

Saxophone Pedagogy Booster Shot *NCMEA 2011*

TONE

The saxophone is easy to play – poorly. Tone quality, low register response, high register intonation, and playing too loudly are easily the most common problems. Thankfully, all of these issues may have a common cause (or two... or three).

EMBOUCHURE FORMATION

The first step is to check the embouchure. There are many ways to describe a proper saxophone embouchure to a student. Eugene Rousseau has condensed embouchure formation instructions into six simple steps¹:

1. Curl lower lip slightly over teeth.
2. Keep chin in a natural position.
3. Form an “oo” shape (as in saying coo) with the mouth and lips.
4. Form a circular shape with the mouth (the lower lip *should* appear somewhat bunched).
[Notice Rousseau says bunched *lip*, not *chin* -- SK]
5. Place mouthpiece alone in the mouth, with top teeth resting solidly on the top of the mouthpiece.
6. The round, “oo” shape should now give solid support all around the mouthpiece.

Here are two other ways to visualize a saxophone embouchure:

1. Have the students pretend they are trying to drink a thick milkshake through a straw. To prevent the straw from collapsing they must provide equal pressure from all sides. Biting up means no ice cream.
2. Have the students pretend they are trying to cool a piece of 300° baked potato inside their mouth.

FOCUSING THE AIR

Once the embouchure is set the student should be able to play from low Bb to high F without changing it. The tongue position, however, will change as it focuses the airstream through the various registers of the saxophone’s range. Lower register notes require a lower, more open tongue position (think the vowel sound *oh* as in Ohio). Higher notes a more arched tongue position (think *ih* as in hit). Altissimo notes will require an *ee* vowel sound (think *heel*).

¹ Rousseau, Eugene. *Saxophone High Tones*, MMB, 2002,

A good starting place for focusing the airstream is to play the mouthpiece/reed without the rest of the saxophone. If the embouchure is correct and the tongue is focused correctly the various sized saxophone mouthpieces should play the following concert pitches: alto mouthpiece – A; tenor mouthpiece – G; baritone mouthpiece – E; soprano mouthpiece – C. If the saxophonist is playing a lower pitch, they should aim their airstream up higher, toward the tip opening. If the pitch is too high, they should aim the air below the reed. (This one is a little tricky as they may also be biting too tightly.)

Ideally, these techniques and ideas should result in a beautiful, warm tone quality. Should. However, none of these techniques will work if the reed is too hard.

REED STRENGTH

The reed plays a huge role in the formation of a proper embouchure. Occasionally Too often, a young player will choose a stiff reed believing that it will create a better tone (warmer, darker, louder?). A harder reed has the *potential* to provide these sounds, but the player must *first* have a strong, well-developed embouchure to be able to control the firmer reed.

If the embouchure muscles are not strong enough, playing on a reed that is too stiff will force the player to bite up with the lower teeth. This extra pressure will dampen the reed’s ability to vibrate, as well as reduce the tip opening between the reed and mouthpiece. The effects of playing with too much lower teeth pressure include: muffled tone, difficulty slurring descending intervals, poor or delayed response in the lower register, sluggish articulation speeds, and very sharp intonation in the upper register (high A and up). Finally, biting will cause pain, and as pain increases, practice time decreases.

A reed that is too soft ought to be quite playable, but will require a modified airstream. The student will need to use an airstream that is slower and warmer; otherwise the tone will be thin and bright, especially when the student plays loudly. Intonation will usually be flat with a soft reed. A very soft reed may even tend to “clam up” against the mouthpiece during loud passages.

DIAGNOSING REED STRENGTH PROBLEMS

Determining the best reed strength for the student should be fairly easy. Have the student try Rousseau’s six steps and watch the student’s chin *when they start to play*. The chin shape should appear “flat” as opposed to “bunched” (like a walnut shell). If the student cannot keep the chin from bunching up the reed is too hard for the embouchure strength. If the chin stays in position but the tone is very bright and thin the reed may be too soft.

Mouthpiece tip opening size is an important factor in selecting the right reed strength. I have found a medium-tip “classical” mouthpiece such as the Selmer C* works well with medium-strength reeds such as a Vandoren #2.5 or 3. Larger tip openings will require a softer reed; smaller tip openings a harder reed.

There is no one magic reed size that will work for all players. Furthermore, reed companies have yet to create a standardized measuring system for all reeds. The chart below² shows how various reed brands/strengths compare to each other.

Brand	Strength																	
	Softer										Harder							
Rico Reserve						2		2.5		3		3.5		4		4.5		
Rico		1.5		2	2.5		3		3.5		4							
Grand Concert Select								2.5		3		3.5		4		4.5		5
Vandoren		1		1.5		2		2.5		3		3.5		4		4.5		5
Rico Select Jazz			2S		2M		2H	3S	3M		3H		4S		4M		4H	
Vandoren V16			1.5		2		2.5		3		3.5		4				5	
Java		1.5		2		2.5		3		3.5		4						
ZZ		1.5		2		2.5		3		3.5		4						
Frederick L. Hemke					2		2.5		3		3.5		4					
Plasticover	1	1.5		2	2.5		3		3.5		4		5					
La Voz				S	MS		M		MH				H					
Rico Royal	1	1.5		2	2.5		3		3.5		4		5					

TECHNIQUE

The most important step for saxophonists who want to improve their technique is to reduce all tension and pressure – that is, the muscle tension in the fingers, hands, wrists and forearms, and the pressure on the saxophone keys. Of course, before this can happen the saxophone must be completely leak-free.

If a saxophone pad is leaking there will be a response issue somewhere. Period. Unfortunately, the most common quick-fix for leaks is to squeeze the keys. If a note doesn't respond a saxophonist will usually squeeze tighter until the note plays. This becomes a conditioned response and eventually a way of life. The negative outcomes of playing with too much finger pressure include a slow, heavy technique, noisy pad slapping sounds, and, if carried to extreme, tendonitis in the fingers and wrists. The pressure on the keys can also result in more frequent trips to the repair shop.

Once the instrument is leak-free, have the students try to play very simple passages with the least possible amount of finger pressure. They should also keep the fingertips right on the keys. They will need to play very slowly at first, focusing their minds on their fingers and nothing else. Trills make a great beginning "light-touch" exercise. From simple trills the student can move to short, partial scales, then full octave or two-octave scales. Developing a feather-touch on saxophone is a difficult project, but well worth the effort.

² Reed chart from: <http://www.saxplus.com/reed-strength-chart.html>. Accessed on 11/6/2011