Beginning and Intermediate Shifting and Vibrato

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1. Introduction:
    a. We will be giving a sequence of instruction for vibrato and shifting from the first introduction of these skills through the intermediate levels. We will offer exercises that can be incorporated into classroom and lesson settings as well as musical examples and excerpts to further illustrate these concepts. All four instruments (violin, viola, cello and bass) will have their own specific concerns addressed; unique things to look for as well as some universal language you can use. A further resources section will include websites, articles, videos and more that we have found useful for reference and further exploration is included at the end of this handout.
2. Shifting Sequence of Instruction: *On upper strings I start with shifting before I start talking about vibrato. I do use the same "magic" exercise for both and I tell students this, but I also encourage them to do one new thing at a time and find that the vibrato is really ready to appear for most students after they have spent time working on good shifting technique. *On lower strings, I also start with shifting before vibrato, as vibrato uses to same motions and muscles as shifting, only refined. I often remind my students that they must have solid intonation before they can move to vibrato because they cannot use vibrato to 'cheat' a note.
    a. Start with a solid foundation
        i. For any instrument, we believe that starting with correct and consistent right-hand and left-hand technique and posture is key. Being able to work from a good starting place will make the shifting and vibrato learning process easier for both the student and teacher and will also prevent possible mis-use injuries in the future. Having this solid foundation will also allow students to be able to easily learn other more advanced techniques more quickly and is worth spending the extra time emphasizing its importance.
        ii. Left hand set up
            1. Fingers, wrist, and elbow all in a line
                a. Wrist should not bend out or in, this will help allow for full freedom of motion and prevent future injury.

b. Players should be able to freely swing the arm from right to left with no obstruction. If necessary, adjust the instrument placement and/or shoulder rest for each student. Instrument set up can vary widely from student to student.

2. Thumb curved with no tension, fingers curl naturally
    a. I find a "fuzzy dot" can be especially helpful for students to promote good thumb position. The tactile nature of the felt dot is great for them to do a quick self- assessment and adjustment and after a while the sticky backing wears off and they are left with good thumb technique. (Also, as they are learning to shift, having that tactile information about where first position is when down-shifting can be incredibly helpful for students when building their muscle memory.)
3. Low Strings: no broken chicken wing arms

b. Ear training
    i. Intervals: know what different intervals sound like and what they look like in the music
        1. <u>Singing: sing the starting and ending notes in a comfortable octave before playing the shift and when first learning the shift. This will associate the sound with the movement and help accuracy.</u>
    ii. Hearing the shift
        1. On violin or viola, third position first finger is D on the A string which is a third above first position first finger B.
        2. Names of positions have nothing to do with the first finger "replacing" the 3rd finger and so it's named 3rd position (this only works on violin and viola but not for cello and bass); rather all positions are intervalically named based on the distance from the first finger in first position.
    iii. Awareness of what you hear and feel will come with the singing and knowing what the intervals can look like "in real life"

c. Upper strings:
    i. Hand frames
        1. <u>Intervals can be a "scary" word or idea for students. I start talking about them early and use very basic language to encourage students to embrace them. 'Interval is a word that describes the distance between two pitches. We can see</u>

and hear them and they are named with a number and often with the words Major or minor. To find intervals easily, count the half steps between notes!'

2. On the same string/ "real intervals"
3. On different strings/ "feels like intervals"
4. See notes intervalically
    a. Intonation: Being able to hear the intervals in your head and feel them in your hand frame before and while playing will yield better intonation. *Intonation can be another "scary" word…talking about pitch can be very abstract for students and I like to make it more concrete by talking about hand frames (the spacing of whole steps and half steps in an individual position on an individual string.)

d. Mechanics
    i. Thumb
        1. Release the tension, tension = bad
            a. Teachers can easily check thumb tension by coming by and lightly pulling on the left thumb as students play. Students can also have a partner check this for them. I love the idea of thumb taps, when you tap your thumb you release any built-up tension and I can see that release on the faces of my students. All I have to say is "tap your thumb" and it's a reminder to relax, breathe and do a quick check in with their hand.
        2. Thumb travels with the hand/wrist as a unit. (*see #3 below)
            a. The thumb DOES NOT lead or follow the shift. We really want the arm to work together and not as separate parts.
    ii. Left arm unit: fingers, wrist, elbow in a cooperative unit
        1. Open and close the elbow to initiate the shift. Using this larger muscle group is often easier to think about and engage for students and offers more control over the shift. The fingers and wrist will move as a consequence of moving the elbow if the left-hand technique is good.
        2. The unit is stable in 1st through 4th position for violin, and somewhere between 3rd and 5th position on viola depending on the size of the instrument and player.
        3. Only in the upper positions should you "break" the unit or bend the wrist.

a. The thumb should always be "anchored" to the neck, for smaller hands you can move it up along the fingerboard, but not along the shoulder of the instrument itself.

4. A note about shoulder rests: It is not possible to shift smoothly without being comfortable holding the instrument steady while your hand moves. The most common reason my students have trouble shifting is they are holding up the violin with their left hand (often unconsciously) and it will fall once they release for a shift. A shoulder rest that fits them is absolutely essential. Not all shoulder rests work for all players, but they MUST NOT shift/move while the student is playing. (This means sponges with rubber bands are not ideal as they are not a stable shoulder rest.) There are some students who don't need a shoulder rest. Personally, this doesn't work for me, but I have one student who just uses a cloth and has no trouble at all with keeping her instrument stable.

iii. Do the "magic" exercise

1. Place instrument on your left shoulder and release both hands.
2. Reach across to your right shoulder with your left hand and rest for a moment before releasing back to your side. This shows the teacher that the student isn't holding the instrument with their arm, but between the jaw and shoulder.
3. With violin/viola on the shoulder, place the hand in first position with the thumb and fingers lightly resting on the A or D string.
4. Using only the elbow (no hand or wrist) slide the fingers up the neck until the hand hits the shoulder of the instrument. Slide back to first position and check to make sure the thumb moves with the fingers and has no tension.
5. Check thumb tension at the top and bottom of the shift by trying to lightly pull on the tip of the thumb, it should come away easily, ask students to do a "thumb tap" when practicing at home.

6. In between slides up and down, swing the elbow right and left while the fingers rest lightly on the strings. This is a precursor to playing on different strings.
7. Once the motion is smooth and easy, transition into siren sounds with each finger on every string.

iv. Shifting Game, see attached sheet.
1. Start with same finger shifts, 1 to 1, 2 to 2, etc.
2. Expand into all finger combinations.

e. Lower Strings:
i. Types of Shifts on Lower Strings
1. Direct Shift: Sliding one finger from one note to another (hand frame is not altered)
2. Hidden Shift (or Compound Shift): Sliding a finger to an inaudible note and then placing another finger down to play sounding note (can be thought of as shifting between positions, not fingers)
3. Free Shift (can be also thought of as Target Shifting): Move hand frame while no fingers are making contact with the string. Takes Practice

ii. Mechanics
1. Thumb
a. On Cello: balanced behind 2nd finger closer to tip of thumb
b. On Bass: balanced behind 2nd finger on ball of thumb
c. DO NOT squeeze with the thumb (thumb tension = bad shifts) Think of neck simply resting in the hand and the thumb provides balance (like holding a waffle cone)
2. Left Arm
a. Fingers sink into fingerboard (not by squeezing. You should be able to feel strings vibrating in fingers. Think of fingers being affected by another plane of gravity.)
b. Shifts begin the elbow and left hand is dragged along.
c. Movement in arm unit begins before the "shift" occurs

iii. Positions

1. 12 positions total (½, 1st, L 2nd, U 2nd, L 3rd, U 3rd, 4th, L 5th, U 5th, L 6th, U 6th, 7th) Each span same distance (m3 on cello, M2 on bass)
2. Finger spacing compresses as the notes get higher
3. Thumb moves around to the side of the fingerboard in the upper positions
4. Don't stretch for a position (especially on bass). Shift into thumb position if need be.
5. I will often quiz students on the regular positions to see if they know their fingerboard-map well

iv. Thumb Position

1. Where, When and How?
    a. Where: Whenever fingers in the normal position cannot reach a note comfortably (typically C#5 on cello and A3/A#3 on bass). Typically whenever treble clef is used (but not always)
    b. When: Either with the rest of the shift (direct thumb shift) or delayed after another position is reached (indirect thumb shift)
    c. How: Elbow must raise to get over the bout of the body of the instrument. Thumb moves in semicircle onto two strings at a time. This motion takes practice!
2. Finger Groups
    a. Cello: 5 groupings total (Major: W-W-H, Dorian: W-H-W, Phrygian: H-W-W, Double Harmonic: H-1.5-H, Lydian: W-W-W)
    b. Bass: 3 groupings total (Chromatic: H-H-H, Semi-Chromatic: W-H-H, Diatonic: W-W-H)
3. Considerations
    a. Lower strings become similar to higher strings in thumb position. This means that finger independence becomes important and the bow must move closer to the bridge, move faster, and become lighter.
    b. Watch for 'broken wrists' in thumb position (wrists have to remain relatively straight)
    c. Thumb is also a finger in thumb position. Typically thumb will stay on the harmonics, but the thumb can

shift up or down and can be played in lower/higher positions

d. 4th finger is rare in thumb position (but can still happen). Basses use 3rd finger in thumb position.

3. Vibrato Sequence of Instruction
    a. Upper Strings
        i. After the students are able to do same finger shifts, I start talking about vibrato
        ii. Go back and repeat the "magic" exercise
        iii. Start making the motion of the siren sounds smaller while simultaneously doing finger flexibility exercises.
        iv. Use egg shakers, there are 3 different sounds to work towards
            1. Soft and shimmery, elbow only
            2. A "chk-chk" sound, hand/wrist only
            3. Combine the two
        v. With each finger, try to get one independent wiggle on A or D strings
        vi. Start having students play scales in half notes and vibrating just that one finger. Then work into all of the fingers, still on half notes. The third finger can support the fourth finger.
    b. Lower Strings
        i. Once students pass all their quizzes on the fingerboard map and can mostly make accurate shifts, that is when I will introduce vibrato
        ii. Start instruction without instrument. Begin with a robot wave. Upper arm should only rotate to move forearm, not move. Transition to shaking up a can of soda. Move forearm in towards the body via the elbow. Plant finger on sternum and simulate vibrato motion
        iii. With instrument, start with robot wave and shaking a can of soda. Move to polishing string with finger. Progressively polish a smaller and smaller area. Add "superglue" to finger while continuing motion to add vibrato to pitch.
4. Selected Exercises are underlined throughout.
    a. See also "Playing the String Game"
5. Musical examples and excerpts for Shifting
    a. Shifting

i. Violin
    1. Learning exercises: Whistler position books and Suzuki Tonalization exercises
    2. Practice etudes and exercises: Yost, Sevcik, Schradieck, Dancla, Wolfhardt
ii. Viola
    1. Learning exercises: Whistler position books and Suzuki Tonalization
    2. Practice etudes and exercises: Sevcik, Schradieck
iii. Cello
    1. Learning excercises: Krane II, Whistler, Cossman Shifting Excercises
    2. Practice etudes and excercises: Schroeder 140 foundational studies, Dotzauer, Popper, Benoy and Sutton
iv. Bass
    1. Learning Excercises and etudes: Simandl, Clarke Thumb Excercises

b. Vibrato
    i. Violin and Viola: Viva Vibrato, 77 Variations on a Suzuki Melody
    ii. Cello: Viva Vibrato, Woolstenhulme Vibrato Basics
    iii. Bass: Woolstenhulme Vibrato Basics, Simandl

6. Universal language
    a. Intervals can be a "scary" word or idea for students. I start talking about them early and use very basic language to encourage students to embrace them. 'Interval is a word that describes the distance between two pitches. We can see and hear them and they are named with a number and often with the words Major or minor. To find intervals easily, count the half steps between notes!'
    b. Intonation can be another "scary" word…talking about pitch can be very abstract for students and I like to make it more concrete by talking about hand frames (the spacing of whole steps and half steps in an individual position on an individual string.)
    c. Thumb Taps: I love the idea of thumb taps, when you tap your left thumb you release any built-up tension and I can see that release on the faces of my students. All I have to say is "tap your thumb" and it's a reminder to relax, breathe and do a quick check in with their hand.

7. Further Resources can be found on Melissa's website: www.melissabarru.com/conferences
8. Conclusion
    a. We feel that a strong foundation for both shifting and vibrato is achievable for every educator. Often these skills are talked about as "difficult" or "advanced" for both the students and the teachers when in fact they are part of our everyday skill set. We hope that all string teachers will be more comfortable teaching these skills and the next generation of string players will enjoy the learning process!