Clinic: String Pedagogy Through Remote Teaching

presented by Nicole Parks — reported by Faith Farr

Originally from Minnesota, Nicole Parks is a Boston based violinist, educator, and advocate for contemporary music. She currently serves MA-ASTA as President. Nicole gave a fast-paced presentation of lots of techniques and technology for teaching on-line. In mid-October many of these strategies were new or almost new to attendees trying to figure out how to maintain a successful on-line teaching approach for the rest of the year. Nicole did her presentation from her home teaching area – showing how effective a Chinese screen can be to hide her home environment and make her background close to her to encourage student focus.

Using Zoom

Nicole prefers teaching through Zoom. She has tried many other platforms including Skype, Google, WebEx, and JamKazam (but couldn't make the "no latency" feature of JamKazam work). Zoom is free for 2 people for any length of time; and can accommodate up to 100 people for 40 minutes. You only need paid a Zoom account for things like group lessons that last more than 40 minutes.

Zoom settings recommended include:

- Waiting room: enable, so students don't enter until you are ready.
- Meeting passcode: off, so you don't need to take time to deal with it
- Option to join before host: sometimes yes, sometimes no. Possibly you want students to be able to consult each other without you.
- Mute participants on entry: on
- Chat: on, so you can use to send assignments to students to make sure they get everything you want
- File transfer: on, so you can send PDF to students through chat
- Screen sharing: on, so you can demo other things from your computer
- Breakout rooms: recommended if you have groups of students. Nicole ran a camp with 22 students in one meeting, and just separated them into breakout rooms
- Allow users to select stereo audio in their client settings: on, because it makes sound from the speaker more realistic.
- Allow users to select original sound in their client settings: on. This prevents sound from cutting in and out. "Enable original sound" prevents compression that enhances speech and flattens the harmonic overtones and the dynamic range of music. Smartphones may not have "original sound" and "stereo audio." You can adjust the sound during your meeting on computer, but you have to set up ahead on a tablet or phone. Click on Zoom ->

preferences -> audio -> advanced.

• Request permission to unmute: on, so the teacher can mute/unmute and students don't have to mute/unmute themselves.

Computers will be better than tablets/ phones because having a built-in mic and speaker is helpful. Headphones for teacher makes students sound better. For cello, use earbuds or small headphones that don't bump into pegs.

Use ethernet cable whenever possible because the internet connection will be more stable than over wifi. Nicole has 100 feet of ethernet cable.

Built-in cameras are usually fine. Nicole uses an iMac and is happy with its camera. With the limitations of teaching through a screen, students need a high-def camera with more than 720 pixels for the teacher to see really well. Laptops and phones have better cameras, but not as good microphones.

Any external microphone will be better than the internal mic. Yeti Blue (\$150) and Blue Snowball mics are recommended. Nicole was using a Neewer brand mic on an arm attached to her desk. Nicole demonstrated for us the difference in sound using the built-in mic on her iMac, the Neewer mic and an H6 mic. Each time she demonstrated with "original sound" on and off. I thought "original sound" made more difference that the brand of microphone.

Experiment with microphone distance. Most mics sound better close to the mouth, but we need the mic farther away because of playing.

We need good lighting to get the best visual possible, to compensate as much as possible for the bad sound. Avoid bright light behind you! Nicole has lights behind her computer to light her face brightly.

Having the camera angle slightly down is better than up. Stack your camera on books or something to get better camera angle.

Zoom offers a "virtual background" feature, but it makes the edge of your image

swim a bit. Nicole recommends creating your own "green screen" background. She demonstrated putting several sheets of green posterboard from Target onto the Chinese screen behind her. With a "green screen" in place, then the virtual background feature works well without swimming the edges. Nicole mentioned that she usually turns her camera off during a lesson while she puts the posterboard up so as not to give away the magic to her students. One moment they see her with her normal Chinese screen background, and the next moment the jelly fish in the sea may be her background to encourage a loose and flexible bow hold.

For young students (under age 6), Nicole recommends several short lessons a week — 2×15 minutes or 2×20 minutes instead of one 30 minute. She finds it helpful to get parents involved in stickers on the bow or on the fingerboard to help students focus. She finds it necessary to give parents a task during lesson (e.g. keep camera angle correct) so parents don't intrude on the student during lesson too much.

For effective on-line teaching, prepare students intellectually for what is going on. For example, show your bow hold hand shape up close in the camera without bow. Then have students show their bow hold up close, take a screen shot and send it to them.

Advanced students can send a "performance" every 3 weeks or so and then watch the video together through share-screen. When the video is open, click Share Screen. At the bottom of Share Screen choose "optimize for video clip" and "share computer sound." There is also an "annotate" feature in Share Screen where, for instance, you can draw a circle around bow hold for student to notice. The teacher can start/stop video as the observation/discussion proceeds.

Share Screen also provides a white screen option where for instance you can put music on screen, and then student can draw/annotate with letter names or finger numbers or bowings. Discussion revealed Chromebook doesn't have the annotate feature.

In Zoom, you can record part of lesson.

Set the options up ahead of time, and then send the recording to students to hear your instructions repeatedly during the week.

With bad sound, difficult visuals and hands-on touch impossible, words are really important. Make sure your students understand your words. Have students define "intonation" [again]. "What muscles are engaged when you put your violin on your shoulder?" Make sure students can tell you if they don't understand.

To hold a recital on-line, Nicole recommends students make their recording ahead of time and email the video to their teacher or put it onto private YouTube. Everyone watches at the same time on Zoom and claps for each other. Invite remote family to tune into the combined performance. In a discussion about accompaniment, Nicole said the teacher sometimes adds accompaniment afterwards. Or the teacher could send accompaniment for the student to record over, but that is very hard for students to do. It is possible to put student videos together into one long video using software such as Garage Band, iMovie or Audacity. It is possible to have students perform live on Zoom instead of pre-recording, but Nicole finds this approach is less formal than recording and uploading ahead of time.

Playing together is one of the most difficult things to adapt to an on-line teaching environment. The Acapella app was suggested as a way to record an ensemble — one person records, sends to next person to record over. Student and teacher can "play together" if the teacher mutes the student. Both teacher and student play while the student hears the teacher. Although the teacher can't hear the student, the teacher can see, and make a guess accounting for the latency.

As a group lesson game, assign a number to each student. They count off to make sure they know who to follow. Then play the piece one measure at a time; this helps students practice trouble spots.

Use the student's home lesson space in imaginative ways. A bow hold game for young students might include: make a bow hold, run away and find something blue; then return and show the bow button touching something blue with a good bow hold. Or do "dance moves" while maintaining a good bow hold.

Some recommended apps include:

- Staff Wars: play the note or tap the note name before it "explodes" across the screen.
- Bingobaker.com: you can make your own bingo cards for instance with rhythms. For group class, send rhythm bingo card to students as PDF.
- Pickerwheel.com: to help make a random selection. The Picker spins and selects how students will play. For group lessons use Image picker to put rhythms on the wheel for instance.
- Kahoot.com: a quiz type game.
- Sightreading Factory: recommended for generating rhythms.
- Rhythm randomizer: is free.
- Rhythmtrainer.com

Faith Farr has been editor of this magazine since 1996.