TBA Journal March 2002

Double Reeds 101: A Refresher Course

by Dr. Carol McNabb, University of Texas at Brownsville

Although there are varying opinions on many aspects of double reed playing and teaching, the following suggestions are concepts and techniques that I have found useful in teaching at the middle school and high school levels, as well as at the college level in double reeds methods courses. Reed adjustments given below are strictly basic. Please help your double reed players to develop good habits. Here are a few basics to reinforce. Strongly encourage your students to seek private lessons and to have a minimum of two working reeds at all times.

OBOE

- **1. Hand Position:** On low notes, the left thumb is on the wood just below the back octave key with the thumbnail pointing diagonally up. This promotes curved fingers which are slanted downwards. The second joint of the left pointer should be close to the side octave key. The right thumb is barely under the thumb rest, usually to the bottom of the thumbnail and definitely not as far as the first joint of the thumb.
- **2. Angle of Head and Oboe:** The oboe should be held at a forty degree angle out from the body. The head should be upright. Lowering the head or holding the oboe too far out from the body often cause a flat high register. Don't allow the student to rest the bell on the knee.
- **3. Embouchure:** The teeth are apart and the lower jaw is down. Students should not bite up with the lower jaw. This is one cause of sharpness and of poor low register response. Very little reed is placed in the mouth. A tell-tale note is third space C, which will be very sharp with too much reed in the mouth. Have the student bring the corners of the mouth forward for best cushioning and dark tone. No smiling. The smiling/biting habit is lethal to good oboe playing and is almost impossible to correct, once established. Students may smile and bite because they do not breathe and support properly or because the reed is too soft or too open (see below).
- **4. Reeds:** Insist that the student soak the oboe reed in a film can of water only up to the thread for 2 to 3 minutes before playing. Dry reeds are brittle and usually are too closed. Playing a reed which is too closed is one cause of sharpness. However, an over-soaked reed may be too open, resulting in flatness and overly loud playing. New reeds are often too open. Students should soak them well, then very gently hold them closed for a minute or two. Never try to open or close a dry reed. A reed which crows lower than a "C" with full air but no embouchure pressure and flat high A, Bb, B, and C are likely signs that the reed is too soft. Attempting to play high notes on a reed which is too soft will result in biting. Using a cutting block and a very sharp knife, try slicing about a half millimeter or less off the tip of a reed which is too soft. If a reed is not airtight, cut a piece of plumber's Teflon tape one inch long and wrap it tightly around the reed just about the thread.
- **5. Half Hole Technique:** Half hole notes are third space C#, D, and Eb. Never slide the left pointer down, as sliding necessitates a hop to return the pointer to the closed hole position. The most efficient motion is to rock the pointer, with the movement originating at the knuckle joint. Only in the extreme high register are the half hole and the back octave key used at the same time. If a piece starts on a half hole note, make sure the student starts in the rocked down position.
- **6. Fingerings:** F fingerings: Beginning students will use forked F until band pieces approach F from E natural. On oboes without the F resonance key, the Eb key is held down for forked F. Even on certain oboes with F resonance keys, forked F sounds better with the Eb key down. Use the right pinky Eb key normally for this. "Normal" F is with the small right hand ring finger key. It is not used before or after any note in which the right ring finger is on its normal key, the D key. "Left" F is with the left hand pinky key that is at a higher level than the other pinky keys. Some instruments do not have this key and should be used only by sixth graders. On longer Fs approached by a note with the right hand ring finger key on the D key, encourage left F. Have students mark in their parts "F" for forked, "N" for normal, and "L" for left. Allow no right hand ring finger hops from the D key to the F key.

Use the left pinky Eb before and after Db or low C. Allow no right pinky slides for this combination of notes. Mark left Eb with "L."

Double Reeds 101 March 2002

Use of Octave Keys:

The back octave key is used from third space E up to Ab. The side octave key is used from ledger line A natural up to ledger line C. The back octave key should be left down when the side octave key is used. The side octave key cancels the action of the back octave key. Do not allow the student to "trade" octave keys.

High register fingerings: Middle School students will probably not need to know above high Eb. No octave keys are used on the high C#, D, and Eb. For D and Eb, the half hole is needed, but for C#, the left pointer should be up.

7. Note on oboe care and adjustment: Wood oboes should be bore-oiled about once a month. This helps water run down the bore instead of collecting in the tone holes, which causes gurgling. When the oboe is dry, place a few drops of woodwind bore oil on an old swab and run it through the instrument. The outside wood may also be wiped with the oiled swab. Have the student wait until the next day to play, or at least a few hours.

Playing an oboe that is out of adjustment forces the student to develop the bad habit of using hard finger pressure on the keys. Because oboe adjustment is complex, involving many links to other keys, take your oboes regularly to a competent repairperson (not a "key-bender").

BASSOON

1. Seat Strap and Holding Position: A newer idea on bassoon balance than you may have been taught in your double reeds methods courses is as follows. Place the seat strap diagonally across the chair so that the hook is at the forward right of the chair seat and allow the boot of the bassoon to rest on the player's thigh, closer to the knee than to the back of the chair. This prevents excess weight on the fingers of the left hand, one of the most common complaints from beginners.

The bassoon is brought diagonally across the body. Music should be read to the right of the bell only. The bocal may be turned right or left to a position in which the wrists can be held as straight as possible. The whisper key pad must still close the hole in the bocal. Handle the bocal by its arch, the strongest point, and turn it only when the whisper key is up and the whisper key lock is off to avoid tearing the whisper key pad. Elbows may be slightly raised away from the body. There should be no twists in the back. Shoulders should be level, and the left arm should never be allowed to rest on the thigh. Let the use of the right hand thumb crutch be the student's choice. If the student prefers not to use it, the bracket to hold it may easily be unscrewed and stored. Please do not march your bassoonists! Not only is it dangerous, but it promotes bad thumb habits.

- **2. Embouchure:** The reed should enter the mouth level with the floor, rather than at either an upward or a downward angle. The head may tilt slightly down but never up. The teeth are apart and the corners or the mouth are brought in. No smiling. No biting. The lower lip is even with the upper lip or is slightly back, but never forward. The reed is approximately half way to slightly more in the mouth.
- **3. Reeds:** Insist that the student soak the reed in a film can of water before playing. First dip the thread end into the water, then let the blades soak for two or three minutes. If the thread end is not wet each time, the wires may get loose and the thread may detach from the cane underneath.

A reed will feel too hard if it is too open, and will produce a thin sound and poor low register response if it is too closed. Adjusting the tip opening is a simple matter. With the reed well soaked, simply squeeze the top wire from the sides or from top to bottom as needed.

A flat third space E and F indicate that the student is not supporting or that the reed is too soft. Using a cutting block and a sharp knife, cut a 32nd of an inch off the tip of the reed if it is too soft. Sharp third line Ds and flick notes that fall are possible signs that the reed is too hard, especially at the corners of the tip. If the reed is too hard, soak the reed, slip a bassoon reed plaque or a guitar pick between the blades, and lightly sand with fine wet/dry sandpaper all over, but don't take too much out of the center.

Also check to be sure the reed does not wobble on the bocal. The reed should be airtight at the connection. Check this by taking the bocal out of the bassoon, placing the reed on it, and stopping off the cork end and the whisper key hole. Blow and listen for leaking air. A reamer is a worthwhile purchase. It may be used to cut out some cane from inside the thread end of the reed so that it goes on further and does not wobble. Note that reaming should be done only when the reed is perfectly dry.

Double Reeds 101 March 2002

4. Fingerings: Many band method fingering charts contain short cut fingerings that are not in tune and should not be used. Let's teach the student the correct way from the beginning! You may need to correct the fingering chart in the book and mark out poor fingerings. Some fingerings to check are the following.

A more stable third space Eb is with the left hand fork fingering plus the Bb key and either the right pointer or middle finger. This will be the beginner's standard Eb fingering. The whisper key is down from Low F to top line Ab. The pancake key should hold the whisper key pad closed from low E natural down to low Bb. Alternate F# (right pinky) is used after notes with the Bb key down. Allow no right thumb hops from the F# thumb key to the Bb key.

Half hole notes are fourth line F#, G, and Ab, and the G and Ab an octave higher. When half holing, the whisper key is down! If the half hole note growls between the note and the lower octave, open more of the half hole. If it squeaks to higher harmonic, too much was opened. Add the left pinky top key to fourth space G to bring the pitch down. This is standard.

Flick notes are top line A, Bb, B, C, and sometimes D. Beginners should learn to flick these notes every time they play them in order to get the left thumb off the whisper key. Later they will flick only when tonguing these notes, when slurring up to them from fourth line F or below, or on some slurs down to them. The third key up from the whisper key is flicked for A and Bb, the fourth key for B and C, and the fifth key (if on the bassoon) for D. When students are taught from the very beginning how to flick they are far less likely to bite to get the higher octave notes, and their attacks will be much cleaner than if the whisper key is simply lifted.

Middle School students will probably not need to know fingerings above ledger line F. For notes above this, fingerings are rather illogical on the bassoon and there are often several choices for each note. Most of the time I will mark the fingering to be used on the music. Note that high Eb (second ledger line) is not the same fingering as the Eb an octave below. The high one is not a fork fingering. However, the high E natural and high F are fork fingerings. This is a common mistake in beginners.

In the low register, do not allow the student to hook the left thumb when using the keys on the long joint. The left thumb should operate in an arc from "Noon" to "3:00."

When approaching second space C# from a note with the whisper key down, roll the left thumb to the C# and low D keys, keeping the whisper key down. Observe the whisper key pad. There should be no hop.

5. Note on bocal cleaning: The purchase of a bocal brush is worthwhile. Clean the bocal about once a month by running water through it, then running the brush through it. Blow through the bocal with the cork end stopped with your finger to determine if the whisper key hole is clear. If air does not come out, find the tiniest diameter needle possible and very gently probe for debris. Remember that bocals are made of soft metal and are easily damaged. Reapply cork grease to the bocal cork as needed.

Please do not hesitate to call (983-7528) or email me (*cmcnabb@utb1.utb.edu*) with any questions or problems concerning your double reed players. Good luck!

Dr. Carol McNabb was a full-time double reed specialist for four years with Brownsville I.S.D. and now teaches at UT-Brownsville/Texas Southmost College. She holds degrees in bassoon performance from University of North Texas, University of Louisiana-Monroe, and University of Arizona.