Winning Woodwinds!

Beginning Band Method Book Supplement for: CLARINET
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Practical Applications III
in partial fulfillment of the degree requirements for a Master’s of Music in Conducting from the American Band College of Sam Houston State University
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Congratulations, you’ve decided to play a woodwind instrument! This book will help guide you through the process of developing correct habits for posture, breathing, tone quality, and hand position. It will also give you information on how to take care of your instrument in order to keep it in good, working condition at all times. This book is designed to be a supplement to whatever method book your school band teacher or your private music instructor already uses.

Remember that playing a musical instrument is a physical activity which requires you to use your facial (and other) muscles in a new and different way. When you first start playing, you may only be able to practice for a few minutes at a time before you get tired. That’s okay! Practicing on a daily basis will help you build your endurance and allow you to play with a better sound for a longer period of time. So even if you have trouble at the start, don’t give up!

Regardless of which woodwind instrument you choose to play, here is a list of items you will need in order to develop good playing habits:

- Your instrument & method book
- A music stand
- A small mirror (set on your music stand so you can see yourself in it.)
- A pencil (to mark down reminders!)
- A cleaning rod and handkerchief or a swab
- A polishing cloth for your instrument
- Appropriate reeds (for clarinet & bassoon)

Recommended items:

- A metronome (a small device that you set to click and/or blink at a regular rate to make sure you don’t speed up or slow down when you play.) If you don’t own a metronome, a free one is available online at www.metronomeonline.com
- A chromatic tuner (a small device that will tell you what note you are playing, and if the pitch is accurate.) If you don’t own a metronome but you have a computer with a microphone, a free chromatic tuner is available online at www.seventhstring.com/tuner/tuner.html
Developing Proper Seated Posture

Before we start learning how to play our instrument, we need to first start to develop proper posture. Correct posture isn't just about looking professional while you play—it helps you breathe better. This is important, since you have chosen to play a wind instrument!

Imagine a garden hose that’s turned on full blast. If you bend the hose, the flow of water will slow down or stop altogether. When you hunch over, you are putting a “kink” in your airway, which makes it more difficult to breathe in and out.

Seated Posture

1. Sit on the front edge of your chair with your feet flat on the floor and spread shoulder width apart. Your weight should be distributed far enough forward that you can stand straight up without having to shift your weight first.

2. Push your spine slightly forward towards your navel until you are sitting upright and tall.

3. Make sure your shoulders, arms and neck stay relaxed. You should be comfortable enough to sit in this position for quite a while.
Developing Correct Breathing Habits

You may look at this section and think, "What do I need to learn about breathing? I've managed to live on this earth for years and have successfully inhaled and exhaled enough to still be here today!"

Playing a musical instrument requires you to use more air than you would normally use when you're just sitting around having a conversation with friends. It also means that you have to learn how to control the rate and speed of the air that you use.

Developing good posture will help allow you to breathe in large amounts of air quickly.

Breathing Technique

1. Start by laying on the floor, flat on your back, with one hand on your stomach and the other hand on your upper chest. Relax and breathe naturally for a few minutes. You should notice that, when your body is relaxed, your abdomen expands first, and then your chest does when you inhale. As you exhale, your chest deflates first, then your abdomen.

2. Sit in your chair (while demonstrating proper posture.) Relax your shoulders and try to inhale and exhale in the same way that you did while you were lying on the floor—filling your lungs all the way to the bottom first, then up to your chest before exhaling. Try and expand your ribs outwards until you feel like they can't expand any more before exhaling. If you are breathing properly and expanding your lungs, your shoulders should not move very much as you inhale and exhale.
Checkpoint: Think about saying the word “OH” when you inhale and “HO” when you exhale. If you are breathing correctly, you should feel cold air in your throat when you inhale and you should be able to blow warm air onto the palm of your hand when you exhale.

3. When you play a musical instrument, you need to be able to inhale so that your lungs are full in a short amount of time. Try the following exercise to help you breathe in more quickly:

- Turn your metronome on to 60 beats per minute (mm=60)
- Inhale for 4 beats, then exhale for four beats; make sure that the air is either constantly moving in or out; you should never stop and “hold” your breath in this exercise.
- Inhale the same amount of air over the course of 3 beats and exhale over the course of 5 beats. You may need to add pressure from your stomach muscles to keep the air moving as you exhale. (Imagine blowing out a birthday cake with 1,000 candles on it—you’ll use those same muscles!)
- Inhale for 2 beats and exhale for 6; then inhale for 1 beat and exhale for 8.

Important! If you start feeling light-headed during these exercises, STOP, lean over to rest your head between your knees, and breathe naturally for a few minutes until you feel well again! This is perfectly normal when you start a wind instrument!
**Reeds**

In order to play the clarinet, you need to always have reeds on hand. A reed is a piece of cane (bamboo) that has been cut to certain specifications so that, when it has been moistened and attached to your mouthpiece, it will vibrate and create sound.

Try to keep 3 or more *good, working* reeds with you at all times. If treated properly, reeds will last a long time—but reeds that have chipped or frayed will produce poor quality sound.

Reeds come in different strengths, ranging from 1.5 to 5 (depending on the brand.) Most beginners should start on a 2 or 2.5 strength reed.

Recommended brands of reeds include Rico Royal (light blue box) and Vandoren (dark blue box). Don't forget that orange is a color indicating a warning—so avoid purchasing reeds that come in an orange box.

**Parts of the Instrument**

Before you get started, ask your music teacher to help you put a mark on your case to help you identify which side is the TOP and which side is the BOTTOM. (As a general rules, the latches flip UP to open on most cases.)

Put your instrument case on the floor and open the latches. Always leave your case on the floor—if you attempt to assemble your instrument with your case on your lap, you could drop it!
When you open your case, this is what you should see:

**LOWER JOINT**

**BARREL**

Accessories:
Reeds, Swab, &
Cork Grease

**MOUTHPIECE**
with ligature & cap

**BELL**

Corks

Tone Holes
with and
without rings

**UPPER JOINT**

Bridge Key

**Instrument Assembly**

Note: As you assemble your clarinet, if any of the sections do not go together easily, apply a small amount of cork grease to the cork, rub it in with your finger, then try again. They should connect more easily.

1. Put your instrument case on the floor and open the latches. Always leave your case on the floor—if you attempt to assemble your instrument with your case on your lap, you could drop it!

2. Carefully take a reed out of its case/wrapper and put it in your mouth (flat side down) to soak while you assemble your mouthpiece. New reeds taste funny at first, but the taste will go away after you’ve played it a couple of times.

3. Pick up the **BELL** of your clarinet with one hand. Pick up the **LOWER JOINT** of your clarinet with your other hand. Be sure to hold it on the side near the cork where there are the fewest keys. Insert the cork end of the lower joint into the narrow end of the bell with one smooth twist.
3. Hold the lower joint of the clarinet in your right hand and take the upper joint out of the case with your left. Use your index and middle fingers of your left hand to press down on the two rings at the top of the upper joint. This will open the “bridge key” on the side of the clarinet. Gently twist the upper and lower joints together, aligning the bridge keys on the right side.

4. Pick up the barrel and insert the wide end onto the cork at the top of the upper joint.

5. Insert the mouthpiece into the top of the barrel. Line up the table of the mouthpiece with the hole on the back side of the clarinet. (Remember, the table of the mouthpiece is the flat part on the back side.)

**Setting Up Your Mouthpiece**

When you take out your mouthpiece assembly, it will likely look like one of these two set-ups:
Take the mouthpiece cap off of your mouthpiece and leave it in your case. You don’t need it when you play, only to protect your reed if you’re moving around with your instrument. Go ahead and leave the ligature in your case for a minute as well.

Hold your clarinet so that you are looking at the flat side of the mouthpiece (called the “table”) at eye level. Take the reed out of your mouth and place the flat side of the reed against the table of the mouthpiece. Using your thumb to hold the reed in place, adjust the reed so that you can only see a tiny sliver of the mouthpiece sticking up behind the reed. Then, make sure the bottom of the reed is lined up symmetrically at the bottom.

Once your reed is lined up, pick up your ligature and loosen the screws most of the way. The wider side of the ligature faces down and the screws always face to the right. If you have a regular metal (bonade-style) ligature, this means your screws will touch your reed on the back side of the mouthpiece.

If you have a leather ligature (such as a Rovner), the leather strap goes against the reed and the screw points to the right on the front of the mouthpiece. Lower the ligature so that the top of the ligature is just below the “beak” on the front of the mouthpiece. If you’re using Rico Royal or Vandoren reeds, you can line up the top of the ligature with the cut line on the back of the reed.

Tighten the screw(s) only as much as needed to hold the reed firmly on the clarinet—BUT the ligature should not be tightened all the way. If you start noticing indentations in the back of your reed, it’s probably because your ligature is too tight.

For the next section, leave the barrel and mouthpiece assembled and remove it from the rest of the clarinet.
Forming the Embouchure & Producing a Tone

“Embouchure” (pronounced AHM-buh-shur) is the term for the way you form your lips and facial muscles in order to play a wind instrument. The term comes from the French word bouche (pronounced boosh) which means “mouth.”

Sit on the front edge of your chair and push your spine forward towards your navel. If possible, position a mirror on a music stand in front of you so you can see your face and mouth in it while sitting properly. Firmly grasp the mouthpiece assembly by the barrel using your left hand. The reed should be facing towards you.

From here, setting the embouchure is a four step process:

1. Curl your lower lip slightly over your lower teeth, as if you were going to apply chapstick to your lips. As you do this, your chin should become very flat.

2. Rest the reed side of the mouthpiece against your lower lip and with the tip of the mouthpiece pointing in your mouth at a 45-degree angle. About 1/2” of the mouthpiece should be inside your mouth.

3. Place your upper teeth on top of the mouthpiece. The upper part of the mouthpiece should put some pressure against the back of the teeth. (If you’re unsure if you’re getting the correct sensation, put your thumb behind your upper teeth and pull forward—your mouthpiece should feel similar.)

4. Close your lip around the mouthpiece and apply equal pressure around the mouthpiece. The corners of your lips should close firmly in order to create a seal around the mouthpiece. As your teacher/parent/friend to try and move your mouthpiece around—it shouldn’t go anywhere.

5. Take a deep, relaxed breath, set your embouchure and blow across the reed. You should have produced your first pitch!
Producing a Sound on the Clarinet

Now that you've produced a sound on the mouthpiece, reassemble the clarinet with the barrel and mouthpiece assembly attached.

Continue to hold the clarinet by the barrel with your left hand and with the either the bell (if you can reach) or the thumb rest with your right hand. Look in the mirror and make sure you are not stretching or compressing your neck as you hold your clarinet. Also, double check the angle of your clarinet—it should point away from you at a 45-degree angle.

Once you have checked your posture and clarinet angle, re-form your embouchure, take a deep relaxed breath, and once again blow into the clarinet. You should produce a G on the clarinet.

Checkpoints for Good Sound:

1. Put a tuner on your music stand and set it for B-flat (Bb) instruments. Play on your mouthpiece and barrel only—the tuner should show a G-sharp. Reassemble your clarinet and play again—it should show a G. If these aren't the notes that the tuner shows, check the section called “What If It Doesn't Sound Right?” for solutions!

2. Place your clarinet on your lower lip and form your embouchure according to the instructions. Now, move both hands to the bell of the clarinet (or the underside of the clarinet as far down as you can reach without changing your throat position.) Push the clarinet away from you so that it becomes as horizontal as you can—you should feel the weight of the instrument transfer to your mouth. Use your lip muscles to keep the mouthpiece in place, then lower the clarinet back to its normal position without changing your embouchure. This is how strong your lip muscles need to be while you are playing!

3. Try playing around with the angle of your clarinet until you find the angle that creates the most resonant, pretty sound—then keep using that angle!
**Developing Proper Hand Position**

Playing with correct hand position will allow you to play faster notes with greater ease and will help avoid playing-related injuries later on in your playing career.

In order to make it easier to get started holding your clarinet, this section will focus on teaching one hand at a time.

**Left hand:**

Start by holding your clarinet with your left hand. Put your index, middle, and ring fingers on the rings and tone hole as indicated in the photo on the right.

Keeping your fingers on the tone holes and your palm close to the clarinet, lay the instrument flat underneath your left arm. Cover the hole on the back with the fleshy part of your thumb.

Use the tip of your thumb to press down the silver key (called the “register key”) on and off. It should be a similar gesture to changing channels on a remote control.

When you bring the clarinet back to a vertical position, your hands should be somewhat curved and your index finger should be somewhat hook-shaped so that it can hit both the top ring and the silver key above it (the “A” key.) Your pinky hovers over the keys to the left.

**Right hand**

Relax your left hand form a C, as if you are holding a can of soda. Place your right thumb underneath the thumb rest; it should sit where your fingernail meets your thumb. Place your index, middle, and ring fingers over the tone holes as show in the diagram on the right. Your pinky should hover above the four keys at the bottom. Never use your pinky to support the weight of the clarinet.
What If It Doesn’t Sound Right?

Sometimes, even when you think you’ve done everything right, you still don’t sound exactly like you’re supposed to. Here’s a short guide to help you identify common problems with sound production—and suggestions on how to fix them.

<table>
<thead>
<tr>
<th>Tone Quality</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correct Result</strong></td>
<td>• More often then not, if you’ve followed the instructions you will get a reasonable sound. Congratulations! Keep practicing until you can consistently achieve the correct tone every time you play.</td>
</tr>
</tbody>
</table>
| **No Tone, Rushing Air:** No sound comes out when you play, just the sound of air rushing through your instrument. | • This is caused because there is no pressure against the reed from your lower lip.  
• Try Checkpoint exercise #2 and focus on firming up your embouchure muscles while you play.  
• If this still doesn’t work, try either soaking your reed longer or test out a different reed—it’s possible that your reed is too hard. |
| **Squawk-like tone or Flat pitch** Pitch is flat and “honks” | Possible causes:  
• It’s possible that you’re putting enough pressure against the reed; firm up your embouchure muscles (especially your lower lip.)  
• You might have too much reed in your mouth, so try using less mouthpiece  
• Your air stream may not have enough intensity—try blowing faster air across the reed. |

![Too much mouthpiece](image1) ![Too Little Mouthpiece](image2) ![Just Right](image3)
## Tone Quality

<table>
<thead>
<tr>
<th>“Squeaks” or Continuous High-pitched Squeal</th>
<th>Suggested Remedy</th>
</tr>
</thead>
</table>
| You are able to produce a sound, but it is more of a squeak than a characteristic clarinet tone. | - There is too little pressure against the reed. Stop playing, then try again while focusing on keeping firmer embouchure muscles while you play.  
- There is too much mouthpiece in your mouth. Stop playing, look in the mirror and pull some of the mouthpiece out—remember, you should only have about 1/2” of the mouthpiece in your mouth. Then try again.  
- Your instrument is angled too far away from your body OR you are looking downward. Stop playing, check the angle of your clarinet and make sure you are looking straight ahead (not down at your instrument), then play again.  
- It is also possible that your reed is too soft. Try changing reeds; be sure not to soak the reed too long before you play. |

<table>
<thead>
<tr>
<th>Completely Stopped Sound or Intense Air Only</th>
<th>Suggested Remedy</th>
</tr>
</thead>
</table>
| You are blowing air but none is going through the instrument or you hear intense air but no sound. | - You have too much lip pressure against the reed and/or you have too little reed in your mouth. Try playing using more mouthpiece in your mouth, and make sure that you are not “biting” down on the mouthpiece.  
- If this does not work, check your reed—if your sound is stopped, your reed may be too soft; try changing reeds; be sure not to soak the reed too long before you play. If you are hearing intense air, your reed may be too hard (so you may need to soak it longer |

<table>
<thead>
<tr>
<th>Thin Tone, Sharp Pitch</th>
<th>Suggested Remedy</th>
</tr>
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</table>
| Your sound is not full or is sharp (too high) | - This is sometimes caused by a combination of three factors: You are using too much lower lip pressure against the reed, you are using too little reed, and you may be playing with a tight, closed throat.  
- Stop playing. Use a little more mouthpiece and less pressure against the reed and focus on maintaining your “OH” throat shape while you play. If this still does not work, your reed may be too hard—try soaking. |

<table>
<thead>
<tr>
<th>Bunched Chin</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing with a bunched chin can cause a number of problems. Look at yourself in the mirror. If your chin looks like it has a “pebbly” texture, then reset your embouchure and focus on maintaining a flat</td>
<td></td>
</tr>
</tbody>
</table>
Instrument Care & Maintenance

An instrument is essentially a small machine that is powered by you. Like most machines, it needs to be properly cared for in order to remain in good working condition.

There are three major concerns when it comes to caring for an instrument.

1) **Personal Responsibility**—Your instrument is an investment, so be sure to take care of it! This means keeping it in a secure area and away from extreme temperatures at all times, keeping it in your case when you are not playing it (so it can’t get dropped or dented or otherwise broken), and taking care to not eat right before playing. (The acid from your saliva and sugar from gum/candy can eat away at the inside of your instrument. And no one wants chunks of lunches past rotting inside their instrument anyway.) Finally, be careful when putting your instrument away—you should never have to “squash” your instrument case to close it. If your case doesn’t close easily, open it up, make sure your instrument is sitting in the case properly and that nothing is pressing down on the keys before trying to close it again.

2) **Removing moisture from your instrument**—Before putting your instrument away, be sure to swab your instrument and take the reed off the mouthpiece.

   To clarify:

   **TAKE** the reed off the mouthpiece. Take **the** reed off the mouthpiece. Take the **reed** off the mouthpiece. Take the reed **off** the mouthpiece. Take the reed off **the** mouthpiece. Take the reed off the **mouthpiece**. (Understand?)

   It is imperative to remove the reed from the mouthpiece every time you finish playing. Leaving the reed on the mouthpiece can cause the growth of bacteria and mold (ew!) and warp the reed and/or mouthpiece. It’s just not a good idea.

   **Having maggots in your mouthpiece is a clear indicator that you have not been caring for your instrument properly.**
After you’ve finished playing for the day, be sure to swab out your instrument. There are many different swabs available, and they basically all work the same way. Take the mouthpiece and ligature off of the instrument. Wipe these out with the cloth end of the swab—but never swab through the mouthpiece itself because you can rub away or chip the inside of it.

Be sure your swab is not tangled. This is very important—tangled swabs can get stuck in the instrument, requiring an avoidable trip to the repair shop. Drop the weighted end of the swab through the instrument and gently pull it through the instrument. If the swab gets stuck, do NOT pull harder—pull it back the way you put it in, untangle it, and try again. After you’ve swabbed the instrument, disassemble it, dry off the joints, and put it away.

3) **Awareness**—Because clarinets are “small machines” with moving parts, sometimes those parts need a little care and maintenance. Here are some signs that you should ask your band director or a repair person to look at your instrument:

- One or more notes aren’t sounding correctly
- A key is slow coming back up after being depressed
- A key does not return to its normal position after being depressed
- You see a screw sticking really far out. (Note: The screws on your instrument are precisely adjusted to make it work properly. If you think a screw needs tightening, take it to your teacher or a professional. Unless you or your parent know what they’re doing, you could cause serious damage to your instrument if you attempt to “fix” it yourself!)

Remember: When in doubt, take it to a professional! (And if you have to leave your instrument at the repair shop, be sure to ask for a loaner instrument to use in the meantime.)
Developing Muscle Memory: Finger Wiggling

Now that you understand how to hold your instrument, it is going to take some time to become familiar enough with it that you won't have to look down and think about exactly where each of your fingers is supposed to go before you play. This is called developing “muscle memory.”

**Finger Wiggling** is an easy way to help speed up the process of developing muscle memory (and, hopefully, solidifying good playing habits along the way!) It’s also an activity that requires very little thought and lots of time—so you can do other things like listen to music or watch TV while you work on developing your good habits!

For the first week you have your instrument, set aside 30-60 minutes of time in the evening—while you are watching TV, listening to music, talking to a friend, or any other activity you can do without the use of your hands.

Assemble your instrument and find a seat where you can get comfortable. Start by placing your left thumb and index finger in their appropriate location on the instrument. Spend 5-10 minutes lifting and lowering your index finger repeatedly (“wiggling”). After 5 or 10 minutes (or, if you’re watching TV, at the next commercial break), start wiggling your second finger up and down. Repeat this with each finger of your left hand. Then, repeat this with the fingers in your right hand. Don’t forget to wiggle your left thumb too!

By “wiggling” your fingers one at a time, you fingers will start remembering where they’re supposed to go without having to think about it. Through the course of the week, you should start to be able to pick up your instrument and place your fingers without even having to think about it—which leaves your brain free to think about other things (like notes, rhythms, and which fingers you’re supposed to put down to play a particular note.

As you learn new notes, practice “wiggling” the fingering to help you develop muscle memory for each of the notes you learn.
Reading Notes in Treble Clef

Before you learn to start making sound on your instrument, it’s important to be familiar with the symbols of music.

Clef:
The symbol placed at the left of the staff which tells us which notes go on which lines of the staff. Your instrument reads Treble Clef.

Staff:
The set of five lines and four spaces upon which music is written.

Each line and space of the staff has a name that corresponds to a letter of the alphabet. Only the first seven letters of the alphabet (A through G) are used in reading music. After G, the letters repeat—so our musical alphabet goes A, B, C, D, E, F, G, A, B, C, D, E, F, G, etc.

The notes that go on the spaces of the staff can be remembered by stacking the letters of the word FACE. (Remember: SPACE rhymes with FACE.)

The notes that go on the lines of the staff can be remembered by the saying Every Good Boy Deserves Fudge. The first letter of each word can be stacked to give you the notes which go on the lines of the staff.
When you put both sayings together, the lines and spaces alternate to reveal pieces of our musical alphabet. *(And remember: Our musical alphabet starts at A and ends at G—then we repeat the same letters over again!)*

![Diagram of musical staff with notes E, F, G, A, B, C, D, E, F, G, A, B, C]

Our musical alphabet can be extended above and below the staff using **ledger lines**. We continue alternating the pattern of lines and spaces to name additional notes.

**Notes above the staff** continue the pattern of lines and spaces by adding letters going forward in the alphabet.

*Example: the top line is F, so the next space up would be G, the line above that is A, etc.*

![Diagram of musical staff with notes G, A, B, C, D, E, F, G, A, B, C]

To figure out which note comes next **below the staff**, start from the bottom line of the staff (first line E), and count backwards in the alphabet.

*Example: the bottom line is E, so the space below that is D, and the line below that is C, etc.*

**Congratulations!** You can now figure out any treble clef note name on, above, or below the staff! The next step is to be able to look at a note and recognize it immediately (without having to count up and down.) Use the flash cards at the end of this book to help you practice reading notes faster.
When do I play?

Now that you can read the notes on the staff, read a fingering chart, and produce a good quality tone on your instrument, it’s time to learn the terms and symbols that tell you when and for how long you will play.

**Beat**

Put the first two fingers of your right hand on the front side of your neck (near your voice box)—you’ll be able to feel your heartbeat or pulse. Sometimes our heart beats fast (like after you’ve been running) and sometimes it beats slow (like when you’re drifting off to sleep), but it is almost always steady. Music has a steady pulse that we call **beat**.

**Rhythm**

While the underlying beat of music is always the same, we have different symbols which determine for how many beats each note should be played.

The four most common symbols that tell us how long to play a note are as follows:

- Whole note
- Half note
- Quarter note
- Eighth note

These symbols can be mixed and matched into varying patterns in music; the organization of note lengths in time is called **rhythm**.

Young musicians often use the terms beat and rhythm interchangeably—but they actually mean different things. Remember: **beat** is always steady; **rhythm** can (and often does) change.
Learning how long each note value lasts in relation to another is a lot like using fractions in math.

In math,

\[
\begin{align*}
1 \text{ whole} & = 2 \text{ halves} = 4 \text{ quarters} = 8 \text{ eighths} \\
& = \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \\
\end{align*}
\]

In music,

\[
\begin{align*}
1 \text{ whole note} & = 2 \text{ half notes} = 4 \text{ quarter notes} = 8 \text{ eighth notes} \\
\end{align*}
\]

When we add numbers in math, we know that if \(1+1\) equals \(2\) and \(2 + 3 = 5\), then \(1 + 1 + 3\) also equals \(5\). (This is known as the transitive property in case your math teacher ever asks.)

Applying the same rhythmic equivalencies above (1 whole note = two half notes = 4 quarter notes, etc.), we can come up with any number of rhythmic combinations that equal one whole note:

\[
\begin{align*}
0 & \leftrightarrow \begin{array}{c} \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \\
1 & 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 \\
\end{array} \\
& \leftrightarrow \begin{array}{c} \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} \\
1 & 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 \\
\end{array} \\
& \leftrightarrow \begin{array}{c} \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} \\
1 & 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 \\
\end{array} \\
& \leftrightarrow \begin{array}{c} \frac{1}{16} + \frac{1}{16} + \frac{1}{16} + \frac{1}{16} \\
1 & 16 + 16 + 16 + 16 + 16 + 16 + 16 + 16 \\
\end{array} \\
& \leftrightarrow \begin{array}{c} \frac{1}{32} + \frac{1}{32} + \frac{1}{32} + \frac{1}{32} \\
1 & 32 + 32 + 32 + 32 + 32 + 32 + 32 + 32 \\
\end{array} \\
\end{align*}
\]

FYI: Pairs of eighth notes are often written like two quarter notes connected by a single bar line rather than two eighth notes with a flag each. (\(\begin{array}{c} \frac{1}{16} + \frac{1}{16} \\
\end{array}\) = \(\begin{array}{c} \frac{1}{8} + \frac{1}{8} \\
\end{array}\))
Time Signatures

While the last example grouped rhythms by whole notes, it’s actually possible to group them in any number of ways. But how do you know how beats and rhythms are grouped in your music?

When you are reading a piece of music, to the right of the clef sign, you will find two numbers stacked on top of each other like this:

![Time signatures](image)

These symbols are called time signatures. They tell us how our notes will be grouped in our music. These groups are called measures.

The top number tells us how many beats are in each measure.

Think of the bottom number like the denominator of a fraction. It tells us what type of note equals 1 beat.

As a young musician, the most common time signature you will see is called “four-four”. The top number tells us how many beats are in each measure. The bottom number tells us what type of note equals one beat. Think of the bottom number like the denominator of a fraction—if the bottom number is a 4, think of the fraction \( \frac{1}{4} \). Another name for that fraction is a “quarter”—so if the bottom number of the time signature is 4, then we are counting in quarter notes.

The time signature \( \frac{4}{4} \) then means that there are 4 quarter note (\( \cdot \)) beats in every measure. Rhythms will always need to “add up” so that they are equal to 4 quarter notes in each measure.

Beat:

![Beat](image)

Rhythm This is one measure of music. This is a bar line. It separates measures of music. This is a double bar line. It tells us when to stop.
There are endless possibilities for the time signatures you can play. The only limitation is that the bottom number has to relate to one of our possible note values (1 = whole notes, 2 = half notes, 4 = quarter note, 8 = eighth notes, etc.)

Examples:

There are 6 beats in each measure.

The bottom number is 8, so think \( \frac{1}{8} \); this means that an eighth note (\( \cdot \)) equals one beat.

This time signature means there are 6 eighth notes in each measure.

There are 3 beats in each measure.

The bottom number is 4, so think \( \frac{1}{4} \); this means that a quarter note (\( \cdot \)) equals one beat.

This time signature means there are 3 quarter notes in each measure.

**Rests**

In addition to the symbols that tell us when we should play, there are also symbols which tell us when we should leave silence in the music—these symbols are called rests. The most common rests are as follows:

- Whole rest
- Half rest
- Quarter rest
- Eighth rest

As the names would imply, a whole rest takes up the same number of beats as a whole note, a half rest equals the same number of beats as a half note, etc. Thus, when “adding” the number of beats in a measure, rests count for just as much time as their “note” equivalent.
Putting It All Together

Now that you’ve learned the basic skills of music reading and tone production, let’s put them all together!

Here’s your first musical exercise.

Set up your instrument, sit with good posture, and hold your instrument in playing position.

- Look at the music! What is your time signature? What does it mean?
- What’s your first note? What’s the fingering? Do your notes change in the piece?
- If you are not working with a teacher at the moment, it may be helpful to turn on your chromatic tuner. (Make sure it is set to “Bb” so the correct notes show up for your instrument!) The tuner will help make sure you’re playing the correct pitch.
- Turn your metronome on—set it to somewhere between 60-80 beats per minute. Tap your big toe (not your whole foot!) so that your toe hits the ground as the same time the metronome taps.
- Here we go! Think “1-2-3-breathe” then play through the exercise! Hold each whole note for 4 beats, then don’t play (rest) for 4 beats during each whole rest. You should be thinking:

\[ \text{Play—2—3—4—Off—2—3—4breathe—Play—2—3—4—Off—2—3—4breathe} \]
Great! Now that you've got that first exercise down, here are a few more! Be sure to watch the music carefully—sometimes the notes change!

2. 

3. 

4. 

Articulation

Now that you've played through your first exercises, go back and play them again one more time. This time, think about articulation, or tonguing.

In order to tongue notes on clarinet, the tip of your tongue will touch the tip of the reed. Find the tip of your tongue by scratching the tip of your tongue with your fingernail or by rubbing it against the bottom of your top teeth. Stick your tongue out of your mouth and touch the tip of your tongue to the tip of your reed (still outside of your mouth.) Bring your mouthpiece back into the mouth, keeping the tongue on the reed. Form your embouchure and “blow” air into the instrument while keeping your tongue against the reed. (You should “feel” as though you are playing, when in reality air is just backing up and not going into the instrument.) Release the reed with your tongue, then touch the tip of the tongue to the tip of the reed many times in a row (while constantly blowing) to understand what it feels like. Repeat the process, but play first, then stop the air with your tongue.

Remember, the tip of the tongue touches the tip of the reed. Play all of these exercises with good articulation, then keep going!
As you start playing more exercises involving different notes, be sure you are working to instill good playing habits.

- Are you setting your embouchure correctly? Are you holding your mouthpiece firmly without biting?
- Are you looking down at your hands to see the notes? (Remember, looking down will negatively affect your sound!)
- Are you supporting your instrument with your right thumb, but not resting pinky fingers under the keys?
Take a breath after each whole note if you need to. Be sure to speed up your air for the second note of each pair, and don't forget to articulate!

Remember, half notes get 2 beats in 4/4 time. Don’t change the way you constantly blow air when you play from any whole note exercises—just separate the notes by lightly tonguing where appropriate.

Now that you have a better understanding of how to produce a good tone, read music, and read a fingering chart, you have all of the tools you need to teach yourself many of the songs and exercises you will find in your band method book. The rest of the materials in this book will help you strengthen the skills you have already learned.
Clarinet Fingering Chart

This chart shows both preferred and alternate fingerings for the clarinet. When more than one fingering is shown, the first is the most common.

Every instrument has a few notes that don’t sound quite in tune when they are played. The chart below will show you the pitch tendencies for those notes—that is, if a note tends to be a little sharp (too high) or flat (too low.) If you adjust the pitch on those notes, you’ll sound even better faster!

How to Read A Fingering Chart:

Each of the shapes in the fingering chart correspond to a key on the clarinet.

In the chart on the next two pages, if a key is filled in (like this: ●) it means you should push that key down. If a key is open (like this: ○) it means that key stays up.

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<tr>
<th>Note Name</th>
<th>E</th>
<th>F</th>
<th>F# or G♯</th>
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<th>G# or A♯</th>
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<td>Slightly sharp</td>
<td>Moderately sharp</td>
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**American Band College Master's Degree Project**

More info on ABC @ www.bandworld.org • scottmckee@bandworld.org • (541) 778-4880
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**Treble Clef Flash Cards**

Cut out the flash cards on the following pages and use the “Reading Notes in Treble Clef” section (pages 18-19) and your fingering chart to fill in the note name and fingering on the back of each card. Use them to quiz yourself until you can instantly identify both the name and the fingering for each note!
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Each pair of musical notes represents a comparison or contrast in terms of pitch or quality.
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Acknowledgements

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About the Author

Catrina Tangchittsumran-Stumpf is entering her seventh year as the director of bands at Thomas Jefferson Middle School in Arlington, Virginia, where she oversees the Symphonic Band, Concert Bands, Beginning Band, and Jazz Ensemble. She has served as the Elective Team Leader since 2007 and is a member of the International Baccalaureate Steering Team. As of the 2010-2011 school year, she has been appointed the Secondary Instrumental Music Lead Teacher for Arlington Public Schools and will also serve on the Arlington Public Schools Secondary School Grading Committee.

Ms. Tangchittsumran-Stumpf holds a Bachelor of Music in Education from James Madison University, and is pending completion of a Master of Music in Conducting from the American Band College of Sam Houston State University. Her primary instrument is flute, on which she performs regularly with the Fairfax Wind Symphony. She is certified to teach Instrumental Music (grades k-12) in the State of Virginia and has completed Level 3 assessment training for the International Baccalaureate Middle Years Program.

In addition to her position as the Band Director at Jefferson Middle School, Ms. Tangchittsumran-Stumpf serves as the Color Guard and Marching & Maneuvering Instructor for the Wakefield High School Marching Warriors. She is the Manager for the Arlington Junior Honors Band & Orchestra for Grades 4-6.

Ms. Tangchittsumran-Stumpf is a member of the Music Educators National Conference, the Virginia Music Educators Association, the Virginia Band & Orchestra Directors Association, and the Women Band Directors International.
List of Works Cited


Lotz, Jim.  Bassoon Clinic.  American Band College, Ashland, OR.


