

So You Want to Tune Your Flutes?

Randy Vaughn

First, a few suggestions all of you know (but might need reminding) about selecting students to play the flute. It helps to have a full bottom lip and no cupid's bow on the top lip. Braces could, but shouldn't, be a problem and neither is an overbite.

To play in tune, it is absolutely essential that students learn how to use their air properly. I like to do some sort of breathing exercise plus review proper breathing techniques every day. Standing while doing the breathing exercises is a great way to start. Feet should be a shoulder-width apart. I have students put their left hand an arm's length out in front of their face, palm facing the mouth. With the metronome on 72 - 82, breathe in (with a flat tongue and cool air at the back of the throat) using 2, 4, or 6 counts, then 8, 6, or 4 counts to breathe out. I instruct the students to move their hand to imitate what the air should be doing as it enters and leaves the body. As the hand moves toward the mouth on the breath in, and moves away from the mouth on the breath out. The speed of the air should be constant with the left hand mimicking the air. Be sure the shoulders do not rise with a breath in. It is very important that students not hold air at the end of breath - the

air blows in and out in rhythm. Remind students to relax their upper body.

The next really important area to address is how to sit. Students should sit in their chairs with their feet flat, back away from the chair. Be sure students have enough room on each side so they don't feel cramped. I like to see the students have a feeling of pushing forward and up slightly with the right arm and hand, but not so much as to create tension in the right shoulder. There should be absolutely no pressure with the left hand to the chin.

Specific information on tuning the flute:

First, it's important to check the end plug with the tuning rod. The line on the tuning rod should be in the middle of the tone hole.

Second, pull the head joint around one-fourth of an inch and leave it. You may need to pull a little more on some models.

Third, the embouchure has to be correct by covering a little over half of the opening with the bottom lip. This will vary some, depending on the student's lips.

Fourth, the speed and direction students tend to blow the air will affect the pitch. If they blow *down* too much into the opening, the pitch will be flat. I just tell them to blow more *across* the opening



to raise the pitch. Sometimes I put my hand in front of the head joint and tell the student to aim air for my hand. I will do the opposite if the student blows across the opening too much. To correct it, I will put my hand below the opening and tell the student to aim the air stream there.

Fifth, it's important to not press the flute into the chin with the left hand. I like to push a student's flute out on the end when they are playing to make sure they are not pressing.

Sixth, volume affects pitch. Students that tend to play loud will generally be sharp and those that play softer will tend to play slightly flat. I have students that play too loudly back off some and try to match the energy of the

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students on each side. If they are playing too weakly, I ask them to play louder to match students on either side.

Seventh, the overall pitch tendency is to be flat in the low register and sharp in the high register. To keep from playing flat in the low register, the student should blow more air faster across the opening, remembering not to press with the left hand. In the upper register, starting at high E-flat through A-flat, the pitch is sharp, with high B and C being very sharp. Surprisingly, high A and B-flat are generally not too sharp, if at all, and could even be flat. Some other notes that tend to be out of tune are the third space C, which is very sharp and then D, E-flat, and E at the top of the staff tend to be flat.

To correct the upper register notes, students should not press with the left hand. I tell them to direct the air stream down more by lowering the bottom jaw or their head to cover more of the opening (or a combination of lowering both). Students should be careful not to overdo this movement, because it could go too far and make it worse. The movement is very slight; tell them to listen and if the pitch gets worse, they may have over-corrected.

Students can use portable tuners, but they must learn to hear the correct pitch and not depend on the tuners too much.

Alternate fingerings that will help with pitch:

- Third space C-sharp - add 5 & 6 fingers in right hand or even 4, 5 & 6 plus direct air stream down
- High E - lift the E-flat/D-sharp key
- High F - add 6th finger on right hand
- High F-sharp - use finger 5, not 6 of right hand
 - High G-sharp - add fingers 5 & 6 of right hand
 - High E-flat and G - both sharp - no alternate fingering, just aim the air down more into the opening.

Many intonation problems in the flute section stem from the use of wrong fingerings. Such fingering errors, for instance, as over-blowing middle D and E-flat to produce high D and E-flat, keeping the first finger down on middle

D & E, and using the middle finger of the right hand for F-sharp in the first two octaves are typical of the kind that can wreak havoc with flute section intonation. (This last statement was taken from *The Symphonic Band Winds: A Quest for Perfection* by James Middleton, Harry Haines, and Gary Garner.)

Tuning the top of the staff:

I like to use F, G, A, B-flat playing quarter notes slurred, then hold the B-flat four counts. Sometimes I like to have a student stand in front of the tuner just to see how it feels to see and hear the flute in tune. Students can use portable tuners, but they must learn to hear the correct pitch and not depend on the tuners too much.

Randy Vaughn grew up in school bands in Clovis, New Mexico where he received private flute lessons from Ted Raven. He went on to graduate with a Bachelor of Music Education degree from West Texas State University. After 34 years of teaching in Texas public schools, Mr. Vaughn retired in 2001. His career has taken him to several junior high and high schools in the Klein ISD, Hereford ISD and Claude ISD. Under the direction of Mr. Vaughn, his bands have been recognized state wide and nationally for their musical excellence, earning a total of 32 UIL Sweepstakes awards. Additional honors were received at the Bands of America Grand Nationals in Indianapolis; Texas 5A State Marching Band and Honor Band Competitions; Bands of America National Concert Band Festival in Chicago; and for performances at Constitution Hall in Washington, DC and Carnegie Hall in New York City. Mr. Vaughn belongs to many professional affiliations including TMEA, TMAA, Phi Beta Mu and TBA of which he is a past president. He maintains a busy schedule as clinician, guest conductor, and adjudicator across the United States.