Saxophone Core Concepts
A Guide for Teachers of Young Saxophonists

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Instrument Assembly

- Neckstrap on
- Start the reed soaking *prior* to instrument assembly
    - Soaking in fresh water is ideal, but it can be soaked in the mouth as well
    - Soak the entire reed, not just the tip
    - In dry climates (West Texas!) the reed will need to soak for a longer time
- Twist mouthpiece on neck, being careful with the top octave key lever. A quality cork grease will help provide a seamless seal and will prevent the cork from tearing.
- Place ligature on mouthpiece - note that the ligature screws will always face to the RIGHT when looking straight on.
- Slide the blunt end of the soaked reed between the mouthpiece and ligature. The reed tip should align with the mouthpiece tip when viewed at eye level.
- Insert the neck into the body, being sure to align the seam of the neck with the octave key post.
- Discourage students from picking up the saxophone by the bell

Instrument Accessories

Case, End Plug, Mouthpiece Cap, Ligature, Reed Case, Neckstrap, Cork Grease, Pull-Through Swab

Posture

A beautiful tone begins with beautiful posture! Proper posture allows for efficient breathing, relaxed technique, improved endurance, injury prevention, and comfort while playing.

- Imagine a string attached to the top of your head, being pulled upward. This creates an upright, but not stiff, posture. The body should feel relaxed and balanced. The hands are lifted to the instrument as if by puppet strings - the arms are loose and relaxed.
- The tipmost joint of the right thumb is positioned in the thumbrest; however, the neckstrap supports the weight of the instrument.
- Push the right hand forward so that the bell of the saxophone approaches the knee.
- On the Side or In the Middle?

- The mouthpiece can be rotated, the neck turned a few degrees, and the neckstrap length adjusted in order to find a comfortable position to play. Remember that the saxophone is brought to the mouth, never the other way around.

Embouchure

Tongue
The tongue should be positioned high at the back and low towards the front (French "eu"). The tongue allows the saxophonist to shape the oral cavity (often referred to as "voicing") to direct air into the mouthpiece and adjust timbre and pitch.

Teeth
The top teeth should be placed firmly on the top of the mouthpiece, providing an anchor for the instrument, while the bottom teeth are slightly covered by the lower lip. Upper and lower teeth should be aligned.

Lips
The lips should be drawn inward from all sides toward the mouthpiece. The lower lip should be wrinkled to form a thick cushion against which the reed will vibrate. Focus on bringing in the corners as if saying "ooh". In classical playing, the lower lip generally covers the bottom teeth (think about saying the letter "V" – the color change in the lip should be visible while playing) while in jazz playing, the lower lip often covers to a lesser degree.

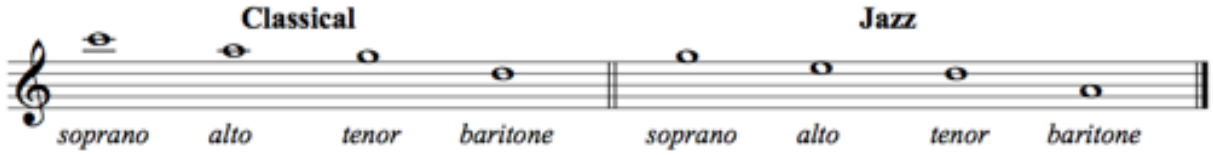
Jaw
The jaw assists in aligning the upper and lower teeth as well as producing a vibrato. Young saxophonists with underdeveloped facial muscles will tend to favor the jaw rather than the strength of the lower lip. This will result in a thin, buzzy, or muffled tone and a painful lower lip. The chin should be relaxed and flat – be on the lookout for the bunched chin. A bunched chin can often indicate that the student is playing on a reed that is too hard for their current stage of development.

Throat
The throat muscles should be relaxed and open, allowing breathing to occur naturally and unobstructed. Think about the sensation of yawning to feel the walls of the throat open and relax.

Air
The air should be fast, cool, and focused as if pointed toward a target beyond the instrument. The air is what creates and supports the tone and is reliant on the success of the preceding five elements. The core of nearly every issue the young saxophonist will face

is a lack of adequate air support. Make this a thoughtful part of the playing process and encourage students to play with a strong airstream from day 1.

A correctly formed embouchure with appropriate lower jaw pressure and air support should produce the following concert pitches on the mouthpiece alone:



Octave slurs are a great way to test for proper embouchure pressure. They should be produced effortlessly and immediately without any movement of the jaw.

Mouthpiece Placement

The top teeth and lower lip should be positioned on the mouthpiece at the point where the reed and mouthpiece first make contact. This point serves as a natural fulcrum for the vibrating reed and this placement of teeth and lower lip will allow for optimal vibration for a full, warm sound.

Too Much Mouthpiece
This causes the reed to pull away from the flat table of the mouthpiece and results in a sound that is loud, spread, and difficult to control. Too much mouthpiece in the mouth can also create difficulties in achieving a light articulation. If a student is struggling with squeaks, squawks, or an unwieldy sound, check to make sure that they do not have too much mouthpiece in the mouth.

Too Little Mouthpiece
This does not allow the reed to vibrate to its full potential; the tip of the reed closes toward the mouthpiece and vibrates with too much force, creating a thin, quiet sound without projection. If the student is using too much jaw pressure, the reed may not respond at all.

When switching students to soprano, tenor, or baritone saxophones for the first time, assist them in finding the optimal position and the appropriate mouthpiece pitch to avoid the issues listed above.

Articulation

Introducing articulation to the young saxophonist often introduces an entirely new set of issues to overcome. Although we often think of the tongue as the prime variable in articulation, keep in mind that so-called "tonguing" is 95% air and 5% tongue. The student must, therefore, have already established the concept of a fast, controlled, strong airstream before the tongue is introduced.

Some things to keep in mind:

- The tip of the reed should contact just behind the tip of the tongue
- The tip of the tongue vs. the "fingernail" of the tongue
- Tongue pressure should always be light – 2 taste buds
- Keep the air stream strong at all times, allowing the tongue to lightly interrupt the vibration of the reed
- The tongue should always move quickly and never linger
- Students must practice articulating in all registers of their instrument, thus controlling the voicing and articulation independent of each other

Vibrato

Saxophone vibrato is initiated by the jaw and lip muscles (macro-micro) and not with the diaphragm or airstream.

- Before attempting on the saxophone, have students say the word "vah" in time
- Vibrato should flow around the center of the pitch, pulsing slightly above and slightly below with the air moving forward
- Tunable app for iPhone and Android
- Begin with a metered vibrato on quarters, eighths, triplets, and sixteenth notes
- Encourage students to use a wide vibrato in the beginning – students often feel that they are using an adequate vibrato, but it is not wide enough to project and is interpreted as a shaky sound or airstream.

Voicing

Voicing is awareness and control of the shape of the oral cavity which is formed by the lips, soft palette, and the tongue. Each note on the saxophone has its own unique feel and each note must be voiced correctly to ensure optimal resonance and intonation. The middle of the tongue functions similarly to an airplane wing flap, directing the airstream up and down to manipulate the pitch of a note.

Mouthpiece Flexibility

Once the appropriate "home base" mouthpiece pitch is established, it should be possible to play a descending Remington exercise on the mouthpiece alone. Do not rely on alterations

of embouchure pressure - rather, use the tongue to change the direction of airflow. As you advance, extend your mouthpiece practice to include scales and simple melodies.

Front F Trick
Finger front F and, by altering the tongue position, bend the pitch down by progressive half-steps in a Remington style. Practice changing notes in both a quick and gradual fashion.

Half Step Exercise
Finger the note a half-step above a drone pitch and then lower the pitch into tune by manipulating the tongue, without changing fingerings. After this is mastered, the interval should be widened.

Siren Exercise
Beginning on palm D, bend the pitch down as far as you can without breaking the tone before returning to the starting pitch. On the ascent back, change fingerings to the next chromatic note to create a siren effect.

The Overtone Series
It is possible to produce a full overtone spectrum using the fundamental low Bb fingering through subtle adjustments in the position and arch of the tongue and the air column.

Overtone Matching
Alternate between the regular fingering and the fundamental fingering, striving to match the tone quality of the overtone and regularly fingered note.

Overtone Scales

Technique

After tone and control, the development of technical facility on the saxophone is perhaps the most important element faced by the young saxophonist.

- Hand position is of utmost importance in achieving a fast, fluid technique. Although saxophones do not have open holes, teachers must be as picky about saxophone finger position as they are with other woodwinds. Watch for flailing fingers and pinkies.
- When working on technique, accuracy is always more important than speed. Speed will come with time – inaccuracy forms bad habits that take years to undo.
- Avoid cross fingerings if possible – no flipping fingers.

- Students must feel each note under their fingers as they pass through it. Imagine that every note is a landing strip and we must land our fingers perfectly for each one.

Chromatic Fingerings

Know the rules about when to use chromatic fingerings and when to use regular fingerings. Preach these to your students and have them mark the fingerings in their music before they play a note. Below are the rules for the chromatic fingerings and the markings that I personally use to designate and differentiate in my music.

Note	Marking	When to use
Side / Chromatic C	S	Chromatic Scale. Use when there is a half-step on both sides of the C.
Middle Finger / Regular C	X	Most scalar passages. This is the most commonly used fingering.
Bis Bb / A#	∅	Flat keys. Avoid sliding from Bis Bb to B-natural. This is a common bad habit.
Side / Chromatic Bb / A#	S	Chromatic Scale. Use when there is a half-step on at least one side of the note. Use in F# and B major scales.
Middle Finger / Regular F#	X	Most scalar passages. This is the most commonly used fingering.
Fork / Chromatic F#	Ψ	Chromatic scale and chromatic passages. Db and F# major scales. Must avoid when adjacent to D or Eb

Alternate Fingerings

Below are a few of the commonly used alternate fingerings to aid with some of the intonation problem areas on the saxophone. Although they are useful, they do not provide a real solution to chronic intonation issues. In general, have students open a key if they are flat and close a key if they are sharp. Experiment to find solutions other than the ones suggested here.

Common Saxophone Alternate Fingerings

Note	Tendency	Alternate Fingering
Low Bb	Sharp	Use a donut or moleskin in the bell to offer a permanent fix.
Low D	Flat	Add low C# key
Low D# / Eb	Flat	If playing in the middle, move the saxophone away from the body
Low A	Flat	Add G# key
Middle B	Flat	Add side Bb key
Middle C	Flat	Add side Bb key
Middle C#	Flat	Add third finger and octave key (covered C#) or add side C key
Middle D	Sharp	Add low B key or use palm key 2 by itself as the fingering
Middle D# / Eb	Sharp	If playing in the middle, bring the saxophone toward the body
Middle E	Sharp	Add low B or low C key
High A	Sharp	Add sixth finger
High C	Sharp	Add right hand
High C#	Sharp	Add right hand
High D	Sharp	Add right hand
High D# / Eb	Sharp	Subtract first palm key
High E	Sharp	Subtract first palm key
High F	Sharp	Subtract first palm key or subtract right hand side key

Exercises for Technical Development

Scales

Students today are often in search of some kind of shortcut or "hack" for achieving success. Scales are the cheat code!

- Level 1 – Tetrachords (slurred and tongued)
- Level 2 – Texas All-State Scale patterns (1 and 2 octave)
- Level 3 – Continuous eighth-notes to the 9th and back (1 and 2 octave)
- Level 4 – High and Low caps (high B – F and low F – B)
- Level 5 – Full Range Scales

Chromatic Scale

Students must be comfortable with their full-range chromatic scale from low Bb to high F or F#.

- Level 1 – Chromatic Stair Steps – Jaws Exercise
- Level 2 – 5 note patterns
- Level 3 – 1 octave from each starting note
- Level 4 – Full range

Arpeggios

Major, Minor, Dominant 7th, Diminished 7th

- Level 1 – 1 and 2 octave
- Level 2 – Full range

Equipment

Saxophones

Selmer and Yamaha are the industry standards

- Beginner: Yamaha YAS-26
- Intermediate: Selmer SAS280 La Voix II, Selmer AS42, Yamaha YAS-475/480
- Professional: Selmer Paris SA80 Series II/III or AXOS, Yamaha Custom EX II or Z

Mouthpieces

Classical

- Selmer S80 (C*) or S90 (180 or 190)
- Vandoren Optimum (AL3)
- D'Addario Reserve (155) – favors a slightly softer reed

Jazz

- D'Addario Jazz Select Mouthpiece (D5M or D6M)
- Meyer Hard Rubber (5M or 6M)
- Vandoren V16 Hard Rubber (A5 or A6 / T7 or T8)

Otto Link Metal – tenor only

Reeds

D'Addario Reserve (3.0 / 3.0+ / 3.5)
Vandoren Traditional, V12, V21 (3.0 or 3.5)
D'Addario Venn (Synthetic)
Legere Signature Series (Synthetic)

Reed strength has nothing to do with skill level or experience, rather it has to do with balance of embouchure, air, and mouthpiece.

A reed that is too hard will sound fuzzy. A reed that is too soft will sound buzzy.

Saxophone Recommended Listening

Classical

Jan Berry Baker

Arno Bornkamp

Christopher Creviston

Vincent David

Claude Delangle

Sue Fancher

Connie Frigo

Frederick Hemke

Carrie Koffman

Masato Kumoi

Jackie Lamar

Joseph Lulloff

Timothy McAllister

Otis Murphy

Stephen Page

Debra Richtmeyer

Sarah Roberts

Nicki Roman

Eugene Rousseau

Idit Shner

Donald Sinta

Nobuya Sugawa

Rhonda Taylor

Kenneth Tse

Anna-Marie Wytko

Jazz

Mindi Abair

Cannonball Adderley

Melissa Aldana

Patrick Bartley

Michael Brecker

John Coltrane

Paul Desmond

Lou Donaldson

Candy Dulfer

Tia Fuller

Kenny Garrett

Stan Getz

Joe Henderson

Vincent Herring

Grace Kelly

Hank Mobley

Charlie Parker

Art Pepper

Chris Potter

Joshua Redman

Sonny Rollins

Wayne Shorter

Sonny Stitt

Alexa Tarantino

Phil Woods