IT'S ALL ABOUT THE BOW!
THE BEST STRATEGIES FOR DEVELOPING A BEAUTIFUL TONE IN BEGINNERS AND BEYOND

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EASTMAN STRINGED INSTRUMENTS

with the Alpharetta High School Symphony 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!
WHAT WE THINK WE MUST DO

“Straight” bowing...

Right Shoulder Pivot
WHAT WE MUST ACTUALLY DO

Unnatural “straight” bowing!
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 or "Early Bow Hold"
  • 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”.

- BUT.... You need to find out what works for you and your own teaching situation.
UNDERSTANDING

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

• “What techniques are required to produce a desired sound?”
ITEMS OFTEN OVERLOOKED...

- Bow hair tension
- Bow hair condition
- Bow hair quantity
- Appropriate amount of rosin
- A quality bow can make a HUGE difference in one’s sound and ease of playing
THE “BOW HOLD”

• Not a “grip”

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

• Never fixed or rigid!

• A good bow hold is essential first step in producing a quality tone
TWO BOW HOLDS??

- The “frog bow hold”
- The “tip bow hold”
- 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, etc.
- The “Chop & Flop”
- The snake (video next)
- “Baby’s hand”
- “Each finger goes here…”
- Bow “seat belts”

• What are your favorites??
“SLITHER” BOW HOLD STRATEGY

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MR ORCHESTRA DIRECTOR ON YOUTUBE
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
SHAPING THE RIGHT HAND

BOW BUILDER ONE

Pencil Hold

Step 1  Hold a pencil in your left hand at eye level.

Step 2  Hang your right fingers over the top of the pencil, as shown.

Step 3  Place your right 4th finger on top of the pencil.

Step 4  Touch the tip of your right thumb to the pencil just opposite your 2nd finger. The curve of your thumb will form an oval with the finger.

Step 5  Lean your right hand so the first finger rests on top of the pencil between the 1st and 2nd joints. Keep your fingers relaxed. Remove your left hand from the pencil. Practice shaping your hand on the pencil until it feels natural to you.

★ Practice BOW BUILDER ONE daily.
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
- “Alpharetta A” Thumb
- Texting thumbs

* No Banana Thumbs
* No Hitchhiker thumbs - illegal in every state!
# Bow Builder Two

## Pencil Hold Exercises

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m Outta Here</td>
<td>Wave good-bye while keeping your wrist relaxed.</td>
</tr>
<tr>
<td>Thumb Flexers</td>
<td>Flex your thumb in and out.</td>
</tr>
<tr>
<td>Finger Taps</td>
<td>Tap your first finger. Then tap your fourth finger.</td>
</tr>
<tr>
<td>Knuckle Turnovers</td>
<td>Turn your hand over and be sure your thumb knuckle is bent, as shown.</td>
</tr>
</tbody>
</table>

## Bow Builder Three

### Bowing Motions

- **Swingin’ Out**
  - Put one finger inside your right elbow and swing your arm, as shown.
WHERE DOES THE THUMB BELONG?

• NOT in the frog’s mouth!!

• Important that you continuously remind students

• The tip of the thumb belongs on the stick just in front of the frog’s “mouth”
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
- Helps build strength and independence

- 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

- Possible Drawbacks:
  - Students may be afraid to touch the bow hair
  - Students sometimes don’t want to leave it and hold bow near frog
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??
CELLO DÉTACHÉ IN FOUR EASY STEPS!

• To start: Elbow starts relaxed and near the side of the body,

• 1. **OUT** - elbow comes out, 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 on contact points.

• Allows teacher to move about class to assist students, assess, etc.

• 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!
  • Mark bow in different spots with finger tape or stickers

• 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.

\[\text{WB} = \text{whole bow} \]
\[\text{LH} = \text{lower half} \]
\[\text{UH} = \text{upper half} \]
“BOW MAPPING”

Dyson: Kingsbridge March, Violin I Excerpt
Traditional/Arr. Jim Palmer: Down By The Salley Gardens
**COLLÉ**

- Finger and wrist flexibility are of the utmost importance when considering a smooth and consistent bow stroke (Dakon & Giray, 2015)

- Collé is a technique that facilitates smooth bow direction changes, spiccato, and more.

- 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!”
• “Water flick”
• Set at frog, set at tip
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$^2$

- **W**eight on the bow
- **A**ngle of the bow hair
- **S**peed of the bow
- **P**lacement
  - 1. On the string
  - 2. On the bow
WEIGHT

- Violin/Viola - first finger adds “weight” and provides leverage
- 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”*

---

100 lbs.  
50 lbs.  
0 lbs.  

fff  
ff  
f  
mf  
mp  
p  
pp  
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.

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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
- Ratios (2:1, 3:1)
- “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

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<th>Description</th>
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<tbody>
<tr>
<td>🏹️</td>
<td>25 MPH</td>
<td>“Super Duper Slow Bow”</td>
</tr>
<tr>
<td>🎵</td>
<td>75 MPH</td>
<td>“Bow”</td>
</tr>
<tr>
<td>🎵</td>
<td>33 MPH</td>
<td>“Super Slow Bow”</td>
</tr>
<tr>
<td>🎵</td>
<td>100 MPH</td>
<td>“Run”</td>
</tr>
<tr>
<td>🎵</td>
<td>50 MPH</td>
<td>“Slow Bow”</td>
</tr>
<tr>
<td>🎵</td>
<td>125 MPH</td>
<td>“Sprint”</td>
</tr>
</tbody>
</table>
PLACEMENT ON THE STRING

- Bowing “lanes”
- Beginners = 3 lanes
  - near fingerboard, middle, and near bridge
- Goal = keep bow in same lane!
- Switch lanes to change sound
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)
50 (middle of bow)
100 (at the tip)

33 (balance point of the bow)
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


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