

The Trombone

Historical Sketch

The trombone's earliest ancestors were, like those of all brass instruments, animal horns, hollow sticks, or other items with which the player produced a sound by buzzing the lips. People later learned to fashion more sophisticated instruments out of wood and/or metal.

By the thirteenth century a long, metal straight trumpet called the *buisine* was common. In the fourteenth century a single-slide instrument, known in musicological circles as the *slide trumpet*, is believed to have been in use (though the earliest surviving examples of such an instrument are from several centuries later). This instrument changed pitches/harmonic series by moving the entire body of the instrument back and forth along a single tube into which the mouthpiece was inserted.

By the mid-fifteenth century a double-slide instrument, called *trombone* in Italy, *posaune* in Germany, and *sackbut* in England and France, had appeared. These instruments were functionally almost identical to modern trombones, except that the bore, bell, and mouthpiece sizes were considerably smaller. The term *sackbut* is now commonly used to refer to these smaller predecessors of the modern trombone. The sound of these instruments was much softer and mellower than that of modern instruments, well-suited to doubling voices.



Tenor Sackbut (modern reproduction)

By 1500, trombones were in use throughout Europe, being most commonly used for church and civic functions, and often doubling vocal parts. An entire family of trombones, soprano in Bb or A, alto in F, Eb, or D, tenor in Bb or A, bass in F or Eb, and contrabass in BBb, was developed, but only the alto, tenor, and bass were commonly used, frequently doubling their corresponding vocal parts. The soprano appeared only sporadically and never really caught on; in trombone ensembles this role was most often filled by the cornett. The contrabass also was rare, and likely little more than a novelty.

In the early 1600s trombone usage remained much the same as it was in the previous century, with voice doubling in church music being its most common role. Early dramatic music, including Claudio Monteverdi's (1567-1643) famous opera *L'Orfeo*, used trombones rather prominently as well, often to symbolize death, the underworld, and/or religious themes. As the century progressed, however, trombone usage became increasingly rare, until the instrument nearly disappeared completely from England, France, Italy, and parts of northern Germany. Only in Austria did the instrument continue to thrive, and composers there used trombones very prominently in early eighteenth-century chamber music. In such works the alto trombone was the preferred solo trombone, though there is some debate among musicologists whether the "alto" trombone of that time was indeed a trombone in F, Eb, or D, or if it was really a Bb (tenor) trombone equipped with a smaller mouthpiece and used to play in the alto register.

Beginning in the mid-eighteenth century Christoph Willibald von Gluck (1714-1787), Wolfgang Amadeus Mozart (1756-1791), and others began to exploit the trombone's dramatic associations in operas and sacred works, and composers slowly began to use the instrument in serenades, divertimenti, and other instrumental works. Trombones became a standard part of the symphony orchestra after the early nineteenth century thanks largely to Ludwig van Beethoven's (1770-1827) use of trombones in his fifth, sixth, and ninth symphonies.

The eighteenth century also saw a significant change in trombone construction, with larger bell flares and bore sizes more similar to those of modern instruments being introduced. In the early nineteenth century the tenor replaced the alto as the most common solo instrument, and the newly-invented valve was applied to some trombones, producing instruments similar to the F-attachment instruments widely used today. The valve trombone (no slide) was also invented during this century and for a time more common than the slide trombone in some locales, but never gained a long-term foothold in any country or genre. In the twentieth century an enlarged Bb tenor trombone with a bass trombone mouthpiece and usually two rotor valves came to almost completely replace the large and unwieldy F, Eb, and G bass trombones.

Trombone soloists became especially popular in the early nineteenth century in Leipzig, Germany, and surrounding areas. Prominent players such as Friedrich August Belcke (1795-1874) and Carl Traugott Queisser (1800-1846) were featured in concerts along with the finest string and piano soloists of the day. Later in the nineteenth and early twentieth centuries American soloists associated with the bands of John Philip Sousa (1854-1932), Arthur Pryor (1840-1942), and others demonstrated an unprecedented level of technical facility on the trombone. Pryor himself was the most famous of these soloists.

In the twentieth century the trombone was more frequently used and used in more diverse roles than ever. Increasing amounts of solo and ensemble music were written for the instrument, and jazz opened up an entire new medium of performance. In the early twenty-first century fine trombonists were making a living as soloists, small and large ensemble performers, studio performers, recording artists, and teachers in the classical, jazz, and popular realms.

Instruments

Tenor trombone in Bb. This is the most common trombone in use today. The small-bore straight tenor (no F-attachment) is preferred for beginning students, and professional versions of this instrument are preferred by most jazz/commercial players. Large-bore straight tenor trombones are sometimes used by principal players in bands and orchestras, although the large-bore tenor with F-attachment is usually preferred for all forms of classical music.



Tenor Trombone with F-Attachment

Bass trombone in Bb. Really an extra-large-bore tenor trombone, this instrument most often uses two valves in order to provide a fully chromatic lower register, and the large bore and mouthpiece helps this instrument to effectively reproduce the sound of "true" bass trombones in F, Eb, or G. These instruments come in two varieties: "independent," with the two valves in F and Gb or G (D or Eb combined) on the main body of the instrument, so that both valves can be used individually, or "dependent," with the second valve in D or Eb mounted on the F-attachment tubing, making it where the second valve can be used only when the first valve is depressed. Other valve tunings are occasionally encountered, but only as rare, custom modifications. Once rare in high school settings, they are now common in the most advanced ensembles; skilled students who excel in or prefer the lower register could enjoy great success by specializing in the bass trombone.



Independent Bass Trombone



Dependent Bass Trombone

Alto trombone in Eb. This is believed by most to have been the preferred solo instrument in the trombone family during the eighteenth century; thus all solo literature for trombone written before 1800 would most likely be best played on this instrument. (A “minority report” of scholars believes that a small-bore Bb tenor trombone with a small mouthpiece was the “alto trombone” in use at the time, but modern players still tend to prefer the sound and response of the Eb instrument for period works.) In the orchestra the alto trombone should be used for the first trombone parts in most eighteenth century and many nineteenth century works, at the discretion of the conductor and performer.

Bass trombones in F, Eb, or G. These instruments are still occasionally used today, but have mostly been replaced by the Bb bass trombone because the long slides require a handle to operate, making them rather clumsy. That said, an F bass trombone, usually (somewhat inaccurately) referred to as an F “contrabass” trombone, is becoming increasingly common in certain contexts where a deeper trombone sound is desired. The addition of two valves has rendered the outer positions (and thus the handle) unnecessary, so the instrument can be operated more efficiently than the older F bass trombones.



Modern F “Contrabass” Trombone. (Can you tell I really want one of these?)



Bass sackbut in F, with handle.

Contrabass trombone in BBb. The modern version of this instrument has a quadruple-slide, making the slide the same length functionally as that of the Bb tenor or bass trombone. This instrument usually sometimes uses a mouthpiece similar to a small tuba mouthpiece, and has a very deep, dark sound. This instrument was never very common, and with F “contrabass” trombones increasing in quality and availability these have fallen into almost complete disuse. The older (i.e. “sackbut” era) version of this instrument was EXTREMELY long, requiring a very long handle to operate.

Tenor valve trombone in Bb. Instrument makers began replacing the handslide on trombones with three or four valves not long after the valve was invented, but by the early twentieth century a decided preference for the slide trombone was apparent because of that instrument’s superior sound and intonation. Valve trombones are comparatively rare today, except as used by a few jazz players and in specialized contexts where the valve instrument’s timbre and articulation are desired. Valve trombones are sometimes used by euphonium players who want to participate in jazz bands but have not developed their handslide technique; this is permissible but usually not ideal. Those who want to double on trombone should learn to use the slide instrument.

Soprano trombone in Bb. This rather small instrument uses a similar mouthpiece to and plays in the same register as the trumpet. A few makers do produce these now, but they are little more than novelties. Due to the extremely short slide, intonation is very difficult on these instruments and is likely a reason that they were never widely used.

Choosing Students for the Trombone

Facial structure. An extremely small mouth and/or thin lips may make the student a better candidate for a higher brass instrument, while very large-lipped individuals may be more successful on tuba. Extreme overbites or underbites can be a problem on brass instruments but can in some cases even be beneficial for woodwind players. A student with a lisp may have difficulty articulating properly on any wind instrument, but more so with the brasses.

Physical stature. It's hard to tell with young students, though students who are REALLY small at age 10-12 might never "grow into" the instrument. It's a good idea to have a parent meeting before choosing instruments for many reasons—most importantly to explain to parents which brands of instruments are acceptable and where to obtain them—but one reason is to take a look at the stature of students' parents to see if those students are likely to be able to eventually reach seventh position!

Caveats. Of course, all of the suggestions above are "general guidelines" to help in guiding students to finding appropriate instruments for them. Sometimes a child who "on paper" seems like a poor candidate for a given instrument will sound great and seem to do well with a given instrument despite "breaking the rules." In such cases, "go with it," though it might be worth observing a bit more closely for a bit to make sure the instrument really is a good fit. Also, though it should go without saying, any stereotypes regarding particular instruments based on gender, race, etc. are irrelevant and should be ignored.

"Trying Out" the Trombone

- When allowing students to try instruments, have them try to create a buzz first of all. No really special embouchure formations—just buzz the lips, then do it in the mouthpiece. If a student can get at least an octave or so, he or she may be a good candidate for the trombone. If higher or lower ranges are favored, try the trumpet, horn, or tuba, as needed. If the student can't buzz at all, strings, percussion, or woodwinds may be better.
- After having the student buzz the mouthpiece, you can let him or her play the instrument while you hold it and manipulate the slide.
- A student that gets a reasonably good sound on the mouthpiece and/or instrument, favors its middle register when play-testing, and LIKES the trombone will probably be okay.

The First Day (or Two, or Three)

On the first day with instruments tell students they should leave their instruments in their cases. Before removing instruments, begin the rehearsal with some breathing exercises such as those found in *The Breathing Gym*. If possible, every rehearsal should begin with some of these exercises.

After breathing, have students get their mouthpieces only. Have them buzz "any note," and then have the class match pitches in simple patterns (i.e. middle register whole notes).

Have students place their cases on the floor, and "walk them through" removing and assembling the trombone using the process indicated below. The trombone is delicate and students tend to be careless with it, so make them go through the process step by step with you.

Show students how to lubricate the slide and have them do so. (Hint: You can have your music store include a bottle of Yamaha Trombone Slide Lubricant with the instrument, along with a spray bottle.)

Demonstrate the correct holding position for the trombone. The left arm should support all of the weight, with the thumb around the first bell brace (or on the trigger paddle if the instrument has an F-attachment), the index finger going across the slide to the mouthpiece receiver, and the other three fingers wrapped around the lower



Left Hand Position



Right Hand Position

cork barrel. The right hand should be free to move the slide. Place two fingers on either side of the lower leg of the slide, holding the slide brace between the thumb and the index and middle fingers. The slide should be held loosely, with the fingertips only. Move the slide using all of the joints of the fingers, wrist, elbow, and shoulder as a “system of hinges.”

Teach students how to find each slide position as follows. Keep in mind, though, that these guides are a starting point only; slide positions are not fixed locations but must be adjusted according to intonation needs of the moment:

- First position: Just barely past the stop. You shouldn't be able to see the inner slide at all, but it is good to be out just a bit.
- Second position: The slide brace will be about halfway between the bell and the stop.
- Third position: The slide brace will be just inside the bell.
- Fourth position: The back part of the outer slide will be just past the bell.
- Sixth position: As far as the student can comfortably reach. (For beginners, this will probably still be a little short, but it is a good starting place.)
- Seventh position: As far as the student can reach when the shoulder, elbow, wrist, and fingers are extended. (Most beginners will not be able to reach an in-tune seventh position. This is fine for the moment.)
- Fifth position: When in seventh position, allow the right elbow to drop and bring the hand back with it. This should be approximately fifth position.

After students have a rudimentary idea of where the slide positions are, beginning on fourth-line F, teach students a Remington pattern whole-note exercise by rote. Repeat beginning on low Bb. If time allows, try doing the same starting on the Bb on top of the staff. This gets the students' “playing range” well ahead of their “reading range.” While not all students will be able to play this whole range of notes from day one, the attempt is still good, and places you in a situation where each “new note” introduced in students' reading is one that they have already played in a rote exercise, at least for the first few months.

If time allows, distribute warm-up sheets and have the students repeat the rote Remington exercise while looking at it on the sheet. Hopefully some associations between reading and playing will begin to develop.

Lastly, “walk students through” disassembly of the instrument and placement in the case, going through the assembly process in reverse.

Assembly, Lubrication, Care

Assembly. When assembling the trombone, set the case on the floor, or a sturdy table—NOT on a chair. Remove the slide section first, hold it vertically, and place the bell section on it, **TAKING CARE NOT TO CRASH THE BELL INTO THE SLIDE.** Then place the mouthpiece in the receiver and twist slightly—do NOT hit or force the mouthpiece.

Lubrication. The product I recommend is YAMAHA TROMBONE SLIDE LUBRICANT. This works as well as any slide cream, but is as easy to apply as petroleum-based slide oil, which I do NOT recommend. Make sure the slide is clean, place a thin line of product about a third of the way down each inner slide tube, reassemble the slide, work the outer slide up and down to spread the product, and spray with a small amount of water. Lubricate rotary valves by placing rotor oil on the spindle under the valve cap and under the stop screw, and on all moving parts. Remove the valve slides and squirt some regular valve oil down into the valves for even faster action (excess will have to be emptied). Don't let this valve oil run into the handslide. Do NOT allow students to remove rotary valves. You can do this to clean them if you so desire—instructions for the process can be found on various Internet sites. If in doubt, leave this to repairmen. Tuning slides require just a small amount of tuning slide grease to keep them moving.

Care.

When placing the trombone on the ground place it somewhere away from heavy foot traffic, with the mouthpiece receiver, bell, and tuning slides on the ground (the mouthpiece should be removed). This keeps the weight of the instrument off of the slide, which can bend quite easily.

DO NOT place the instrument on a chair with the bell in the seat and the slide bumper on the floor. This places unneeded weight on the slide and leaves the instrument prone to being knocked over by inattentive students.

The slide and mouthpiece should be cleaned regularly. The inner slide tubes should be wiped clean before applying additional lubricant to avoid buildup and dragging. Even better, clean the insides of the outer slide tubes using a cleaning rod and cloth as well before each application of lubricant.

Occasionally a more thorough cleaning is needed. To do this, fill the assembled slide with warm water and a bit of dishwashing detergent, and then work a trombone cleaning snake through both sets of tubes and into the slide crook. Pour out the water and then rinse with clean water until all of the soapy residue is gone. Repeat this process with the outer slide only, then wipe clean the inner slide tubes before applying lubricant. DO NOT run the cleaning snake through the inner slide tubes when the slide is disassembled, as this can bend the inner tubes.

Very little lubricant is needed to make the slide work well. Both the Yamaha product recommended here and the various available creams will cause dragging if allowed to build up excessively.

Emphasize to students that the instruments are VERY delicate, and must be cared for. Still, I hate to say it, but they WILL drop the slides.

If you have to restring a rotary valve (though most trombones today have mechanical linkages), a quick internet search will yield instructions. Woven fishing line is an acceptable alternative to the more expensive rotary valve string sold in music stores.

Pedagogical Concepts

Instrumentation. For beginners, small-bore, straight tenor trombones are preferable, as F-attachment instruments are often too heavy, and using an attachment too early often keeps the student from mastering the longer positions. For high school players moving to a large-bore F-attachment instrument is usually preferable.

Make sure players learn at least a short chromatic scale as early as possible, even if only by rote. While this is advisable for all brass players, this will help trombonists in particular to avoid a great many difficulties later, as students will be familiar with a fuller spectrum of notes and especially the locations of all the slide positions. Operating the handslide. Make sure that students use the fingers, wrist, elbow, and shoulder together as a sort of “system of hinges” in order to operate the slide. Think of the larger joints (elbow, shoulder) as being primarily responsible for larger movements, and the smaller joints (wrist, knuckles) as responsible for smaller, “fine-tuning” movements. Overdependence on the elbow and shoulder leads to poor intonation, jerky slide movements, and eventually to slide alignment problems. As players advance, the grip on the slide should become increasingly loose, so that eventually there is enough play between the thumb and fingers on the right hand that slide movement becomes almost a “throwing and catching” kind of operation. Be aware that this relaxed and efficient slide action can only be achieved if the instrument is clean, properly lubricated, and in good repair.

The trombone slide is very delicate, with tolerances much tighter than those of the valves on other brass instruments. Because the slide is more exposed than the valve sections on valved brass instruments, it is especially prone to being damaged. Teach students to be very careful with the slide, and teach them how to properly clean and lubricate the slide. A thorough cleaning process should be completed at least once per semester.

Legato. Although most method books indicate that trombonists should tongue softly in order to play legato, even more importantly, students should be told to blow a steady stream of air, and to move the slide quickly from note to note. The hardness or softness of the tonguing will then usually resolve itself. In short, teach students to use a quick tongue, fast slide, but most importantly STEADY AIR to produce a smooth but clean legato. While some slurs are possible on the trombone without glissando, for beginning players trying to mix natural slurs with legato tonguing in slurred passages can be confusing, as students forget where they can and cannot slur. Except in lip-slur exercises during the warm-up routine, have students use legato tonguing for the entirety of passages marked slurred. When players become more advanced judicious use of natural slurs—which are available when crossing from one partial to another—can be encouraged.

Mutes. Trombone players will encounter passages needing straight mutes fairly early. High school players may need cup mutes, plungers, and perhaps Harmon or bucket mutes.

Clefs. Advanced players will want to begin learning to read in tenor and alto clefs. While these clefs are rarely encountered in high school level band music (though tenor clef is beginning to appear more often), orchestral pieces employ them frequently. The method books by Reginald H. Fink and Brad Edwards on this topic are excellent for initial training in clef reading.

Suggested Method Books for Individual Practice

Tenor Trombone.

- Arban, Jean-Baptiste/Alessi, Bowman: *Complete Method*
 Bordner, Gerald: *Practical Studies for Trombone*, vols. 1 and 2
 Bordogni, Giulio Marco/Mulcahy: *Complete Solfeggi*
 Edwards, Brad: *Introductory Studies in Tenor and Alto Clef “Before Blazhevich”*
 Edwards, Brad: *Simply Singing for Trombone*
 Fink, Reginald H.: *Introducing the Alto Clef*
 Fink, Reginald H.: *Introducing the F-Attachment*
 Fink, Reginald H.: *Introducing Legato for Trombone*
 Fink, Reginald H.: *Introducing the Tenor Clef*
 Gower, William and Voxman, Himie: *Rubank Advanced Method for Trombone*, vols. 1 and 2

Lafosse, Andre: *School of Sight Reading and Style, Book A*
 Long, Newell H.: *Rubank Elementary Method for Trombone*
 Remington, Emory/Hunsberger: *The Remington Warm-Up Studies*
 Vining, David: *The Breathing Book for Tenor Trombone*

Bass Trombone.

Aharoni, Eliezer: *New Method for the Modern Bass Trombone*
 Bordogni, Giulio Marco/Ostrander: *Melodious Etudes for Bass Trombone*
 Getchell, Robert W./Hovey: *Practical Studies for Tuba*, vols. 1 and 2
 Gillis, Lew: *20 Etudes*
 Gillis, Lew: *70 Progressive Studies*
 Grigoriev, Boris/Ostrander: *24 Studies*
 Ostrander, Allen: *Method for Bass Trombone*
 Raph, Alan: *The Double-Valve Bass Trombone*
 Vining, David: *The Breathing Book for Bass Trombone*

Suggested Reading

- Baines, Anthony. *Brass Instruments: Their History and Development*. New York: Dover Publications, Inc., 1993.
- Bate, Phillip. *The Trumpet and Trombone: An Outline of Their History, Development, and Construction*, 2nd ed. New York: W.W. Norton and Company, 1978.
- Farkas, Philip. *The Art of Brass Playing*. Rochester, New York: Wind Music, Inc., 1962.
- Fink, Reginald H. *The Trombonist's Handbook*. Athens, Ohio: Accura Music, 1977.
- Frederiksen, Brian. *Arnold Jacobs: Song and Wind*. Gurnee, Illinois: WindSong Press Limited, 1996.
- Griffiths, John R. *Low Brass Guide*. Roswell, Georgia: E. Williams Publishing Company, 1991.
- Guion, David M. *A History of the Trombone*. Lanham, Maryland: Scarecrow Press, 2010.
- Guion, David. *The Trombone: Its History and Music, 1697-1811*. New York: Gordon and Breach, 1988.
- Herbert, Trevor and John Wallace (eds.). *The Cambridge Companion to Brass Instruments*. Cambridge, U.K.: Cambridge University Press, 1997.
- Herbert, Trevor. *The Trombone*. New Haven, Connecticut: Yale University Press, 2006.
- Kleinhammer, Edward. *The Art of Trombone Playing*. Evanston, Illinois: Summy-Birchard Company, 1963.
- Kleinhammer, Edward and Yeo, Douglas. *Mastering the Trombone*. Hanover, Germany: Edition Piccolo, 1997.
- Lane, G.B. *The Trombone: An Annotated Bibliography*. Lanham, Maryland: Scarecrow Press, 1999.

Nelson, Bruce. *Also Sprach Arnold Jacobs: A Developmental Guide for Brass Wind Musicians*. Mindelheim, Germany: Polymnia Press, 2006.

Stork, John and Phyllis Stork. *Understanding the Mouthpiece*. Vuarmarens, Switzerland: Editions Bim, 1989.

Vining, David. *What Every Trombonist Needs to Know About the Body*. Flagstaff, Arizona: Mountain Peak Music, 2010.

Whitener, Scott. *A Complete Guide to Brass*. Second Edition. Belmont, California: Wadsworth/Thomson Learning, 1997.

Wick, Denis. *Trombone Technique*. Oxford, England: Oxford University Press, 1971.

Recommended Instruments (in Everett's Order of Preference)

Beginner Tenors.

- Eastman ETB221
- Yamaha YSL-354
- King 606
- John Packer JP031

Advanced/Professional Large-Bore Tenors.

“Budget”-Priced

- John Packer-Rath JP332
- Eastman ETB828

Moderately-Priced

- S.E. Shires Q30
- Yamaha YSL-882
- Conn 88H
- Bach 42

High-Priced

- S.E. Shires Custom
- Edwards Custom

Advanced/Professional Small-Bore Tenors.

“Budget”-Priced

- John Packer-Rath JP230

Moderately-Priced

- Yamaha YSL-891Z, YSL-897Z
- King 3B, 2B

High-Priced

- S.E. Shires MD, MD+, Custom
- Edwards Custom

Advanced/Professional Bases.

“Below-Budget”-Priced

- Mack Brass TB831
-

“Budget”-Priced

- John Packer-Rath JP333
- Eastman ETB848

Moderately-Priced

- S.E. Shires Q36
- Yamaha YBL-830, YBL-822
- Conn 62H
- Bach 50

High-Priced

- S.E. Shires Custom
- Edwards Custom

Recommended Mouthpieces

Tenor

- Bach 7, 7C, 6.5AL, 5GS, 5G, 4G
- Schilke 47, 51, 51C4, 52
- Wick 5BS, 5AL, 4AL, 4BL

*The Bach 6.5AL and Schilke 47 are *great* first mouthpieces for trombonists.

Bass

- Bach 1.5G, 1.25G, 1G
- Schilke 58, 59
- Yamaha Yeo

*The Schilke 58 and Bach 1.5G, or similar-sized mouthpieces from other makers, are probably the best first bass mouthpieces.

Prominent Players (not a comprehensive list, but you can start here)

- Classical Tenor
 - Christian Lindberg
 - Joseph Alessi
 - Peter Steiner
 - Megumi Kanda
 - Jorgen van Rijen
 - Brett Baker
 - Abbie Conant
- Jazz/Commercial Tenor
 - Carl Fontana
 - Bill Watrous
 - Wycliffe Gordon
 - J.J. Johnson

- Michael Dease
- Carol Jarvis
- Aubrey Logan
- John Fedchock

- Bass (all)
 - Douglas Yeo
 - Randy Hawes
 - James Markey
 - David Taylor
 - Charles Vernon
 - Jennifer Wharton
 - Ben van Dijk
 - Brandt Attema

Online Resources

International Trombone Association. www.trombone.net

The Trombone Forum. www.tromboneforum.org

Trombone Pedagogy Facebook Group. www.facebook.com/groups/tromboneped

Douglas Yeo Trombone Web Site. www.yeodoug.com

Dr. Everett's Blog. thereformingtrombonist.wordpress.com