

Essential Fundamentals for Connecting the Clarinet's Registers



THE MIDWEST CLINIC

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WEDNESDAY, DECEMBER 18, 2024 4:30–5:30 PM | W179

Myths and Legends?

- ▶ Tight embouchure
- ▶ Harder reed (?)
- ▶ Fancy mouthpiece or ligature
- ▶ Tongue as high as possible
- ▶ More air

Essential Fundamentals

- ▶ Integral part of playing clarinet
- ▶ Don't need to do things “differently” to connect registers

Essential Fundamentals

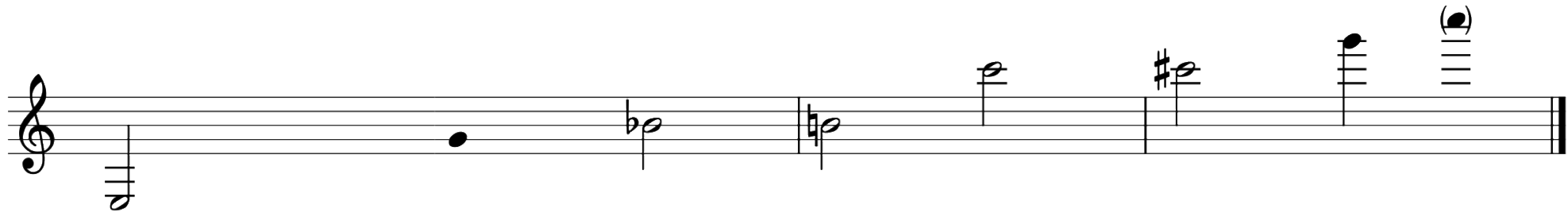
- ▶ Four layers:
 - ▶ Embouchure (external)
 - ▶ Voicing (internal)
 - ▶ Airflow
 - ▶ Hand position and finger motion

Introducing Clarion Register

- ▶ Can play low F and E with strong, resonant and characteristic tone quality
- ▶ Start in the middle of clarion register, then work down, followed by working up
 - ▶ 12th slurs to encourage consistency between chalumeau and clarion registers

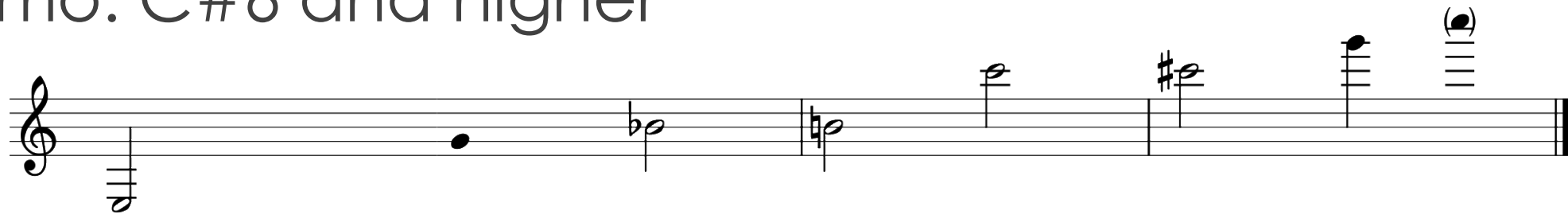
Clarinet and the Overtone Series

- ▶ Clarinet skips the even-numbered partials
 - ▶ C + register key = G?



Clarinet and the Overtone Series

- ▶ Chalumeau: E3 to Bb4
 - ▶ (Throat tones: G4 to Bb4)
- ▶ Clarion: B4 to C6
- ▶ Altissimo: C#6 and higher



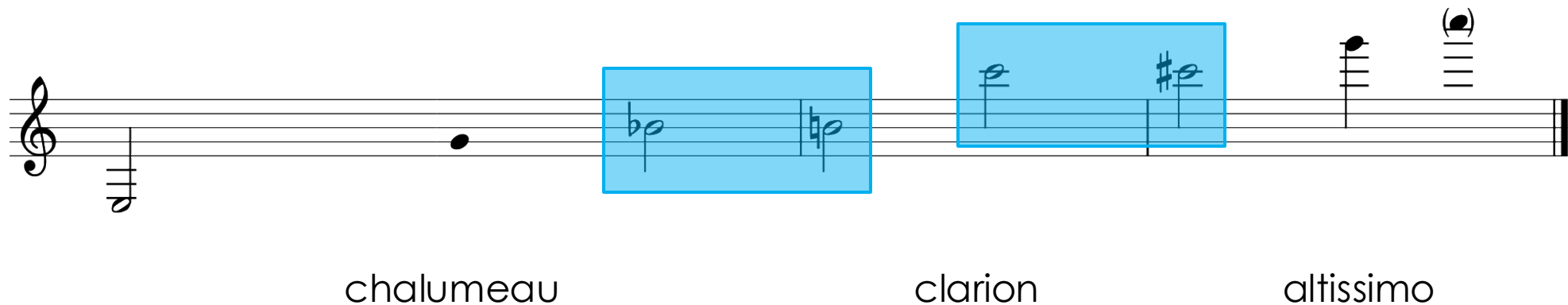
chalumeau

clarion

altissimo

Clarinet and the Overtone Series

- ▶ Connecting registers is moving across two partials, not just one
- ▶ More fingers moving simultaneously



Chalumeau: The Most Forgiving Register

- ▶ Allows tone production without:
 - ▶ Sufficient air support
 - ▶ High tongue position
- ▶ Moving to clarion register before tone quality is established creates problems
 - ▶ Jaw biting upward

“Crossing the break”

- ▶ Fundamentally, two breaks
 - ▶ Chalumeau to clarion
 - ▶ Clarion to altissimo
- ▶ The first is more problematic, not “harder”
- ▶ Semantics matter

Embouchure

- External component
- Upper lip tucked against upper teeth, hugging or gripping the mouthpiece
- Chin draws into a point (not “flat”)
- Lower lip curled to where edge of lip is even with edge of lower teeth

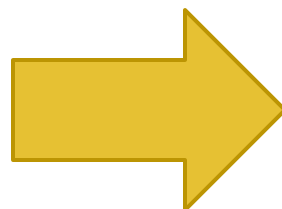
Embouchure

- ▶ Lower lip contacts the reed at the fulcrum point of the mouthpiece (curves away from reed)
- ▶ Jaw pressure is stable throughout registers
 - ▶ Bringing jaw forward *slightly* so lower teeth are even with upper teeth can help stabilize this

Embouchure



Embouchure





"It only comes out if I..."

- ▶ Bite harder, change angle of instrument and/or visibly move my chin!
 - ▶ Reason: needs to bend reed closer to mouthpiece to decrease resistance
 - ▶ *Solutions: increase air velocity by raising tongue higher, imagine blowing out a candle, inflate balloon through mouthpiece*



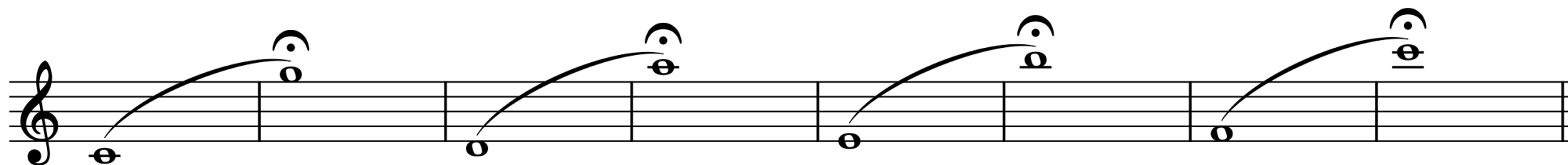
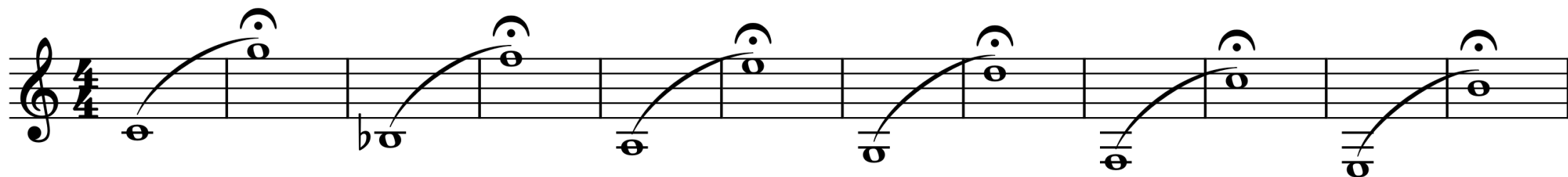
"It only comes out if I..."

▶ Move my lip on the reed!

▶ Reason: needs more reed in mouthpiece to vibrate sufficiently

▶ *Solution: adjust lower lip placement to fulcrum point on reed*

Embouchure Exercise: 12th Slurs



Voicing

- ▶ Tongue does not *consciously* move
- ▶ The middle of the tongue determines tonal color and focus
 - ▶ High and forward
 - ▶ Compressing airstream (liquid) through smaller opening increases velocity
 - ▶ “eee” vowel?

Voicing

- ▶ Back of tongue determines register
- ▶ Will subconsciously move upward when moving from chalumeau to clarion
- ▶ Encourage students to hear the sound first, and allow the physical change to happen

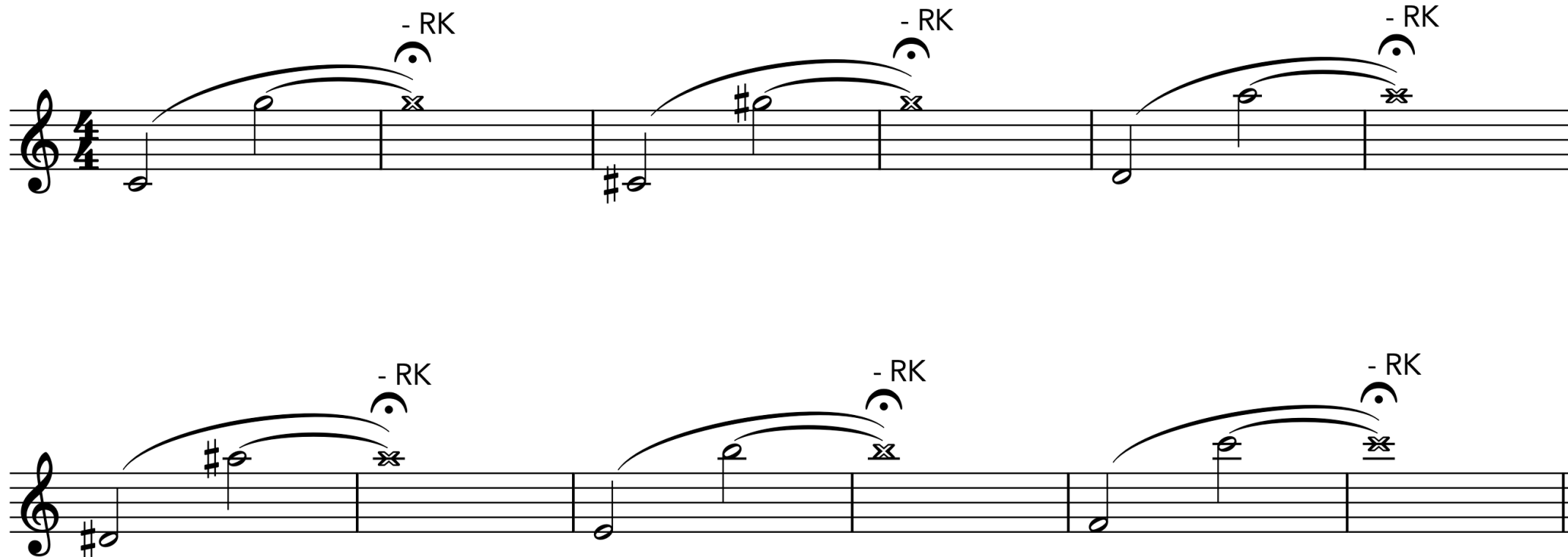


"It only comes out if I...":

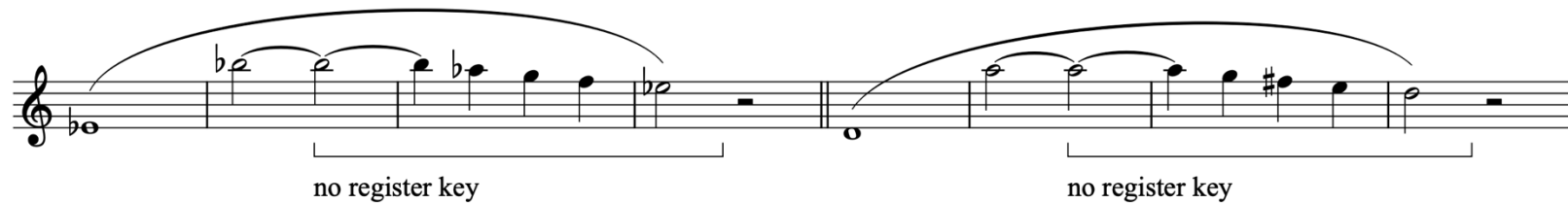
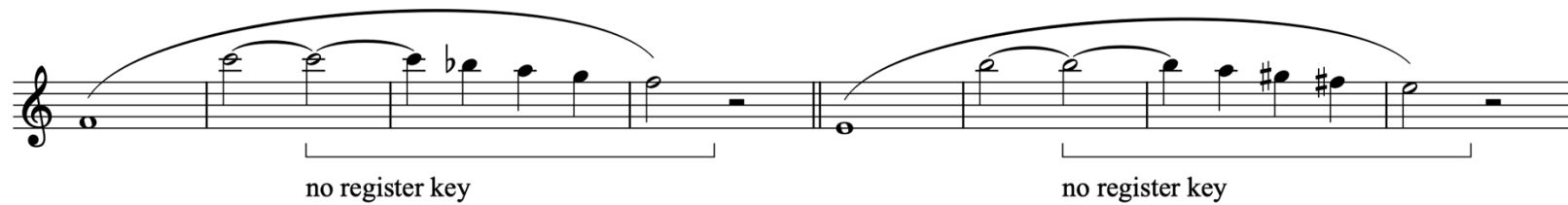
▶ Move my tongue a whole lot!

- ▶ Reason: tongue is not in correct position when playing in chalumeau register
- ▶ *Solution: encourage high and forward tongue, "where the peanut butter gets stuck", "like a whale blowing out through their blowhole"*

Voicing Exercise: 12th Slurs, then remove register key



Voicing Exercise: Descending Pentachords



FROM *CLARINET CONDITIONING:
WARM-UPS AND PERSPECTIVES*

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Airflow

- ▶ Consistently fast
 - ▶ Aided by tongue position
 - ▶ Faster vs. more?
- ▶ Increased resistance moving to clarion register, so students often back off when they feel that resistance increase



"It only comes out if I...":

▶ Blow really hard!

- ▶ Reason: needs to compensate for low airspeed with high air quantity... also, they're probably biting the reed upward while they blow really hard
- ▶ *Solution: blow the air through the clarinet into the floor, blow to the opposite side of the room, pin a piece of paper to the wall with your breath*



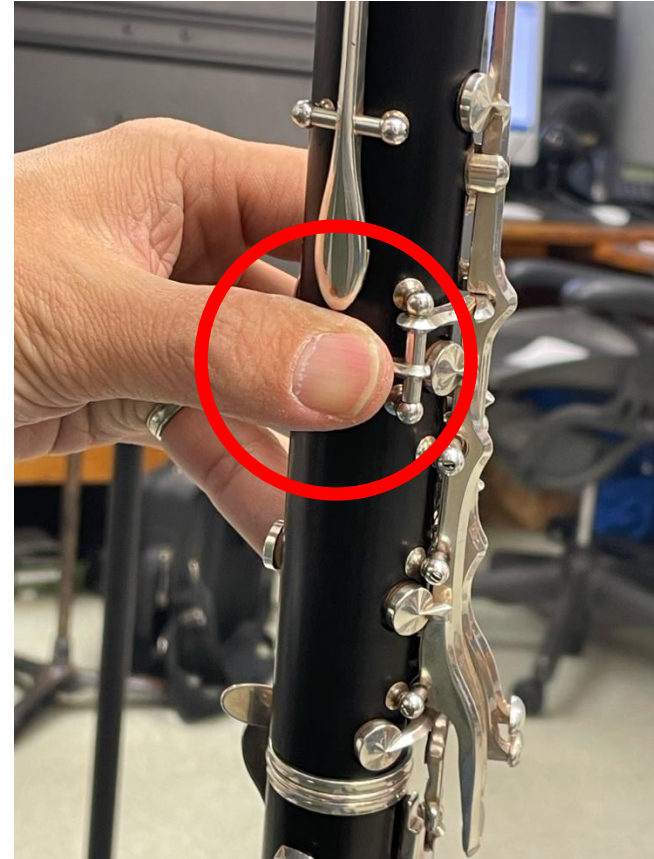
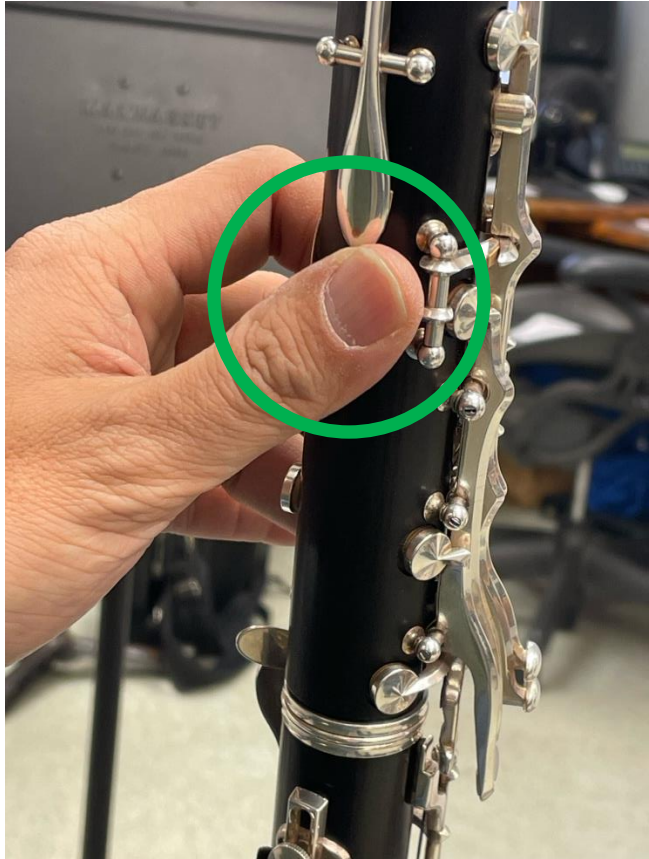
"It only comes out if I...":

- ▶ Have gaps between the notes!
 - ▶ Reason: consciously or unconsciously interrupting airflow when fingers are moving
 - ▶ *Solution: address finger motion separately from playing (singing and/or note names is valuable), sizzle while moving fingers between notes*

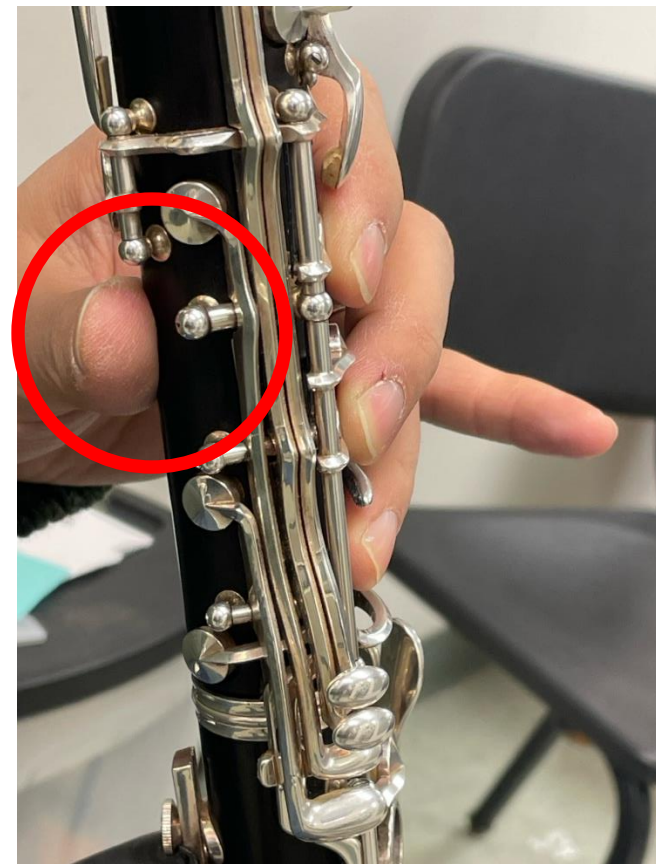
Hand Position and Finger Motion

- ▶ LH thumb must cover tone hole and rest on register key
 - ▶ Requires the thumb angle to be between 1 or 2 o'clock on a clock face
 - ▶ When thumb is not covering tone hole or register key, must hover over tone hole instead of resting on back of clarinet (double-sided tape will help students avoid this)
 - ▶ If thumb must uncover tone hole to activate register key, SQUEAK!

Hand Position and Finger Motion



Hand Position and Finger Motion



Hand Position and Finger Motion

- ▶ LH first finger must angle so it touches the G# and A keys while covering the first tone hole
 - ▶ Rolling or rocking motion to/from the A key, not leapfrog
 - ▶ Perpendicular to the instrument makes legato connection impossible

Hand Position and Finger Motion



Hand Position and Finger Motion

- ▶ Consider starting from the top note
- ▶ RH fingers *may* be left down on throat tones (G, G#, A and Bb) to facilitate smoothness
- ▶ I prefer to teach without this so students don't become accustomed to a crutch... **but students have to be afforded the opportunity to be successful**

"It only comes out if I...":

- ▶ Have gaps between the notes!

- ▶ Reason: fingers are not positioned to move immediately from one place to another
- ▶ *Solution: address finger motion separately from playing (singing and/or note names is valuable)*



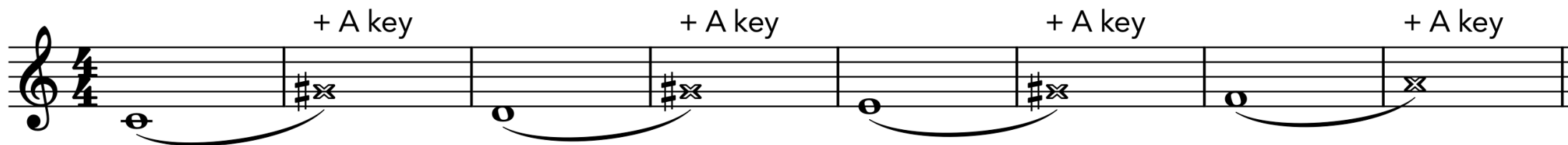
"It only comes out if I...":

▶ Have an undertone! (???)

- ▶ Reasons: tongue is too low and/or too far back in oral cavity, air is not fast enough, jaw is biting into reed too much
- ▶ *Solution: raise tongue to a whispering or hissing position, use a faster and narrower airstream, press up with RH thumb to wedge the embouchure open*

Hand Position and Finger Motion

Exercise: LH Rock and Roll



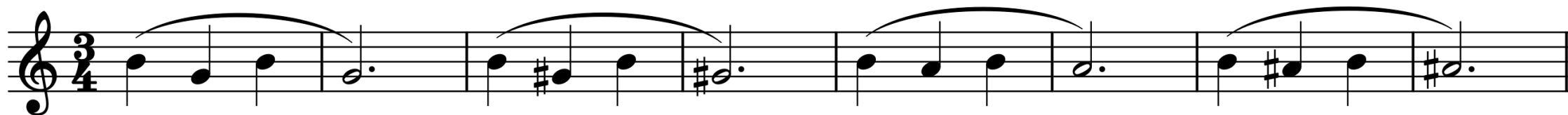
Hand Position and Finger Motion

Exercise: LH Interval Studies



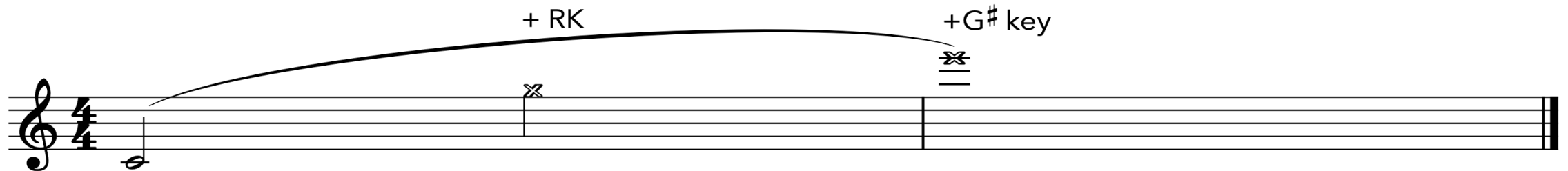
Hand Position and Finger Motion

Exercise: RH Interval Studies



Three-Note Exercise

- ▶ If all aspects of embouchure, voicing and airflow are correct, all three notes will speak easily



Conclusion

- ▶ Difficulties connecting registers originate in problems developing many months earlier
- ▶ Every issue is symptomatic of a larger area for improvement

Questions?

