

Tuba Essentials

By Zach Collins
Professor of Tuba and Euphonium
Indiana University of Pennsylvania
zcollins@iup.edu
www.tubaphonium.com

I have put this document together as a guide for future and current band directors as well as middle and high school tubists. You will find the document to be in three main sections: Equipment, Pedagogy, and Literature. In the Equipment section I have provided lists of mouthpieces and horns that would be appropriate either for school settings or for serious young tubists who wish to purchase their own. In the Pedagogy section I have stated my musical and teaching philosophies in five subsections: sound, breathing, articulation, technique and daily routine. Lastly I list appropriate method and solo literature for middle and high school sections in the Literature section. I hope this document will be beneficial for band directors and young musicians. If you have any questions as you read through the document, I welcome you to email me at zcollins@iup.edu.

Equipment

****Disclaimer****

In the following section I will list various recommended mouthpieces and instruments. I am in no way affiliated with any of these companies. I have simply listed the most popular models of mouthpieces and instruments and the models that I have found to work best. The mouthpieces and instruments are listed in no particular order.

Mouthpieces

- Conn Helleberg (Perhaps the most standard tuba mouthpiece)
- Perantucci 36 or 88
- Schilke Helleberg II
- Laskey 28 H

Instruments

- **General points for buying a tuba**
 - Beware of deals that are too good to be true. As with most things, you generally get what you pay for. A cheap price on a tuba generally means poor workmanship. You may save a couple thousand dollars up front on a cheaper tuba, but you will soon find that solder joints will come apart and valves will leak among other problems. This is not to say that you won't have to repair a more expensive horn, but a good quality tuba should last several decades if cared correctly.
 - Buying a used tuba can be a more affordable way to purchase an instrument. You should insist on testing out a used instrument before buying. If taken care of, most tubas will only have cosmetic damages that can easily be taken care of. Dents and scratches are nothing to worry about. Instruments with structural damage should be avoided.
- **Instruments suitable for elementary, intermediate, middle, junior high, and high school settings:**

- When looking for new tubas you should consider the students you are buying for. For elementary and middle school students I would recommend a 3/4 sized tuba. These smaller horns will not reach the volume of a large horn, but they will be much more comfortable for the students to learn on. 4/4 sized tubas are more appropriate for high school aged tuba players. These should be comfortable for your students to perform on and will produce a big sound to support your band.
- Recommended models:
 - King 2341
 - Miraphone 186
 - Yamaha YBB 641, YBB 105
- **Instruments suitable for university and professional settings:**
 - I recommend that all students buy CC tubas. There are no problems with BBb tubas, but CC tubas are the standard in American orchestras. Tubists are expected to perform on CC when auditioning for graduate school or for professional jobs. All of the following tubas listed are CC tubas.
 - Students should try to play on the instrument they are looking to buy before purchasing. Most students will be more successful starting on a 4/4 sized tuba and move up to a 5/4 or 6/4 tuba later if necessary.
 - Recommended models (This list is in no way exhaustive. I have compiled this list based on popularity, affordability, availability, and size:
 - Besson: 995
 - Conn: 52J, 54J, 56J
 - Meinl Weston: 2000, 2145, 2155, 5450 (Thor)
 - Miraphone: 186, 188, 1291, 1292, 1293, 3450

Aids

- The tuba is an awkward instrument to play. This fact is magnified when the instrument is played by a shorter person. Tuba stands have been developed over the past few years that aid good posture. I have been using a tuba stand for the past few years due to back pain and I have not had any issues since using the stand. Brands that currently make tuba stands are K&M, DEG, and Baltimore Brass.

Pedagogy

Sound

- If a melody is performed perfectly, but with a sound that no one cares to listen to, the technique of the performance does not matter. Therefore, the first concern for any wind instrumentalist should be tone. Most young tubists struggle to produce a full, rich, mellow, dark tuba sound. This is because it takes them a while to realize just how much they have to open their mouths. The best way it has been described to me is that a tuba player should feel like he has an egg in his mouth. The tongue should be low and the jaw should be apart.
 - I should, however, warn against constantly telling your low brass players to “be open,” or “open up.” I confess I use these statements as well, but oftentimes students use the muscles in their throats and oral cavity to try and achieve this. Unfortunately, when the brain sends signals to these muscles to work, all they do is tighten up—which just defeats the purpose for them being called upon anyway. Playing with a beautiful sound is achieved by having an open oral cavity and throat that are relaxed, not forced open. I often have students breathe through a short tube of PVC pipe (about 1 inch in diameter). When the pipe is inserted in to

the mouth and held in place by the teeth most students will naturally breathe correctly. Also, the use of the syllable “oh” (with no diphthong on the end) creates the correct shape.

Breathing

- Without a doubt, the biggest issue I deal with when teaching students of all ages is breath support. The tuba takes an inordinate amount of air, but just as with playing with an “open” sound, using muscles to achieve a deep breath is counterproductive. In the words of Arnold Jacobs, tubists should “breathe to expand, not expand to breathe.” Oftentimes when students are told to use more air, they again try to achieve this through use of their chest and abdominal muscles. This works against them, because those muscles don’t actually help in expanding the lungs, but rather restrict the lungs’ movement.
- Correct breathing happens when the throat, chest, and abdominal muscles are completely relaxed. The performer should breathe in through their mouth. I have found the most effective way to practice breathing in correctly is to say “oh” and then breathe in with the same mouth shape. The PVC pipe works well for this as well. For most playing (and thus, exhaling), the abdominal, chest and throat muscles should be relaxed as well. I find that I start to use my abdominal muscles for “support” around Bb in the bass clef staff and gradually use more abdominal support as I play above that note.

Articulation

- A generic articulation on the tuba should be the syllable “doh.” If a stronger articulation is needed try “toh,” and softer, “loh.” Articulation on tuba should be generally lighter than other wind instruments. When tuba students tongue too firmly they often restrict the sound production. In other words, the articulation is heard more than the pitch. I only use “toh” for secco and heavily accented playing. Because the tuba is so large and relatively clumsy, a lighter articulation oftentimes ends up sounding plenty articulated.

Technique

- Generally, not enough is required of tuba students. If tuba students are only required to cover their band parts, they will never achieve mastery of their instruments. The parts just do not demand much of them. Challenge your students to know all of their major scales. If this has been achieved, start on the minor scales. Encourage your students to work out of etude books and learn solos. The tuba can be a virtuosic instrument.

Daily Routine

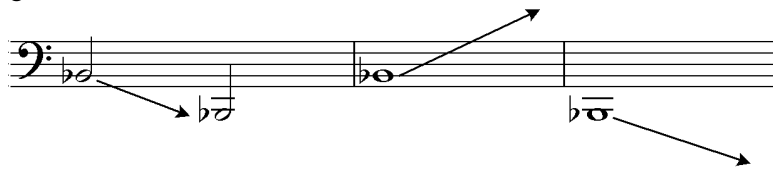
- I am a firm believer in the importance and effectiveness of a daily routine. A daily routine should touch on all of the technical issues that the musician will face in his or her musical literature. I recommend spending daily time on mouthpiece buzzing, long tones, lip slurs, and scales.
- **Mouthpiece Buzzing**
 - Buzzing the mouthpiece works on airflow and connecting the ear to the embouchure. When playing the tuba, the musician is limited to only the pitches available on the harmonic series for each given valve combination. In other words, the musician can’t play an Eb if he or she has the fingering down for F. However, if he or she buzzes an Eb while holding down the fingering for F, he or she will get an uncentered F. When buzzing, the musician can hit infinite pitches. So, if the musician can learn to buzz precisely on pitch, when the musician plays

the tuba the sound will be centered, will project more, and will generally be more in tune.

- I recommend to my students to begin by playing simple tunes: folk songs, pop tunes, children's songs, etc... I also recommend that students be able to buzz any piece that they are playing.

- **Long Tones**

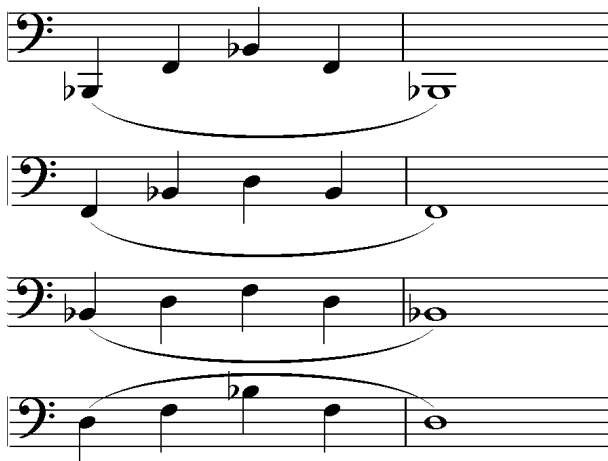
- Long tones are a beneficial exercise that focus on holding a steady pitch and sound and extend the musician's pitch range, dynamic range, and stamina. As with scales and lip slurs, it is important that long tones are practiced over the musician's complete range. A basic long tone routine can consist of holding each chromatic pitch for as long as the musician can make a good sound. I recommend the order below. The musician should first start in a comfortable range, next stretch the range as high as he or she can go, and lastly as low as he or she can go.



- Long tones can easily become a bore. For this reason I recommend playing these with varying dynamics. I sometimes practice them as soft as I can play, as loud as I can play, or with crescendos or decrescendos.

- **Lip Slurs**

- I think lip slurs are the most complete musical exercise a brass musician can practice. They work on breath control, support, flexibility, evenness, and range. Again, I recommend playing lip slurs in all ranges and dynamic levels. I use the following patterns:



- Each pattern should be continued down chromatically [0, 2, 1, 1-2, 2-3, 1-3 (4), 1-2-3 (2-4)] using the same fingering for all five notes.

- **Scales**

- Students should be taught all of their major and minor scales. It is certainly understandable to not overwhelm first and second year musicians with 48 scales, but it is important that high school students know at least all 12 major scales. This is an area that is deficient in most incoming college students. Many students are only comfortable with G, C, F, Bb, Eb, and Ab scales by the end of their high school career. Students then become very adverse to keys such as A, E, and B because they seem so foreign. If the development of this skill begins

early, the musician will not struggle as much with the dexterity needed to perform in those keys.

- At first it is just important that students understand keys and basic constructions of scales, but as the musician progresses he or she may find the scale patterns in the Arban book (see below) to be a good challenge.

Resources

- *Song and Wind*, Brian Frederiksen
- *The Breathing Gym*, Sam Pilafian and Pat Sheridan
- *The Art of Tuba and Euphonium*; Harvey Phillips and William Winkle

Literature

In order to cultivate strong musicianship and technique in young tuba players it is important to challenge them with appropriate solo and method literature. As mentioned before in the “technique” section, not much is required from tuba players in band and orchestral settings. When working with students I try to choose methods and solos that are just above the ability level of the student so that they can grow as they work out the music. Below is a very selective (and in no way exhaustive) list of middle school and high school level literature. I have sorted the literature by difficulty level as assigned by the *The New Tuba Source Book*.

Method Books

- II
 - *First Book of Practical Studies*; Robert Getchell and Nilo Hovey (Belwin-Mills)
- III
 - *Second Book of Practical Studies*; Robert Getchell and Nilo Hovey (Belwin-Mills)
- III-IV
 - *Studies in Legato*; Reginald Fink (Carl Fischer Inc.)
 - *40 Advanced Studies*; H.W. Tyrrell (Boosey & Hawkes, Inc.)
 - *43 Bel Canto Studies*; Marco Bordogni/ed. Chester Roberts (Robert King Music Company)
 - *70 Studies (2 Volumes)*; Vladislav Blazhevich (Robert King Music Company)
 - *60 Selected Studies*; C. Kopprasch (Robert King Music Company)
- I-V
 - *Arban Complete Method for the Tuba*; Jean-Baptiste Arban/ed. Jerry Young and Wesley Jacobs (Encore Music Publishers)

Solo Literature (collections)

- I-II
 - *Tuba Solos, Level One* (CPP/Belwin, Inc.)
- I-III
 - *Classic Festival Solos, Vol. 1*; Jack Lamb (CPP/Belwin, Inc.)
 - *Classic Festival Solos, Vol. 2*; Jack Lamb (CPP/Belwin, Inc.)
- II-III
 - *Medici Masterworks*; Gershenfeld and Mitchell (Medici Music Press)
 - *Tuba Solos, Level Two* (CPP/Belwin, Inc.)
- II-IV
 - *First Solos for the Tuba Player*; Herbert Wekselblatt (G. Schirmer Inc.)
- II-V
 - *Solos for the Tuba Player*; Herbert Wekselblatt (G. Schirmer Inc.)

Solo Literature

- II-III
 - *Honor and Arms*; G.F. Handel/arr. William Bell (CPP/Belwin, Inc.)
- III
 - *Suite for Tuba*; Don Haddad (Shawnee Press Inc.)
 - *Thrice Happy the Monarch*; G.F. Handel/arr. R. Winston Morris (Ludwig Music Publishing Company)
- III-IV
 - *Air and Bourree*; J.S. Bach/arr. William Bell (Carl Fischer Inc.)
 - *Ricercar*; Domenico Gabrieli/arr. R. Winston Morris (Shawnee Press Inc.)
 - *Variations for Tuba and Piano (The Cobblers Bench)*; Arthur Frackenpohl (Shawnee Press Inc.)
- IV
 - *Introduction and Dance*; Edouard Barat/arr. Glen Smith (Southern Music Company)
 - *Andante and Rondo*; Antonio Capuzzi/arr. Philip Catelinet (Hinrichsen Edition)
 - *Suite for Tuba*; Don Haddad (Shawnee Press)
 - *Suite for Unaccompanied Tuba*; Walter Hartley (Elkan Vogel)
 - *Suite No. 1*; Benedetto Marcello/arr. Donald Little and Richard B. Nelson (Southern Music Company)
 - *Suite No. 5*; Benedetto Marcello/arr. Donald Little and Richard B. Nelson (Southern Music Company)
 - *Adagio and Allegro*; G.P. Telemann/ arr. Norman F. Friedman (Southern Music Company)
- IV-V
 - *Concerto for Tuba*; Edward Gregson (Novello & Co., Ltd.)
 - *Six Studies in English Folk-Song*; Ralph Vaughan Williams/tr. Michael Wagner (Galaxy Music Corp/ECS Publishing/Stainer & Bell)

Additional Resources

- *The New Tuba Source Book*, Winston Morris and Dan Perantoni
- *Brass Gym*, Patrick Sheridan and Sam Pilafian

Last edited February 2018