



Max McKee Executive Director (541) 840-4888



Scott McKee Managing Director (541) 778-4880



Paul Kassulke Director of Operations (541) 778-3161

Visit us @ www.bandworld.org

Another ABC Presentation American Band College of Sam Houston State University





Double Your Fun With Double Reeds

A Method for Switching to Bassoon

by

Alison Buckler

Foreword

I am a middle school director in California, and double reeds are virtually extinct in my district where marching reigns supreme. I assumed initially that we did not have a bassoon at my school, but later in a back corner I found a brand new instrument inside a dusty old case. I was eager to get a student playing this instrument but felt lost, having no background on the bassoon other than a fingering chart.

As a result, I have designed this text as a tool to help the non-bassoonist director switch a student from saxophone, clarinet, or flute to bassoon. This bassoon method focuses on selecting a student, comparing embouchures and fingerings, beginning playing, reading bass clef, and techniques unique to this instrument, such as half hole and flicking. It is my expectation in creating this book that your student has already had 1-2 years experience on another instrument. Therefore, the book focuses more on the technique of playing bassoon rather than learning how to read music, although there are some quick theory review sections. As this is a method book for transitioning a student I did not want to confuse the student with too many clefs, but it will be necessary for you to introduce the tenor clef when your pupil is ready, depending on the student's age and skill level.

Table of Contents

| Selecting a Student | 4 |
|-----------------------|----|
| Care of Instrument | 5 |
| Selecting a Reed | 6 |
| Steps to Assembly | 7 |
| Posture | 9 |
| Hand Position | 10 |
| Embouchure Comparison | 11 |
| Forming Embouchure | 12 |
| Tongue Articulation | 12 |
| Crowing/First Note | 13 |
| Fingering Comparison | 14 |
| Bassoon vs. Saxophone | 14 |
| Bassoon vs. Clarinet | 16 |
| Bassoon vs. Flute | 17 |
| Bass Clef | 18 |
| Bassoon exercises | 20 |
| Half Hole | 28 |
| Flicking | 31 |
| Major Scales | 34 |
| Fox Fingering Chart | 36 |
| References | |

Selecting a Student



It can be good to switch a student to bassoon who already has experience on another instrument. Already understanding how to read music will allow the student to take more time to think about the idiosyncrasies of the bassoon. As with any instrument, finding a student who is personally interested in the instrument is key. The bassoon can be a frustrating instrument for many musicians, so those who are intelligent, self motivated, interested in being challenged, and want to be different and individual often find more success on this instrument.

The bassoon does not use a firm or tight embouchure, so the spectrum for suitable students is wide. Neither teeth nor bite need to be normal, and in most cases mental motivation can be more powerful than any physical attribute. However, there are some physical attributes that can make the switch less frustrating that you will want to take into consideration when selecting a student. Good physical attributes to look for are in the mouth and hands. Slightly fuller lips, especially the top lip, are good because the bassoon requires a double embouchure. Adequate sized hands and thumbs that bend beyond vertical to reach all of the keys are also helpful. One physical attribute to stay away from is students with an under-bite. It will be physically difficult and frustrating for this type of student to form the correct embouchure needed to play the bassoon.

Care of Instrument

General Care

The bassoon is sensitive to excessive changes in temperature and moisture. Do not leave the instrument in a car for extensive periods of time. It is cheaper to take good care of your instrument than to pay for repairs which require hand labor.

Daily Care

After playing and before you put your instrument in its case

- 1. remove reed from instrument and blow air through it, then return the reed to the case.
- 2. remove the bocal and blow air from the large end out to remove excess moisture inside.
- 3. disassemble the instrument in reverse order from assembly, cleaning out each section with a swab. Drop the weighted end through each section and pull it through, dragging the cloth through the inside of each section.
- 4. swab the boot joint by dropping the weighted end through the "unlined" side and out the "lined" side. This will pull the moisture away from the wood side where it is more damaging.
- 5. wipe the outside of the instrument with a clean soft cloth to remove oils from your hands.

As each of the above is completed, return the parts to the instrument case.

Weekly Care

1. Wipe off old cork grease and apply a new thin coating of grease to cork tenons.

Monthly Care

- 1. Flush the bocal out with a mixture of one tablespoon of baking soda and warm water. After flushing, swab the bocal with a bocal brush and then flush again with just warm water. Blow air from the large end out to remove excess moisture inside.
- 2. If you have threaded tenons, use canning wax to keep the joints lubricated. Warm the wax in your hands and then apply a thin layer to the thread tenon.

Yearly care

1. Have a repair technician check that everything is working properly. A technician will typically replace pads, check alignment, lubricate keys, oil the bore, and do anything else necessary to keep the instrument in good working condition. Find a bassoon repair specialist to perform any repairs or yearly care. If you are not sure where to take your instrument just ask your director or a local bassoon instructor.

Selecting A Reed

Selecting the proper reed is very important in producing a good tone quality. The difference between bassoon and other woodwind instruments is that the neither the double reed nor the bocal is pushed in if flat in pitch or pulled out if sharp in pitch. The bocal and reed should always be fully pushed into the instrument. The pitch and intonation can be improved by changing the length of the bocal, the amount of breath support, the amount of embouchure support, or the reed. While handmade reeds are preferable, here are some tips for finding a good store-bought reed:

1. Look at the tip; it should have a small opening, about 1/16 of an inch. Also, the opening should be even all the way across.



- 2. The top should be even, and the sides should be straight and should meet evenly.
- 3. The length of both reeds needs to be equal--one should not be longer than the other.
- 4. Make sure the wires are not too loose--they should be adjustable.



If you have one arched side and one flat side, put the arched side on the bottom because it is harder. The lower lip pushes up on the heavy blade just enough to make it the same as the top blade. If you play with the heavy blade on top,

- 1. it will cause flatness throughout the range of the bassoon.
- 2. soft attacks will be either very difficult or impossible.
- 3. various intervals will be very out-of-tune.

Steps To Assembly

- 1. Always start with your case on the floor and check the latch to make sure the case is not upside down, or the instrument may fall out.
- 2. Soak your reed in water, place cork grease on the joints as needed, and place a seat strap across your chair. Remember that the seat strap needs to be closer to the front of the chair under the legs and not all the way in the back under the rear.





- 3. Place the wing and bass joints together so that the bottoms are even with each other. The curve in the wing joint should hug to the bass joint.
- 4. If there is a body lock, lock the two joints together before inserting into the boot joint.



Wing, Bass Joints



5. Rest the boot joint on the ground or chair between your legs and slide both the wing and bass joints into the boot joint.



If you cannot comfortably hold both the wing and bass joints together for steps 3-5 then you may insert them separately, but be careful as this makes it easier to bend keys and throw off alignment.

- 3. Twist the wing joint into the boot
- 4. Twist the bass joint into the boot and line it up with the curve in the wing joint, watching out for the whisper key.
- 5. If there is a body lock, lock the bass and wing joints together.

Steps To Assembly



- 6. Hold the bell with your thumb on the key so that the connection lever is lifted. Using a twisting motion, put the bell on the bass joint and align the connecting bars.
- 7. Connect the boot joint to the seat strap by hook or cup, depending on the strap.
- 8. Grabbing the bocal by the crook, push the cork side of the bocal all the way into the small opening at the top of the wing joint. Carefully align the vent and the whisper key pad.



9. Place the reed on the end of the bocal.



Posture

- Sit with feet flat on the ground.
- Have a straight and relaxed back posture.
- The head needs to be in a natural forward position, not tilted sideways.
- Allow the bassoon to rest on your right leg.
- Use the palm index finger knuckle as the balance point for your left hand.



- Use a crutch on the bassoon as the balance point for your right hand.
- If you are in a resting position and the reed does not come up to your mouth, readjust the seat strap until it does.
- The reed angle into the mouth is mostly determined by the student's natural jaw and teeth position.
- Remember—the instrument comes to you, not you to the instrument.

Hand Position

















Embouchure Comparison

There is no significant advantage to switching from clarinet, saxophone, or flute to bassoon. They all share a similar hand placement with left hand on top and right hand on bottom. The charts below compare the embouchures of clarinet, saxophone, and flute to the bassoon.

| Bassoon | Clarinet | |
|--|---------------------------------------|--|
| Loose embouchure | Firm embouchure | |
| Double lip embouchure | Single lip embouchure | |
| Lower jaw back | Lower jaw forward | |
| Reed enters mouth straight | Reed enters mouth at a downward angle | |
| Tip of the tongue to the tip of the reed | | |

| Bassoon | Saxophone | |
|--|-----------------------|--|
| Loose embouchure | Firm embouchure | |
| Double lip embouchure | Single lip embouchure | |
| Lower jaw back | Lower jaw forward | |
| Tip of the tongue to the tip of the reed | | |
| Reed enters the mouth straight | | |

| Bassoon | Flute |
|-----------------------------|---|
| Tongue on the reed | Tongue on the roof of the mouth |
| Corners of mouth pulled in | Corners of mouth pulled back |
| Reed, double lip embouchure | No reed |
| Lower jaw back | Lower jaw free to move forward and back |

Forming Embouchure

To form the proper bassoon embouchure follow these steps:

- 1. Place the tip of the reed on the lower lip.
- 2. Slightly roll the lower lip into a playing position, taking in the reed.
- 3. Make sure the top lip is covering teeth, and that teeth are not touching the reed.
- 4. Close the jaw; the tip of the reed should be inside the mouth so the tongue can touch it, and no teeth should be touching the reed.
- 5. The top lip should come to the 1st wire; if not, you do not have enough reed in the mouth and need to restart at the beginning.
- 6. Make sure you have a slight overbite and the lower jaw is drawn back a little.



7. Don't bite but apply pressure; dampen the reed from the lower jaw.

Tongue Articulation

Air is what will set the reeds in motion and create sound, and the tongue will act like a water valve on a garden hose allowing the air to flow or stop. Once the embouchure has been properly formed use the tongue and air on the reed inside your mouth to create sound.

- The tip of the tongue should touch the tip of the reed lightly in an up and down motion.
- Begin each tone by saying the syllable "tah" or "dah" followed by a large, fast stream of air.
- When breathing take a full breath of air through the corners of your mouth; do not take your mouth off the reed to play.

Crowing

Crowing is the act of playing--without the instrument--with only the double reed mouthpiece. This is a good place to start to hear if the embouchure is set correctly or if the reed is playing well. Set the embouchure and tongue as if you were playing and listen. The ideal crow will have many different pitches, including high, medium, and low sounds; if not follow the chart below.

| Sound Produced | Problem | Solution | |
|--|---|--|--|
| High pitched crow with too few sounds. | Student embouchure is too tight and pinched. The reed is too stiff and the tip opening is closed off. | Decrease embouchure pressurethink of being more relaxed. Check the thickness of the reed and balance in the cane. The reed needs to be freed up | |
| Low pitched crow. | Student is not supporting the sound with embouchure. The reed is too long and/or too wide. | Apply more support to dampen the reed. Adjust the reed to make it shorter and/or more narrow | |



First Note

Sit with good posture, cover the holes that are filled in with your fingers, set your embouchure, take a big breath, and tongue "dah," holding the note "C" for a few seconds.

| Sound Produced | Problem | Solution | |
|--|--|---|--|
| Student has difficulties with low notes or plays with a pinched sound. | • The embouchure is too tight. | • Decrease embouchure pressure onto the reed. | |
| Unsupported sound or flat. | There is not enough support from the lower jaw. The student is not using enough air to support the sound. | Apply more support from the lower jaw to dampen the reed. Use more air and a faster airstream. | |

Bassoon vs. Saxophone

Saxophone and Bassoon have similar fingering positions. Saxophone fingerings are shown on top and bassoon fingerings are shown on the bottom.



ADD THUMB!



Bassoon vs. Saxophone

Saxophone and Bassoon have similar fingering positions. Saxophone fingerings are shown on top and bassoon fingerings are shown on the bottom.



- 1st finger uses 1/2 hole technique
- Add left pinky



NO THUMB!



Bassoon vs. Clarinet

These fingerings require no adjustment; just learn to read bass clef. Clarinet fingerings are shown on top and bassoon fingerings are shown on the bottom.



Bassoon vs. Flute





The **Grand Staff** below shows the bass clef as a lower extension of the treble clef. Both the treble and bass clefs share the middle "C" note.



Reading Bass Clef Note Names



Student Practice: Write the letter name below each note. Do not forget to include the accidentals.





The reed goes straight into the mouth. Tongue is on the reed, not the roof of the mouth.



Balance the instrument between the crutch and the palm of the left hand.



The tones must be sustained full value.



Rain, Rain

1

Traditional















22





































American Band College Master's Degree Project • More info on ABC @ www.bandworld.org • scottmckee@bandworld.org • (541) 778-4880

Half Hole

There is a break in the octave between F and F#/Gb. Because of this we use a half hole technique for the following notes: Gb, G, and G#. The half hole acts like a register key on other instruments. The half hole technique only applies to the index finger on your left hand. Achieve this by rolling the index finger down, thus opening the hole; do not pick up your finger and move it. Each half hole note may require a slightly different amount of the hole open, so be willing to experiment.



- F#/Gb and G 2/3 open
- G#/Ab 1/4 open

In each exercise listen to where the note sounds the best, and that will be the exact finger position for that note on that instrument.



On the fingering chart the half hole is represented by a half shaded left index finger. The whisper key should always be down when using a half hole.

Half Hole Practice

Start with all fingers down, then slowly roll the left index finger down, opening the hole. The note will sound in the lower octave until the left index finger roll opens the first hole. As the hole opens listen for the best and clearest sounding note. Approximately 2/3 of the hole should be open for Gb/F# and G, and 1/4 of the hole should be open for G#/Ab. Listen for the "sweet spot," where the note sounds the best, and then speed up tonguing.



Take breaths where necessary. Focus on good air support and proper hand technique.



If other notes are speaking clearly but the G note is cracking, first adjust the left index finger position before making any embouchure adjustments.

29

Half Hole Practice



Remember both G and F# require half hole technique.



Flicking

Flicking is a fingering method, unique to the bassoon, that allows the player to produce a better tone quality when slurring up to A, Bb, B, C, and D. Technically the player is creating a vent in the upper tenor joint so the beginning of certain notes are clear. The bassoon player has to develop the flicking technique in order play smoothly, more in tune, and prevent cracking notes.



The flick keys are played with the left thumb and should be held down at the beginning of the note for a brief period of time and then released. Beginners need to start slowly, holding the flick key for a little bit before they speed it up and begin truly flicking.



Flicking Practice

The following flicking exercises have been adapted from Bill Harden's flicking clinic at Texas Bandmasters Association. Begin these exercises slowly to master the technique and then speed up. Until you get a feel for proper thumb placement, look down your nose to watch the placement of your left thumb, and make sure it is in the correct spot flicking the correct key.



- Hold the low note for four counts.
- On beat 3 of the low note, remove your thumb from the whisper key and move towards the appropriate flick key.
- On beat 1 of the high note (flick note), quickly depress the flick key, using a fast upward motion with your thumb.



Flicking Practice

- Hold the low note for two counts.
- On beat two of the low note, remove your thumb from the whisper key and move towards the appropriate flick key.
- On beat 3 flick the high note—quickly depress the flick key, using a fast upward motion with your thumb.



- Speeding up the flicking process, move your thumb on the upbeat.
- On beat 2 flick the high note—quickly depress the flick key, using a fast upward motion with your thumb.



Major Scales





Fox Fingering Chart

| в | В | с | C# - Db | D | E♭ - D# |
|------------------|----------------|--------------|------------|------------|-------------------|
| 9 : >0 | 0 | • | # 0 | σ | # o |
| Ano de la come | -1. R R. | -1° & Cont | rent | -1° & Cont | |
| E | F | F# - G♭ | G | G# – A♭ | A |
| 9: • | 0 | #0 | 0 | # 0 | 0 |
| Sond a sta | Son Son Street | | | The second | Mono de la contra |



American Band College Master's Degree Project • More info on ABC @ www.bandworld.org • scottmckee@bandworld.org • (541) 778-4880



References

Beck, Carolyn. Personal interview. 24 May 2011.

- Durran, Daryl. "Flicking: A vital technique for clear response at the top of the bass-cleff staff." "The bassoon embouchure, air, and the <u>importance</u> of voicing." "Half-Holing: An essential technique for bassoonists." Lecture. American Band College, Oregon, 29,30 June 2009 and 1 July 2009.
- Eisenhauer, William. *Learn to play the bassoon! Book one*. Van Nuys, California: Alfred Publishing, 1976.
- Fox, Hugo. *Let's Play Bassoon*. Fox Products Corporation, 2000. Retrieved from <www.foxproducts.com/pdfs/LetsPlayBassoon.pdf>.
- Harden, Bill. "Bassoon." Clinic presented at the Texas Bandmasters Association, San Antonio, Texas, 1998. Retrieved from <www.twofrequencies.com/scott/instruction/ibassoon.pdf>.

Lautzenheiser, Tim, et. al. Essential Elements 2000. Hal Leonard Publishing, 1999.

Rachor, David. "Bassoon: Must Know." Lecture. American Band College, Oregon, 29,30 June 2010 and 1 July 2010.

Picture Credits

- 1, 6 Bassoon reed. 2010. Retrieved from <www.reedexpertise.com>.
- **4** Selecting a student. 2010. Retrieved from

<escondidobassoonteacher.blogspot.com/2010/09ut-austin-bassoon-day.html>.

- 18 Bass F. 2007. Retrieved from <www.musesmuse.com/col-ohi-sep02.html>.
- 18 Bass clef symbol. 2011. Retrieved from <sladepiano.com/wp-content/uploads/2008/08/ bassclef.jpg>.

References

- 19 Bass clef mnemonic device. 2007. Retrieved from <www.musesmuse.com/col-ohisep02.html>.
- 27 Grand staff. 2011. Retrieved from <www.learn-to-play-piano-online.com/images/grand-staff2.jpg>.
- **42** Bassoon-hero-iii. Dead Robot, 2011. Retrieved from <www.deadrobot.com/wp-content/ uploads.2008/03/bassoon-hero-iii.jpg>.

NOTES



Practical Application #3

Alison Buckler