

VI. Vibrato

Violin/Viola:

- A. Definition: oscillation of pitch caused by lengthening or shortening the string
- B. Vibrato is up to the pitch only
- C. Vibrato is measured by its width and speed
- D. General principle: the lower the pitch, the slower the vibrato
- E. Prerequisites: well-established body and instrument position and left hand shape, endurance, and independence of hands
- F. Need to develop variable speed and width
- G. Main types of vibrato: hand (wrist), arm, combination of hand and arm
- H. First knuckle of finger must flex
- I. Refinement of shifting motion
- J. Teach slower, wider vibrato initially

Cello/Bass:

- A. Arm vibrato occurs almost exclusively.
- B. Cello vibrato involves pivoting the elbow. The elbow does not move while vibrating on the double bass.
- C. Bass vibrato motion is larger and slower than cello motion.
- D. It is permissible to vibrato without the thumb always touching the back of the neck of the instrument on lower string instruments.

Vibrato Teaching Strategies

Prerequisites:

- Students must have a well-developed left hand position and good finger placement
- They must be able to sustain playing position for reasonably long periods without fatigue

Violin/Viola:**A. Hand or Arm**

- Hand vibrato motion occurs at the wrist, the forearm only moves to react to the motion of the hand
- Arm vibrato occurs from the elbow, the forearm moves back and forth while the wrist remains stationary
- Some students find one or the other types of vibrato easier. If so, start them on whichever works best. If not, start them with hand vibrato first.
- Most players use a combination of the two types to have a more versatile repertoire of sounds.

B. Guitar Position Pump or Roll

- Holding violin/viola in guitar position, place hand at bout with the fingers resting on their tips on the top of the instrument, left fingernails touching the fingerboard, thumb in the cradle and heel of the hand resting on the bout for stability
- Begin with the third finger
- Roll the hand back and forth, the motion coming from the wrist (hand vibrato), watch to see that the first knuckle joint of the vibrating finger is flexing
- Pump the hand in and out like a bicycle pump, the motion coming from the elbow (arm vibrato), watch to see that the first knuckle joint of the vibrating finger is flexing
- Follow the line of the fingerboard as a guide to be sure the motion is parallel to the string
- When motion is established, transfer finger to string

C. Finger Sequence

- Begin with third finger to establish motion
- Proceed in order: 3, 2, 1, 2, 3, 4
- Allow the balance of the hand to adjust slightly to each finger change

D. Guitar, Intermediate, and Shoulder Position Pump or Roll

- Practice pump or roll in each of three positions:
- Guitar – under the arm, slanting across body
- Intermediate – at the front of the shoulder, facing the front
- Shoulder – regular playing position

E. Moveable Bout

- Once vibrato motion is well established at the bout, add two fingers of the right hand between the bout and the heel of the hand
- Move the two fingers gradually out towards the scroll, bracing or bumping the hand against this “moveable bout” as with the real bout
- Take away moveable bout for short periods of time if the motion is going well – replace if the wrist starts to wobble

F. Buddy Bowing

- When initially adding the bow, have another student or the teacher move the bow while the person vibrates to avoid two-handed coordination difficulties
- Once they hear the vibrato, motivation will be increased

G. Fast Initial Bow Speed

- To avoid coordination problems, have the students use a fast bow speed at first when bowing their vibrato
- Gradually slow bow speed as expertise increases

H. Practice motion away from instrument

- Practice the vibrato motion away from the instrument, using the right hand as the fingerboard
- Student can get in many more minutes of vibrato practice a day if they do this motion every chance they get: e.g., watching tv, whenever there is a commercial, riding the bus, when another section of the orchestra is rehearsing

Cello/Bass:

I. Four-Step Sequence (Teaching Sequence #1)

- Place tall finger tip on collarbone, move hand and arm up and down (move whole forearm, leave wrist still)
- Place tall finger tip on string and repeat
- While vibrating on string, place bow on a *different* string and bow back and forth
- Place bow on same string and bow vibrato note

J. Teaching Sequence #2

- Using a rubber ball or other round object about the size of an orange, place ball and hand on string and simulate vibrato motion
- Remove ball and maintain rounded motions, shape of fingers
- Vibrate on one string and bow another
- Vibrate and bow on same string

K. Teaching Sequence #3

- Place wrist watch area of left hand on strings and slide up and down
- Move out to finger tips and continue motion, sliding up and down string
- Anchor the tip of the tall finger and continue motion
- Add bow

L. Finger Sequence

- Cello: 2, 3, 4, 3, 2, 1
- Bass: 2, 4, 2, 1
- Bass 4th finger may be braced with the 3rd for stability

M. Add a Foot Tap

- Begin to measure vibrato by adding a foot tap and doing one cycle of up and down, two, four, etc. for each tap
- Begin slowly and gradually increase speed

N. Metronome Practice

- Begin with one oscillation per second (set metronome on 60) then two, three, four, etc.
- Gradually increase speed by two points on the metronome until desired speed is reached
- Continue to cultivate ability to increase and decrease vibrato speed at will

O. Checkpoints

Motion comes from the wrist for hand vibrato, elbow for arm (violin/viola)

The first knuckle joint is flexing

Vibrato motion must be parallel to the strings

Wider, slower motion needed for lower pitches, narrower, faster motion for higher ones