

Strategies and Solutions for the Low Clarinets

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Choosing the Players

I recommend starting all clarinet players on Bb clarinet. Switch players when you need them for full band contest level performances. If possible try to have one bass clarinet for every four Bb clarinet players.

Criteria for selecting your bass clarinet players:

1. Chose a student who is genuinely interested and wants to play this instrument.
2. Chose a student with good rhythm. (You may someday want to play *Incantation and Dance*.)
3. Consider choosing a student with an inferior instrument. This student will usually welcome a chance to play a better instrument.
4. In general, a student who has difficulty covering the holes, maintaining a firm embouchure, or reading notes quickly, will welcome the chance to switch to bass clarinet.
5. Avoid putting your worst clarinet player on bass clarinet.

The more technical proficiency you can develop on Bb clarinet, the easier technique will be on the bass clarinet. The technical demands will be much less, especially on the grade 1-3 level of music, but a minimum proficiency for the bass clarinet player should include: chromatic scale - two octave, low G to high G (written notes), major scales - two octave F and G, one octave C, Bb, Eb (written notes).

Knowing these fundamentals will allow the student to contribute to the band sound, play the parts written in grade 1-3 literature, and compete in middle school solo/ensemble and all-region band auditions. Technical studies should be kept in the low register at first. This is where their band parts are written and sound best. This will also help develop the strong sound and confidence that they will need to play in the high register.

James Ployhar's book, I Recommend (Warner Bros. Publications), is an excellent full band method and source for scales, arpeggios, and interval studies.

Even though your band is at an intermediate level, your low clarinets will be at a beginning level, at least for a short time. I suggest that you provide lessons outside of the full band rehearsal to go over assembly, care, embouchure and fingering adjustments.

Assembly and Care of the Instrument

Make students aware that the bass clarinet gets out of adjustment much easier than the Bb clarinet. The longer rods and double bridge keys are easily bent, causing keys to stick or not seal completely. The reeds and mouthpiece are twice as expensive as the Bb clarinet, so extra care when handling them is important. Give the students plenty of time and enough space to put the instrument together carefully.

Take the reed out of the reed guard. (Never leave the reed on the mouthpiece, covered by the mouthpiece cap!) Put the reed in your mouth to soak and keep it safe. For a two piece body (bass, contra,) grasp the top joint firmly with the palm away from the side keys, grasp the bottom joint with the palm on the bottom, away from the long rods. Press the C or D tone hole keys on the upper joint with the thumb. This will assure the proper clearance of the bridge keys. Slowly twist the two joints together, making sure that the bridge keys line up exactly. Never try to push a corked joint directly into the receiving joint as this will damage the cork and bend keys that protrude.

After assembling the middle joints, carefully turn the instrument so that the top joint is pointing down, perpendicular to the floor. Many times it is helpful to actually set the horn on the floor. This will give the needed leverage, without putting excessive pressure on the keys and rods. In placing the bell on the lower joint, remember to press the low Eb pad with the thumb so that it clears the lever on the bottom.

Now turn the instrument over, set the bell on the floor, and insert the neck into the top joint. Next put the mouthpiece on the neck without the ligature and reed. Do not adjust the ligature and reed to the mouthpiece before putting it on the neck. The turning motion used in placing the mouthpiece on the neck will usually move the reed and ligature out of adjustment and many times, especially with younger students, the reed will be broken in the process.

The final piece to be assembled is the end peg. I strongly recommend a peg or other stationary object for height adjustment. Breathing, embouchure, finger coordination, and technique are all greatly affected by the proper height adjustment and by having the instrument absolutely stable.

Take the instrument apart with the same care. Swabbing a wooden bass clarinet is a good idea, although moisture generally does reach the wooden joints because of the curved neck. When you do use a swab, make sure that the cloth is at least the length of the longest joint, so if the string breaks, the cloth won't be stuck in the middle.

Making The First Sound Breath Control - Embouchure

The most important adjustment going from Bb clarinet to bass is in breath control. The student must have the sensation of enlarging the column of air to fit the larger mouthpiece and slowing the rate of air flow so that they can produce a tone for the necessary amount of time.

If a student is switching from Bb clarinet to bass clarinet and has a relatively good embouchure (top teeth on the mouthpiece, red part of the lower lip visible), then I prefer to let the size of the mouthpiece cause the necessary embouchure adjustments and concentrate on a breath control exercise before saying anything about changing the embouchure.

Follow these steps:

Set the top teeth on the mouthpiece 1/2 inch from the tip.

Close the lips around the mouthpiece.

Finger second space A (I believe this is the easiest note to play first.)

Take the biggest breath possible - thinking the word "ooh."

Play this note as loud and for as long as possible.

Work down to G, then F.

The student can now play a simple melody.

Encourage them to take enormous breaths and play loud.

Here are some of the typical mistakes that can cause a stuffy or otherwise uncharacteristic sound and some suggestions to correct and improve the sound.

Not enough mouthpiece -

Try saying "reach for the mouthpiece with your top teeth." This will often cause the student to take in more mouthpiece without rolling the lower lip too far over the bottom teeth.

Embouchure too tight -

Describe the feel as being more of a pucker. Any pressure should be on the top of the mouthpiece rather than on the reed. The larger the mouthpiece the greater the pressure on the top of the mouthpiece and the less pressure on the reed.

Reed strength not compatible with the player or the mouthpiece -

Generally a medium to medium - soft reed will give the intermediate player the best sound. A softer reed can often correct the stuffiness, but you may sacrifice high range and pitch can be flat.

Developing Technique Finger and Hand Position

The best playing position for the low clarinets is with the instrument held directly in front. The instrument should be adjusted for height so that the arms hang naturally. The wrist will be straight and the hands will be in line with the forearms. Arch the fingers and keep them relaxed. The thumbs will play an important part in defining the finger position. Thinking of the thumb key as the face of a clock, place the left thumb at approximately the 2:00 position. Smaller hands may need a lower position (3:00). If the thumb moves toward a perpendicular position with the register key, this causes the fingers above to become stiff and cramped, and will slow technique. The same thing happens in the right hand if the thumb is too far under the thumb rest. The right thumb should touch the thumb rest between the nail and the first joint.

As the students adapt to the plateau keys, they should be reminded to cover the hole in the first key (half-hole), and to keep their fingers in contact with the keys when they lift.

Fingerings for the low clarinets are exactly like the Bb clarinet, with the exception of the altissimo register and the extra Eb (some models D,Db,C keys) key at the bottom. Music is written in the treble clef, with key and octave transposition done by the composer/arranger, so students read and finger notes exactly as they would on the Bb clarinet.

Crossing the Break

This is probably the most important technique to master on clarinet and seems especially hard on the low clarinets. Learning this on Bb clarinet first, before switching to the low clarinets, does seem to make it easier. I try to use the approach of "This is not hard; this is new."

My approach to teaching crossing the break.

1. Students should be very comfortable with the low register E to E chromatic, and the F and G major scales.
2. Students are able to "roll" F# to A and maintain good hand position.
3. Teach upper register by adding register key to low notes.
4. Play upper register C - G (mini scale) with confidence and consistency.
5. Approach the "break" going down D-C-B-A-G, C-Bb-A-G-F.
6. Review F#-A rolling technique. Work B-A-B, A-B-A. C-Bb-C, Bb-C-Bb.

Altissimo Register

The altissimo register (written C# - G above the staff) is played just as on Bb clarinet except instead of raising the first finger, you slide the first finger down to open the tiny hole in the first key (called the half hole). On bass clarinets, these notes may actually respond easier than the middle range and sometimes easier than on Bb clarinet.

Note	Fingering Diagram	R	T	1/2	2	3	4	5
C#	[Diagram]							
D	[Diagram]							
D#	[Diagram]							
E	[Diagram]							
E#	[Diagram]							
F	[Diagram]							
F#	[Diagram]							
G	[Diagram]							

An advanced player may use the throat register fingerings to play the high register. This requires a very open throat and of course time and practice to get the feel of these notes.

Note	Fingering Diagram	R	T	1/2	2	3	4	5
Bb	[Diagram]							
B	[Diagram]							
C	[Diagram]							
C#	[Diagram]							
D	[Diagram]							
D#	[Diagram]							
E	[Diagram]							
E#	[Diagram]							
F	[Diagram]							
F#	[Diagram]							
G	[Diagram]							

Tonguing

Tonguing will be one of the most important skills and adjustments to make on the larger clarinets. The size of the reed, along with the amount of space that the mouthpiece occupies inside the mouth, create problems for tonguing that are unique among the woodwind instruments. The obvious problem in teaching students proper tonguing technique is you can't see what's happening inside the mouth, so you must analyze what they're doing by what you hear.

Tonguing, like embouchure, can at times, be over analyzed and over explained. I prefer to demonstrate the most legato sound that I can and ask the student to imitate that sound. By concentrating on the sound of legato playing, the student can usually develop the correct tonguing technique without a detailed explanation.

The initial attack is usually the most difficult. This is where you hear the slap tonguing effect that is generally associated with low reed playing. To avoid this sound have the student begin the tone with these three steps.

1. Place the tongue lightly on the tip of the reed. A good trick is to have the student lightly scratch the tip of their tongue with the fingernail, right before touching the reed. This sensitizes the tip area and will give the student a better feel for where the tip of the tongue really is.
2. Blow air to create pressure behind the tongue.
3. Release the air by quickly pulling the tongue back. The sound should be immediate and noiseless. Whispering the syllable "thu" is very effective in producing the desired tongue movement.

After practicing the initial attack, add a series of repeated notes. For this, the tongue returns to the reed and is immediately pulled away, creating the desired legato effect. The faster and lighter the tongue moves, the more legato the sound will be. Add more notes and increase the tempo gradually. Insist on the most legato sound possible. Demonstrate frequently. Avoid introducing staccato playing until the legato sound is consistent and the student can play repeated eighth notes at the tempo required for staccato quarter notes. Remind students that while note lengths may vary, the tonguing motion is always the same. Speed is achieved by the speed that the tongue moves both to and away from the reed.

Developing the High Register

The difficulty of playing in the upper register is most often caused by the playing condition of the instrument. Ask a good bass clarinet player (private teacher, high school student) to test your instruments before checking them out to a beginner or intermediate student. Assuming the instrument is in good playing condition, here are some tips for improving high range.

No response -

1. **More air.** Demand a very loud sound in the low register, then add the register key.
2. **Check embouchure.** Emphasize relaxing the lower jaw, using absolutely no pressure on the reed from the lower lip. Pressure or weight will be on the top of the mouthpiece. Also, check the height adjustment. An instrument that is too low will cause the mouthpiece and reed to rest on the lower lip, creating additional pressure.
3. **Reed strength -** A stiffer reed can sometimes help.

Some response, but difficulty starting on a high note or tonguing -

1. Using a C major scale, slur from the middle C to high C. Slurring forces the air to remain constant and will prove that the instrument is not the cause of the problem. After a student can slur the scale, begin slurring the arpeggio. When this can be accomplished, try tonguing the scale, then the arpeggio.
2. Review tonguing exercises, emphasizing legato sound. Many students will develop the high range, but be unable to begin on a high note or tongue a series of notes in this register. Begin on the highest note that will respond, slur up to the note causing difficulty, then re-tongue it immediately. Do this several times, allowing more time between ending the slur and re-tonguing. Emphasize keeping the head and mouth still, while keeping the throat open and the air ready for that initial attack. This can be very frustrating. Give it time and be patient.
3. A new, top line bass clarinet will play the high register with ease. The neck designed by Charles Bay can also improve high register response.

Tuning

Tuning should begin with open G. The instrument should be pulled at the neck or tuning slide to bring this note in tune. A two piece neck is preferable, especially on necks with cork tenons, as these tend to wobble or slide back in as the instrument is played.

The next notes tuned should be the low C and middle C. If the middle joints can be pulled apart, adjust here to establish a compromise for the closest pitch.

If necessary, tune the third line B and low E by adjusting the bell.

The mechanical adjustments used on Bb clarinet will also work on the low clarinets, although not always as consistently.

In general, when a note is sharp, add keys. When it's flat, open keys. Don't be afraid to experiment. Not every instrument or player will respond alike.

Some specific adjustments include:

<u>Note</u>	<u>Tendency</u>	<u>Solution</u>
2nd space A	Sharp	add LH 2nd, 3rd fingers, RH 2nd, 3rd fingers, little finger F key
2nd line G#	Sharp	add LH 2nd, 3rd fingers, RH 1st finger
1st line E	Flat	open the first side key
A below the staff	Sharp	add low E key
Altissimo	Flat	add Ab/Eb little finger key

Other fingering adjustments include the use of the low Eb key and on some models the D, Db and C keys. The Eb key (and the D key) is played with the right little finger. The Db and C keys are played with the right thumb. A longer reach and a little more strength is required to press these keys.

A special trick that you might use on occasion: On models where the Eb key is on the bell, you can actually close the key with your foot. I've used this at times, going from Eb to Ab, where sliding is impossible.

Contra Bass Clarinet

The use of a contra bass clarinet can be quite valuable to the ensemble. The instrument pitched in Bb has a large and heavy sound which adds weight to the bass line. Its greater range can be important if used to replace or supplement the contra bassoon, string bass, or tuba. The instrument pitched in Eb (sometimes called contra alto) has a smoother tone quality, greater dexterity, ease of playing and automatic transposition of bass clef parts.

Guide to Transposition for Eb Contra Bass - Bass clef to Treble clef

Bass clef 7 flats, key of Cb, read in treble clef as key of Ab, 4flats
Bass clef 6 flats, key of Gb, read in treble clef as key of Eb, 3 flats
Bass clef 5 flats, key of Db, read in treble clef as key of Bb, 2 flats
Bass clef 4 flats, key of Ab, read in treble clef as key of F, 1 flat
Bass clef 3 flats, key of Eb, read in treble clef as key of C, no flats
Bass clef 2 flats, key of Bb, read in treble clef as key of G, 1 sharp
Bass clef 1 flat, key of F, read in treble clef as key of D, 2 sharps
Bass clef no flats, key of C, read in treble clef as key of A, 3 sharps
Bass clef 1 sharp, key of G, read in treble clef as key of E, 4 sharps
Bass clef 2 sharps, key of D, read in treble clef as key of B, 5 sharps
Bass clef 3 sharps, key of A, read in treble clef as key of F#, 6 sharps
Bass clef 4 sharps, key of E, read in treble clef as key of C#, 7 sharps

Guide for Transposition of Accidentals:

Transposition for flats as accidentals

Transposition for naturals as accidentals

Transposition for sharps as accidentals

Recommendations - Observations - Odds and Ends

Eb Alto Clarinet -

Use sparingly - Variations on a Medieval Tune by Dello Joio, Sinfonietta by Dahl call for solo alto clarinet.

Most parts written for alto clarinet can be played better on bass or Bb clarinet.

Rewrite alto clarinet part for weaker Bb clarinet players.

Never give a weak Bb clarinet player an alto clarinet.

Alto clarinet requires the least amount of embouchure and breath adjustment, so it can be played by a good Bb clarinet player fairly easily.

Instruments - plastic vs. wood -

Plastic is durable, notes respond easily. Tone can be a little raspy at high volume. Key work tends to rattle more.

A wooden horn requires more air support, but delivers a darker sound, that blends with the ensemble better. The top line horns from all the major manufacturers - Buffet, Leblanc, Selmer, Yamaha are great instruments, play upper register with ease, and have key work that is quiet.

If you can afford it, buy at least one bass clarinet with the extended range.

Having the low C is most helpful, especially when trying to double tuba parts.

Neck and mouthpiece -

The angle of the neck in most newer instruments has been modified to give more of a Bb clarinet feel. This has helped high register response a lot.

A two piece neck is preferable, for ease in tuning adjustments. Many of the older instruments have a one piece neck with a cork tenon.

The Charles Bay neck design is a good choice for replacing the one piece cork neck and can help high register response on the older instruments with straight neck pieces.

The Selmer C* and the Charles Bay are mouthpieces that I prefer.

Cases -

I recommend the long case for intermediate players. Keeping the two joints together saves time and repairs.

Reeds -

I prefer a medium to medium - soft reed. Van Doren, La Voz, and Rico are the most popular brands. Saxophone reeds - alto for alto clarinet, tenor for bass clarinet, baritone for Eb contrabass - work well and there is usually a wider selection of strengths available.

A reed that is stuffy will play better if you wet it then rub it (with the grain) on a pad of paper.

Literature - These lists are certainly not all-inclusive but should serve as a good starting place.

Solos

Class 3

Goldberg - Brahms with Variations

Hasse/Ayres - Bouree and Menuet

Class 2

Handel/Ayres - Andante and Bouree

Handel/Merriman - Largo and Bouree

Prokofieff - Romance and Troika

Class 1

Davis - Variations on a Theme of Robert Schumann

Eccles - Sonata in g minor

Long - Undercurrent

Reed - Haitian Dance

Band Literature

Grade 1,2,3

Himes - Creed

Osborne - Connemara Sketches

Teleman/Gordon - Beau Galant

McBeth - Chant and Jubilo

Swearingen - Blue Ridge Saga

Spinney - Battle of Jericho

Grade 3,4,5

Arnold - Four Scottish Dances

Chance - Incantation and Dance

Dello Joio - Variants on a Medieval Tune, Variants on a Theme by Haydn

Grainger - Lincolnshire Posey, Colonial Song

Marches

Barber - Commando March

Grainger - Childrens March

Leemans - March of the Belgian Parachutists

Sousa - challenging parts, often demand good high range

King - parts are a little easier, often double low brass

Transcriptions

Almost all transcriptions will give the low clarinets the original cello or double bass parts, along with any solo parts written in the original. These parts are great for developing technique. Also, the original orchestral recordings provide a great model for students to imitate phrasing, style, articulation and tone quality.