



Instrument Pedagogy Cheat Sheets

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Pedagogy Guides include the following:

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Flute

Embouchure	<ul style="list-style-type: none"> • Relaxed, no smiling • Lips should be flat, not puckered (say “mmmm” to get correct shape) • Aperture should be small as if blowing out a candle • Line up the tone hole with the center of the student’s lips, and roll the head joint down • The edge of the tone hole should be on the edge of the player’s lip, where it meets the skin of their face. • Blow across the tone hole, as if you are blowing across a pop bottle. • To focus student’s tone, ask them to close off all of the air with ONE finger. There shouldn’t be air escaping from the sides. • If they can’t produce a tone, adjust where you’re setting the lip plate— they might need it a little higher
Posture/Instrument Position	<ul style="list-style-type: none"> • NO RIGHT ELBOW ON THE BACK OF THE CHAIR – sit up toward the front of the chair or even to one side of the chair • Flute should be pushed forward slightly • Chin should be away from left shoulder, left shoulder does nothing to help hold the instrument • Have student sit in a neutral position without their flute, tell them to stay in that position and bring the flute to their face. The head should not move forward or to the left to meet the flute • The students should make a little ledge with their left index finger, on which to rest the flute. • The right hand thumb should be in-between the index and middle finger *BoPep thumb guides are GREAT for this; cheaper version is a corn pad. • Left elbow should be high enough that the player’s airstream is pointing toward the point of the elbow’s bend. • Flute should be parallel to the floor; embouchure will suffer if flute tilts downward. *More important is that the lip moves with the instrument; rigid 90 degree angles are less necessary.*
Hand Position	<ul style="list-style-type: none"> • Contact points to hold instrument are chin, crook of left index finger (Captain Hook), right thumb; students should use opposite pressure to hold instrument in place (left hand pushes back, right hand pushes forward) • Keep fingers close to the keys to allow for faster technique, hover over keys not being used • Fingers should be curved not straight • Right thumb should stay under first trill key not sticking out front; tip of the left thumb should be used for thumb keys, not the entire thumb • Don’t break the wrists – if wrists are bent, position of the flute is wrong. Keys should point toward the ceiling not in front or behind. • Right hand shouldn’t collapse onto the rods; Left pinky shouldn’t hide under the Ab key; Eb key should be in the center of the last key of the body. Right thumb in-between index/middle fingers.
Breathing/Breath Support	<ul style="list-style-type: none"> • Pneumo Pro is a great tool to help breath support and the direction of the air stream



	<ul style="list-style-type: none">• Blow the flame of a candle and see if you can hold the blue part of the flame before it goes out• Make certain throat is relaxed• Just let the belly fall out, and the diaphragm will create a vacuum to pull the air in• Take the foot joint off. Put the END of it (not the part with the Tenon) against the gums, wrap the lips over it, and inhale. Instantly, the students will feel that rush of cold air moving over an open throat.• Using the empty case against the wall, have students lean into case. They should take a deep breath and hiss out, keeping themselves pushed away from the case.
Intonation Tendencies & Corrections	<ul style="list-style-type: none">• C#/D-flat – no pinky, right hand fingers down to help lower the pitch• B-flat above the staff – push A-flat key to help intonation• E above the staff – no pinky helps note to speak and lowers pitch• Tune to A; not B-flat or F• Notes that are sharp—you can add fingers in the right hand (i.e. C#, B, high Ab). Also, some alternate fingerings (high F#-play with finger 5 instead of 6)• Sharp? Drop your jaw, roll in. Flat? Raise your eyebrows and lip it up, roll out.
Alternate Fingerings	<ul style="list-style-type: none">• Thumb B-Flat to avoid right hand index finger UNLESS it's a chromatic passage...then use 1 + 1• F# above the staff – use right middle finger instead of ring finger and make certain to use the single thumb key• The right hand pinky is largely unnecessary. It is only mandatory for E (low/middle), Eb (all), and high A. Everything else, you can take it off to make fast passages easier.• Keep overblowing middle E? Straddle right pinky over the Eb and low C# keys, and you can blow as hard as you like. Won't crack.• Low C, C#, B won't speak? Slap the LH G key as the student is articulating the note.• High E a problem? Don't put the RH pinky down.
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none">• Moving head/rolling in or out teaches bad habits to change intonation – intonation should be fixed with air not head placement• Embouchure should never feel tight
Other Specific Issues and/or tricks	<ul style="list-style-type: none">• Piccolo players should use piccolo fingerings (not all are the same from flute)• Don't be afraid of high notes, use plenty of air and don't pinch embouchure• Check the alignment of the foot joint so that pinkies aren't being strained• Teaching vibrato: have kids "whoo" on quarters, then eighths, sixteenths, quintuplets, sextuplets. As they get faster, have them smooth it out so that each "whoo" isn't noticed.• Teaching double-tonguing: too-koo or duh-guh work great. For triple-tonguing, have them just double tongue: tkt or dgd, to avoid having a couple single tongues in a row.



Quality Equipment Recommendations	<ul style="list-style-type: none">• Beginner Flutes – Yamaha, Gemeinhardt, Armstrong, Trevor James• Intermediate – Yamaha, Pearl, Sonare, Trevor James• Professional – Burkart, Powell, Muramatsu, Miyazawa, Haynes• Piccolo – concert band: Pearl, Burkart Resona model; marching band: Gemeinhardt, Yamaha (use plastic not metal)• It depends on the player. I could try the same instrument as someone else and not get the same sound, because of the way the tone is resonating inside the oral cavity, etc.• When they go to get an intermediate flute: bring a tuner and a favorite music friend (mom, lesson teacher), along with a piece they know really well. Make sure the instrument plays pretty well in-tune, and that it speaks easily in the upper register and the low register.• Necessary in step-up instruments: B foot, silver head joint (the rest can be an alloy at this point), open hole.• Not necessary: gold lip plate (unless the student has an allergy—the black smudge? Just make-up reacting), split E (my piccolo has one, not on flute, don't miss it), roller on the foot joint or gizmo key for high C (never had them, no issues), C# trill, offset G (only if they have ridiculously teeny LH ring finger), soldered vs. rolled or pointed arms• PICCOLO: don't buy metal. If they can't afford wood, look for plastic.
Problem Solving Tips	<ul style="list-style-type: none">• For lower notes point air stream toward elbow, higher notes point air stream toward ceiling• Sometimes raising your eyebrows helps with intonation• Do a lot of long tones. Practice harmonics from low C, low C#.
Emergency Repairs	<ul style="list-style-type: none">• Check springs• Adjustment screws on right hand keys – don't over tighten• Check cork in head joint – notch in the end of the cleaning rod should be in the center of tone hole in the lip plate• Use tobacco paper for sticky pads, keep a teeny screwdriver with you to tighten loose screws.• For sticky head joints, spritz with rubbing alcohol or scrape the tenon with a pencil (scoots away the gunk!)



Oboe

Embouchure	<ul style="list-style-type: none">Think "oooh." The less pressure on the reed, the better, so it can vibrate. The bottom lip is the cushion for the reed to sit upon and do its job correctly and let all the overtones ring out.
Posture/Instrument Position	
Hand Position	<ul style="list-style-type: none">Watch out for the right hand, especially with student oboes. If the hand is tilted too far towards the student, it's very easy to accidentally hit the right Ab key. Results are strange "extra" sounds
Breathing/Breath Support	<ul style="list-style-type: none">Fast, focused air.
Intonation Tendencies & Corrections	
Alternate Fingerings	
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none">That oboe is difficult.
Other Specific Issues and/or tricks	<ul style="list-style-type: none">As you go down the scale and your notes begin "gurgling", drop you jaw (think the donkey EE-AW), to allow the reed to let more air through to get the low notes to speak correctly. If upper notes sag, faster air and raise your eyebrows.
Quality Equipment Recommendations	<ul style="list-style-type: none">Ann Hodge Double Reed SuppliesNorth Texas ReedsAmerican Oboe Reed Company
Problem Solving Tips	
Emergency Repairs	<ul style="list-style-type: none">Play F#, then add the left Ab key. If the pitch changes, tighten/loosen the screw above the F# key. This will solve many problems.



Bassoon

Embouchure	<ul style="list-style-type: none"> • Equal pressure surrounding the reed (i.e. “drawstring bag”) • Bring the corners of the mouth forward (no smile) • Chin should NOT be flat like single reed embouchure • Embouchure should be relaxed not firm • Approximately $\frac{3}{4}$ of reed should be in mouth
Posture/Instrument Position	<ul style="list-style-type: none"> • Sit on the whole seat of the chair with the seat strap up at the front edge of the chair • Using a next strap or harness while sitting is NOT recommended • Instrument should be held across the body at an angle and the player should read music to the right of the instrument • The seat strap should hold the weight of the instrument, and the instrument is balanced with a contact point on the right leg and the left hand
Hand Position	<ul style="list-style-type: none"> • Left hand should contact the instrument at the base of the first finger • Hand rest or “crutch” for the right hand is optional, whatever makes the player comfortable. The hand rest is not for holding the instrument, it is for helping to orient the right hand near the correct keys • When thumbs are not in use they should hover near the thumb keys. Watch for bad habits with moving either thumb to a “resting place” on the instrument
Breathing/Breath Support	<ul style="list-style-type: none"> • Player should feel resistance from the instrument when blowing into it (significantly more than saxophone, slightly more than clarinet). If there is no resistance, they are not using enough breath support.
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> • Low notes (low F and below) tend to be sharp, lower jaw to correct pitch • Notes around middle C tend to be flat, support with air and embouchure to correct pitch • Top left hand pinky key can be added to almost all higher notes (treble clef) to correct pitch and stabilize the tone
Alternate Fingerings	<ul style="list-style-type: none"> • $\frac{1}{2}$ hole for middle F#, G, and Ab • Flicking/venting for A, Bb, B, C, D around middle C • Pinky F# for playing F# to Bb
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none"> • Too firm of an embouchure and not enough air leads to a pinched sound • Do not tune instrument by pulling out or pushing in bocal. The player must adjust with embouchure and air.
Other Specific Issues and/or tricks	<ul style="list-style-type: none"> • Bocals come in different lengths and are labeled with numbers (lower number = shorter bocal) Most players will be in tune on a 2 or a 3 • Advise students handle bocal from the base near the cork when putting in and taking out to avoid bending. Also watch the whisper key pad when putting the bocal in and taking it out. • Bassoons with string tenons can have string added or removed to adjust the tightness of the joints.
Quality Equipment Recommendations	<ul style="list-style-type: none"> • Handmade reeds: www.millerdoublereed.com, www.forrestmusic.com, www.charlesdoublereed.com • Fox bassoon (student models are Fox Renard) • Leather seat straps grip the chair better than fabric



Problem Solving Tips	<ul style="list-style-type: none">• If low notes are not responding: check that fingers are covering holes completely, try slurring down one note at a time from low F, crow reed to listen for lower partials to determine if the reed is the problem• If A, Bb, B, C, or D around middle C are cracking or sounding an octave too low, check that the whisper key lock is not on. If it is not on, these notes need to be flicked using one of the thumb keys above the whisper key
Emergency Repairs	<ul style="list-style-type: none">• If whisper key is not closing, check the spring located near the top of the rod• If the whisper key pad comes off, it can be glued/taped back on with almost anything. The hole that it covers is very small so it does not need to be seated well like other pads.• Keys that are closing but not closing completely can be adjusted by wrapping tape around a rod where it contacts another rod (similar to how you would adjust the tiny screws on a flute or saxophone)



Clarinet

Embouchure	<ul style="list-style-type: none"> Place the bottom lip slightly over the lower teeth (as if putting on chap stick) Put the bottom lip onto the reed Approximately 1/3 of reed should be in mouth Firm the corner of the mouth (wrap the lips around the mouthpiece) Flat chin
Posture/Instrument Position	<ul style="list-style-type: none"> Spine straight, away from the back of the chair Angle of the clarinet is about 30 degrees from the body (Everyone's ideal angle will be a little bit different based on the mouthpiece, kind of clarinet and whether you have an overbite or an under bite)
Hand Position	<ul style="list-style-type: none"> Left hand on top, right hand on bottom Elbows relaxed Keep a natural, relaxed curvature of the hand Thumb rest should place over the top, right thumb knuckle joint. Thumb rest should line up between the first and second fingers. Use the pads of your fingers to cover the tone holes Be sure to press firmly cover the tone holes so no air escapes from holes Keep fingers close to instrument
Breathing/Breath Support	<ul style="list-style-type: none"> Breath through the corner of the mouth while keeping the center of the lips on the mouthpiece Breathe from your diaphragm, think all the way down to your belly button. Shoulders relaxed Keep the back of the tongue high to speed up the air and focus the sound (think edges of tongue touching top molars) Keep throat open as if yawning
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> Throat tones (2nd line G to 3rd line Bb) tend to play quite sharp - cover up the tone holes on bottom joint The lowest notes (E, F, and F#) tend to play flat - use faster air speed and a strong embouchure In addition, adjusting the length of the barrel can help with each instruments intonation tendencies. Pulling out slightly if instrument is sharp, making sure everything is pushed in if instrument is flat. Temperature of instrument can affect intonation. The warmer the instrument it can play sharp, the colder the instrument it can play flat.
Alternate Fingerings	<ul style="list-style-type: none"> Alternate fingerings are used in cases where the sequence of notes that need to be played are either physically impossible to play with the traditional fingerings, or are difficult to play at the speed needed and end up slowing the passage down. Sometimes they are also used for intonation purposes. 2nd finger low B natural. can be played with 1st and sliver key between fingers 2 and 3. 1st finger F# can be played with thumb and right hand side keys, the bottom 2 keys. Bb played with A key and register key can also be played with A key and right hand side keys, 3rd from the bottom. Bb (above the staff) can be played a variety of ways depending on what notes come before or after the pitch. It can be played "One



	on One" meaning first finger covers first tone hole on upper joint, and first finger covers first tone hole on lower joint
Common Errors/Misconceptions in Pedagogy	<p>Tonguing:</p> <ul style="list-style-type: none"> • More a release than an attack, the tongue is pulled away from the reed and air is blown through the mouthpiece • Proper tonguing requires the tip of the tongue lightly touching the tip of the reed • Using a "dah", "du" or "nu" syllable instead of "tah" will facilitate this release <p>High notes</p> <ul style="list-style-type: none"> • Do NOT squeeze harder to play notes over the break. The embouchure should stay the same. <p>Fingers</p> <ul style="list-style-type: none"> • Use the pads of the fingers to cover the holes, not the finger tips. <p>Alternate Fingerings</p> <ul style="list-style-type: none"> • To be used only in special circumstances. They are not a free for all choice.
Other Specific Issues and/or tricks	<p>Crossing the Break</p> <ul style="list-style-type: none"> • Try not to make a big deal out of it. If students have been told that it's hard, they will tense up and squeeze the mouthpiece. • To get them over the break, have them play low E with a strong sound and lots of air, then sneak up behind them and push the register key. This prevents them from tensing when they know it's coming.
Quality Equipment Recommendations	<p>Mouthpiece</p> <ul style="list-style-type: none"> • Fobes Debut or Hite Premier • Vandoren B45 <p>Instruments</p> <ul style="list-style-type: none"> • Student models: Yamaha, Bundy, Selmer • Intermediate: Buffet E-11 • Professional: Buffet R-13, LeBlanc, Selmer <p>Reeds (there will be lots of disagreements here :-))</p> <ul style="list-style-type: none"> • Beginners: Rico Royal or Mitchell Lurie • Vandoren • Rico Reserve
Problem Solving Tips	<p>Squeak</p> <ul style="list-style-type: none"> • Too much mouthpiece • Not enough lower lip over teeth • Lips around mouthpiece not firm enough • Squeezing the mouthpiece too hard with the lips • Fingers not completely covering holes (especially on low G, F, E and over the break) • Reed too soft or too hard, or not centered on the mouthpiece • "Huffing" instead of keeping air constant and tonguing <p>Fuzzy sound</p> <ul style="list-style-type: none"> • Bad reed or reed too hard • water in key • lose pad
Emergency Repairs	<ul style="list-style-type: none"> • A toothpick can be used in place of a missing screw on rods. • A wad of tissue or paper towel can be used in place of a missing pad (this will need to be fixed immediately though!) • A rubber band can be used in place of a missing spring (sometimes) • A rubber band in place of a broken ligature



	<ul style="list-style-type: none">• Eye glass repair kit mini screw driver to tighten lose screws
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Saxophone

Embouchure	<ul style="list-style-type: none"> • Equal pressure surrounding the reed (i.e. “drawstring bag”) • Bring the corners of the mouth forward (no smile) • Chin should be firm • Amount of mouthpiece may be determined by the “break-point” where the reed separates from the mouthpiece (may want to draw line with pencil and have student place thumbnail on line to feel how much mouthpiece is required) • Top teeth on mouthpiece. • Bottom lip rolls in to cover bottom teeth to serve as protection against reed.
Posture/Instrument Position	<ul style="list-style-type: none"> • Sit front 1/3 of seat so instrument does not rest on seat. • Mouthpiece should contact upper lip when mouth is closed if neck strap is appropriately adjusted • All beginners should begin with the instrument off to the side until their torso is tall enough for them to play in the middle without their right arm contacting their right leg. Most students reach that point in early high school or for a very tall student in late middle school. • Sax MUST come to student (raise neck strap); student should NEVER lean down to sax. • Tenor and Bari will always be played on the right side of body. Same concept of neck strap applies to these saxes as well.
Hand Position	<ul style="list-style-type: none"> • Left hand: Curved and Relaxed – if student is having difficulty reaching the keys, examine the L.H. thumb position to increase ease and efficiency • Right hand: Curved and Relaxed – each finger has responsibilities with alternate keys (RING Finger plays forked F#, not the middle finger) • Pinkie fingers should remain curved and hover above appropriate keys at all times • Fingers are to be on the pearls of the keys. • Fingers need to stay close to keys; no flying away. • Left hand thumb acts as a pivot point between thumb rest and octave key; students should never be lifting off to get the octave. • Right hand thumb is positioned directly under the thumb rest.
Breathing/Breath Support	<ul style="list-style-type: none"> • Higher Notes – Cool Air • Lower Notes – Warm Air • Long-tones with wider intervals are great (i.e. slurring 5ths G, Low C, Middle C, etc.) • From the diaphragm; deep breath through the mouth. Lower notes need more air. Higher notes need air but controlled by a firm embouchure.
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> • Tune to lower register (Concert Bb or A for alto) • High C# - Add RH to Lower Pitch • Middle C# - Add Octave and G Key to raise pitch and match tone of registers if playing a “long” note that needs tuned • 4th line D is going to be insanely sharp; students need to correct by dropping the jaw while playing. • 3rd space C# is easily corrected (intonation and tone) by adding some combination of the 3 right hand fingers. Will be different on each saxophone/student.



	<ul style="list-style-type: none"> Ledger line A may sound airy and can be corrected by adding just the G# key (may help intonation on certain saxophones)
Alternate Fingerings	<ul style="list-style-type: none"> Chromatic Scale Requires Forked F#, Side C, and Side Bb fingerings Use alternate fingerings to avoid “flipping” between neighboring fingerings such as F and F# Appropriate Bb fingerings are also necessary – many articles on the topic “Forked” F# - finger F natural and use the right hand ring finger to add the little key directly behind the F and E keys. Bb/A# - use regular fingering ‘A’ and add the bottom side key. OR use Bis Bb which is B and the little key right below B – use ONLY index finger to hold both down.
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none"> “1 and 1” Bb is a flute fingering. It is used only in Bb arpeggio situation on saxophone. In short, Bis Bb should be used for skips and side Bb for stepwise motion (about 85%+ of time) Beginning seated position should be off to the side. Embouchure should be consistent throughout all registers. For example, it should not move for lower notes. Placing a student with no embouchure on a lower instruments is not going to result in better tone Students do not need (and should not be encouraged) a metal mouthpiece for jazz unless studying privately and encourage by their private teacher. Many professional jazz musicians play on hard rubber. Easy to make a sound right away, but challenging to tone down the “honk.” – check reed strength and upgrade mpc if honking continues.
Other Specific Issues and/or tricks	<ul style="list-style-type: none"> Check mouthpiece pitch (Concert A on alto) to diagnose embouchure issues including “biting up”, air support, etc. While students are playing lower register notes, you may flick the octave key to check embouchure and air (if the student stays up the octave after flicking or does not jump up the octave there is a need to be addressed) For low notes such as D and C, have the students start on 2nd line G and finger F, E, D, C. They will have to push more air “down” and drop the jaw. “Think Low!”
Quality Equipment Recommendations	<ul style="list-style-type: none"> Students should be moved to a reputable brand (i.e. Vandoren) size 2.5 reeds as soon as possible. Size 2 and below do not provide enough resistance for proper embouchure development. Premier by Hite mouthpiece is a good intermediate mouthpiece made of plastic rather than hard rubber, but 1/3 or less of the price. (6-8th grade) Vandoren Optimum mouthpiece is recommended for more advanced saxophonists and is relatively affordable for the quality (there are a number of other great advanced mouthpieces by Selmer as well, but more expensive generally) Intermediate Lig. (Rovner “Dark”), Advanced (Optimum or Eddie Daniels) Selmer S80 C* mouthpiece – runs about \$150 but is completely worth it.
Problem Solving Tips	<ul style="list-style-type: none"> “Warm Air” for lower notes with “Ahh” in throat.



	<ul style="list-style-type: none">• A consistent mouthpiece pitch of Concert A on alto will improve tone dramatically at times• Check the reed!• Saxes have a common tendency to have leaks around low E or D. That will cause a lot of headache and frustration with not getting those notes out; have it fixed ASAP.
Emergency Repairs	<ul style="list-style-type: none">• Keys sticking: use a “high value” clean dollar bill to remove dirt from pads• Electrical tape can be used to temporarily replace contact point corks on the instrument and also the octave key “sleeve”• Medical tape can be used to temporarily use as a neck cork• Octave key – hold octave key up and gently bend slightly towards the neck if octave displacement is happening. OR put tape around cork on neck hole to “seal” the hole.



Trumpet

Embouchure	<ul style="list-style-type: none"> • “Set” Corners • Firm chin, pointed down • No “air” pockets • Place mouthpiece ½ on top and ½ on bottom • Top lip does all the buzzing so “anchor” the mouthpiece to the bottom lip. Don’t allow the head to tilt downwards. • Firm corners; more of a pucker, no smile. Think “mmmmm” as in, “Mmm, those pancakes are good”.
Posture/Instrument Position	<ul style="list-style-type: none"> • Always “edge of chair”, feet flat on the floor • Torso should be lifted but not strained. • Elbows at an “A” angle. Do not droop. • Trumpet should almost be parallel to the floor but not marching band style. • Head on top of shoulder, trumpet angle should be comfortable, more often than not a slight downward angle.
Hand Position	<ul style="list-style-type: none"> • Form a “C” in the left hand, with fingers closed and thumb opposite of fingers • Tilt the “C” 90 degrees away from you. The trumpet rests on the top of the “C”. • The fingers wrap around the valve casing. Do not allow the thumb to stick up between the lead pipe and the bell pipe. • I teach the middle finger is to be used for the 3rd ring slide and my beginners used that slide from day 1. The middle finger is the longest and strongest finger. • Get a tennis ball (might be too big for a 5th grade student) or a smaller ball. Have them bounce the ball and catch it. That is the right hand trumpet shape. The thumb goes under the lead pipe, between the 1st and 2nd valves. The 1st, 2nd, and 3rd fingers go on top of their respective valves. Each finger has a “teardrop” (a point) and that “teardrop” is placed on the pearl directly above the valve stem. The pinkie is placed lightly on the C ring, not in it. • Left hand thumb around first valve in the saddle if available. Depending on size of hand, first two fingers around third valve casing under bell pipe. Third finger in third valve slide ring. Larger hands, first finger around third valve casing, second finger in third valve slide ring, ring and pinky fingers around the bottom of the third valve casing. • Right hand thumb under lead pipe between first and second valves, fingers one, two, and three straight up and down on valves. Pinky goes either on the top of the hook or flies free.
Breathing/Breath Support	<ul style="list-style-type: none"> • Crucial - From Day 1, teach them to inhale a significant amount of air and push a significant amount of air through the horn to the far wall of the room. At the very beginning their embouchure will not be able to withstand the air pressure but once it strengthens, you will hear an amazing sound for a beginner. • Firm diaphragm
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> • From low F# to about middle C, tends to be flat. Please teach and make them use the 3rd valve slide on C# and D, as those notes are used quite a bit and are so very sharp.



	<p>Generally speaking, using 1st and 2nd valves (1st line E and 2nd space A) tend to sharp. Once you get above 3rd space D to 4th space E, those notes are flat. For the 4th space D, you can use 1st and 3rd; for Fourth space E, you can use 1st and 2nd.</p> <ul style="list-style-type: none">• Low D/C# are very sharp and require third valve to be extended (more for the C# than for the D). This is true for alternate fingers that use first and third or first, second, and third valve combinations.• Open E (fourth space) is a little flat. Finger first and second valves on occasion.• Fourth line D is flat, best to lip it up.• Most trumpets tend toward the sharp side from top line F up to high C#. Then it gets a little flat.
Alternate Fingerings	<ul style="list-style-type: none">• Most common is to substitute third valve for first and second combination.
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none">• Don't smile to play high notes.• Don't use Vaseline on slides.• Don't pull trumpet in to face when playing high notes.• Lip trills are not hard. It's all air.
Other Specific Issues and/or tricks	<ul style="list-style-type: none">• Have the brass players buzz while the woodwind players play or you play on the piano. Anything to develop an inner ear.
Quality Equipment Recommendations	<ul style="list-style-type: none">• Sometime in 7th/8th grade, a student should move from a 7C to a 5C mouthpiece. Sometime in 10th/11th grade, an upper level student should try a 3C.• Try to stick with Bach or Yamaha in the early stages of development.• Stay on the equivalent of a Bach C cup until you are really good.
Problem Solving Tips	<ul style="list-style-type: none">• Check to make sure the valves were put in properly and in the correct case.• Check water valve to make sure it is not leaking.• Check to make sure a foreign object is not residing in the instrument.• If mouthpiece continues to get stuck, then the student, unless the trumpet was dropped, is using too much pressure. Get a French Horn mouthpiece and insert the FH shank into the trumpet shank and to round out the trumpet shank.
Emergency Repairs	<ul style="list-style-type: none">• Duct tape is wonderful.



French Horn

Embouchure	<ul style="list-style-type: none"> “Buzz” is controlled with bottom lip on the inside 1/3 of lip. Positioning should be 2/3 coverage of the top lip and 1/3 of the bottom. The three shapes that form the horn embouchure are “oh”+ “euu”+ “eee” (“eee” is more of a downward motion, not sideways) , making sure that the shapes are added consecutively onto one another. Mouthpiece is divided equally on top and bottom lip and not most on one or the other. Vocal “EM” sound will show student how lips should be touching. Vocal “BEE” sound will demonstrate proper tension across lips. Use air to make the buzz and not the muscles in the face.
Posture/Instrument Position	<ul style="list-style-type: none"> The horn should always be brought to the embouchure, not the other way around. Ideally, the instrument should be diagonal across the body and resting on the leg for beginners. Advanced players should lift it off of the leg with the right hand as soon as they are able. Student MUST sit up and the lead pipe should be perpendicular to the embouchure to allow airflow to proceed directly into the horn. A common problem is that the student will find a comfortable position to hold the horn which will result in the lead pipe leaving the embouchure at an angle.
Hand Position	<ul style="list-style-type: none"> The first choice for positioning of the infamous right hand should be at 2:00 on the bell (with the body of the horn designating 12:00) and the outside of the hand fitting the contour of the inside of the bell. Depending on physical characteristics of the player, the hand could also be placed at 10:00 with the <i>inside</i> of the hand against the bell. In both cases, the finger tips should be just at the “seam” of the bell and body and should be adjusted in or out to a happy medium based on pitch variances. The shape of the hand can also be changed to adjust tone quality. A more cupped hand, or closing off of the bell, will result in a darker warmer tone quality while leaving the hand flat, thus the bell more open, will result in a more natural “brassy” tone. Very rarely should the horn be played without the right hand. Only on “bells up” and/or “brassy” directions in music. Left hand is obvious w/thumb on trigger. The right hand is often a difficult concept to both teach and then observe while playing. Right hand should be shaped like a cone and inserted into the bell so the the horn is actually held up by the knuckles in the right hand. The hand must hold up the bell of the horn and the bell should not be resting on the leg. The right hand should temper the tone of the horn but not to the point of stifling it.
Breathing/Breath Support	<ul style="list-style-type: none"> Horn breathing is consistent with all brass in that dark warm breaths must be taken from the diaphragm. Also, remember that there must always be more air in the player than what is traveling through the horn, keep in mind that the bore of a French Horn is extremely small. Exercises should be done to ensure a “direct” air stream is always used. Because the partials are so close on French



	<p>horn, improper air direction could result in the wrong note being played.</p> <ul style="list-style-type: none"> • Proper, deep breathing is important to be a successful horn player. With pitch and intonation being a particular challenge for horn due to the instrument playing in a higher overtone series than the other brass instruments. This means that there are far smaller spaces between notes and finding the correct pitch is a very delicate process. If airflow/pressure issues are occurring, the success rate for finding the correct notes declines precipitously.
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> • It is important to ensure that both the F and Bb side of a double should be tuned. Students should move to a double horn as soon as they are able to hold one up. If this means never playing a single horn then so be it. Low notes on the Bb side (trigger side) of the horn tend to be flat, altering the embouchure can fix this or opening the right hand slightly will counter act this. Depending on the horn, anything with 1-2 combination can be problematic, altering the right hand openness can fix these tendencies. See alternate fingerings below and use judgment on the best sounding fix. • Beginning horn players' intonation problems are too many to detail. Remember, since the horn is pitched in F, the range demands placed on the horn player are very different than for any other member of the band. The parts that are in a comfortable range for the rest of the ensemble are often too high or too low for the beginning player to play with comfort especially in beginning band as method books are written in unison.
Alternate Fingerings	<ul style="list-style-type: none"> • Some of the most useful (there are about a million alternate fingerings on French Horn)- First space F can be played 1 or T0. Second line G 0, or T1, Second space F T12 or T0. 4th line D T12, or T3 (this is my favorite). Top line F T0 or T1. High A T12 or T0. The partials are so close above the staff that practically anything can be played with T0, ear training is key to ensure correct notes are sounding. • Beginning students should have a double horn from day 1. Single horns are useful as door stops and flower urns and not much more. The double horn not only makes the instrument easier to play, the student will not have to adjust from single horn fingerings to new double horn fingerings at a later date.
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none"> • When tuning, both sides of the horn should be taken into consideration. It really <i>does</i> matter where the right is placed, the student could be falsely accused of bad intonation if they have improper hand placement. Many will deny this fact but yes, Trumpet fingerings work on French horn, don't use the trigger. • The worst thing to do is to give a struggling trumpet player a horn. All of the issues that lead to trumpet troubles are only magnified by the horn. i.e. breathing, embouchure, intonation/tuning, BRACES.
Other Specific Issues and/or tricks	<ul style="list-style-type: none"> • The lead pipe of the horn should be coated with a light oil like Bluejuice every couple months. This ensures a clean horn and also helps with compression and air-flow. • A heavy rotor oil should be used on the rotor joints at the bottom of the rotor casings. You should see a small gap in



	<p>between the rotor shaft and casing. If a rotor is stuck do not force the key, this will break the string. Rather, grab the rotor on the bottom and twist this, taking all pressure off the string and onto your hand.</p> <ul style="list-style-type: none">• A light oil (blue juice) should be applied into the valved slides on both sides of the horn. Work the oil into the rotors and dump it out of the third valve slide.• Start them young! HS literature demands strong, competent horn sections that are often completely independent voices and not always doubled by the Alto Sax. A horn player cannot be grown overnight and similar a first year oboe, can be at best, a limiting factor in literature selection, and at worst, be a crippling factor in the ensembles performance. (I've also had the best results recruiting potential players from the flute section.)
Quality Equipment Recommendations	<ul style="list-style-type: none">• An intermediate Holton or Conn are recommended for high school and middle school students. Yamaha horns are starting to become better quality but usually have smaller bore sizes in the intermediate models; usually cheaper though.• A good upgrade for advanced high school students is a professional model Holton or Conn 9D or 8D. The Conn 8D is a bigger horn and the industry standard for most American Hollywood ensembles and many symphony players.• Beginning students should be put on a Bach 7 mouthpiece. An upgrade from this would be personal preference on timbre, shape and material.• Conn 8D and Holton Farkas models. I recommend brass over nickel for sonority even though brass is more delicate.• DO NOT ignore the mouthpiece!!!!!! A quality horn is lost on an old, beat up mouthpiece. I recommend Farkas DC, MDC, or VDC
Problem Solving Tips	<ul style="list-style-type: none">• If air is not going through the Horn, a rotor could be out of place. Ensure no strings have slipped and unscrew the valve caps. There should be a "tik" mark on both the rotor and inner valve cap, if they are not aligned, remove the string, align the rotor with the tic mark and restring the horn.• An easy way to get the water out of all valve slides is to turn the horn with the keys facing downward; the water is now in the rotors; tilt the horn further so that the third valve slide is on the bottom; the water is now all in the third valve; remove both of the third valve slides, turn and empty. This should have been all the water in the slides.
Emergency Repairs	<ul style="list-style-type: none">• If a string seems to "break" it may have just slipped, ie. The loop around the rotor may have "unlooped". Try slipping it back over the rotor for a quick fix. Restringing is not something that can be done during a rehearsal. If a rotor seems stuck with no "easy" fix, unscrew the valve cap from the top of the rotor body and gently tap the bottom screw (the big one) with a rawhide mallet ONCE. One tap will loosen the top cap and allow more space to free up the rotor inside. If you tap too hard or more than once the top cap could fall off, just align the tiks and tap back into place. Also, if the rotor seems too loose, tap the top of the rotor body gently.





Trombone

Embouchure	<ul style="list-style-type: none"> Just keep the cheeks tucked in and let the air do the work. If having issues with the upper range, reduce the mouthpiece pressure and increase the air speed. If having issues with the lower range, open mouth wider and compensate with greater air quantities.
Posture/Instrument Position	<ul style="list-style-type: none"> Keeping the instrument close to vertical will help, though at a slight downwards tilt. The freer the air can flow the better. Keep back as straight as possible.
Hand Position	<ul style="list-style-type: none"> Three fingered grip with right hand, a common problem is gripping with a fist. For young students reaching the 6th & 7th position is problematic due to short arms, so using their foot to catch the slide is a common technique to remedy this. With the left hand, squeezing many become an issue- suggest placing pinky under the slide.
Breathing/Breath Support	<ul style="list-style-type: none"> Deep sonorous breathes using as much capacity as possible. Think like a “Darth Vader” in breath. No tension in stomach, but a natural flow of air.
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> Ear must be developed very early. Since the center of resonance and the center of pitch are identical, singing prior to playing is a good remedy.
Alternate Fingerings	<ul style="list-style-type: none"> Higher octave alternates depending on piece can be quite useful, i.e. D with 4th position rather than 1st. The problem is intonation gets a bit wonky in higher registers. In extreme upper range stick to 1st-3rd positions.
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none"> Since 6th position is taught much sooner than 5th, find 6th and snap wrist forward to first generate 5th. Use “Hot Cross Buns” starting in 1st position to firmly establish the intonation.
Other Specific Issues and/or tricks	<ul style="list-style-type: none"> Getting students to play forte should be encouraged before piano. Lack of sufficient air is the greatest obstacle to overcome, aside from a decent embouchure.
Quality Equipment Recommendations	<ul style="list-style-type: none"> Yamaha and Bach A Conn 88H Highly recommend a large bore horn in general.
Problem Solving Tips	<ul style="list-style-type: none"> If students are having trouble with lower ranges, have them play tuba for a few minutes then switch back to trombone. On the other hand, with the upper range, a trumpet will work wonders.
Emergency Repairs	<ul style="list-style-type: none"> Band-aids and tape work good for the spit valve and small cracks. A dented slide is a killer.



Percussion

Embouchure	N/A
Posture/Instrument Position	<ul style="list-style-type: none"> Should be just about where most people wear their belt—if height adjustable. If not (Marimba, timpani, etc), have student adjust using knees—particularly if it's a challenging section.
Hand Position	<ul style="list-style-type: none"> No pointer finger. Make sure to use middle, ring, and fourth finger for control.
Breathing/Breath Support	N/A
Intonation Tendencies & Corrections	<ul style="list-style-type: none"> Ensure that students do not get lazy and play either too close to timpani center or rim or over cords on mallet instruments.
Alternate Fingerings	N/A
Common Errors/Misconceptions in Pedagogy	<ul style="list-style-type: none"> Start reminding beginning snare students to play softly when on practice pads so they don't play hard on a snare. Push students to learn all instruments, don't let some get pigeon holed as the snare player or the mallet player.
Other Specific Issues and/or tricks	<ul style="list-style-type: none"> Roll base---every roll on a snare drum should have a steady rhythm based roll base—usually 16th note or sextuplet based depending on speed (slower speed means sextuplet base).
Quality Equipment Recommendations	<ul style="list-style-type: none"> Pearl/Adams, Yamaha, Ludwig/Musser are the big names. However, there are many quality smaller brands.
Problem Solving Tips	<ul style="list-style-type: none"> Make sure percussionists are always aware of their rhythms and are listening. They must look up. If there is a rhythm they are having trouble with, have them count it out loud. "If you can say it you can play it". Percussion can also mouth or even count rhythms to themselves while playing.
Emergency Repairs	<ul style="list-style-type: none"> For the most part, just getting it good enough to get through a performance is fairly easy. Many screws and bolts that get lost from frames or instruments can be replaced for a fraction of the cost from the manufacturer if you take one that you need to match to a hardware store. If a snare strainer or butt goes bad, tape can SOMETIMES be used if needed to keep snares on a drum to get through a performance at the last minute—make sure it is a tape that doesn't leave residue. Always make sure to check the sound of a repaired instrument from a distance to make sure it sounds good.

