

A Guide to Saxophone Pedagogy
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Tone Production

In order to produce a good tone on the saxophone there are several key components of which one must be aware:

Flat Chin:

The chin must be flat in order to achieve optimum control over the entire range of the instrument. A bunched chin will typically result in a pinched, unfocused sound, which will be difficult to control particularly in the extreme ranges of the instrument.

There are several ways to get the student to produce a flat chin. When doing this the teacher should focus primarily on the visual and kinesthetic modalities. Have a mirror! First, the teacher must give the student a kinesthetic action that will naturally produce a flat chin. One example is a “whistle embouchure.” Having the student whistle will automatically produce a flat chin. Look at it in the mirror, feel what your chin is doing, what muscles are you flexing etc...

Another way to produce a flat chin would be to have the student suck their thumb with the top teeth on the pad and the lower lip curling over their bottom teeth slightly. Most likely, this will be what the student naturally does, but you might need to point it out to them. Do this over and over again, setting the embouchure, and then *inhaling* the thumb into the mouth. Once the student can do that successfully multiple times, simply substitute the mouthpiece for the thumb.

- Be sure to have the student “inhale” the mouthpiece into the mouth so that they can instantly exhale and produce a tone without having to break embouchure to acquire air.

Having an “Oooh” shaped embouchure

It’s also very important that students maintain a relaxed lower jaw and avoid biting on the reed to keep it vibrating. Obviously, there will be pressure that must be added from the lower jaw but the real pressure should come from the lips. Encourage students to feel the muscles they use when they suck their thumb or whistle and use those same muscles when playing the saxophone.

Tongue in “EE” position:

Another important part of producing a focused tone on the saxophone is to have the tongue arched very high in the mouth. Once the student can produce a flat chin, can “inhale” the mouthpiece and produce a tone successfully, alter the inhalation. Have them inhale the mouthpiece while keeping their tongue arched high. Again, be sure to provide a physical action for them to do this. For example, you might ask them to hiss like a cat, or say the word “key” and feel the position of their tongue before inhaling.

- A flat tongue will typically produce a very spread, bright, and unfocused tone. This is extremely audible on middle register “E,” “G (on top of the staff),” as well as in the upper register.

Most important of tone production is that the student needs to have a concept of what a good tone sounds like! Demonstrate a good tone, mark features of what a good tone sounds like and have the student imitate. Playing recordings of saxophonists can also be beneficial.

Legato Articulation and Initial Attack

Legato articulation and initial attacks are necessary techniques to master when playing the saxophone. Legato articulation is both a concept and a skill and consequently, must be addressed in both ways.

Concept

Demonstrate and mark features for the student so that they can determine what good legato articulation sounds like. Begin by demonstrating on just one note saying “notice how light my tongue is and how little separation there is between notes.” The point here is for the student to have a concrete mental image of what legato articulation needs to sound like. Having this secure foundation will allow them to know what it is they are attempting to do.

Skill

Legato articulation is typically easier to do at a faster tempo so start the student out at a relatively quick tempo. The key components that are involved in articulation are; air, tongue speed, tongue pressure. In this case, the air needs to be consistent, simply just a long tone and then the tongue simply bounces off the air stream. Remember that the tongue is still in “EE” position and the top of the tongue is touching the tip of the reed.

It can be helpful to simplify this complex skill by having the student articulate using toneless wind. This can be of great use if there is a percussive sound in the articulation. Ideally, when using toneless wind, the articulation should barely be audible. This allows us to know that the tongue is applying very little pressure on the reed.

Initial Attack

Initial attack is really a complex form of legato articulation. Have the student do some legato articulations and then have them freeze with their tongue in the same position, applying the same pressure, then have them release it. Essentially, the key here is that the tongue functions simply as a damper.

A wonderful acronym to use here is FETA:

Fingers down on the note you are about to articulate

Embouchure formed and tight

Tongue is acting as a damper on the reed

Air is behind the tongue

All that is necessary is the release of the tongue.

Staccato Articulation

The concept of staccato articulation is broken into two different techniques. Again, it is typically easier to do this at a faster tempo. Start by having the student perform legato articulation and then simply instruct them to have the tongue return to the reed quicker. They can keep the same airflow and simply have the tongue return to the reed faster. This way there is not a whole lot of new stuff for them to think about. The feeling should still be the same as legato articulation (very light tongue). A good technique would be to go four legato notes, and then four staccato notes.

Slower Staccato is usually a little more difficult because it requires the player to vary their air stream. Essentially, when doing slower staccato articulation, you are producing “puffs” of air. A good way to simplify this would be to start with initial attacks and gradually increase the speed of the attacks until you have a staccato articulation.

Posture and Breathing

It is incredibly important for a young saxophonist to have the correct posture and to breathe well. Correct posture is simply standing upright, relaxed with the horn coming up to the student’s mouth. The student should not adjust for the horn! A good way to check for posture is to have the student stand up and perform the windmill exercise where they simply raise their arms over their head. It is impossible not to be standing upright when doing this exercise.

Breathing is both a concept and a skill that must be demonstrated by the teacher. Mark features such as “watch my gut when I inhale” so that the student understands what is happening. Practice in front of a mirror! The student needs to see that their shoulders don’t rise and that their lower stomach expands. A good way to do this is to have the student lie down on the floor. Once on the floor, the student can put their hand on their stomach and breathe, feeling their stomach expand. Keep the same feeling as they stand up and do it.

Octave Flicks

Octave flicks are essentially a check pattern for students to make sure that they are exercising the correct control over the instrument. The point is so that they see they don’t need to do anything to bring the horn up the octave. They should let the horn do all the work for them. Start on a middle register C and tap the octave key, it should simply pop up and then return. Some causes for it not doing exactly that would be too much or too little mouthpiece, too much pressure on the reed, “voicing” too high and keeping the upper octave sounding without the octave key. Do the fingerings for the students so that they don’t know when you’re going to switch. Show them that there is no need to change anything to switch octaves.

Rhythm

Teaching rhythm is a difficult thing as it is both a complex concept as well as a complex skill. The basic technique used to count rhythm is subdivision. It is imperative that your students understand subdivision, what it is, and how to use it. The worksheet “subdivision prelims” can help with this.

Subdivision Prelims

This worksheet allows students to visually see the division of the beat and how it breaks down into smaller “subdivisions.” Have the students start at the bottom speaking and clapping sixteenth notes. Tell them they are going to speak sixteenth notes (1 e & a etc...) for the entire exercise. While they speak sixteenths, have them clap eighths, quarters, halves, and whole notes. This will help them to kinesthetically feel what subdivisions sound like by speaking the sixteenth notes. The goal of this worksheet is for the student to understand how subdivisions work and how each beat can be broken down.

Rhythm Worksheet

This worksheet uses what was learned in the prelims worksheet in a more real context. It consists of three staves. One has a melody, one has a string of constant sixteenth notes, and the last one simply has quarter notes. The goal here is for students to see how the melody relates to the subdivisions.

The students should tie sixteenth notes together in order to produce the same rhythm as the melody in the top staff. For example, two eighth notes would mean that you tie two sixteenth notes together, and then tie another two together. The goal then is to do exactly what we did on the prelims worksheet, which is to clap the rhythm and speak sixteenths. This should be relatively easy since the students have done something very similar in a previous exercise.

Once they can do this successfully the student cognitively understands how rhythm is broken down into groups. They now understand the concept of rhythm. However, in order for them to master the skill of interpreting rhythm, they need to begin to internalize the rhythms and in order to do that they can't constantly be saying to themselves “1 e & a, 2 e & a” because it will simply not be fast enough.

In order for the student to make the full transition to internalizing rhythm, have the student switch speaking and clapping. Students should speak the rhythm while clapping sixteenths. Add levels of complexity by then having them clap eighth notes, then quarter notes, then half notes, and finally whole notes. You can keep going by having them speak the rhythm without clapping anything but doing it with a metronome instead, and finally start the metronome, turn it off and then check the tempo at the end to make sure that they have kept a steady tempo. This process will help with the student's internalizing of rhythm and show them that while they are still subdividing and being accurate, they don't need to be consciously thinking “1 e & a” the whole time.

Dynamics

Dynamics on the saxophone are produced by the speed of the air stream being put through the instrument. A faster air stream will produce a louder dynamic while a slower air stream will produce a softer dynamic.

Approach dynamics by going from the *known to the unknown*. You can do this by using sighs. Provide students with an affective quality and have them sigh in that way. For example, you could say something like “sigh as though you are very frustrated and fed up with someone.” What will result is the dynamic level of a forte. You can gradually get softer and softer but always thinking of a sigh so as not to close the throat off.

If the student is not producing dynamics properly, check their reed position, as it might be too high or too low.

Another important facet of dynamics is that the inhalation needs to match the exhalation. If you’re going to play a forte make sure that you inhale in the same manner that you intend to exhale.

Pitch Bending and Intonation

Intonation is a concept that students must understand if they are going to bend pitches effectively. Some ways to demonstrate the concept of intonation are the following:

- Simply demonstrate playing in tune, sharp and flat. Mark features for each of these sounds. What does playing sharp sound like, what does flat sound like. Have the student identify some of the characteristics of each of these.
- Have student play against a drone pitch and identify whether they themselves are sharp or flat using the same characteristics that they applied to the teachers playing
- Pull the mouthpiece all the way out and slowly push in until the student identifies it as in tune
- Push the mouthpiece all the way in and slowly pull out until the student identifies it as in tune.

Essentially all these techniques are doing is encouraging students to hear pitch in relation to another pitch and identify whether one is higher or lower than the other.

Once students can hear that they are not in tune they will need to find ways to be in tune by moving pitch. The next step in the process is to provide them with techniques that they can use for changing pitch and manipulating their instrument so that it is more in tune. There are three ways to do this.

Jaw movement to manipulate pitch

Have the students use more of an “oo” shaped embouchure. If they can draw the lips into a tighter “ooo,” their jaw will drop thereby lowering the pitch. Smiling slightly will tighten the jaw and raise the pitch. The following are some necessary things that must be in place in order for the student to bend pitch using the jaw.

- Tongue must be in “ee” position—otherwise you will hear a “honking” sound and the pitch will tend to drop the octave

- Lips must be strong enough to sustain the pressure on the reed—otherwise you will end up getting toneless wind.
- Adequate air stream—think of a crescendo as the pitch is being lowered.

Kinesthetic Awareness of jaw motion

It is important when teaching this to make students aware of the proper motion of their jaw.

- When the jaw drops down the movement is also somewhat inward
- Try bending over at 90 degrees so that tongue and jaw will be relaxed
- Lean back in a chair and open and close jaw
- Tongue on roof of mouth guides the jaw into its proper gliding motion—put hands on jaw bone to feel the correct motion

Internal Movement to manipulate pitch

These “internal pitch bends” can be done in two ways. The tongue can either produce an “eee—aaa” motion in which the tongue moves slightly back in the mouth (more common), or an “eeee—eeeeeee” motion where the tongue moves farther forward. It is easier to bend pitch in the upper register.

In order to produce these:

- Tongue must be arched in the mouth
- Soft palate must be high. Touch the soft palate to raise it, or you can also yawn. Look in the mirror to gain control over the soft palate.

Mechanical Adjustments

Uncover or cover a tone hole close to the last closed tone hole in the normal fingering will give you a substantial change in pitch.

In order to master intonation it is necessary for students to practice these skills using scales, melodies and intervals. All of these must be practiced against a drone pitch in order to tune *relative to another pitch*. These will help students develop relative pitch.

Alternate Fingerings

There are alternate fingerings for three notes—Bb, C, and F#. Show what they are and explain when you might use them.

Provide examples in music—use attached etudes for examples.

Vibrato

What is it?—A slight bending of the pitch. Start in tune, flatten and then return to the original pitch

Why use it?—to imitate the human voice, make the tone more interesting, imitation of a style and tradition.

When to use it?—notes that are important in the phrase that you want to *highlight* you can use vibrato

Alterations to Vibrato

You can alter the amplitude of the vibrato and make it wider or narrower depending on the range of the instrument that you are playing in as well as the intensity of the music you are playing.

The lower in the range you are, the wider the amplitude of the vibrato will be. As you get higher the vibrato needs to become narrower.

You can also alter the speed of the vibrato making it faster or slower depending on the music that you are playing. A good general speed for saxophone vibrato is quintuplets at quarter note = 60. The point of having quintuplets is so that it is not easily subdivided. Having vibrato that clearly fits into the rhythm or tempo of the music is an extremely unattractive sound.

A few more things about vibrato

- Treat it is an ornament first—something that you really want to emphasize
- Treat it as a more organic part of the sound
- Emphasize an entire line—continuous vibrato
- All relative to the music you are playing—stylistic tradition and we need to be flexible enough to always play in the appropriate style.

Model artistry for the student in any piece of music they are working on. Always demonstrate the correct usage of vibrato.

Altissimo Register

The student should be able to produce successful internal pitch bends before attempting to play in the altissimo register. The tongue position plays a very important role when playing in the altissimo. It must be flexible enough to manipulate the pitch and the best way to develop flexibility is by doing internal pitch bends. The tongue is involved not only in changing the instrument sufficiently to get a higher overtone, but also in fine tuning that higher overtone.

Simplify it!

Have the students sing the note they are trying to produce in their falsetto voice. Then, once they are able to play the note attempt pitch bends on it so that they can tune the note to where it should be. This will be particularly effective in doing major sixth leaps from Eb to C, E to C# etc...

Common problems with altissimo

Usually students will have one of two problems with altissimo. They will either produce very high altissimo easily, or they will produce low altissimo very easily.

If your student can easily produce the upper altissimo notes they usually need more flexibility in order to play lower.

- Ask them to do a pitch bend down a half step, and then change the fingering to the note lower.

This process simplifies and goes gradually.

If your student can easily produce the lower altissimo notes but has trouble playing higher, is usually an embouchure issue.

- Have your student thin out the lower lip until they can play all the higher notes and then gradually add more lip cushion.

Altissimo without a high F# key

Students will usually either overshoot, or close the throat and honk

Start with pitch bends on a D—up chromatically go to Front F as you slide up change fingers. Sometimes it is helpful for the teacher to do the fingerings for the student.

The tongue needs to be in “ee” position for these to work or the student will most likely pop up into a very high overtone.

Extended Techniques

There are several extended techniques that can be performed on the saxophone. Below is a list and different strategies that can help students learn them.

Flutter tongue—tongue flutters against the hard palate.

Ultimately, what is important when flutter tonguing is that some part of the oral cavity vibrates. There are two fairly simple ways in which you can do this.

Firstly, simply rolling your R's while the mouthpiece is in your mouth will cause the necessary vibration. The tongue has to be relatively far back in the mouth in order to produce the roll without bumping into the mouthpiece.

Secondly, the tongue can vibrate against the uvula. This is usually referred to as the “purr.” Have the student try this technique at 90 degrees.

Slap Tongue—tongue creates a seal between the reed and the mouthpiece and then slaps down, producing a percussive effect.

This technique can often be difficult for students to master so begin by simplifying it.

- Start with the mouth open and create a seal with your tongue—kind of like a mini-slap
- Form the embouchure and produce the same tongue motion with the mouth closed.
- The tongue will probably be hitting underneath the reed, enveloping it and then releasing the pressure very quickly.
- Add the resonance of the keys by fingering a lower pitch such as Bb
- Add a little bit of air in order to get even more resonance.

Be sure that students can articulate correctly before attempting to teach slap tongue as this is precisely the motion that we do not want our students to have when doing legato articulation.

Multiphonics—multiphonics can be both very easy to produce but there are others that can be very difficult. Some etudes that incorporate relatively simple multiphonics are Paradigms 1 and 2 by Ronald Caravan.

Some things to keep in mind when playing multiphonics:

- They are still musical gestures and should still be played in a musical way. Practice voicing the multiphonics in such a way so that the melodic line is preserved
- Isolate each pitch using voicing. This will help develop control over the multiphonic.

A book with several multiphonic fingerings is entitled *Les Sons Multiples* by Daniel Kientzy. This can be extremely helpful when choosing pieces for students.

Double tonguing—Double tonguing is a technique that is often used in contemporary repertoire. It is important for the student to master. Again, this is a technique that should be simplified!

- Start by having the student practice saying Dee Gee Dee Gee at a comfortable relaxed tempo. The tongue should always stay relaxed during this process.
- Have them continue to do this until they can do it at a faster tempo while still keeping the tongue relaxed.

- Attempt to put this onto the instrument keeping the air moving. It might be helpful to also attempt this at 90 degrees in order to further relax the tongue.

Once the student can successfully produce this on a single pitch, add scales in many five note and nine note groupings. It can also be helpful to try eighth notes followed by sixteenth notes.

Circular Breathing—Circular breathing is a technique that can be used when there is simply no time for the performer to inhale.

Again, this technique should be simplified into the following steps.

- Puff the cheeks with air. Feel the position of the tongue—it will have to be arched against the hard palate.
- While keeping the cheeks puffed inhale and exhale through the nose. Notice that the tongue is still arched against the hard palate.
- Use your fingers to force the air out of the cheeks as you inhale through the nose. Do this several times to understand the feeling.
- Try not using the fingers and instead use the cheek muscles and tongue to force the air out as you inhale. Practice this until it feels natural.
- Immediately switch to exhaling from the lungs once your supply of air in the cheeks has run out.

This technique should be practiced on descending scales. Be sure that the tone color and pitch stay consistent and that the chin remains flat.

Jazz Style

Jazz technique differs from classical technique in many distinct ways.

Embouchure—the embouchure for a jazz player is formed in such a way as to bring out as many high overtones in the sound as possible. In order to do this the embouchure will typically consist of a lip that has been spilled out significantly and will also have more of the reed in the mouth.

Articulation—the articulation used in jazz is typically much heavier than the articulations that are used in classical music. The tongue will typically strike the reed harder creating a little more of an accent on each note. In addition to this difference there is also a technique often used in jazz articulation that is referred to as “damp tongue” in which the tongue returns to the reed as a means of dampening the vibrations but not stopping the sound entirely. It produces a somewhat muted sound. A great way to practice this is to do descending scales in thirds and “ghost” or “dampen” the lower note.

Rhythm and Phrasing—the rhythm most common to the jazz style is the swing rhythm. Essentially the swing rhythm is basically straight eighth notes with a slight accent on the off-beats. Practice playing eighth notes on a middle register C and accenting the second and fourth eighth notes. This will help develop swing style at a faster tempo.

Both rhythm and phrasing are best taught by imitation. The young jazz player should be constantly listening to recordings of great players in order to have a strong mental concept of what rhythm and phrasing should sound like. Below is a partial list of recommended players for young listeners:

Cannonball Adderley
Charlie Parker
Coleman Hawkins
Dexter Gordon
Sonny Stitt
Lester Young
Paul Desmond