DataXtend™ plans. Xplornet is ready to support rural Canadians with their on-line learning needs. We have pulled together the following information to help you answer questions from customers calling to buy Xplornet Internet.

Can Xplornet support my back to school needs?
Video Conferencing programs like Zoom® don't use much data at all. In fact, YouTube™, Prime®, Disney+™ and Netflix® all use more speed and data than Zoom and Google Meets®. So, as usage shifts from *entertain-the-kids* (streaming video services) to *educate-the-kids* (web conferencing apps) we expect average household data usage to come down.

How much speed and data do I need for on-line lessons/meetings?
ZOOM (and other video conferencing programs)
- Zoom uses about 1.2 Mbps (tops) when counting traffic in BOTH directions.
- This translates to 0.54 GB per hour of data.
- If you are on Zoom calls for 6 hours a day, five days a week, for four weeks, your household will consume 65 GB of data.

What does this mean for our customers?
Speed
- All of our FW and Satellite plans offer enough speed for on-line learning. Our most popular plans offer speeds of up to 10Mbps & 25Mbps, which will support simultaneous video calls.
- On a DataXtend™ plan, the extended download speed on a 25Mbps plans is up to 2 Mbps which is enough to run a Zoom call. (Two simultaneous Zoom connections might be choppy, refer to the helpful hints below)

Data
- On an unlimited data FW plan, customers can meet as often as they would like.
- Our most popular Satellite plan includes 100 GB of full speed data. More than enough for a full month of meetings and learning.
- On a Satellite DataXtend™ plan, there are no data caps on the extended speed, so online learning will continue, even if the full speed data has run out.
- Our customers can change their plans at any time, free of charge. We can help them determine what their ideal plan should be, to fit their growing needs.

Will satellite latency affect online learning/working from home?
Here are the Facts on Satellite latency and video conferencing:
- Satellite latency is 500-600 ms.
- Most video conferencing program quote anything above 150 ms latency will result in audio and video delays when using the **program at full capacity**. There are a number of things that can be done to reduce this:
    - Use a mobile or home phone to dial in to the meeting for the audio connection and dedicate the Internet connection to video only.
    - Minimize the number of connections running simultaneously in the household during the video conference (especially other video streaming or active VPNs)

o   Optimize the settings of your video conferencing software to conserve data consumption. (see section below)

The following tips will help customers optimize video conferencing experience when facing slow speeds:

1. **Turn video off when it's not needed -** When you think you can get away with not using video for a meeting, turning it off is the best way to avoid using excess data.

2. **Turn off screen share -** If at the beginning of your meeting you were sharing your screen, you may be tempted to leave it on for the remainder of your meeting, even if it's no longer necessary. Screen share actually uses extra data that can affect the performance of your video conferencing service.

3. **Mute Audio or Do a Hybrid Video/Call -** Muting your audio when you're not speaking will save you a bit of bandwidth. If you're meeting with one person and you experience lagging, another option is to keep your video conference running and call the person you're meeting with.

4. **Coordinate with your household -** If any of the other members of your household are using the Internet connection in a less crucial manner, try to coordinate times. If you have a video conference meeting at noon, make sure your son isn't spending his lunch break playing Xbox. If you have Alexa, a large game download or any other background Internet users running, make sure they are turned off. These could impact your available speed during your video conference.

5. **Use a strong router -** Make sure you're using a strong router so that you're getting the most out of your Internet connection. With Xplornet's WiFi router you get a commercial-grade router with a lifetime warrantee and the reassurance that our 24/7 customer care team is there to troubleshoot the router and recommend solutions to any issues.

6. **Close background applications -** If you have any applications open on your computer that you're not going to use during your meeting, closing them will help. Video and music streaming sites use the most data.

Have a customer who is looking for help? Here are some helpful tips by platform that can be shared with customers as they connect to their classrooms this fall:

> *Xplornet has recently published a Blog post with all of this information and more. Please feel free to copy the content onto your website, and/or share the post on your social media accounts. Not only is this great information for you to share with your customers, but it will help your SEO.* LINK TO BLOG

Google Meets®
Adjust video resolution to save on bandwidth
To change the camera or the video resolution when using Meet on your computer:
In a web browser, open https://meet.google.com/.
Click **Settings** and then **Video.**
Choose a setting you want to change:

Camera—Select your camera device. If your camera is working, to the right of Video, you'll see your video feed.

Send resolution—The image quality from your device that others see.

*High Definition (720p)—(*Available on computers with a quad-core CPU or higher) Uses more data, but your camera will send a better quality picture.

Standard Definition (360p)—Uses less data, but your camera will send a lower quality picture.

Receive resolution—The image quality that you see from other participants.

*High Definition (720p)—(*Available on computers with a quad-core CPU or higher) Uses more data, but you see a higher quality picture.

Standard Definition (360p)—Uses less data, but you see a lower quality picture.

*Standard Definition (360p)—(*single feed) To save more data, the other participants' thumbnails turn off.

Audio Only—To use the least amount of data, you won't see any video.

Click **Done.**

Microsoft Teams™

The administrator can control bitrate for video and shared media

This setting determines the media bit rate for audio, video, and video-based app sharing transmissions in calls and meetings for the user. Contact the administrator of your Teams account, and request if they can adjust this setting to improve the experience for participants with slower connections. The settings can be found on the administrator panel, here: https://docs.microsoft.com/en-US/MicrosoftTeams/meeting-policies-in-teams?WT.mc_id=TeamsAdminCenterCSH#bkgeneral

Zoom®

Turn off HD Video

Providing video in HD resolution requires significantly more data, so consider turning it off.

To turn off HD in your Zoom client:

In your desktop Zoom client, click Settings (the gear icon).

Click **Video** in the left-hand menu.

In the **My Video** section, uncheck the box beside **Enable HD** if it is checked.

Use the cloud recording option for Zoom meetings

If you need to record a Zoom session, use Zoom's cloud recording option. Cloud recordings are directly transferred to your company or school's Video on Demand service and do not need to be uploaded from your computer.