

Common Brass Questions from Middle and High School Students

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The Giannini Brass has presented educational workshops in universities and public schools throughout the southeast. Over the years we began hearing several of the same questions asked from school to school. The following are responses to some of the more frequently asked questions from brass students and teachers:

How do I get a characteristic sound from my brass?

CHRIS: The same way we learn to speak, through listening and imitation. The sound should start first in the student's head. This can be achieved by exposing students to professional recordings as well as live performances.

DAVE: Mouthpiece buzzing is an important aspect of developing a good characteristic sound. Major benefits from daily mouthpiece work include better tone production, increased endurance, increased range, better breath control, and a more comfortable sense of pitch. Try having your students play a passage, then buzz it, then play it again. Most students are surprised when they feel the results of using more air.

Why does my brass sound "pinched"?

CHRIS: A "pinched" sound in your brass can be the result of several factors. A common solution is to work with your students on opening up their oral cavity. Many directors achieve this by telling students to drop their jaws, pretend they have a mouth full of marbles, pretend they are saying an inward "oh" syllable, etc. Check the corners of their mouth and be sure they are not in a smiling position. Another common cause of a "pinched" sound is poor posture and hand positions. Tuba and euphonium players often slouch over their instruments, which is hard to tell from the podium. This often occurs because students want to rest the weight of the instrument on their lap or chair, then suddenly have a growth spurt and do not realize they need to compensate. To combat this, euphonium players may use a pillow or foam pad for support. Personally, I have used a rest made by DEG which supports the weight of either the tuba or euphonium while being played. M. Dee Stewart, professor of music at Indiana University, has also developed a stand for euphonium and tuba that attaches directly to the instrument. These items can be purchased through various companies such as *Brasswind* and *Brook Mays*. These stands support the weight of the instrument, freeing the player to focus on playing, correct hand position, and help improve their posture!

How do I increase my students' range?

KEN: Lip slurs and chromatic scales. Always connect the high register with the low. Do not attempt to belt out high notes. This produces negative results! Practice slurs from low C to high C trying to minimize embouchure movement only using air and diaphragm support. Always warm down after practicing the extreme registers. Your face will thank you the next day!

CHRIS: One of the most often overlooked parts of a warm-up that develops range and tone are lip slurs! Why? In the beginning they are challenging for students to do. Often a wide variety of sounds are produced during the first few attempts. Don't get discouraged! The first few times will probably sound rough and result in a few giggles, but in time lip slurs will become more comfortable. Lip slurs should be performed

daily. What can the rest of the ensemble do during this time? Many programs have their woodwinds and percussion use this time to look over parts. Some programs have their woodwinds and mallets do pentatonic runs during this time. Keep in mind that lip slurs will not only improve range but also flexibility and tone by allowing them to focus on their use of air.

JOE: Usually this refers to high register, but don't forget that there is also the low register to consider. The main factors in increasing range are:

Air: Most important thing. Lots of support

Embouchure: General rule for mouthpiece placement. is an even ratio of 50/50 upper/lower lip inside the mouthpiece with the mouthpiece centered directly under the nose . One of the most common bad habits is the mouthpiece is "sliding down" so the student has more lower lip than upper lip in the mouthpiece (you can see the red part of the upper lip). If this happens, the high register is going to be weak, and will produce a thin sound.

Pressure: Too much pressure will hinder reaching high notes, as well as endurance.

Practice: Some students have a natural feel for the high register. The rest of us have to practice. Long tones and lip slurs are good basics. (Remember-lots of air)

Mouthpiece: Although trumpet players like to use different mouthpiece for high jazz work, for a horn player this is not recommended. Don't let students switch mouthpieces, looking for a "fix" for high notes.

Don't forget the low register: Students should be able to play a smooth scale from concert Bb in the staff (first space horn F) down to lower octave and then down a fourth to low pedal C. This is not usually as difficult to produce as high notes. But, it can be a problem with transfers from trumpet. Also most students don't know the low fingerings from low F to pedal C. They are the same as trumpet fingerings.

How do I clean my students' articulation?

KEN: Practice staccato scales. There are many tonguing exercises in the Arban's Complete Method that will clean up articulation.

JOE: Correct tongue placement and lots of air. Although we teach using a variety of syllables such as "Tah", students do not always translate the concept into reality unless you spend a little (or a lot) of time with them. Some basic observations: 1) make sure the student is actually using the tongue, not just producing air attacks 2) make sure the student is not stopping the air with the tongue, producing a "tut" type of attack.

What are the benefits of larger equipment?

KEN: Improved sound! Although larger bored instruments and bigger mouthpieces are preferred by the professional player to produce a darker tone and better flexibility, a young student should be advised that attempting to play larger equipment without following a systematic approach can produce negative results. Changes to larger equipment should be gradual and monitored by a private instructor. Range and endurance will suffer if a developing embouchure is not ready for such changes.

CHRIS: Students should be able to get a good sound on the equipment they have first. A bad sound on small equipment usually translates into a bad sound on large equipment. Once a good sound is established and reinforced, you can encourage students to try out different equipment to see what works best for them.

JOE: The greatest benefit is a fuller sound, as well as the ability to produce more contrast in one's playing. To accomplish this, a double horn is necessary equipment. I play a Conn 8D, which is about as big as you will get in the horn world. It is modified with a Lawson FB 210 leadpipe and a Lawson Ambronze screwbell. As a student I played a Conn 6D, which is still a good (slightly) smaller instrument for students. I have also played a Holton and a Yamaha for several years

What are your thoughts on mouthpiece selection?

KEN: Speaking to trumpet players, most mouthpiece companies produce a beginner mouthpiece equivalent to a Vincent Bach 7C. This is a good all around mouthpiece for beginners. The normal progression in embouchure development is to graduate to a 5C after two or three years of playing, depending on the strength of the embouchure. I recommend that students move to a 3C in high

school then by college, the student should have a strong enough embouchure to move to the larger sized (professional player) rims and cups such as the 2C, 1 1/2C, and if advanced, the 1C. The larger the number, the deeper the cup. It is important to remember that a mouthpiece size is like a shoe size, everyone has a different facial structure, some have braces and there are many levels of embouchure development so always consult a private instructor for the best time for a mouthpiece change.

Joe: There are about 5-6 mouthpieces that most teachers and players recognize as good for school horn students, they include the Bach 7, Holton MDC, King H2 and Conn Constellation. Quite often the mouthpiece that comes in the case with a reputable brand horn is a good middle-of-the-road piece of equipment. When a student is working with a private instructor on a regular basis, the teacher may recommend a variation on the basic cup, bore and rim, usually by recommending a mouthpiece that offers a screw-on rim. Usually a student will go with a Giardinelli C-8, C-10 or C-12 (progressively smaller), and will try a few different rims. I use an Atkinson C-12, which is compatible with my horn, and leadpipe, and works well for the types of playing I have to do. An important word of advice to band directors, is to check and make sure that the student has not dropped the mouthpiece so many times that opening of the mouthpiece is half-closed.

CHRIS: Most beginning trombone mouthpieces are small to accommodate young players. Many trombonist start on the equivalent to a Bach 12C or 7C. I recommend a 7C for beginners since they will grow into it faster as most beginners start band now in the 6th and 7th grades rather than earlier. As students mature to larger / professional equipment, a larger mouthpiece is called for. A normal progression for trombone students is Bach 7C, to Bach 6 1/2 A1, then for stronger players a Bach 5G.

DAVE: Although all seem rather large, young tubist should start on a smaller and shallower mouthpiece since it will be easier to produce a good tone on it as well as develop a proper embouchure. As a student develops and moves to High School, a deeper mouthpiece is called for to achieve a warm and full sound to be the bottom of your ensemble.

There are several different choices when it comes to mouthpiece selections. Here are a few general recommendations:

Instrument	Middle School / Beginner	Advanced H.S. / College
Trumpet	Bach 7C	Bach 5C, 3C, 2C, 1.5C, 1C
Horn	Bach 7	Holton Farkas MDC, King H2, Giardinelli C-8, C-10 or C-12
Trombone	Bach 7C	Bach 5G, 4G Wick 5AL, 4AL
Bass Trombone	Bach 4G, 3G, 2G	Bach 1, 1.5 G Wick 1AL
Euphonium / Baritone	Bach 7C(Small Bore) Bach 6.5AL (Large Bore)	Bach 4G, Shilke 51D Wick 4AL
Tuba	Bach 22 Conn Hellenberg 7B	Bach 24AW, 18, 12, 7 Conn Hellenberg Standard or Deep

What are the advantages of a double horn and when should I switch students to one?

JOE: Students should play on a double horn as soon as they can comfortably hold the instrument, which is larger than a single horn. The most touted advantage to the double horn is added security in the high register. But, the director must make sure the student is using the correct fingerings. For a young student most double horns made by a reputable manufacturer will produce an adequate sound, as long as they are in good working order, all the slides work, the valves do not stick, no major dents, etc. (this is often half the battle with public school equipment).

Can you explain the hand placement for horn?

JOE: First of all, this is a very important habit to develop, both for sound quality and for intonation. You should visualize the bell as a “clock”. The students put the back of their right hand against the bell at

“three o’clock”, and their thumb at 12 under the diamond brace. This is a good general rule for all age players, one reason is that if the player has to stand and play, the hand position is already in the right spot to support the horn securely. Another aspect is that a student should visualize that their hand is hinged so that the *palm* can open and close like a trap door. This way, if the student is playing on the sharp side, they can close the hand slightly to bring the pitch down, and open the hand if they are playing flat.

Can you explain muting and “stopping” effects on horn?

JOE: Horn players and band directors often get confused about the difference between muted and “stopped” passages. Here are a few comparisons:

MUTES: sometime noted by the term “con sordino” (or miscellaneous other foreign terms).

Technique: Stick the mute in the bell securely and raise the dynamics a notch to compensate. For fast mute changes, I advise equipping the mute with cord, by drilling a small hole in the center of the mute and running a braided shoelace through the hole in a loop. This way the player can “hang” the mute and grab it quickly if the part calls for a quick change to muted horn.

Equipment: If the band is providing a fiber mute, it is best to go with the old standard, cheapest and reliable, namely the red and white Humes and Berg mute. Giardinelli makes a black fiber mute that is a little better and almost the same price. I use a mute that is made by Steve Lewis in Chicago, it costs approx \$100, twice the price of the cheaper mutes.

HAND STOPPING: a peculiar effect to the horn, is usually notated in the music by +. If a student has correct hand placement and the hand is large enough, stopping should be easier (note: I did not say easy).

Technique: The student will swing shut the “trap door” of the palm, until it seals the bell completely. The pitch should jump up a half-step. This means, of course that the player will have to transpose down a half-step. If the bell is not closed completely, the pitch will not go up and you just get a strange sound, like a cow in pain.

Equipment: As an alternative to hand stopping, the student can use a standard fiber mute or a metal stopping mute. Generally, a regular mute will usually suffice to produce a timbre change, and you do not have to worry about transposition. If you really need a stopped horn sound (and feel like it is worth it to go through the ordeal) a stopping mute is the best solution. But, the player will still has to transpose down a half step, a skill that has to be practiced by young players. The metal stopping mute is a good way to ensure the nasal stopped sound. But, don’t forget, the metal mute is a ”transposing” mute, so the student has to play all the pitches down one half step. Popular stopping mutes are made by Tom Crown and Trumcor (more expensive).

What are the advantages of an F – attachment (trigger) on trombone?

The main advantage is the ability to play low C and F in first position rather than sixth and low B and E natural in second position rather than seventh. With a trigger, there are several other alternate positions available, however these are the most popular. As a rule, trombonist generally do not use the valve on any notes above C in the staff because of the sound quality. Students will also be able to play low Eb, D, Db, C, and B natural below the staff where as they cannot without a valve. These notes are rarely seen in the literature unless you have a bass trombone part.

When should I use the third valve slide on the trumpet?

KEN: It is impossible to build a trumpet exactly in tune. We must compensate for the bad notes by using our slides. In general, low D's and low C#'s are the worst on the trumpet. Always sharp! Use your third valve slide to lower the pitch. Practice intonation with a tuner and you will find

where you need to adjust on your instrument. Advanced players often use the first valve slide to tune low and especially high A's which tend to also be sharp on most trumpets.

Any advice on switching young students to tuba?

DAVE: The biggest concern is the size of your student. Good tuba candidates should be able to lift and hold the tuba comfortably and easily reach the leadpipe. Of course smaller tubas are available for young students, as well as special stands as Chris mentioned that can support the weight of the tuba, freeing the student to focus on performing.

What kind of lubrication do you use?

KEN: I use Al Cass "Fast" valve oil when I can afford it. To be honest, most of the time I use clear lamp oil that costs about a dollar per half gallon at Walmart! It works just as good on my valves. I fill small bottles so I can keep handy in my trumpet case. I use Spacefiller TS, a brand of tuning slide grease for my main tuning slide and valve oil for all other slides.

CHRIS: I recommend a product called "Slide O Mix" for trombone slides. When used correctly, it works wonderfully, last long, and is not as messy than other slide creams. I also use Spacefiller tuning slide grease on tuning slides, and Al Cass "Fast" valve oil on my rotor.

JOE: On my valves, I like the thin trumpet such as Al Cass or Blue Juice. For my slides, I have used a variety of commercial and non-commercial lubes over the years such as anhydrous lanolin, STP, Vaseline, etc. In the end, I like a brand called Spacefiller the best.

How do I find artists to perform for my students that fit my limited budget?

CHRIS: Universities and other schools of music are always on the lookout for places to perform at no cost to the host. Not only do they have large ensembles that tour, but also several smaller ensembles from each studio that look for places to perform throughout the year. If you are fortunate to have a local symphony close by, contact their personnel manager or education representative. Often local symphonies receive grants to visit public schools, either with the full orchestra or one of their small chamber groups.

JOE: Another very good option is to make contact with military ensembles, particularly the top groups that are based in D.C. They will play for free, especially if they are on a tour or if you can cover a portion of the travel expenses.