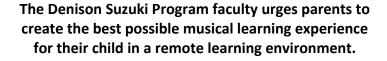
Denison University Suzuki Program

Tech Tips
For Remote Learning



Please consider the information below and acquire and implement as many of these items as possible.

These recommendations contribute hugely to

- your child's understanding of instruction, tone, technique, and musicality from your teacher
- his or her ability to see and hear nuance of tone technique, and musicality
- your teacher's ability to instruct appropriately and efficiently

Software Platform

- Zoom (generally preferred), Skype, and FaceTime are all acceptable.
- FaceTime may be better for very young children, due to less latency/lag and a more natural talking interface.
- Zoom settings
 - o In settings: Check software update availability and update to latest version.
 - In audio settings:
 - UNCLICK "automatically adjust microphone volume"
 - Set "Suppress background noise" to "low"
 - Set microphone and speaker slider bars at about ¾ of maximum. (Consult with teacher based on instrument and hardware.)
 - In audio settings ADVANCED:
 - CLICK ON "Show in meeting option to Enable Original Sound
 - UNCLICK "Disable echo cancellation"
 - CLICK ON "High fidelity music mode"
 - Optional (consult with teacher, based on instrument and hardware): CLICK ON "Stereo"
 - o At time of every lesson, on main Zoom screen, CLICK ON "Show original sound"

Hardware - Basic Device, and Connectivity

- One of the following: laptop computer, desktop computer, phone, tablet (laptop or desktop preferred).
- Internet speed can be tested (www.speedtest.net is recommended).
- Use of ethernet cable (hard wired) with a laptop/desktop computer is far superior to all other setups/devices.
- Wi-fi:
 - Can be satisfactory if internet speed is adequate.
 - o Can be improved with use of portable, stand-alone boosters.
 - Can be improved if device/student/lesson is moved as close to router as possible
- At lesson time, turn off all other apps on device (e.g. mail, browser, all others), and minimize other family use of internet.

Hardware - Essential Additional External Add-ons

- External microphone (Consult with teacher as to type based on instrument.)
 - Blue Snowball: about \$75 \$110 on Amazon. Has settings for omni-directional (all direction pickup), and cardioid (front direction pickup). Consult with teacher on settings.

- Blue Snowball Ice: about \$50 on Amazon. Only setting is for cardioid (front direction pickup).
- Apple devices, such as Mac Pro and Mac Air laptops, have excellent built-in microphones, so an additional microphone may not be necessary if you are using these.
- Piano students are required to have an external microphone to be placed to the side of the music rack.
- External desktop speakers
 - Any small external speakers: general price range from \$25 \$100
 - Any external speakers will substantially enhance the child's experience hearing the teacher's instrumental sound.
- Microphone and speaker connectivity
 - Both must be hard-wired and cannot be blue tooth/wireless.
 - o For desktop/laptop: speakers connect in audio port, and mic connects in USB port
 - After connecting mic/speakers, check audio settings on device and in software to ensure mic/speakers are connected and being used. (Brand names of mic/speakers will show in audio settings.)
 - For phone/tablet:
 - Purchase a "dongle" (one end is USB, other end is "lightening" connector).
 - Connect mic with dongle to charging port
 - Connect speakers with their audio cable to audio port
- Microphone and speaker setup
 - Speakers must be placed substantially behind the microphone.
 - Similarly, if using <u>external microphone</u> and <u>internal speakers</u> (i.e. speakers within the device), place device behind microphone.
 - o Microphone for piano students should be placed beside the music rack, facing the student.

Other Helpful Equipment

- A music stand or a tripod (Amazon) designed to hold a tablet that can be adjusted to the proper height.

Physical Setup for Music Lesson

- A quiet room with no distractions
- Adequate lighting, but without window or strong light shining in device's camera eye.
- Music, notebook, pencils, metronome (if used), music stand (if used) assembled.
- Device positioned (use of special stand, tripod, table or shelf, device stand, etc.) so that camera is at student's eye level.
- Student positioned so that camera eye fully captures head, neck, shoulders/upper body, arms, fingers, and as much of instrument as viable.
- Student positioned about 2 3' from microphone.