How to do an Online Fly Tying Presentation

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Breaking into the Online World

When the Pandemic hit us on March 2020, we were all scrambling to learn how we can keep our membership update, informed, and even entertained.

Social Media platforms such a Facebook had Facebook Live to run Live Online Video streams to the Facebook Community. It had its downfalls as a one way communication platform. Zoom came out as the top Online Communication platform and skyrocket to the top as the charts beating Wall Streets expectations on earnings. Zoom became part of our vocabulary and we all became Zoomers. Others started breaking into the Online Communication media, such as Microsoft Teams, and Google Meetings.

Online Communication gave us a great way to social distance and yet be linked together and interact with each other.

With new tools and technology comes a big learning curve. We need to understand the technology and new terms. We need to break the mold of being in person as a fly tying demonstrator and learn new ways to present our "How To" to the audience. We also need to learn how to be entertainers. Yes, we are now in the entertaining business. We are used to having an in person audience, now we are talking to a computer screen where our audience is on the screen miles away from use.

Cameras are now the eyes of our audience and we need to know how to use them as we try to teach and show our fly tying techniques over the internet.

Bandwidth is now a term we need to know to be able to do a successful workshop/presentation. How much bandwidth is your Internet Service Provider (ISP) providing you?

Lighting becomes even more important, as we need to make sure everyone over the internet can see the subject being tied.

Your computer equipment now becomes important and how your process can handle the speed and volume of data needed to process the information for the online applications and the ISP bandwidth.

One question that always come up is, why are we doing online presentations? Isn't YouTube good enough? The answers is the Fly Tying Community has fallen in love with the Online Presentation format, the participants enjoy the response and answers from the online instructor, you cant get that with YouTube. Plus, now we can do presentations that are far away but have them right in your living room.

My hope is that document is to help you become familiar and prepare you to become an Online Fly Tying Presenter.

Sincerely

Jerry Coviello
FFI Buz Buszek Memorial Fly Tying Award Recipient

BANDWIDTH

Bandwidth (*def*) describes the maximum data transfer rate of a network or Internet connection, and how much data can be sent over a specific connection in a given amount of time.
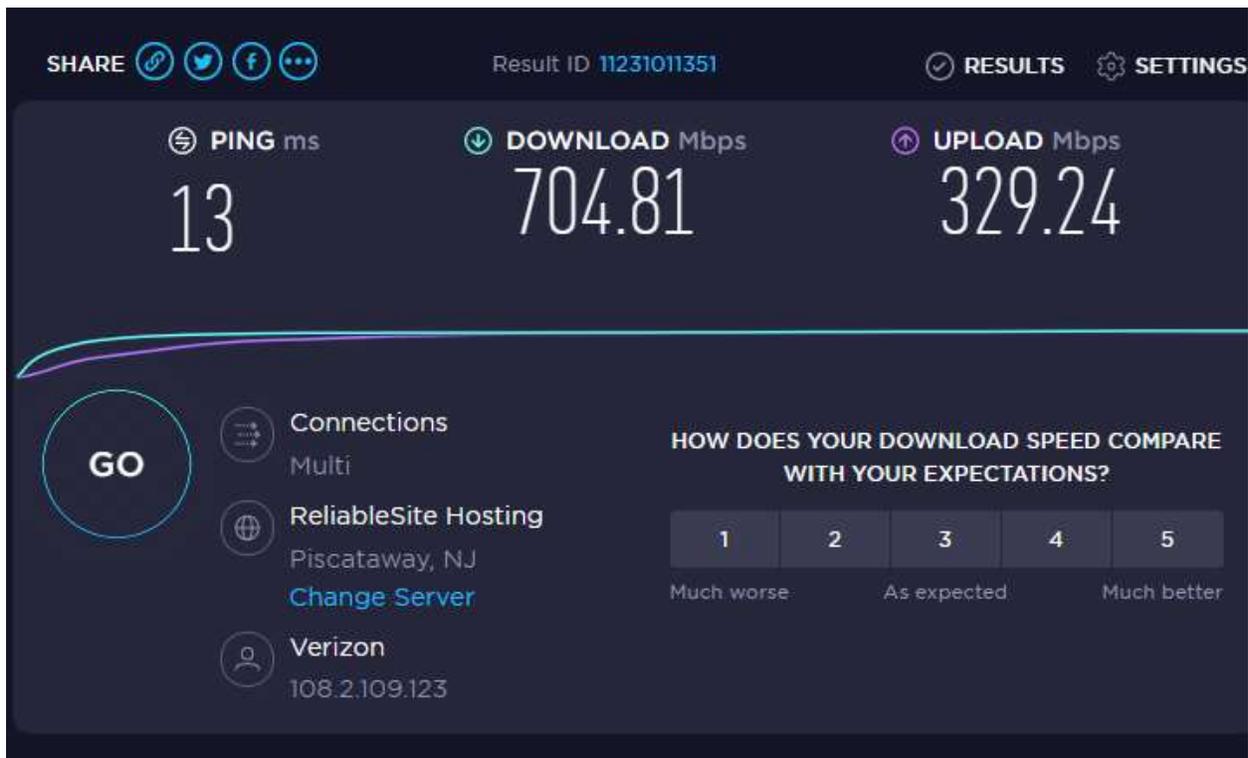
Let us jump right to the top of the most important part of the Online Presentation needs. Your Internet Service Provider (ISP) internet speed. How fast is your ISP connection? Can you handle the minimum needed to send and receive video through the Online Communication Application (ZOOM)?

Sending data is called Upload Speed and Receiving Data is called the Download Speed. These are measured in Mbps which means megabits per second. Mb is used in reference to download and upload speeds.

What does all this mean? Think of it as a pipe going into your house. The wider the pipe the more water can be moved outside the house. What is needed is a wide pipe to transmit volume of data out to the internet.

How do we test the Upload/Download Speed of the connection from our computer to the outside world on the internet?

There is a website www.speedtest.net , copy this address into your Internet Browser and hit the GO Button.

(results of my connection during a busy usage day)

Now that I have the numbers what do they mean? Below are the minimum needs to do an Online Presentation:

For high-quality video: 1.0 Mbps/1.0 Mbps (up/down)

For 720p HD video: 2.6Mbps/1.8Mbps (up/down)

For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)

The 720p (1280×720 px; also called HD ready or standard HD) "px" means pixels for resolution.

The 1080p (1920×1080 progressively displayed pixels; also known as Full HD.

The minimum need in a Zoom Presentation is between 1.0 Mbps and 2.6 Mbps

WIFI vs Direct connection to Router

Other impacts on Upload/Download speed I WIFI usage in your home. The more devices using the WIFI the more impact on your Upload/Download speed.

One way to guarantee other devices do not impact your Online Presentation is to do a direct connection to your Router from your computer network connection. That requires a Network Cable from your computer to the Router. This sometimes increase your Upload/Download Speed.

System Requirements

This is the requirement from the Online Application and should be looked up on their website. For example, Zoom's System Requirement for Windows is:

Windows 10*
Note: Devices running Windows 10 must run Windows 10 Home, Pro, or Enterprise. S Mode is not supported.

Processor minimum Single-core 1Ghz or higher, but recommended is a Dual-core 2Ghz or higher (Intel i3/i5/i7 or AMD equivalent) with RAM of 4Gb

Please check with the online application on their website for more information.

Run only one camera per USB port.

Cameras/Video Equipment

What kind of video equipment can be used? This is a subject that can be complicated, we can start from the simple Webcam to a video camcorder. The camera on the laptop is not acceptable for showing a fly tying demo.

Most setups will require at least 2 cameras and one should be a webcam while the second camera could be one of the following:

Webcam

Another webcam that can inexpensive and plug into your USB port on your computer. Most produce a 1080p video. They may come with a microphone; I find them a little muffled and I rely on the computer microphone for my audio.

Suggestion, purchase a Manual Focus Webcam. Prevents out of focus while tying.

Basic Webcam with a ring light. This can be secured to a tripod and placed between the presenter and the fly.

Camcorder

Using a HD Camcorder produces superior results. Many of us might already be using this to create YouTube videos. Place on a tripod or table mount with head between the Tier and the fly, has manual focus and a HDMI connection for High Definition output. Using the HDMI output will require another piece of equipment called a **HDMI Capture Card**. Elgato makes a few HDMI capture cards and might require your USB port to be 3.0 compatible. There is also a USB output and software from the manufacture would be required for setup to use the USB port. Setting the focus to Manual to prevents the fly from going out of focus.

Digital Single Lens Reflex (DSLR) Camera

Most DSLR's come with a video setting and output to an USB connection. With a Macro Lens or Extension Tube or closeup filter 2X to 4X you can get up close video of the fly tying steps. This should be mounted on a tripod or table mount with head and preferability between the tier and the fly vise.

This is also good for when you would like to make a Step by Step PDF document of the fly you are teaching for a handout to your students or audience.

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I also set the focus on Manual to prevent the fly from going out of focus.

Miscellaneous Camera Equipment

Test these before you go live!

GoPro

Advantage is small and lightweight. Can be used as a webcam but check with the manufacturer. Older models might not be compatible.

Please check GoPro's Website for more information

https://gopro.com/en/us/news/how-to-use-gopro-for-webcam

Cellphones

Cellphones can be mounted on a tripod.

Requires software for connection.

Lighting

This is usually the most overlook item for online presentations but is one of the most important parts for online presentations. Just having overhead light is not enough. Lighting should be all around your fly, top, bottom, sides and in the front. It is the front light which is the most important one. This shines on the subject and removes the shadows so the audience and see the fly. LED lighting is usually nice and bright.

Connect your camera to your computer and verify that your lighting is good. This is what the students will see.

Ring Light

This is a LED Ring Light that fits on the lens of the Camcorder and the DSLR Camera. This gives an all-round even light to the front of the fly. In conjunction with lights over the top and sides this will keep shadows off the subject and give a nice clear video while tying. Lights from Cellphones are not strong enough for videos.

LED Shop Lights

Bright LED shop lights are a good economical way to increase the general lighting of the room and are extremely helpful for the lighting on your subject. White paper on your table will help bounce back light.

Background

To show the fly without any background distractions, a background behind the fly is needed. Webcams have a wide angle view and would require a larger background, where camcorders and DSLR's and zoom and focus are a smaller background could be used.

Colors and Materials:

A solid 18% grayscale range, or Light Blue work great to help show off the fly and can be made of foam core or poster paper.

Profile Plate

Using a profile plate with a binder clamp to attach the background on makes it easy to adjust your background and keep it from falling.

Light Box

A light box may help with lighting and backgrounds. Most have two LED Strips on the top and using the ring light from your camera will help keep the fly well lit. Maybe a light on the bottom of the base may help also.
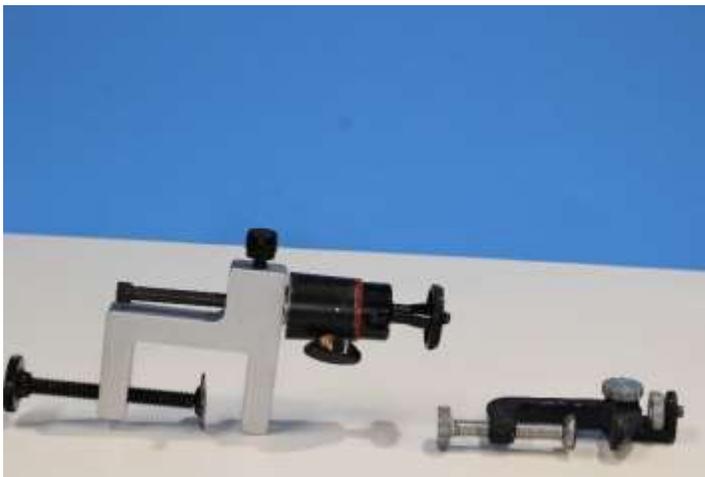
Mounting Camera/Camcorder to Fly Tying Desk

There are many ways to mount the camera to the fly tying desk for online presentation use. Best location is between the Fly Tier and the Fly. This gives the audience the best presentation on how the fly is tied. The audience does not have to flip the image in their head to understand the steps needed to tie the fly.

Clamp Ideas

A Bogen Manfrotto clamp with a super head. An easy way to clamp the camera to the fly tying desk. Helps keeps your legs from bumping the camera and is in line with your vise or you can angle your camera to view the fly.

(photo by Scott Sanchez)

C-Clamp with Screws (fly tying vise clamp with a panhead) This will give more flexibility with the ability to move the camera vertical and tilt up and down.

(photo by Scott Sanchez)

Wood Base Pedestal. This is perfect to adjust focus and depth using a webcam. Also can be used with a camera or camcorder.

(photo by Scott Sanchez)

Focus Rail Head Video Head. To help keep your fly in focus, only need to move the camera or camcorder when set on manual focus to keep the subject in focus while tying the fly.

(photo by Scott Sanchez)

Camera Tripod. Last option is a camera tripod, I have been using one for years with video taping and with Online Zoom Presentations. The work but are bulky and you must be careful around the tripod legs. The legs are easy to pump and shake the camera and will need to refocus your subject, the fly.

Camera and Vise Setup

Here is a basic setup of the background, lighting, and camera mount.

I have also added a piece of wood, clamped to the desk and the camera with a fly tying vise clamp with panhead to the end of the wood. Just to keep the camera away from the vise.

Background is supported by the profile plate.

Photo showing the extension of the camera away from the fly tying vise.

Also a light from the bottom of the vise to give help remove shadows while tying.

Preparing for your Zoom Presentation

Be prepared, have a syllabus ready for your fly tying workshop or demonstration, this gives the student or audience a heads up on what they are looking at.

If you are running a Fly Tying Workshop, please have a Document or PowerPoint to share what you are doing. If you are running a Fly Tying Demonstration, have a PDF of the step by step tying instructions so the participant can practice after the program is over.

KNOW YOUR CAMERA EQUIPMENT –
- Manual Focus Options. Set the fly in your vise and set the Focus.
- Exposure Options – here is where you can increase more light on the subject by opening the aperture of the camera/camcorder. (webcam does not have that option)
- Battery vs. Plugged in
- How it connects to your computer
- One camera per USB Port. No Gang connections.

Audio - Microphone
- Make sure you can be heard at the vise and at the webcam.
- Some people use a headset, make sure the volume is adequate for they audience.

Make sure you look at the computer screen to make sure your fly is in focus. The image on the computer screen is much larger than the screen of your camera. Fly is in focus if the eye of the hook is in focus.

Make sure your background fills up the background behind the fly. Sometimes a wide angle webcam will need a larger background.

Practice your presentation, record it if possible and critique it, better yet get a friend to go on and critique your workshop/demonstration. If possible, have a person help you during your presentation. That person can read chats and keep track if something happens such as your fly goes out of focus, they can let you know and you can correct.

Zoom fatigue is REAL. Limit you time presenting or watching. Two hours is usually the maximum.

Know the controls of the Zoom Software.
- Video
- Audio
- Chat
- Participants
- Record

Screen shot of the Webcam shot on Zoom. The controls on Zoom are on the bottom. Circled in red are Audio and Video controls. The Video will have the second camera.

This is a screen shot of the second camera where the fly tying vise is.

Clicking on chat and participant view brings up a side screen with anyone that will enter a chat or anyone that comes into your Zoom Room.

Biggest suggestion I can give, PRACTICE. Learning your Camera and Computer equipment. Also make this fun. We have gone from tying in person to being a talk show host. Let us make it lively, fun, and informative.

I hope this helps you with basic knowledge of how to set up and be an Online Presenter and for being an instructor or just a Fly Tying Demonstration.