

- I am delighted to be here today and thank you for asking me .
- I have chosen to discuss vibrato because it is such an elemental component of flute tone. Often it is not addressed in the first year of learning the flute and thus is left to the student to try to figure it out at a later time.
- My goal is to provide some information that will help in the teaching of this technique in that first year, for most this will happen in the spring.

VIBRATO

Vibrato is an indisputable component of flute playing. While its use depends on the historical era [Baroque vibrato will not be the same as 19th century, etc.], the composer's intent or desires [especially in the 20th c. composers will often indicate "no vibrato" or "wide vibrato", etc.], and the orchestration of the performance, it is also an intimate and defining aspect of an individual's musical being. Anyone who follows flutists will recognize James Galway in an instant...just from his vibrato!

What is vibrato ?

Vibrato involves

1. Pitch – above all, pitch change must be present to create a usable and expressive vibrato.
2. Dynamics – there is a dynamic change to a degree, but if “vibrato” is only dynamic in nature it sounds like the dreaded “nanny goat” or “machine gun”! This lacks any expressive or musical character and usually just sounds nervous.
3. Timbre – there is also a color component to vibrato which occurs naturally as the changes of intensity in the air create pitch change.

Why use vibrato?

- All of my teachers [Joseph Mariano, Bonita Boyd at Eastman, Murray Panitz, Principal Flute Philadelphia Orchestra] stressed the importance of listening to and imitating the voice.
- In singing, vibrato is a natural extension of vocal maturity, breathing, support and relaxation. It is an integral part of the voice.
- As an instrumentalist, imitating the voice is one of the most elemental ways to create the “oneness” between the instrument and the individual.
- Joseph Mariano –“The flute should be an extension of oneself.” Great players sound “one with the instrument”.
- “Hug your instrument” [Loving your instrument!] – Learning to see your instrument as a vehicle to express oneself changes a student’s attitude and vibrato is part of that process.

- Vibrato improves breathing and support – it is impossible to create a natural vibrato without these working properly so starting vibrato early can help with these fundamentals.
- Vibrato improves projection. Because of the necessity of proper breathing and support, vibrato actually enhances projection. It is impossible to create the same tone and projection without vibrato.
- All advanced flutists use vibrato, and it is a consideration on Region tryouts even in Junior High. The categories of “tone” and “musicality” absolutely involve vibrato.

A word about breathing

- Before students begin vibrato, they should have a reasonably clear and controlled tone. This will happen generally when they have developed good breathing habits [deep, full breaths], strong support muscles and reasonable control of the lip aperture.
- I encourage students to exhale before inhaling whenever possible and for fun I suggest they breathe like Darth Vader. This encourages a flatter tongue in the back and a low larynx [which they should maintain as they begin to play]
- Another rather common problem has to do with students bringing their stomachs in when they are inhaling and pushing out when they are exhaling. Make sure they have resolved this if they are having problems.
 - [Yoga breathing]
 - [Slow breathing in and out on 10 counts]

Beginning Vibrato Exercises

- Many young students think vibrato is “weird” and don’t want to work on it.
- Where to begin?
- Breath pushes
 - Begin with the syllable “who” ,”huh” or “Ho”. . [Santa Claus “ho ho ho” works well or the “Merry Old Land of Oz” song]
 - The point is to engage the abdominal muscles as the point of origin for a breath push. The lower abdominal muscles should go IN when pushing the air OUT.
 - Have students articulate separate pushes going to 2 per beat, then 3. [If you want to use a metronome, I recommend m.m. 60 per beat.]
 - Return to 1 or 2 and move up to 4, having them connect the pushes with the air. Encourage students to work for a change in pitch [sharp and flat!]
 - You do not want the sound to disappear when they relax the air.
 - They should try for “rolling waves” rather than “heart monitor” jags!
 - The pitch change comes from the pulsing of the air- relaxing the air before you intensify it with the push.
 - Fun and silly – try yodeling to feel the motion in the throat and mouth, all of which will move somewhat with vibrato

- Before adding the head joint, have students do the above exercises using air only and no vocal phonation. They should exaggerate the air so that they can feel the abdomen work and you can hear the waves in the vibrato.
- They should feel some expansion and contraction of the throat as the air moves through, but the actual push should come from the abdominal area. While the lower abdominal muscles will go in, remind them to keep the solar plexus expanded as long as possible. Keep the rib cage expanded.

Vibrato Exercises with the flute

Begin on the head joint.[The shorter the length of tube the greater flexibility in pitch and thus, the easier to create vibrato.]

- The following exercises involve measuring the vibrato to create evenly spaced waves and equal width of pitch change. While vibrato should NOT be measured in performance, it is helpful to measure it for learning purposes.
- Vibrato should never sound forced. This indicates poor breathing and support and consequently unwanted tension.
- Watch out that students do not tongue during this exercise.

- **Graduated vibrato speed**

- Go to the air only exercise starting with one pulse to a beat [60 m.m.] Usually they can get to 3 or possibly 4 before the pulses become uneven rhythmically and/or dynamically. Don't let them progress beyond the speed they can control !
- Somewhere between 3 and 4 or certainly at 4, the vibrato will shift to end up in the solar plexus, throat and possibly even tongue motion in the mouth. This has to happen to create the 5 and 6 pulses per beat [6 is a good maximum and not an average speed since it tends to result in throat vibrato.] If it is not well supported, the attempt at speed creates a great deal of tension and becomes just dynamic vibrato which is really undesirable.]
- You are listening for pitch change- above and below the initial tone, so have them start with a good solid tone to be able to recognize the pitch change. Again, be sure the pitch changes in rolling waves and not sharp jabs as this is not a supported tone or vibrato. If they are struggling with this, have them go back to air only and remind them of the abdominal push.

If you do not hear a wide pitch change, continue to work at slower speeds reinforcing proper breathing and support. It is highly unlikely they will get too wide of a vibrato unless they are artificially creating this through rolling the flute in and out or moving their jaw. [Most flutists only get about a quarter tone of pitch change.]

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— As they speed up the vibrato, they will inevitably lose some of the pitch change, so it is important to be as wide as possible on the slow speeds.

The following exercise produces the same result but allows a student to move more gradually. This is especially good for students who are having difficulty with maintaining pitch change.

- Begin with the metronome on 60 [or even slower if need be]. Pulse triplets. Gradually increase the metronome to 120 [equivalent to 6 pulses in the above method].
- Observe all of the same concerns as mentioned above.

- You must begin vibrato with a focus on breath pushes. As vibrato speeds up, the abdominal pushes will become less overt as the movement of the throat and solar plexus take over. Lower abdominal muscles will not move fast enough to create the faster speeds, however the breathing and abdominal support are critical to maintaining pitch change and avoiding the glottal stop that creates “nanny goat” vibrato.
- Students should practice vibrato every day. Like any technical skill, repetition is critical.

How to use vibrato

- In general, the higher the pitch the faster the vibrato can be, the lower the note generally the slower [within reason]. This is one of the most important reasons to practice vibrato up to 6 pulses. Vibrato should have the capacity to vary speed and width.
- A slow piece will most likely involve a slightly slower vibrato than a fast piece.
- The more intensity in the musical line, the faster the vibrato should usually be.

Vibrato helps to project a sound and thus can be important if there is a need for greater volume.

For the best projection, one should work for maximum width, or pitch change. Like volume, vibrato decays with distance.

- A great exercise to demonstrate this is to have students listen to another student as close as possible [right next to their ear if possible]. Have the student play exactly the same example while having the listener move as far away as possible. The bigger the distance the better. They will probably notice a significant decay in volume and presence of vibrato. This emphasizes the need for good support, breathing and a big vibrato.
- Vibrato may cause a student to use more air than a straight tone because the aperture in the lips may become larger and looser.
- Students should guard against the upper lip being pushed up and out or simply using more air than necessary. This will cause pitch, control and tone problems.

Vibrato and Expression

While vibrato should never be overly controlled or measured, this does not mean that the use of it should be unconscious. Vibrato should always be consciously approached for speed, width and general use.

- One of the most common [bad] habits is the “ON-OFF” technique. I frequently make students play scales using vibrato. It is a great opportunity to observe this as many students will play the first note with vibrato, the next without, the next with, etc. This habit is a bit like a driver who has one foot on the gas and one on the brake and who keeps alternating them while driving. [Egg under foot] Not a very pleasant effect!

One should take into account what other instruments are playing particularly in soli or lightly scored sections. Most instruments use vibrato regularly, the exceptions are clarinet and French horn. Therefore, if you are playing with these instruments you should be thoughtful as to whether you use vibrato or not. Simply playing with these instruments doesn't necessarily mean you shouldn't use vibrato, but it certainly means it is something to consider.

- There are divergent views on the use of vibrato on fast notes. I believe that it really depends on the circumstances. Using vibrato on fast notes can create great energy, vibrancy and help with projection when used appropriately. The biggest argument against its use is a sense of rhythmic disruption that can occur. If one is playing a rapid passage in conjunction with other instruments, it can be disrupting and difficult to maintain ensemble. However, in a solo passage there is no reason not to use it if you like the effect! It is personal taste.
- Note: Using vibrato on fast notes, doesn't really sound like vibrato. It sounds like energy and sparkle.

- **Practice scales** at fast and slow speeds with vibrato on *every* note. This works to improve flexibility and control of vibrato. It also works to improve breathing and support. [It also helps to learn scales!] Play scales at 60 per note using pulses of 3,4 and 5 for each note.
- **Long tones** – practice these with and without vibrato. Most people will realize that their tone sounds bigger, fuller and more relaxed when using vibrato. If that is the case, use vibrato the first time and straight tone the second time in an effort to match the quality, volume, etc.

- **Slow pieces** - So that you can be thoughtful as to how you ultimately choose to use vibrato as an expressive device, I highly recommend the following practices. In addition to the “on-off” habit, students can get into habits of turning vibrato on in the middle of a note. This leads to a “seasick” affect of starting without and then a crescendo as the vibrato increases, then turning it off to start the next note and expanding again when the vibrato comes in.
 - Practice the piece without any vibrato at all. Attempt to play music expressively and dynamically and with a variety of tone colors. If you are used to using vibrato, you may find this very difficult since you really have to control your air!
 - Practice the same piece now using vibrato on every note. You will have to listen very carefully not to manipulate the air and keep the vibrato steady throughout.
 - Now you are ready to make choices as to when, where and how you will use vibrato!

Vibrato the “old way”

- Traditional teaching of vibrato was simply, “listen to others and imitate them”
 - Some students will instinctively do this but most need one of the more regimented exercises to get started. However, listening is a critical component to learning and using vibrato.
 - I have listed a number of You tube videos involving flutists, singers and string players whose vibrato and subsequent use might be helpful. I find the string videos of great interest because you can see what they are doing to create vibrato! The wavering of the finger up and down on the strings illustrates the pitch change component and also illustrates the speed variation.

You tube suggestions

- I have a public You tube site with a variety of videos that I find inspiring for vibrato [and beautiful playing!]
- As mentioned, the string videos are particularly interesting since you can visibly see what they are doing to create vibrato.
- All of these videos utilize a variety of speed, width, intensity, timbre and illustrate the personal nature of vibrato.

You tube videos

- Look up: Karen Futterer
- Playlist: Vibrato
- The videos I posted in the playlist “vibrato” consist of a variety of flutists, singers, and string performers, all significant in the way they utilize vibrato.

Vibrato can and should be taught

- Whatever method you choose to use, don't give up on teaching vibrato. Once students leave the beginning class, you will not have the opportunity to work with them on this very important element of their playing!