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#### **Description of Initial Lesson for Beginning Trumpeter**

This is assuming you are working with a small group of first-time trumpeters. Adjust appropriately for one-on-one lessons. If at all possible, do not let your students take their trumpet home until they have had at least one lesson. This will prevent the formation of bad habits, and students exploring/tampering with and potentially damaging the trumpet.

1. Have your students put their trumpet case on the floor with the emblem up. Demonstrate how to open the case and pick up the trumpet (I suggest grabbing the leadpipe with the right hand).



 Demonstrate holding the trumpet with the left hand with good posture, standing if possible. Wait until they have all copied you. Address differences that you see. Left hand ring finger should be in the third valve slide ring. When they have all copied you, add the right hand and have them copy you again. Right hand should be shaped as if holding a Big Mac (idea borrowed from Walter Chesnut). Left hand holds the trumpet, right hand plays the trumpet.





- 3. Have them press all of their valves down and remove their tuning slide, placing it gently in their open case. Remove yours too.
- 4. Have them experiment on their own playing an open (valveless) tone. It may sound like "moo" or "cluck". Mimic what you hear from them (you may even verbally label it "moo" or "cluck") and have them copy you. Then play a focused tone for them with a breath attack. Play the lowest "note". Have them copy you on your cue. Play back and forth this way for a while. Observe and acknowledge success. Address any differences you hear and guide them to adjust. Ask if anyone wants to demonstrate and assess this student individually.
- 5. Try to make sure everyone is making a sound. If not, have them just blow air through the trumpet (or even just the mouthpiece) to get air moving through the horn. Then have them try to play again.
- 6. Replace the tuning slide. Demonstrate a focused low C for them (breath attack) and have them copy you. Observe and acknowledge success and address any differences you hear. Ask if anyone wants to demonstrate and assess this student individually.

You may want to have pinwheels to facilitate a steady air stream. Ask them to blow into the pinwheel, keeping it moving at the same speed consistently. This is like how they should blow through the trumpet. Then return to the low C and see if that made a difference.

- 7. Teach them the first part of a C scale (C, D, E, F, G). Have them show you and tell you the note name and valve combination.
- 8. Demonstrate a low C tongued and ask if they can tell what you did differently. Have them copy you. Do this for each note in the mini-scale. Then demonstrate playing all five notes in sequence, legato tongued, and have them copy you.
- 9. Teach them a tune by ear, like "Mary Had a Little Lamb".
- 10. Show them how to put the trumpet back in the case (you can put your right-hand pinky in the pinky ring and, holding the trumpet with your right hand, put the trumpet in the case) and close the case. Have them copy you.



Encourage them to review the lesson at home every day. Congratulations! You have given a first trumpet lesson!

Future thoughts:

Generally, the instructional sequence should be as follows:

- 1. You demonstrate
- 2. They copy
- 3. You address differences

If you want to give them a little more control and freedom, you can have them try something first before demonstrating. One sequence is sometimes better than the other.

#### Subsequent lessons:

Have them learn several tunes by ear. The ear is the priority. Then give them a book. It doesn't really matter which beginning book you use. Then you will show them what their sounds look like. Young students like check marks in a book that show they completed a task. Continue learning tunes. Learn them in major and then minor keys. Play them in a round. Recognize these learned concepts and skills and other mile markers you hit. Later, learn tunes in different keys. Tunes are fun to learn. This will keep them interested and develop their ear.

Cut normal drinking straws to about 6 inches in length. Students can practice blowing through an open straw. If they block the open end of the straw by closing it off with their finger, they can produce a pitch/tone by blowing into the straw. This is akin to producing sound on the trumpet (exercise could be misunderstood in writing, better to demonstrate in person).

Concepts/exercises borrowed from MWNA program designed to retrain brass players: <a href="https://musicianswellness.com/">https://musicianswellness.com/</a>).

On lesson 3 or so, teach them how to oil their valves as follows:

a. Put the trumpet between your legs with the bell facing out (having a rag underneath keeps the oil off pants).

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- b. Unscrew the valves, and while keeping the end of the valves in the casing, drizzle some oil on the bottom section with the holes in it so it coats that whole section.
- c. Twist the valve up and down and back and forth until you feel the oil is well distributed.
- d. Reinsert the valve, making sure it is properly aligned. Usually the number on the valve should be facing you. Put the number slightly to your right and turn clockwise until it stops. Screw the valve back on. If the valve is not aligned, it will feel like there is a sock in the instrument when you try to play it! e. Repeat this process with each valve.

## Trumpet Pedagogy for All Ages and Abilities

How do you play the trumpet? Sound is produced on the trumpet when the player energizes the air molecules already in the trumpet by blowing into the trumpet with the intention of making a sound. The energy traveling in the air sets the air molecules already inside the trumpet in motion. They "reflect" of the atmospheric air at the bell, and a standing wave is created in the trumpet (concept borrowed from John Harbaugh,

<u>https://www.youtube.com/watch?v=MVs2G60-ilo&t=466s</u>). The lips sympathetically vibrate with this standing wave in the trumpet, creating a tone. The lips will naturally come together when air is blown through the trumpet (Bernoulli effect).

- Therefore, the enrgy in the air and the ear plays the trumpet. You do not need to buzz your lips. In fact, doing so will cause problems. I discourage lip and mouthpiece buzzing for this reason.
- Breathe as naturally as possible. Lay down and observe how you breathe in this position. The abdomen should rise on the inbreath and fall on the outbreath. When standing, the gut should relax on the inbreath, and the chest should rise and expand on the outbreath. Then, let the music teach the body how to breathe.
- You do not need to use a lot of air to play the trumpet. Too much air will cause problems. You need just enough to touch and vibrate the air already in the trumpet. This is very little. You do however need air that moves.
- Cut normal drinking straws to about 6 inches in length. Students can practice blowing through an open straw. If they block the open end of the straw by closing it off with their finger, they can produce a pitch/tone by blowing into the straw. This is akin to producing sound on the trumpet. You should not feel the air coming back towards you. If you do, you may be using too much air. Transfer this feeling and sound of resonating the pipe to trumpet playing (exercise could be misunderstood in writing, better to demonstrate in person; exercise borrowed from MWNA program designed to retrain brass players: <a href="https://musicianswellness.com/">https://musicianswellness.com/</a>).
- The teacher should encourage the student to focus on feeling the air travel freely through the pipe and hearing how they want to sound. This external focus of attention will be a far more successful method of motor skill development than teaching the specific motor skills themselves (based on research by Gabriele Wulf, <u>http://gwulf.faculty.unlv.edu/</u>).
- The teacher can however correct bad physical habits that present in their students. Otherwise, teach by having the student envision the sound they want. While demonstrating is helpful, description, recordings, and the student's imagination are just as helpful.
- Many trumpet playing struggles can be addressed focusing on the above concepts.

Concepts borrowed from MWNA program designed to retrain brass players: <u>https://musicianswellness.com/</u>.

## **Common Problems and Solutions with Beginning Trumpeters**

- 1. Stuffy sound, forcing
- The trumpeter may be blowing too hard, using too much air, or physically trying too hard. Encourage a relaxed body and an ease in playing, perhaps even a gentle approach. Have the student look for a relaxed sound. Playing with ease should be a top priority. Students should not move on to more difficult material until they can play the current material with physical ease. Work only as hard as you need to and not any more.
- The trumpeter may be closing off the airstream with their lips. Encourage the trumpeter to feel the air flowing across the inside fleshy part of the lips, allowing the air to flow freely into the mouthpiece. To practice, have them blow air through the trumpet (with the mouthpiece inserted) and focus on how the air feels flowing freely through the lips. Have the student blow air through the horn to the bell gently (exercise borrowed from MWNA program designed to retrain brass players: <a href="https://musicianswellness.com/">https://musicianswellness.com/</a>). Have them recreate this feeling playing the trumpet by playing low C's with breath attacks. Alternate back and forth between air and tone to match.
- 2. Posture and holding the trumpet

Feet should be flat on the floor. Shorter people can sit towards the edge of the seat. Others can sit all the way back. Shoulders, arms, and hands should be relaxed. The trumpeter should be relaxed but not slouching.

The left hand holds the trumpet, the right hand plays the trumpet. The left-hand ring finger should be in the ring on the third valve slide. The other fingers should be curled around the third valve casing and the slide. The wrist should be as straight as possible and the ring finger should be as far out of the ring as possible. The thumb should go in the first valve "crook" or in front of the first valve, at the bottom. The trumpet should rest on the left hand. The right-hand shape should be like holding a Big Mac or the shape of a backwards "C" (idea borrowed from Walter Chesnut). The right-hand pinky should rest on top of the pinky hook. The wrist should be as straight as possible. The right-hand thumb should go in front of the first valve at the top. Arms should be at a 90° angle.



Good posture is important so that the air is as free flowing, in and out, as possible. Proper holding of the trumpet is important for staying relaxed and for long-term physical health and comfort. This can be difficult if the instrument is too big for the young student. Be flexible with smaller students. Using a cornet or pocket trumpet can help with this.

#### 3. Tonguing, attacks, releases

Use the sound to guide articulation, or diction as labelled by Jan Kagarice. Tongue does not need to hit any surface in mouth but only needs to interrupt air/tone column. Tongue should time precisely with air movement. Tongue should interact with air part way back on the tongue. This location will move back as pitch ascends.

A good analogy for tonguing is like a running faucet. If you run your finger under the water, it does not stop the water. The tongue should not stop the air. The air should be continuous when legato tonguing; staccato tonguing should be one air flow even though it technically pauses in between notes.

The energy in the air makes the sound, not the tongue. The tongue provides color to the tone and helps with projection. In most classical music, the tongue is not used to stop notes, just stop the air flow.

## **Common Problems and Solutions with Developing Trumpeters**

## 1. Embouchure

Embouchure is not something we want to teach. Every student is different, and their physical make-up influences their embouchure (usually teeth and jaw position). What is most important is that their air can easily get through the trumpet and they can make a resonant sound. Air stream should generally be centered on the mouthpiece. Keep striving for that sound and the embouchure will develop naturally.

## 2. Using slides for out-of-tune notes

The D and C# right below the staff are sharp on the trumpet. The C# is sharper than the D. Players need to extend the third valve slide for these notes. It depends on the trumpet and the player, but typically the slide needs to be extended all the way for the C# and about 3/4 for the D. The earlier this becomes a habit, the better. Make sure this slide is lubricated and very easy to move. If not, it should be assessed by a repair person.

For those with small hands, wrap several pipe cleaners around the third valve slide ring at the back to help with its use. And, using plyers and a cloth to avoid damage, bend the front part of the first valve slide crook closer to the first valve to help with its use (suggestions from Louis Ranger).



#### 3. Warm-up

A daily warm-up/maintenance routine is important for growth, ease of playing, fundamentals, and health. Please see <u>www.utc.edu/trumpet</u> for my warm-up routine.

#### 4. Lip slurs

Use the sound as your guide and seek ease in playing. Sound should be continuous through any slur. Lip slur exercises are important for developing the embouchure.

#### 5. Inhale/exhale

The body knows how to breathe very well. Trumpeters should inhale and exhale as they normally would without the trumpet, similar to speaking. The difference is the exhale will be more directional. A timed inhale is counterproductive and unhealthy. If you are resting before an entrance, allow the air to come in naturally ahead of time. If you are breathing in the middle of a phrase, relax the gut to let the air come in quickly. Do not "take a breath" or suck air in. Remember, let the music teach the body how to

breathe. When we speak, we do not "take a breath". Our body knows how to take in the air it needs to speak in sentences. Same with music. Use the body's natural breathing expertise. Concept borrowed from MWNA program designed to retrain brass players: <a href="https://musicianswellness.com/">https://musicianswellness.com/</a>).

#### 6. Projection

The person sitting in the cheapest seat in the concert hall still needs to hear you at pianissimo (concept from Louis Ranger). But this is not about playing louder. This is about projection which comes from resonance in the bell.

#### 7. Developing range

Select music that is within a comfortable range for your trumpeters. Inappropriate music selection and a natural but sometimes unhealthy competitive tendency often makes trumpet players try to expand their upper register too quickly, resulting in strain, a range plateau, and risk of health issues. Create an atmosphere that values a good sound, ease of playing, and musicality over high notes. Those notes are not any more important than others. Let range develop naturally. One exercise to incorporate in the student's practice routine, when they are ready, involves a sequence of one octave scales. Have the student start with their lowest scale and play it ascending and descending. Rest for as long as it took to play the scale, then play the scale one-half step higher. Continue with this process until the student just begins to strain for the highest note. That is when the student should stop with that exercise for the day. The student should stop at the point of strain each day, which will vary. Eventually, it will become more consistent (exercise from Louis Ranger). Chromatic scales can be used in a similar fashion.

## Select Problems and Solutions with Advanced Players

## 1. Playing mechanically vs. musically

Focusing on musical expression will yield maximum growth as a musician. How do you want it to sound? What do you want it to communicate? Technique will develop naturally from this focus. Help them to develop a musical vision for each piece. Nourish their creativity, imagination, and expression. This will fertilize their passion for music and make it lifelong, music education's most important aim.

## 2. Practice habits

Please refer to the Practice Guide on my website (<u>www.utc.edu/trumpet</u>). Serious students should be practicing every day, completing a warm-up/daily maintenance routine, in the morning if possible, and 1-2 practice sessions later in the day.

## 3. Endurance

Endurance is really about efficiency, working less and making playing easier. The lips should relax around the air stream. Do not buzz. The air and the ear plays the trumpet. This allows a trumpeter to play for a long time. The trumpeter should prioritize a relaxed way of playing as a skill to practice. This will allow them to play longer. It is also important to rest frequently and when tired. Avoiding fatigue will build endurance. Listen to the messages from your body. Concepts borrowed from MWNA program designed to retrain brass players: <u>https://musicianswellness.com/</u>.

## Common Problems and Solutions with Trumpeters in Band or Orchestra

## 1. Inside voices

Trumpeters might need to be reminded that concert band is not marching band. While a certain volume and brightness is acceptable on the field, and perhaps necessary to project outdoors, this is not acceptable inside. Students will need to play softer in general. Their loudest dynamic inside will be less than the same outside. Students should strive for a warmer sound.

# 2. Balance

For concert band, I think a good rule of thumb is to have section members play a little softer than the first chair player of each part; make sure they can hear the first chair player while playing (suggestion from Walter Chesnut). Make sure they understand which part is most important at various parts in the music. Make sure they can hear that part (if it is not theirs) while they are playing. Sometimes, all parts within the section are equal; ask them to make sure they can hear all parts equally. For practice, rotate the players so they all get experience playing every part, and therefore get familiar with every part. Often, it is the inner parts that need to play out more. Exercises to practice this can be helpful. For example, for a particular section of music, have the lower parts play forte and the first part play piano. In orchestra, the principal trumpet should not have to play louder to project over the other trumpeters. Section trumpets should generally play under the principal trumpet. Sometimes the balance should be equal. Sometimes the section members have a lead or solo part and need to play accordingly. When playing, the principal trumpet often leads the orchestra.

# 3. Uniform sound, articulation

In any ensemble, players need to sound the same. They should match the principal trumpet. They may not want to do this, but they must. When they leave the group, they can go back to their own style if they wish. For practice, have one student play something simple, like a scale or arpeggio, and have each player try to play exactly like the model student. You can have the players take turns being the model or use the principal trumpet. When modeling, they can experiment with playing very uniquely and thus making it harder to match (style, articulation, dynamics, intonation, etc.). Have a classmate verbally analyze if they sound like the model or not and how they sound the same or different. Exercise borrowed from Doug Lindsey, https://www.dougtrumpeter.com/.

# 4. Projection

Although #1 and #2 address those who play too loud, some young trumpet players have the opposite problem-they do not project their sound well or play too soft. Trumpet players can adjust their bell angle slightly depending on the desired volume of their part. In general, make sure they are not playing into the ground or into a stand. Their bells should be visible to the audience and directed towards them when playing an important part. Orchestral trumpeters in particular will need to project well. Ask them to envision themselves in a large concert hall, and the person in the cheapest seat needs to hear them just as well as those in the orchestra section (concept from Louis Ranger). Please refer to "Projection" in the "Developing" section for more information.

## **Recommended Trumpets and Mouthpieces for Different Ability Levels and Prices**

#### Mouthpieces

Trumpet players should start on a Bach 7C. With Bach mouthpieces, as the number decreases, the size of the mouthpiece increases, specifically the cup diameter. The letter refers to the cup depth. As you progress through the alphabet, the cup gets shallower.

When the student can play from low C to top-of-the-staff G with good tone and is practicing 30 minutes/day, the student is ready to move to a 5C.

When the student can play from low F# to high C and is practicing 45 minutes/day, the student is ready to move to a 3C. The student can move from a 7C straight to a 3C if they meet these criteria. Once on the 3C, the student can remain here throughout high school. Any subsequent changes should be made with a private instructor.

(Progression concept borrowed from Michael Huff,

https://www.troy.edu/academics/collegesschools/college-communication-fine-arts/departments/johnm-long-school-music/faculty-staff.html). The student may regress at first when using a larger mouthpiece regarding range and endurance. This is normal. Be patient. The student should not force progress. With patient, gradual practice, the student should eventually sound even stronger than before.

Do not move students to a particular mouthpiece size by age. Move them by the criteria above. If a trumpeter does not advance beyond a 7C during high school, so be it.

Do not succumb to the temptation of switching your trumpet players to smaller mouthpieces in order to gain more range. For example, the Schilke 14A4A should be avoided. High school and younger trumpeters should be playing only one mouthpiece as described above unless the trumpeter is very strong, and the private instructor feels a different mouthpiece might be more suitable for jazz or marching band. High school and younger trumpeters should not be experimenting with mouthpieces. Mouthpieces do not solve playing problems, practice does!

I do not recommend purchasing used mouthpieces unless you have evaluated them in person, and they are in like-new condition. Mouthpieces should not be worn, scratched, dinged, or dented.

#### **Trumpets**

Recommended horns for beginning students: Yamaha student model, examples include YTR-2330 or 200AD, new around \$1600 Or Bach student models, example includes TR600, new around \$1000

It is a good idea to rent a horn at first, but once the student seems like they will stick with the instrument for a while, I recommend purchasing a used beginner horn. It will be more economical than renting. Good used trumpets of these and various other brands can be found on eBay and www.trumpetherald.com. If you purchase a used horn, make sure there is a trial period during which you can return the horn with a full refund. For beginner horns, the make and model of the horn is less important. Most important is its condition: Are there any major dents or a lot of lacquer wear? Do the valves move smoothly and easily? Do the slides move (this is sometimes an easy fix)? It is best to have a trumpet player you trust evaluate the horn.

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Professional models: Yamaha Xeno 8335, new around \$3,300

Or

Bach Stradivarius 18037, new around \$3,000

I do not see a purpose to an intermediate level horn. Once the student has moved to a 3C using the criteria above, they are ready for a professional model horn.

## Trumpet Tuning Tendencies Relating to the Overtone Series with Solutions

The fundamental of the overtone series does not exist as a real note on the trumpet. The first member of the overtone series that exists on the trumpet is the first overtone, or second harmonic. I refer below to the open/valveless overtone series as a reference point, but these tuning tendencies apply to valved series as well. In relation to equal temperament, the notes in the overtone series are out of tune as follows:

First overtone (low C)	in tune
Second overtone (second line G)	2 cents sharp
Third overtone (middle C)	in tune Fourth
overtone (top space E)	14 cents flat
Fifth overtone (top of the staff G)	2 cents sharp
Sixth overtone (Bb above the staff, played open)	31 cents flat
Seventh overtone (high C)	in tune

These numbers vary slightly from trumpet to trumpet, but the tendencies are the same, except for a rare exception.

Because it is so out of tune, the sixth overtone is never played open; it is played first valve. Therefore, this is technically an alternate fingering, but has become standard. Refer to fingering charts for how to play the sixth overtone in each overtone series.

To make it easy, here are some other notes that tend to be out of tune on the trumpet, mainly because of the presence of valves, which makes it impossible for the trumpet to be completely in tune.

Low C#, D	very sharp
Low E	sharp
Second space A	sharp
A above the staff	sharp

Here is a summary of the typically out-of-tune notes on the trumpet:

Low C#, D	very sharp
Low E	sharp
Second line G	sharp
Second space A	sharp
Fourth space C# through top space E	flat
Top line F through top of the staff G	sharp
A above the staff	sharp

Use slides to fix sharp notes whenever possible. The third valve slide should be used for the low C# and D. The first valve slide should be used for all other sharp notes that use the first valve (low E, second space A, top line F, and A above the staff); the first valve slide will probably only need to be moved slightly for these notes. This leaves the flat notes and some sharp notes (second line G, top line F#, top of the staff G) that one must now "lip" in tune. This involves directing the air stream upwards for flat

notes and downwards for sharp notes. The challenge then also becomes to play these notes with as beautiful a sound as though you are playing through the center of the horn.

Some other thoughts:

- Notes from low C below are so "moveable" that they do not have traditional pitch tendencies and typically slides are not needed. These notes tend to be flat because one is relaxing the embouchure so much to reach them.
- Notes above the staff tend to be sharp for younger players as they tend to "squeeze" for these notes, and this pinching makes these notes sharp.
- Fatigue also affects intonation on the trumpet and will affect players differently. Some go flat when tired, some go sharp.
- Temperature affects pitch. Cold trumpets play flat. Hot trumpets play sharp. Temperature also affects intonation exponentially on pitches which are already out-of-tune. For example, top space E is always flat, but as the temperature decreases, this E will get flatter by larger amounts.
- Each trumpet has slightly different intonation issues. Each student needs to learn the tendencies of their own trumpet by first putting third space C or third line B in tune, using the tuning slide, while playing through the *center* of the horn. The student can then play through the center of the horn on other notes with a tuner to see where they lie and adjust accordingly.
- When shopping for a new trumpet, one should consider how in-tune the trumpet is generally, and also how out-of-tune the typically most out-of-tune notes are (the flat notes and G on top of the staff).

## **Special Considerations for Trumpeters**

## 1. Mutes Recommendations:

## Straight mute: Denis Wick (metal)

Cup mute: Humes and Berg (less expensive; more of a jazz tone) or Denis Wick (more expensive) Harmon: B Model Wow-Wow (less expensive), Jo-Ral Bubble Mute-aluminum (more expensive) or aluminum/copper (even more expensive and very heavy; sounds great but tends to fall out of the horn)

Mutes will typically make the trumpet sharp. Some make it flat. Students should determine how each mute affects their intonation and, time permitting, adjust the tuning slide during rests accordingly. If time does not permit, one must use the valve slides or lip the notes in tune. Mutes tend to have a greater effect on the intonation of notes already naturally out-of-tune on the trumpet.

All high school trumpet students should own a straight mute. Once a student owns more than one mute, a mute bag may be needed to carry them.

## 2. Multiple tonguing

Multiple tonguing is executed by combining the traditional "ta" articulation with a "ka" articulation. Double tonguing is used for duple subdivision: "ta-ka-ta-ka". Triple tonguing is used for triple subdivision: "ta-ta-ka" or "ta-ka-ta" (either is fine; the student should do whatever is more comfortable for them but should select one quickly and use only this method). The syllables "tu-ku" are a better alternative because they move the tongue forward in the mouth (from Jean-Baptiste Arban's *Complete Conservatory Method*). Students should get used to the multiple tongue pattern by whispering it as they walk to class. The pattern should become automatic; they should not have to execute each syllable. It is usually easier to multiple tongue between quarter note = 100-120 to start; slower is usually more difficult. Find where it is easiest or natural for the student. The student must use fast air to drive the tongue and to get the air past the tongue. It is important that students who are multiple tonguing practice keeping the notes long and connected. Get the "k" out of the throat. One can also practice exercises using just the "k" articulation to strengthen that syllable.

# 3. Flutter tonguing

Flutter tonguing is executed by "rolling your R's" while you play. Fast air is needed to execute this on the trumpet.

#### 4. Shakes

A shake is most commonly seen in jazz band music and is a squiggly line above a note. A shake is when the trumpeter performs a lip slur between the written note and the next partial up repeatedly, very fast (or in the case of wide shakes, several partials up). It is called a shake because once sufficient lip strength is developed, the trumpeter can "shake" their horn forward and backward (adding more and less pressure) very fast to assist with the lip slur. It therefore has a "wilder" quality appropriate for jazz. To develop the ability to shake, the trumpeter should first become very adept at fast lip slurs between neighboring partials (called lip trills); this can take a long time. Once the trumpeter can perform a fast lip trill with ease, they can practice using the horn movement to work in tandem with the lips to facilitate the shake.