IT'S ALL ABOUT THE BOW!
The Best Strategies for Developing a Beautiful Tone in Beginners and Beyond

CHARLES LAUX
KENNESAW STATE UNIVERSITY
HAL LEONARD CORPORATION
D’ADDARIO ORCHESTRAL
EASTMAN STRINGS
WHAT CAME FIRST, THE BOW OR THE INSTRUMENT?

• The bow is just as big a part of the instrument as the violin, viola, cello, or bass!
• The bow on the string initiates the sound!
WHY IS THIS SO DIFFICULT?

• It’s a lifetime learning process!

• Defies most natural joint movements

• Requirements:
  • Exceptional coordination among shoulder, upper arm, lower arm, wrist, and fingers
  • Dexterity and flexibility of fingers
  • Fine muscle control
WHAT OUR BODY WANTS TO DO

Naturally “crooked” bowing!

Right Shoulder Pivot
WHAT WE THINK WE MUST DO

“Straight” bowing...

Right Shoulder Pivot
WHAT WE MUST ACTUALLY DO

Unnatural “straight” bowing!

Right Shoulder Pivot
PREREQUISITES

• Good body posture

• Good instrument position

• “How many times are you going to learn the proper bowing angles?”

• We must ISOLATE the teaching of the right hand!
THE FIRST STROKES
WHAT ARE THE BENEFITS/DRAWBACKS OF EACH?

• Short bow approach
  • e.g. Suzuki ("Mississippi Hot Dog")

• Partial bow approach
  • e.g. Essential Elements

• Full bow approach
  • e.g. String Builder (whole notes)
PERSONAL PHILOSOPHY

• I have found that it is easier to start with larger bows and shorten the length later

• Starting with small strokes and sound good initially, but can often be difficult to break the "habit"
UNDERSTANDING

• Students MUST have a conceptual understanding of how the body works to produce a proper bow stroke

• What techniques are required to produced a the desired sound?
ITEMS OFTEN OVERLOOKED...

- Bow hair tension
- Bow hair condition
- Bow hair quantity
- Appropriate amount of rosin
THE “BOW HOLD”

• Not a “grip”

• “Bow Balance” rather than bow “hold” or “grip” (Butz, 2015)

• Never fixed or rigid!

• The bow hold is under continuous change as it is moved from frog to tip and back.
BOW HAND SHAPE STRATEGIES

• The flop hand
• The bunny
• The llama
• The “Chop & Flop”
• The snake
• “Each finger goes here…”
• What are your favorites??
PRE-BOW HOLD

- Hand shapers (from large to small)
- 1/2 inch PVC tube
  - Shapes fingers by exaggerating the curve
- Pencil
  - convenient, closer to bow size
- Drinking straw (cheap, thin ones!)
  - helps prevent squeezing
- Mini Bows (don’t ever throw away a broken bow!)
HAVE STUDENTS MEMORIZE THE CHECKPOINTS

• All fingers are curved and naturally spaced

• All fingers are relaxed

• The thumb is bumpy

• The pinky is on top (violin/viola)

• The ring finger covers the eye
A NOTE ABOUT PRONATION

• Pronation is the slant of the fingers on the bow

• Prominent in violin/viola bow hold

• When setting up the violin/viola bow, always angle the tool/bow at a 45 degree angle to automatically build in the pronation.

• Traditional methods of setting up bow hold only reinforce supination (the wrong kind of slant)
#BOWHOLDTHUMBPROBLEMS

• If the thumb is not bent, the rest of the fingers will usually not bend!

• Bumpy thumbs

• “Kennesaw Mountain” Thumb

• Texting thumbs

* No Banana Thumbs
* No Hitchhiker thumbs - illegal in every state!
WHERE DOES THE THUMB BELONG?

- Important that you continuously remind students
- NOT in the frog’s mouth!!
- The tip of the thumb belongs on the stick just in front of the frog’s “mouth”

Thumb goes here!
TWO BOW HOLDS??

• The “frog bow hold”

• The “tip bow hold”
BOW HAND EXERCISES
“TURN THE MUSH INTO MUSCLE”

• Get students comfortable holding bow

• Build strength of fingers

• Improve finger dexterity

• The bow must feel like an extension of the arm and body

• Setting them to music makes exercises more fun!
1. “GET SET” AND “PINKY PUSH UPS”

- Remind students of their checkpoints
- Sets up the hand

- Music: “Gonna Fly Now” - Theme from “Rocky”
2. “THE WAVE”

• 1. Lift each individual finger to create “the wave,” like in a stadium

• 2. Wave “goodbye” with the wrist or simulate the throttle grip of a motor cycle. (Optional: Have students hold the bow with both hands.)

• Music: “Na Na Hey Hey, Kiss Him Goodbye”
3. “WINDSHIELD WIPERS”

- Twist wrist and forearm ONLY.
- Elbow should not move.
- Double check for bent thumb each time
- (Don’t hit your neighbors!)
- Music: “Singing in the Rain”
4. “SPIDER CRAWLS”

- Keep proper hand shape all the way to the top and back down.
- Very good exercise for strengthening.
- Move each finger individually.
- No cheating!

- Music: Original “Spiderman” Theme Song
5. “ROCKET LAUNCH”

- Students should stand up
- Align bow vertically with center of body.
- Move up and down slowly, keeping bow vertical and parallel with body

- Music: Strauss: Also Sprach Zarathustra, Op. 30: Prelude
6. “LOCOMOTION”

- Hold bow in front, horizontally
- Move back and forth, keeping parallel to ground, and as if on a train track.

- Music: “Locomotion”
7. “SHORT FINGERS, TALL FINGERS”

• Start with a “frog” bow hold. Let fingers drop and lengthen.

• Essentially this is the Collé stroke

• Music: “Soul Bossa Nova” from Austin Powers
WHAT ABOUT BEGINNERS HOLDING NEAR THE BALANCE POINT?

- Can be effective in training weak fingers
- Allows for a “lighter” bow and easier control

Drawbacks:
- Kids may be afraid to touch the bow hair
- Kids sometimes don’t want to leave it
DÉTACHÉ STRATEGIES

- PVC Tubes
- Straws in F holes
- “Pick a point”
- Laser pointer bows
- Buddy bowing
- Paint brushes
- Hair tie or bracelet tug

- “Lift, Set, Settle”
- Dowel rod bowing
- Rosin bowing
- “Swinging Out”
- Up against the wall
- Shadow Bowing

What are your favorites??
CEILLO DÉTACHÉ IN FOUR EASY STEPS!

- To start: Elbow starts relaxed and near the side of the body,
- 1. OUT - elbow comes away from the body to initiate the stroke
- 2. OPEN - elbow joint opens, extending bow to tip
- 3. CLOSE - elbow joint closes,
- 4. IN - elbow comes back in toward the body and is completely at rest
START EACH CLASS WITH “OPENS”

• Isolate the right hand!!

• 4-8 full strokes on each open string

• Order: C, G, D, A, E, E, A, D, G, C

• Demand quality!! Students must focus.

• Students should remove left hand from neck of instrument

• Create variations by altering tempo, adding dynamics, changing articulations, etc.

• Can also be used to enhance posture and confirm tuning
“OPENS” EXAMPLES

So many possibilities!
TECHNIQUES FOR ADVANCING STUDENTS

• Developing bow control

• “Resistance Training” - pinch the bow gently, forcing students to feel resistance

• “Endurance test” - see how long students can hold a note and still keep a strong tone

• Great for beautifying those slow pieces!
TECHNIQUES FOR ADVANCING STUDENTS

• Developing familiarity with parts of the bow
  • Play “follow me”
  • Devise warm-ups that utilize the desired area of the bow
  • Write out the “bow mapping” for rhythms/exercises!
• Have a 1/2 size violin bow or 1/4 size cello/bass bow handy to force students to play in the lower half
“BOW MAPPING”

• Forces students to think about the speed and amount of bow they will be using.
"BOW MAPPING"

Dyson: Kingsbridge March, Violin I Excerpt
• Finger and wrist flexibility are of the utmost importance when considering a smooth and consistent bow stroke (Dakon & Giray, 2015)

• Coll is a technique that facilitates smooth bow direction changes

• Bow stroke that essentially uses only the fingers

• Requires flexible fingers - hold the bow loosely

• Stiff, rigid fingers is one the most common problems in bow technique
COLLÉ STRATEGIES

• “Short fingers, tall fingers” (Gillespie)

• “The claw!”

• Right hand slap

• Hand on a table or other flat surface

• “Water flick”
PERPENDICULAR OR NO?

- Works for perpendicular bows at the beginning
- With advancing students, work toward “Smiley Face Bows”
- Reduces sound gaps during direction changes
- Helps keep a constant the sound at frog and tip
WHO WANTS THEIR STUDENTS TO HAVE A BEAUTIFUL SOUND?
MUST LEARN BALANCE!!

- Key is to appropriately balance each of the bowing variables
- Demonstrate what happens when variables are unbalanced
  - Ex. 1: Too much weight, not enough speed
  - Ex. 2: Too little weight, too much speed
WASP$^2$

- **Weight** on the bow
- **Angle** of the bow hair
- **Speed** of the bow
- **Placement**
  - 1. On the string
  - 2. On the bow
WEIGHT

- Violin/Viola - first finger adds “weight”
- Cello/Bass - bow should be sunk into the string by the weight of the arm.
- Have students add weight to the bow so the stick touches the hair.
**Weight**

*the amount of pressure you put on the bow*

*use first finger to push the stick into the bow hair - “bite” the string*

*measured with “pounds”*

- **fff** 100 lbs.
- **ff** 50 lbs.
- **f**
- **mf**
- **mp**
- **p**
- **pp** 0 lbs.
- **PPP**
LEVERAGE

- Application of first finger weight
- More weight must be applied as bow is drawn toward the tip
- Less weight as bow is drawn near the frog
- Goal: Keep an even tone, regardless of where you play in the bow!
Application of first finger leverage on violin/viola bow stroke

Goal: Maintain an even tone across the entire bow stroke.

Violin/viola bow hold, viewed from front (above) and underneath (right). Notice how the fingers curve and the thumb bends outward.

A “lever” is created with the first finger and thumb.

The leverage allows the player to flex the stick to increase the pressure put on the hair. The “weight” is gradually added during the down bow stroke and released on the up bow. Along with keeping a constant bow speed, the alteration of the weight helps keep the tone even across the stroke.
ANGLE

- Angle of bow hair on the string
- Violin/Viola - Stick angles away from nose
- Cello/Bass - Stick angles toward nose
- Amounts
  - Flat hair
  - 1/2 hair
  - 1/4 hair
  - 1 hair (exaggeration)
SPEED

- “Miles per hour” analogy
- Speed ratio (2:1)
- “X” times as fast
- Having a good speed “vocabulary” is important

- Can’t always assign a speed to a particular note!
**Speed**

* the speed of the bow
* measured in “miles per hour”

* the longer the note, the slower the bow stroke
* the shorter the note, the smaller the bow stroke

- 25 MPH
  - “Super Duper Slow Bow”

- 33 MPH
  - “Super Slow Bow”

- 50 MPH
  - “Slow Bow”

- 75 MPH
  - “Bow”

- 100 MPH
  - “Run”

- 125 MPH
  - “Sprint”
PLACEMENT ON THE STRING

• Bowing “lanes”

• Beginners = 3 lanes
  • near fingerboard, middle, and near bridge

• Goal = keep bow in same lane!
PLACEMENT ON THE STRING

• Advanced students = 5 lanes (upgraded highway)
  • over fingerboard, near fingerboard, middle, near bridge, next to bridge
• Goal = the ability to change lanes depending on desired effect
PLACEMENT ON THE BOW

• Zero to 100 analogy (number line)
• Bowing area - U.H., L.H., M.
• Balance point
• Place marker on the bow with fingerboard tape.
• Puts students/sections all in the same part of the bow
Area of the Bow

(the part of the bow used)

- whole bow: 0-100
- lower half: 0-50
- upper half: 50-100
- near the frog: 0-30
- middle: 30-60
- near the tip: 60-100

0 (at the frog)
33 (balance point of the bow)
50 (middle of bow)
100 (at the tip)
INTONATION

• We must remember that the bow effects intonation!

• Playing with too much weight with the bow near the fingerboard forces the pitch to go flat!

• A good tone will only help improve intonation
BIBLIOGRAPHY


SPECIAL THANKS!
CONTACT ME!

charleslaux1@gmail.com
facebook.com/drcharleslaux
@charleslaux

Slides and more available at:
www.OrchestraTeacher.net