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20 Years Ago in Bandworld Tuba Embou-Sure by Stuart Turner

INTRODUCTION

The concept of EMBOU-SURE has been utilized with outstanding success on students of all levels. It is by no means an experimental technique, but rather one which incorporates descriptive terminology as a means of clearly stating the goals, problems, and solutions involved in learning to play the tuba. It is a method which will work equally well for the tuba teacher who is also a tuba player and the non-tuba-playing music teacher.

It had occurred to me, as I am sure it has to many teachers, that specialists in any area have only three advantages over the rest of us:

- 1. Visual expertise in detecting incorrect tone concepts.
- 2. Auditory expertise in detecting incorrect tone concepts.
- 3. Verbal expertise in correcting embouchure formation and tone-concept problems.

So, if we can see, hear, and say EXACTLY the right things, there is no reason that we can't also be experts in teaching, altering, and refining embouchure and tone. That is, in short, the very intent and purpose of EMBOU-SURE.

And, there's no magic in all of that either. Simple, very explicit comments during initial stages of development almost guarantee immediate success. Having applied the methods detailed in this article to the instruction of beginners of all ages (including some as young as six years), I've been really amazed by the instant effectiveness of these concepts. It's very exciting and it's the reason I decided to join in the development of this series

EMBOU-SURE is formulated on the concept that the prospective instructor has also "taken the course." It is mandatory that each concept be thoroughly and accurately comprehended. Thus, anyone planning to use this method must start as a beginner, utilizing the text (accompanied by the cassette tape, if possible) as a means of developing a fine sound and an expert teaching system.

PREPARATION

There are two very basic concepts in playing tuba which must be understood by both the tuba student and teacher. These concepts are somewhat unique to the character of the instrument and it is my contention that they should be carefully introduced and discussed prior to the student's attempts to produce a sound on the tuba. These two concepts have to do with:

1. BREATHING 2. TONGUE PLACEMENT How often I have heard directors say to students, "more breath support! Blow from your diaphram!" and each time I hear it, I cringe at the concept that is being conveyed to the student. In fact, the diaphram muscle has little to with the breathing process at all and usually ends up being a foe rather than a friend.

The diaphram is a muscle located just below the lungs at approximately the place where the rib cage ends.

When in a relaxed state, the diaphram is in a nearly flat or slightly raised position. When the diaphram is flexed or tightened, it pulls downward. When this takes place, the lungs are also pulled or stretched downward and it becomes a physical impossibility to blow a large QUANTITY of air. By tightening the diaphram and attempting to blow a large amount of air, we create at the same time an isometric exercise within the body which has no beneficial effect. Try this:

Hold your hand in front of your face. Tighten your diaphram. Try to blow a large quantity of air on your hand.

Doesn't work, does it ? Now relax your stomach and diaphram muscles and repeat the process of blowing a large quantity of air on your hand. It is really quite easy to do. The tuba player needs to put large quantities of air through the horn because of the size of the instrument itself. The easiest way to accomplish this is to use little or no "diaphram support."

Arnold Jacobs frequently says, "For tuba players, strength is our weakness!"

A saying which Arnold Jacobs uses frequently is: "For tuba players, strength is our weakness!" That statement pretty well says it as far as the concept of breathing goes for the tuba player.

TONGUE PLACEMENT

The second concept mentioned above is that of tongue placement; once again we have a situation which is unique to the tuba. As previously stated, we need a large quantity of air to produce a good sound on tuba. The tongue is often the culprit which prevents this process from taking place efficiently.

If you say the syllable "TEE," you will notice that the tongue is arched up in the back. . .nearly to the point of touching the roof of the mouth. When this happens, we have a block (the tongue) thrown up in the way of the air stream. The result is a restricted amount of air passing beyond that blockage to the lips and an absence of good tone on the tuba. Remember: the large quantity of air produced through proper breathing does no good at all until it passes through the lips to make them vibrate; if the air is stopped or partially blocked off in the process of blowing, the result will be totally unsatisfactory. Say the vowel sound "OH" and notice the position of the tongue. The production of the "OH" sound causes the tongue to lay down flat in the bottom of the mouth, thereby causing no obstruction to the air stream. This is the ideal placement of the tongue for ALL RANGES in tuba playing. The "AH" sound will also cause the tongue to rest in the correct position, but if exaggerated, gagging results; once again the throat is closed off. For this reason, the "OH" sound is preferable.

I should also mention here that tongue placement in beginning a note with the tongue, we simply say, "TOH." When we say this sound, the tip of the tongue hits behind the top front teeth. Never allow a student to tongue through the teeth as it always causes a sloppy, thick attack. I have heard teachers describe the act by telling the student to "spit out a seed." Nothing could be further from the correct method of tonguing. Simply tell the student to say "TOH."

With a basic understanding of these two concepts, we are now ready to move to the tuba itself and prepare to play the first note.

FORMING THE EMBOUCHURE

If possible have an embouchure visualizer or mouthpiece ring available to aid in forming the embouchure. This will make it easy for you to see what is taking place inside the mouthpiece area. Ask the student to place the mouthpiece ring on his lips and say, "OH" and then gradually change to an "OO" sound. This will form the lips into the correct position.

Now have the student grasp a small tube or pen (about 1/8" in diameter) in the center of the lips. This will cause the lips to tighten toward a central point and will also bring the corners of the mouth to a firm set.

Remember: "OH-OO-SQUEEZE THE TUBE WITH THE LIPS." Once you have gone through this procedure carefully, the student is ready to make the first sound on the tuba.

THE FIRST TONE

Ask the student to take a deep breath, completely filling the lungs with air. This sounds awfully basic in nature, but it is amazing to me how many students prepare to play tuba by taking a very quick, shallow breath. . .air can not be blown out which has not first been taken in.

So, have the student gulp air with the same feeling in the throat as when yawning. This opens the throat and permits the student to take in large quantities of air in a very short period of time. There should not be a hissing sound as the student inhales, for this indicates that the tongue is arched up near the roof of the mouth. Further- more, if the tongue is arched during inhalation, it will likely remain there during exhalation.

Now ask the student to put the tuba in position with the mouthpiece near the lips. With the young student, instruct him to place the mouthpiece so that half is on the top lip and the other half on the bottom lip. This is not the most desirable mouthpiece position but about all that will be physically possible with small children. Ideally, the mouthpiece placement should be 2/3 on the top lip and 1/3 on the bottom lip.

Now, take a deep breath, re-form the embouchure ("OH-OO-SQUEEZE THE TUBE") and blow, expelling the air as rapidly as possible.

#1 - CORRECT RESULT More often than not a reason- able tone will result. The particular note produced is not important at this point. The student will generally produce a second line B-flat or the F directly below the staff. Let the student center whichever note comes naturally.

EXAMPLE #1

#2 - NO TONE, RUSHING AIR In this instance, there are two possible causes:

- a. Embouchure not formed tightly enough.
- b. Air stream restricted by closed throat and/or raised tongue.

EXAMPLE #2

REMEDY: Re-form the embouchure ("OH-OO- SQUEEZE") and tell the student to grip more tightly on the imaginary "tube in the center of the lips." Also stress the importance of saying "OH" to keep the throat open and the tongue down.

#3 - THIN, PINCHED TONE This sound:

EXAMPLE #3

is caused by a combination of the following:

- a. Embouchure formed too tightly; lips pinched together.
- b. Insufficient volume of air passing between the lips.

"Loosen the grip on the tube."

REMEDY: Instruct the student to "loosen the grip on the tube in the center of the lips." Also, reiterate the concept of taking a deep breath with the "yawn" type of feeling in the throat and then expelling the air as rapidly as possible. A relaxed diaphram is especially important to allow maximum expulsion of air.

#4 - GARGLED TONE This "split" tone is a result of:

a. Lips not "gripping the tube" tightly enough to center the pitch.

b. Lips folding over the teeth causing a double vibration.

EXAMPLE #4

REMEDY: If gripping the tube more firmly does not solve this problem, have the student re-form the embouchure using the mouthpiece ring and check to see if the lips are staying even with the edges of the teeth, not curling over the top. (When the "OH-OO-SQUEEZE" embouchure is formed correctly, the lips will not curl over the teeth.)

#5 - STOPPED or INTENSE AIR ONLY This less frequently heard sound:

EXAMPLE #5

is a severe exaggeration of #3 (THIN, PINCHED TONE). The lips have been pinched completely together and only extreme force of air causes any sound whatsoever.

REMEDY: Instruct the student to "loosen the grip on the tube in the center of the lips." Stress only "OH-OO" in this instance.

GENERAL EMBOUCHURE PROBLEMS

Make sure the corners of the mouth are not drawn back into a smile type of set. The corners should be very firm but held in the natural, lateral position.

The angle of the mouthpiece to the lips is very important. Problems here can be spotted quite easily and very simply corrected. The mouthpiece should be placed against the mouth while holding the jaw in a very natural position. The angle will vary greatly from student to student, depending on the degree of over- or under-bite of the teeth. Don't let the student jut his jaw forward to meet the mouthpiece. Have him lean slightly forward or backward with the tuba to the point where the mouth-piece sits at a natural, comfortable angle.

Don't allow the student to puff out the cheeks. When the cheeks are puffed, the corners of the mouth can not set firmly and the basic embouchure set and control are lost. With emphasis on gripping the tube, the cheeks will not puff.

Using the mouthpiece ring, check to make sure that the lips do not go into a radical pucker. Sometimes, if there is too much emphasis put on the "OO" sound in formation of the embouchure, there will be a tendency to push the lips too far forward into an exaggerated pucker. This will result in loss of control and "bracky" tone quality.

CHANGING PITCHES

If the embouchure appears to be formed correctly and the student is having good success in producing the first tone on the tuba, move immediately to a note other than the one which was most natural at first. If the first note produced was F below the bass clef staff, ask the student to now try second line B-flat. To accomplish this, tell him merely to tighten more on the tube and blow more air. Remember: Don't tell the student to push the air, as this will bring the tight diaphram into the picture, a condition we do not want!

"Nicklaus tries to recreate the feeling of a good shot."

Once he has produced the second tone, ask him to play back and forth between F and Bflat, remembering what each feels like. This will begin transference of the feeling into the memory bank so that it may be recalled whenever a particular pitch is needed. Jack Nicklaus once said that when he steps up to the ball to hit a golf shot, he does not try to concentrate on all the minor details which go into hitting the shot correctly; he simply tries to recreate the overall physical sensation of what it feels like to hit a good shot.

Once he has produced the second tone, ask him to play back and forth between F and Bflat, remembering what each feels like. This will begin transference of the feeling into the memory bank so that it may be recalled whenever a particular pitch is needed. Jack Nicklaus once said that when he steps up to the ball to hit a golf shot, he does not try to concentrate on all the minor details which go into hitting the shot correctly; he simply tries to recreate the overall physical sensation of what it feels like to hit a good shot.

The correlation to tuba playing is obvious: Once we have gone through all of the processes which form the embouchure and produce the sound, we should then concentrate on the overall physical feeling which produced that sound. Then we should attempt to recreate that feeling each time we wish to play a certain note.

EXAMPLE #6

If the first pitch produced by the student was second line B-flat, follow the reverse procedure: have him relax the "grip on the tube" and blow slightly less quantity of air in order to produce F below the staff.

ADDING THE VALVES

Now ask the student to take a large breath and play down by half-steps from B-flat to F (open, 2, 1, 1 & 2, 2 & 3, open). It is important to start from the top note and work down as this is much easier than working up. The student's chances of immediate success are much greater as well. Also, have the student play this chromatic exercise without use of the tongue; at this point it will only get in the way and cause problems. Instruct the student to think of air movement being exactly the same as playing a single long tone so that he will blow through the chromatic run.

EXAMPLE #7

The next step is to play the chromatic run starting on F and ascending to B-flat. This will generally be more difficult but can be made easier by playing a crescendo throughout the

exercise. This will tend to keep air moving throughout the run and will make the F to G-flat break much easier.

EXAMPLE #8

MOUTHPIECE BUZZING

It is my contention that the single most neglected exercise by most brass players is mouthpiece buzzing. Let's face it; there is nothing inside a brass instrument which will itself produce sound. The sound is produced by buzzing the lips--sound which is amplified by the instrument. Therefore, it stands to reason that anything played on the instrument can also be played on the mouthpiece alone if the embouchure is properly performing its function.

So, HAVE YOUR STUDENTS PRACTICE BUZZING WITH THE MOUTHPIECE. They can play scales, etudes, songs, anything. One word of caution: Don't let them just buzz indiscriminately. Make sure they produce definite pitches as this is the only way in which mouthpiece buzzing is beneficial. Also, do not have them buzz their lips without a mouthpiece or a mouthpiece ring to define the area of lip which must be trained and controlled. Buzzing the lips without the mouthpiece will provide nothing useful in embouchure training.

Anything done with the mouthpiece can and should be done with the mouthpiece ring as well. You will be amazed at the results.

EXAMPLE #9

FOUR VALVE TUBAS

I have often been asked about the purpose of the fourth valve on the tuba. It is really quite simple as it is merely a compensating valve used to help bring low B and low C in tune. In fact, it is an F attachment much like the one on bass trombone; however, due to problems with intonation it can not be used in exactly the same manner. The fourth valve is used as a substitute for the 1 and 3 valve combination, which means that instead of playing low C with 1 and 3, we can play it was 4 alone. Instead of 1, 2, and 3 for low B natural, we can play it with 2 and 4.

Even with the fourth valve, these notes will tend to be quite sharp, so the fourth valve slide should be pulled out. The exact amount to pull the fourth valve slide will vary and should be determined with each instrument individually.

The fourth valve can also be used to produce the notes between low E and pedal B-flat, but due to intonation problems in this register, the fingerings usually need to be altered:

E - 2 and 4

E-flat - 1, 2, and 4 (On some instruments this E-flat can be played 1 and 4, but normally all pitches from E-flat on down must be fingered a half-step low to be in tune.)

D - 2, 3, and 4 D-flat - 1, 3, and 4 C - 1, 2, 3, and 4

Note that low B natural is lost as a result of pitch compensation. Don't worry; it won't likely be needed.

INTONATION

Every student can and must play in tune from the very beginning! As soon as a note is introduced, there must be instruction which produces correct tone quality. Since out of tune notes seldom contain proper tone quality, it follows that attention to one cures the other. Note the following examples of natural pitch tendencies on tuba which, when corrected, also improve tone quality:

LOW B: natural sharpness and thinness, then corrected. Using 1, 2, and 3 combination.

EXAMPLE #10A

Correction by opening throat to maximum "OH" shape.

LOW B: natural sharpness and thinness, then corrected by using 2 and 4 valve combination.

EXAMPLE #10B

BOTTOM LINE G-FLAT: natural flatness and corrected. The natural flatness of the 2 and 3 valve combination must be corrected by "lipping" up. This fact often makes "centering" of G-flat a problem. Increasing the "grip on the tube" often a help pitch here.

EXAMPLE #11

THIRD LINE D: natural flatness and corrected. The problem of flatness on D is similar to the G-flat; however, several alternate fingerings are available for the purpose of comparison to locate proper pitch level. Valve combination 1, 2, and 3 is an in-tue possibility which can be used to show the student how much to lip up the open D. Even 1 and 2 (sharp in pitch) can serve as an aid in this regard.

EXAMPLE #12



Instrument Playing Position

- Sit up straight in your chair.
- Bring the instrument to your face.
- Fingers should be in a natural curved position.

Embouchure- Flute

- Corners of mouth should be pulled outward.
- Lower lip flattened and resting on/over the embouchure hole.
- Focus the air directly into the hole.

Embouchure- Oboe

- Corners of mouth firm and forward.
- Chin down and firm.

Embouchure- Clarinet and Bass Clarinet

- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Chin is flat.

Embouchure- Bassoon

- Overbite: Lower jaw is slightly behind upper jaw
- Lips are covering teeth
- Little pressure from bottom lip.
- No pressure from upper lip.

Embouchure-Saxophone

- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Even pressure from top, bottom, and sides.

Embouchure-Brass

- Corners of mouth are firm.
- Throat should be in an open "O" configuration.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.





The first step to playing with great intonation is playing with correct body and instrument position, embouchure and proper air support.

Flute Playing Position

- Sit up straight in your chair.
- Bring the flute to your face.
- Do not slouch or rest your arm on your chair.
- Fingers should be in a natural curved position.

Embouchure

- Corners of mouth should be pulled outward.
- Lower lip flattened and resting on/over the embouchure hole.
- Focus the air directly into the hole.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



The first step to playing with great intonation is playing with correct body and instrument position, embouchure and proper air support.

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Oboe Playing Position

- Sit up straight in your chair.
- Bring the oboe to your face.
- Hold the oboe forty-five degrees from the body.
- Fingers must be slightly rounded.
- Pads are played with the fleshy part of your fingers.

Embouchure

- Corners of the mouth firm and forward.
- Chin down and firm.
- Lips are a firm springy cushion.

- Sit tall.
- Take in a breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.

The first step to playing with great intonation is playing with correct body and instrument position, embouchure and using proper air support.

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Bassoon Playing Position

- Sit up straight in your chair.
- Place the seat strap on the front corner of the chair.
- Bring the bassoon to your mouth without moving head.
- Pads are played with the fleshy part of your fingers.

Embouchure

- Overbite: Lower jaw is slightly behind upper jaw.
- Lips are covering teeth.
- Little pressure from bottom lip.
- No pressure from upper lip.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.

The first step to playing with proper embouchure, body, and instrument position, and proper air support.

Clarinet Playing Position

- Sit up straight in your chair.
- Bring the clarinet to your mouth without moving your head.
- Hold the clarinet at a 45 degree angle from the body.
- Hand position is a relaxed and natural; not flattened or arched.
- Pads are played with the fleshy part of your fingers.

Embouchure

- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Chin is flat.
- Upper teeth are on the mouthpiece.
- Half-an-inch reed in mouth.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



The first step to playing with great intonation is playing with correct body and instrument position, embouchure and using proper air support.

Bass Clarinet Playing Position

- Sit up straight in your chair.
- Bring the clarinet to your mouth without moving head.

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- Fingers must be at slightly rounded on the keys.
- Pads are played with the fleshy part of your fingers.

Embouchure

- Chin is flat.
- Upper teeth are on the mouthpiece.
- Lower embouchure in "A" shape.
- Upper embouchure in "Q" shape.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



Alto Saxophone

The first step to playing with great intonation is playing with correct body and instrument position, embouchure and using proper air support.

Alto Saxophone Playing Position

- Sit up straight in your chair.
- Bring the saxophone to your mouth without moving head.
- Fingers must be slightly rounded.

Embouchure

- Upper teeth rest on mouthpiece.
- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Even pressure from top, bottom, and sides.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



The first step to playing with great intonation is playing with correct body and instrument position, embouchure and using proper air support.

Tenor Saxophone Playing Position

- Sit up straight in your chair.
- Bring the saxophone to your mouth without moving head.
- Fingers must be slightly rounded.
- Pads are played with the fleshy part of your fingers.

Embouchure

- Upper teeth rest on mouthpiece.
- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Even pressure from top, bottom, and sides.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



- Upper teeth rest on mouthpiece.
- Exaggerated "A" to firm lips to teeth.
- Add a "Q" to bring in corners of lips.
- Even pressure from top, bottom, and sides.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.



great intonation is playing with correct body and instrument position and using proper air support.

Horn Playing Position

- Sit up straight in your chair.
- Bring the horn to your mouth without moving your head.
- Cup your right hand like you are holding water. Place the cupped hand into the far side of the bell so your knuckles are against the bell. "Stopping" the horn should be easy from this angle.
- If you are resting the bell on your leg, move one leg to the side of the chair. The other option is holding up the bell with your right hand.

Embouchure

- Corners of mouth are firm.
- Mouthpiece placed at the ratio 2/3 upper and 1/3 lower lip.
- Throat should be in an open "O" configuration.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.





The first step to playing with great intonation is playing with correct body and instrument position and using proper air support.

Trombone Playing Position

- Sit up straight in your chair.
- Bring the trombone to your mouth without moving your head.
- Hold the trombone at almost parallel angle from the floor.

Embouchure

- Corners of mouth are firm.
- Mouthpiece centered: one half lower and one half upper lip.
- Throat should be in an open "O" configuration.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.





The first step to playing with great intonation is playing with correct body and instrument position, embouchure and using proper air support.

Euphonium Playing Position

- Sit up straight in your chair.
- Bring the baritone to your mouth without moving your head.
- Keep the fingers rounded for fast movement.

Embouchure

- Corners of mouth are firm.
- Mouthpiece centered: one half lower and one half upper lip.
- Throat should be in an open "O" configuration.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.





The first step to playing with great intonation is playing with correct body and instrument position and using proper air support.

Tuba Playing Position

- Sit up straight in your chair.
- Bring the tuba to your mouth without moving your head.

Embouchure

- Corners firm and natural.
- No puffing cheeks.
- Throat should be in an open "O" configuration.

- Sit tall
- Take in a big breath, feeling the air fill the lower part of the lungs first.
- Support the air with your abdominal muscles.
- Blow out fast air.

Mallet Percussion

As the wind instrument players concentrate on air production to improve their intonation, mallet percussionists concentrate on body and mallet position to better their technique.

Mallet Percussion Playing Position

- Stand up with your feet shoulder-width apart.
- Using matched grip, hold your mallets out at a 45 degree angle.
- Play the bars slightly off center.
- Move your legs and body side-to-side as the notes rise and fall on the instrument.
- Relax arms and hands.

Woodwind Instruments Intonation Factors

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp
 - Loose = flat
- Reed Strength
 - Hard reed = sharp
 - Soft reed = flat
- Angle of Entry
 - Held too close to body = sharp
 - Held too far away from body = flat

Tuning

- If the instrument is sharp in all ranges, pull out.
- If the instrument is flat in all ranges, push in.

Adjusting for Individual Notes on Reed Instruments

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Adjusting for Individual Notes for Flutes

- Sharp Notes: Direct air stream down.
- Flat Notes: Direct air stream up.

Brass Instruments Intonation Factors

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp
 - Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp
 - Loose = flat
- Extreme Range
 - High range = sharp
 - Low range = can vary depending on players ability
- Mute

Straight and harmon = sharp $C_{\text{true}} = flat$

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Cup = flat
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Tuning

- If the trumpet is sharp in all ranges, pull out the main tuning slide.
- If the trumpet is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.



Flute Pitch Tendencies



Notice that the lower octave has the same pitch tendencies as the upper octave. This makes it easy to memorize!

Factors of Intonation

- Room Temperature Cold temperature = flat
 - Hot temperature = sharp
- Dynamics
 - Loud = sharp
 - Soft = flat

Tuning

- If the flute is sharp in all ranges, pull the head joint out a small amount.
- If the flute is flat in all ranges, push in the head joint in a small amount.

Adjusting for Individual Notes

- Sharp Notes: Direct air stream down.
- Flat Notes: Direct air stream up.

Once in a while, it is helpful to check the cork in the head joint. Place the cleaning rod in the head joint, the line in the cleaning rod should line up with the center of the mouthpiece hole.

Oboe Pitch Tendencies



Factors of Intonation

- Room Temperature Hot temperature = sharp Cold temperature = flat
- Reed Strength

Hard reed = sharp

- Soft reed = flat
- Embouchure

Pinched embouchure = sharp Loose embouchure = flat

Tuning the Oboe

- The reed is the most influential part on the intonation.
- If your oboe is sharp in all ranges, you may need a harder reed.
- If the oboe is flat in all ranges, the reed could be too hard, over-soaked or in a moist climate. If this happens, you need to adjust your reed. Put a plaque in reed and pinch back and forth.
- If the low register is difficult to play and has awkward pitch, the reed could be leaking.

Adjusting for Individual Notes

- Sharp notes: Take in more reed.
- Flat notes: Take in less reed. Increase your air pressure.

Buy reeds that are medium and harder so they can be trimmed. Always trim reeds and then check them every step so that you don't take too much off.



S = Slightly, M = Moderately, V = Very * = Varies by brand

Factors of Intonation

- Room Temperature Hot temperature = sharp Cold temperature = flat
- Reed Strength Hard reed = sharp Soft reed = flat
- Embouchure Pinched embouchure = sharp Loose embouchure = flat

Tuning the Bassoon

- If your bassoon is sharp in all ranges, slightly pull out the bocal.
- If your bassoon is flat in all ranges, slightly push in the bocal.

Clarinet Pitch Tendencies



Throat tones on the clarinet have the tendency to be sharp. Add fingers in your right hand to drop that pitch and also make it easier to transition to the notes over the break.

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp
 - Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp
 - Loose = flat
- Reed Strength
 - Hard reed = sharp
 - Soft reed = flat
- Angle of Entry
 - Held too close to body = sharp Held too far away from body = flat

Tuning

- If the clarinet is sharp in all ranges, pull the barrel out a small amount from the body of the clarinet.
- If the clarinet is flat in all ranges, push the barrel in a small amount. Use more air support.

Adjusting for Individual Notes

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Bass Clarinet Pitch Tendencies



Throat tones on the bass clarinet have the tendency to be sharp. Add fingers in your right hand to drop that pitch and also make it easier to transition to the notes over the break.

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp
 - Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp
 - Loose = flat
- Reed Strength
 - Hard reed = sharp
 - Soft reed = flat
- Angle of Entry
 - Held too far away from body = flat
 - Held too close to body = sharp

Tuning

- If the bass clarinet is sharp in all ranges, pull out the neck.
- If the bass clarinet is flat in all ranges, push in the neck. Use more air support.

Adjusting for Individual Notes

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Alto Sax Pitch Tendencies



Factors of Intonation

• Room Temperature

Hot temperature = sharp; Cold temperature = flat

• Dynamics

Loud = sharp; Soft = flat

- Embouchure Pinching = sharp; Loose = flat
- Reed Strength

Hard reed = sharp; Soft reed = flat

• Angle of Entry Held too close to body = sharp; Held too far away from body = flat

Tuning the Alto Sax

- If your alto sax is sharp in all ranges, pull the mouthpiece out.
- If your alto sax is flat in all ranges, push the mouthpiece in.

Adjusting for Individual Notes

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Mark the spot on the cork of the instrument with a pencil where your saxophone plays in tune. This will improve the consistency of the intonation every time you put it together.

Tenor Sax Pitch Tendencies



Factors of Intonation

• Room Temperature

Hot temperature = sharp; Cold temperature = flat

• Dynamics

Loud = sharp; Soft = flat

• Embouchure

Pinching = sharp; Loose = flat

• Reed Strength

Hard reed = sharp; Soft reed = flat

• Angle of Entry Held too close to body = sharp; Held too far away from body = flat

Tuning

- If your tenor sax is sharp in all ranges, pull the mouthpiece out.
- If your tenor sax is flat in all ranges, push the mouthpiece in.

Adjusting for Individual Notes

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Mark the spot on the cork of the instrument with a pencil where your saxophone plays in tune. This will improve the consistency of the intonation every time you put it together.

There are only two notes that are flat, "Ab" (second space) and "Bb" (third line).

Baritone Sax Pitch Tendencies



Factors of Intonation

• Room Temperature

Hot temperature = sharp; Cold temperature = flat

• Dynamics

Loud = sharp; Soft = flat

• Embouchure

Pinching = sharp; Loose = flat

• Reed Strength

Hard reed = sharp; Soft reed = flat

• Angle of Entry

Held too close to body = sharp; Held too far away from body = flat

Tuning

- If your baritone sax is sharp in all ranges, pull the mouthpiece out.
- If your baritone sax is flat in all ranges, push the mouthpiece in.

Adjusting for Individual Notes

- Sharp notes: Drop your jaw.
- Flat notes: Firm the embouchure. Use more air pressure.

Mark the spot on the cork of the instrument with a pencil where your saxophone plays in tune. This will improve the consistency of the intonation every time you put it together.

The lower range has more notes with a flat tendency and the upper range has more notes with a sharp tendency.

Trumpet Pitch Tendencies



Straight and harmon = sharp Cup = flat

Tuning

- If the trumpet is sharp in all ranges, pull out the main tuning slide.
- If the trumpet is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.

If you have a fourth valve, make the following fingering corrections:

- "C#" (line below) = second and fourth valves
- "D" (space below) = fourth valve

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp
 - Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp
 - Loose = flat
- Extreme Range
 - High range = sharp Low range = can vary depending on players ability

Tuning

- If the horn is sharp in all ranges, pull out the main tuning slide.
- If the horn is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.



Make sure your right hand is shaped in a cupped position and in the bell so that your knuckles are against the further part of the bell. By moving the wrist of the hand in towards the center of the bell, the note will make a note more flat.



Low range = can vary depending on players ability

Tuning

- If the euphonium is sharp in all ranges, pull out the main tuning slide.
- If the euphonium is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.

If you have a fourth valve, make the following fingering corrections:

- "B" (second line) = second and fourth valves
- "C" (second space) = fourth valve



Low range = can vary depending on players ability

Tuning

- If the euphonium is sharp in all ranges, pull out the main tuning slide.
- If the euphonium is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.

If you have a fourth valve, make the following fingering corrections:

- "B" (second line) = second and fourth valves
- "C" (second space) = fourth valve



S = Slightly, M = Moderately, V = Very

Factors of Intonation

- Room Temperature
 - Hot temperature = sharp
 - Cold temperature = flat
- Dynamics

```
Loud = sharp
```

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Soft = flat
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• Embouchure

```
Pinching = sharp
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- Loose = flat
- Extreme Range

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High range = sharp
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Low range = can vary depending on players ability
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Tuning the Trombone

- If your trombone is sharp in all ranges, pull out the main tuning slide.
- If your trombone is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Move the slide slightly out or loosen the embouchure.
- Flat notes: Move the slide slightly in or tighten the embouchure.

Trombone is probably the easiest instrument to tune!



Factors of Intonation

- Room Temperature Hot temperature = sharp Cold temperature = flat
- Dynamics
 - Loud = sharp
 - Soft = flat
- Embouchure
 - Pinching = sharp Loose = flat
- Extreme Range High range = sharp
- 12: Slightly Sharp13: Moderately Sharp122: Vary Sharp

Sharp Valve Combinations

123: Very Sharp

Flat Valve Combination 23: Moderately Flat



Low range = can vary depending on players ability

Tuning the Tuba

- If the tuba is sharp in all ranges, pull out the main tuning slide.
- If the tuba is flat in all ranges, push in the main tuning slide.

Adjusting for Individual Notes

- Sharp notes: Drop the jaw and loosen the embouchure.
- Flat notes: "Lip up" or tighten the embouchure.

If you have a fourth valve, make the following fingering corrections:

- "B" (third space below) = second and fourth valves
- "C" (second line below) = fourth valve



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FLUTE

Eb Chorale

QUINCY HILLIARD



OBOE/MELODIC PERC.

Eb Chorale



BASSOON/TROMBONE

Eb Chorale

QUINCY HILLIARD



CLARINET 1

Eb Chorale



CLARINET 2

Eb Chorale

QUINCY HILLIARD



ALTO CLARINET

Eb Chorale



BASS CLARINET

Eb Chorale

QUINCY HILLIARD



ALTO SAXOPHONE

Eb Chorale



Eb Chorale

T. SAX/BARITONE T.C.

QUINCY HILLIARD



BARITONE SAX

Eb Chorale



TRUMPET 1

Eb Chorale





HORN

Eb Chorale

QUINCY HILLIARD



BARITONE B.C.

Eb Chorale





Eb Chorale

QUINCY HILLIARD



OBOE/MELODIC PERC.

Eb Chorale



It's Back to School by Tim Lautzenheiser Vol 12, #1, p.29 (Aug-Oct. 1996)

Ah, yes. . .the summer months are long gone and "the bell tolls" for all of us to "get back in the saddle." (Many of you never left it!!) Here are some little hints which should be remembered when mentally preparing yourself to "Strike Up the Band." These may also get everything in perspective and launch this school year as THE BEST EVER!

- 1. Let's remind ourselves that WE HAVE THE BEST STUDENTS in the school. They choose to be in the band and represent the highly motivated, caring young person in today's society.
- 2. A ROLE MODEL (That's us!) is three to four times more powerful than the information being used in a lesson plan. These band students are very keen to your own behavior patterns. Constantly check yourself and make sure that your lifestyle and personal discipline habits are congruent with what you expect of/from them. (Self-evaluation must be constant; it leads to constant self-improvement.)
- 3. MAINTAIN BALANCE IN YOUR LIFE. We all know it takes an incredible amount of long hours and hard work, but be certain you are sensible about your pattern of living. Mind, body, spirit: They all have to be intact or we lose efficiency in every area. (Translated: Continue to learn, stay in good health, and be true to your beliefs and convictions.)
- 4. FAILURE IS NOT BAD when seen in the appropriate context. Use failure (which is only a label) as an opportunity to correct and improve. The very term, failure, insinuates: No good, incapable, invalid, and can often lead to quitting as a solution. Failure is a mistake and allows us the chance to rework the situation for a new solution.
- 5. DISCIPLINE IS AN EXPRESSION OF CARE (LOVE). Young people all want to be great. (The band students are at the front of the pack.) It is important that we maintain a forward motion for the group and allow them to see the benefits of a WE-US philosophy, as opposed to the I-ME philosophy which violates all forms of teamwork. To accomplish this, it will take a sense of group discipline which will translate (if taught appropriately) into self-discipline.
- 6. CHOOSE TO BE HAPPY in your work. B.F. Skinner (the noted psychologist, philosopher, educator) said, "In the presence of JOY, students learn 3 to 5 times faster than in a negative setting. When joy is absent, the potential to learn falls to a horrifying minimum." (We often confuse "discipline" with "stern dictatorship.") It is important to "be yourself" and be content with your profession. Negative attitudes are damaging and contagious. Set the example for how you want the group's attitude to be.
- 7. TEACH PERSISTENCE by being persistent. Even though we all wish they would go on and play their horns, we know we will not get 100% participation in that area; however, the students will go on and be contributing members of society. To be a success at anything, they will need to be persistent. Let's make sure we see

them graduate with that personality quality stamped on their diploma via their musical experiences.

- 8. GREAT TEACHERS ARE GREAT COMMUNICATORS. Take the time to "know the students." If there is a discipline problem, it usually is not because of the band. Rather than use rehearsal time to "make an example" of a confused, upset student, take some time after rehearsal to find out WHY this instance happened. (Surgery isn't always the answer; a little T.L.C. can go a long, long way. Surgery = last resort.)
- 9. SUPPORT OUR PROFESSION. We need to be loyal to our discipline. Go to conventions, workshops, seminars, etc. Share your findings with colleagues and those young teachers who so desperately need the wisdom of your own experiences. Critics are a dime a dozen; let's join together and continue to promote music education in our schools. We need each other. We need you!!
- 10. COOPERATE. Whether it is within your own school faculty, booster organization, community affairs, etc. CONFLICT is certain to bring a halt to forward progress. Look past your ego and do what is RIGHT for the program. . . . the TOTAL PROGRAM

It's easy to sit and read (or write) this list of very "idealistic" guidelines. The real mark of the teacher of excellence is in the implementation of them in the day to day rehearsals, meetings, performances, and problem solving. Let's make sure we ACT instead of REACT.

You are making such a positive difference to so many young people via your talents. Put a smile on your face and keep reminding yourself how great it is to be in a country where music is part of the school day. And we need great band directors, like you, to get that group of eager young students in shape for all the upcoming performances.

As Carl Jung so brilliantly stated, "From the beginning I had a sense of destiny, as though my life was assigned to me by fate and had to be fulfilled. This gave me an inner security, and, though I could never prove it to myself, it proved itself to me. I did not have this certainty; it had me." It's back to school. . .Strike Up the Band!

Mini-Tips by Randall Spicer Vol 2, #1, p.21 (Aug-Oct. 1986)

Spring Tension

Check spring tension of the woodwind instruments. The action and resistance of all keys must be similar. Any stiff springs will result in uneven playing.

Long phrases

Challenge the woodwinds with long phrases. Much of the band's contemporary music has no real phrasing required of the woodwinds. Cliche or percussive effects ask only for a rapid tonguing of 3 to 7 notes. Technical demands in the woodwinds will easily be covered by forte playing in the brass and percussion sections. Select some music which requires the woodwinds to play in the style of the classic or romantic periods; this music will help develop phrasing and technique.

Reed Test

Roll the tip of a good clarinet or saxophone reed across your left thumbnail. Does it bend slightly, a quarter of an inch, three eighths of an inch, more from the tip of the reed? Use the observations in this test to help select new reeds.

Reed Instrument Air Flow

Keep the air flow constant. Let the tongue stay close to the reed and touch it lightly. Keep tongue movement very slight, aiming for a movement of one eighth of an inch away from the reed.

Sticking Pads

Flute, clarinet, and saxophone pads have a tendency to stick at the beginning of a rehearsal. Use a fresh dollar bill or a piece of cigarette paper ("roll-your-own" type) to clean the pad. Hold the pad down and draw the bill or paper through the key opening.

Flute Foot Joint

Adjust the foot joint of the flute so that the rods of the keys on the foot joint point through the middle of the pads for the right hand D, E, and F holes. Then adjust so that the little finger of the right hand drops on C or Eb without any wrist movement.



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Dana Hamant

Director of Bands at Wichita East High School since 1995, Dana Hamant began teaching in 1978. His education includes bachelors and masters degrees from Wichita State University. He has held positions as Kansas Band Association president and IAJE state president. His bands have performed at the KMEA conference and he was also selected to lead the Kansas Lions International Band.

"Any success I have attained is due to having parents who have always been supportive and insistent on doing things the right way. Being involved in drum and bugle corps at an early age taught me what hard work and dedication can accomplish." Previous LEGION Next LEGION

A special award of

BW 2006 The Bandworld Legion of Honor

The John Philip Sousa Foundation

The Bandworld Legion of Honor was established in 1989 to honor, over the course of a year, eight of the finest band directors in our business.

Recipients have taught for at least fifteen years, have maintained a very high quality concert band program, and have contributed significantly to the profession through dedication to bands and band music.

Each is honored at the annual Sousa Foundation awards ceremony during the Midwest Band Clinic in Chicago, Illinois.

Chairman of the Legion of Honor Committee is Robert E. Foster, University of Kansas, and Past President of the American Bandmasters Association.

Legion Laureates List Link



Evelio Villarreal

A teacher in the public schools of Texas for over 25 years, Evelio Villarreal is currently Director of Bands at Plano East Senior High School. He is a graduate of Angelo State University and holds a Masters in Music from Texas A&M-Commerce. His bands have received many Best in Class awards from American Classics, Musicfest and other events. Since 1997 his bands have received UIL Sweepstakes Awards for superior ratings in marching, concert and sightreading.

"I believe that all students can be successful and it is my goal for them to achieve their highest performance level. Through music, students learn many life skills, such as discipline, teamwork and goal setting."

Robert Foster Bio Legion of Honor Chairman