

Clinic: Remediating Cello Bow Hold

presented by Faith Farr

We all hope that we'll teach technique so students get it right, right from the start. But we all end up dealing with remedial teaching to some extent. I think there are two reasons: students may misunderstand the goal or they may lack of strength, flexibility and agility in their hand.

Bow Hold Set-up – fingers, hand, wrist

My bow hold goal includes a flexible thumb (press the “doorbell” main thumb joint and it should bounce back); the corner of thumb touches where the end of the frog meets the stick (not in the notch); finger 2 is tall and goes on ferrule; finger 1 lies on stick; finger 3 feels the side of the frog; and pinkie is over the stick.

I have three ways I suggest to students to set bow hold; I use the one that seems most effective to that particular student. 1) Dangle the hand to get a natural shape; then insert the bow without changing anything. Or (2) set the bow hold vertically; then stir, do rocket ship or jiggle. Or (3) set the bow hold horizontally with two hands: point the hair to wall and put “your fingers on the edge of a table.” Tip into playing position (point the hair to the floor) and tuck in the thumb.

When the bow is on the string at the frog, check for: low elbow (pointing towards the floor); rounded wrist; relaxed shoulder; natural arm weight. Twist the bow so the stick is closer to the player than the hair is—the hair will be flat to the floor and the “keyhole” shape of the button and the end of frog should be oriented up and down. (On violin/viola, the stick is twisted so the stick is away from the player—on all instruments, the twist makes the hair closer to the bridge than the stick is. If you are teaching heterogeneous classes demonstrating from a violin/viola, consider sometimes holding your violin vertically so your cello/bass students see an arm shape/string contact similar to what they need to do.)

Develop arm weight at the frog by leaning on the string. “Portrait position” means put your bow on the string at the frog and imagine you have to sit like that for the next two hours while an artist draws your portrait—almost everyone figures out how to release weight into the string! “Stretch the string” means imagine the string is a rubber band that you want to stretch out of the peg box, along the length of the string; use your

arm weight on the bow to stretch the string towards the bridge. Once you feel a good stretch, then play and enjoy the full tone.

Bow hold problems and suggestions for remediation

If there is a lack of finger dexterity and strength: try finger taps, flicks, snaps and wiggles.

To develop thumb flexibility: try alternating “circle/bird beak”. Without the bow, make a circle with your thumb and fingers, and then straighten the finger and thumb joints. Or with the bow, do finger pull ups with the bow in two hands.

If finger 1 is “bossy”—taking over the entire bow hold and usually causing overpronation: try setting the bow on the string at the frog and tapping finger 1; the other fingers need to do something to hold the bow when finger 1 lets go.

If finger 4 collapses, often resulting in over supinating: try “the 1 finger bow hold.” With the bow on the D string at the frog, hold the bow with just thumb and finger 1 and play 4 short notes (about 1/4 bow). With the bow still on the D string at the frog, hold the bow in 2 hands and put finger 2 about where finger 1 was. Hold the bow with just thumb and finger 2 and play 4 short notes. Similarly do 4 short strokes holding the bow with just thumb and finger 3, then just thumb and finger 4; fingers need to be closer to the tip of the bow than thumb. Finally, hold the bow normally, and feel “balanced bow hold”—I want each of the fingers to be doing the same amount of work.

If there is no contact with side of fingers and the fingertips stick out: usually the bow is not twisted. Try keyhole and bow twist. Try using “dangling hand” to set the bow hold. Check that there is a wrist bump at the frog.

If there is extreme fingertip contact with the bow, try using “tabletop” to set bow hold. Possibly left hand and right hand are talking to each other and appropriately curly left fingers are causing overly curled right fingers. Possibly the thumb is stiffly bent, causing the fingers to claw; make sure the “doorbell” works.

If the stick is too deep into the hand, possibly fingers are weak. Try dexterity and strength exercises.

If the thumb is touching the wrong

place on the frog, try putting mole foam on the stick/tip of frog as a reminder of the right spot, and as a bit of a cushion.

If the thumb has straightened into “banana thumb,” possibly the student misunderstands what part of the thumb contacts the frog. Try rapid taps with thumb and finger 2 like “pac-man.” The spot that finger 2 taps is the corner the thumb, near the nail. That’s the thumb spot that touches the frog. By contrast the “thumb tack spot” in the center of the fleshy part of the thumb—is *not* the spot that touches the frog.

Bow Stroke Set-up – arm, elbow, shoulder

My bow stroke goal includes straight bow: 90° to the string (use windshield wiper for a T bow, X bow); the tip “aims” for a different target for each string (use “rocking chair” silent string crossings from A to C and back again); in “lane 3,” the stroke is half way between fingerboard and bridge on all strings; on a down bow, you need to reach out on the A, compared to the C, and reach out at the tip compared to the frog.

The whole arm moves throughout the stroke to avoid stiffness; in the lower half of the bow, you use mostly upper arm with some forearm; in the upper half of bow you use mostly forearm opening with some upper arm.

Release your shoulder to get weight at frog and extension at tip; slide your shoulder blades into your back pockets. Help students realize that our arm bones connect to spine/ribs at the clavicle bumps by your throat; people with short arms need to use the “third arm bone” moving the clavicle forward to reach the tip.

Particularly for people with short arms, the bow hold at the tip will differ from at the frog: at the end of a down-bow, the hand naturally pivots to lean more on first finger; fingers become more slanted, no longer 90°; the elbow naturally rises to point to wall; wrist is more level, but not caved in. Starting from a good position at the frog, the transition to the bow hold at the tip usually happens naturally during the down-bow, but students often need help to return to the starting position at the frog. During the up-bow, drop the elbow, lead with the wrist especially at near the frog, and allow the fingers to return to more 90°

to the stick.

Bow stroke problems and suggestions for remediation

If the elbow is always high (“scarecrow” bow stroke), the student may wrongly think that the elbow goes in a straight line in order to get the bow to go in a straight line. In fact, the elbow swings in an arc—pointing towards the floor when playing at frog and rising to point towards the wall when playing at the tip. Drop the elbow on up bow, and lead with the wrist as you approach the frog.

If the bow hold starts with fingers at 90° at the frog but eventually over-pronates, the student may need help releasing the pronation appropriately needed at the tip. With the bow on the string at the frog, tap first finger to make sure it is released. Play a full down bow and up bow. As you return to the bottom quarter of the bow, release finger 1 again by tapping it on the stick.

If the bow starts straight but doesn't stay straight, make sure the elbow is opening enough—reach out at the tip. Try putting the bow on the string at the tip; hold the bow in place with the left hand, and “paint” the stick with the right hand—pantomime the bowing motion by following the stick.

If the bow isn't straight on all strings: try “water pistol:”—imagine the tip of the bow

is spraying water. The target will change for each string. For the C and A strings, it can be helpful to keep the bow half-way between the corners; a crooked bow will be aiming for one of the corners, not crossing the middle of the C-bout.

Misconception: string crossings are up-down / parallel to body. Correct perception: reach out for the A string to keep good bow angle.

Where is the highway? Look between the hair and the stick at the “line” the hair draws on the bridge. Or don't look, just feel—the string feels spongy near the fingerboard and stiffer near the bridge.

Setup for Good Tone

My setup goals for good tone include arm weight; lean on the string; use the bow twist to “stretch the string” especially on C and G. “Grab & go” means jiggle the string silently then play.

Lift bow from string to about head-height up and down a few times—these are lifting muscles; don't use lifting muscles when you play; only use sideways muscles.

Tighten the bow so that it is possible but difficult to make the stick touch the hair in the middle of the bow; play with the stick half-way to the hair, even when playing at the frog.

Tone problems and suggestions for remediation

A lot of student problems with tone may come from misconceptions. We often use the terminology “set” the bow on the string, which may imply the bow/string contact is a gentle surface touch, like I “set” my cup on the table. Actually, I want to sink into the string like a trampoline; the string depresses under the weight, and the hair bends to wrap around string.

Misconception: tone is produced by the tightness of the hair; if you need a bigger tone you need to tighten your bow. I show students how to test for correct tightness and then get more tone by more arm-weight adding more bend to the stick.

Misconception: it takes force to play loud. Correct perception: it takes weight; lean on the string. Try “portrait position.”

Misconception: you can't see good tone. Correct perception: especially on the C and G strings, a big sound will look like a big vibration. Surface sound doesn't look big.

Faith Farr taught at MacPhail Center for over 35 years, and currently teaches cello at her home studio. She has frequently done cello pedagogy presentations for MNSOTA, SAA and ASTA conferences. †