

Using the buzzing tube with brass students in a Secondary Education Context will help beginner students buzz the mouthpiece correctly. This method will allow students to set their embouchure and match sound with muscle memory using the drone feature on the metronome to hear the pitch. In typical early instruction, the student is introduced to mouthpiece buzzing as a supplemental tool to help generate buzz and pitch. Still, the resulting sound is often overly tense, rigid, and lacking in resonance. This is because buzzing on the mouthpiece requires much more physical exertion and muscle tension to play a given note than on the instrument. The physics involved in playing the instrument aids the embouchure with both wind pressure and sonic resistance. The mouthpiece does not have these alone, and the student must compensate by exerting greater muscle tension. The buzz tube that attaches to the mouthpiece creates the best and most proper embouchure via a compromise that achieves the best of both worlds: The independence of pitch of the mouthpiece alone, but, with the backpressure and stability of the entire instrument that creates the most relaxed and open sound. The buzzing tube resistance makes the transitions to playing the instrument easier because the embouchure and the air require little to no change.

This method should be introduced during 5th or 6th-grade brass students and ongoing practice tools through High School and beyond. Some may disagree with having the students buzz on the mouthpiece because it creates embouchures fatigue and tension, and they feel it is ineffective. During the first three to four weeks of the beginning band, most band directors will show students buzzing without a mouthpiece, proper placement of the mouthpiece on the lips, breathing techniques, and creating a buzzing sound on the mouthpiece. On average, at least 20 to 30 minutes is spent doing buzzing exercises. The buzz tube method creates the resistance needed to prevent fatigue and tension and help with breath support.

The Buzzing method aligns well with Gordon's Music Learning Theory, a pedagogical approach that emphasizes aural/oral discrimination. According to Gordon, this is the most basic type of discrimination, where students hear tonal and rhythm patterns and imitate them by singing, moving, and chanting patterns back to the instructor. The buzzing method encourages students to listen to the aural portion of discrimination learning while performing the oral portion, making it a suitable learning approach for this method.

This approach from Gordon was taken recently with two students in the sixth grade who began playing trombone, but both students wanted to switch to Tuba. Both students had played the trombone for the past four months and were able to create a sound although it was generally very tense and they struggled with concepts of pitch. In this instance the method was found to be helpful in aiding the students in this area.

Buzz Tube Assessment (While Using Gordon's Theory)

To assess the students, I went through the process of using the method in which most band directors use by having the students buzz on the mouthpiece alone. Since they were already used to buzzing on a trombone mouthpiece with this bigger mouthpiece, I wanted to make sure that the students were able to produce a buzzing

sound and have the proper embouchure. Immediately, I noticed a lack of airflow, an inability to sustain a buzz, a thin, pinched tone, and tension in their lips.

Development/Application of method

At the beginning of my baccalaureate career in tuba, I was shown this buzz tube method by my teacher. A nine-inch plastic tube was placed on the end of my mouthpiece, and I was instructed to buzz. While working with it, I noticed significant improvements in my tone, pitch accuracy, intonation, and air flow. I tried this method with both students and saw improvements with the flow of air and the ability to buzz through the mouthpiece. The first week I spent 10 minutes during each class having the students buzz on the mouthpiece with the tube. The goal for the first week was to have the students be able to form an embouchure, create a steady flow of air, and a steady even sound without tension.

Second week, I focused on pitch accuracy on the mouthpiece. With this I used a metronome tuner and played the pitch for three notes: B-flat, C and D. In most books in the secondary methods for 6th grade such as standard of excellence by Bruce Pearson, they begin with the third note (D) and have the students play down to the first note (B-flat). Using the drone, I was able to have the students listen to the note, understand this sound and lock it in their minds. Now that they heard the note the student then was instructed to buzz the note using the buzzing tube what they heard. This took some time as students were still getting adjusted to the size of the mouthpiece but were able to buzz the first two notes (D, C). Goal: Students be able to hear the note and imitate what they heard. Challenges: air support, embouchure

Third Week: Focused on the B flat, C and D transferring to the instrument. First five minutes used to buzz the mouthpiece with a buzzing tube using the drone. Students showed much improvement with air flow and less tense embouchure. The next five minutes was spent on teaching the students to hold the instruments and have the student buzz through the instrument. With the buzzing tube simulating the tension and resistance of the Tuba, the students were able to imitate what they did on the plastic tubes. Throughout the week, I began showing the students the notes they played in relation to the notes' placement on the staff so they could merge what they saw with the sound they produced with the instrument. Though there have been some challenges to breath support with just using the buzz tube, when transferred to the instrument, though still present, they showed improvement compared to when they first began.

Measurable progress/results

While working the Tuba section, I noticed a horn player in the same grade who had lip tension, pinched sound, and pitch accuracy issues. Like the two trombone players, the horn player has played the instrument at the same length of time. I began shifting the focus to him and using the buzz tube method with him. We spent five minutes during warm-ups each week using the tube and drone for three weeks, starting with A down

to F and then from middle C to F. After a week, students' tone showed significant improvement. Throughout the weeks, I noticed an improvement in embouchure, aural skills, and relaxed sound.

After three weeks, the two tuba students continued to achieve noticeable improvements in tone, embouchure sustenance, and sound consistency. After two weeks, the horn student progressed to a more relaxed sound with airflow and could play partials. I've seen the power of the buzz tube method with my wife, who has never played brass instruments, initially struggling to create and sustain a pitch on the mouthpiece alone, but was able to do so after just a few minutes of work with the buzz tube. This personal experience further reinforces my belief in the effectiveness of this teaching tool.