

THE MIDWEST CLINIC
An International Band and Orchestra Conference
Wednesday, December 14, 2005
IMPROVING THE LOW BRASS SECTION WITH THE LOW BRASS ENSEMBLE
Harvey Phillips & Norlan Bewley

Dear Friends and Colleagues:

I am proud to share today's clinic session with Norlan Bewley, a multi-talented musician, composer, orchestrator, arranger, publisher, promoter, friend, and music educator. He is equally dedicated to each facet of his professional commitments. He is tireless in his pursuit of improved communication between music educators and the students they are charged to educate.

When parents ask, "Why should my son/daughter play an instrument and study music?" My response, "Because it's fun." Playing the tuba at age twelve was fun..... it still is. I soon discovered that the better others played their instruments, the better I played mine. I sought out the better players as a sure way to get better myself. And, the better we played as an ensemble, the more anxious we were to get together, with or without a teacher. We were inspired, and to get the full benefit of inspiration one must add perspiration. Talent doesn't make great musicians, only time and application can do that.

Improving The Low Brass Section with the Low Brass Ensemble - Elementary, High School & Beyond

Norlan Bewley has given much thought and experience to the preparation of today's demonstrations. If you follow this experience with your students and/or colleagues, the results will be impressive. As each student experiences improvements in the ensemble, their morale, self-esteem, pride, achievement and commitment will strengthen your program. Low Brass Ensembles, from duets to four-part mass Low Brass Choirs will flourish. Middle school beginners, high school students and beyond will endeavor to reach their performance potential. Discussion topics start to include tone quality, intonation, balance, blend, sub-division, rhythm, technique and style. Performing in Low Brass Ensembles will motivate players to listen and learn from one another.

Norlan Bewley is music director and principal composer- arranger for TOP BRASS (over 1,000 concerts), which he co-founded in 1979. For twenty years he has taught, performed on and composed for low brass. In the last ten years he has given more than 600 individual low brass students over 23,000 private lessons.

A graduate of Indiana University School of Music Norlan Bewley received scholarships to study with his mentor Harvey Phillips. He continues to serve as Associate Director of Harvey Phillips' ensembles including TUBACHRISTMAS, TUBASANTAS, TUBACOMPANY, and TUBASHOP QUARTET. He is the primary arranger of music for these ensembles. He edited "Carols for a Merry TubaChristmas" adding 14 carols to the original 18 arranged by Alec Wilder. Norlan was nominated for the Pulitzer Prize for composition in 2005.

Harvey G. Phillips

Harvey Phillips and Norlan Bewley are clinicians for Holton and Martin instruments
of the Conn-Selmer Corporation.

ACKNOWLEDGEMENT
We express our appreciation and thanks to
RICHARD SAUCEDO
for lending us his Low Brass Section from
THE CARMEL HIGH SCHOOL WIND SYMPHONY

MIDWEST CLINIC 2005

Improving The Low Brass Section

With The

LOW BRASS ENSEMBLE

Harvey Phillips and Norlan Bewley

Elementary

"Learning Your Way Around The Instrument"

WARMUP: Low-Middle-High on each position/fingering.

LB ENSEMBLE: Start with DUETS. Have everyone play the A part, then the B part. Divide the parts in a variety of combinations so everyone plays each part, learning to take the lead and to accompany. Move to simple trios as the students progress.

ISSUES: Low-Middle-High helps students learn their way around their instrument early on. Identifying notes as the position/fingering numbers plus low, middle, or high at first gives them an idea of where they are on the horn. They then have a reference to correct themselves if they get off: "Oh, I'm on 1 low and I'm supposed to be on 1 middle." Note names have no real reference until you've already learned your way around. The musical alphabet is an easy way the teach note names in any clef.

Rhythm Positions/Fingerings help students build coordination for moving the slide and valves in rhythm. Have students say the trombone position numbers out loud while they move the slide in rhythm. Euphonium and tuba students say Tah out loud while pushing the valves in rhythm. They MUST say it out loud; silently does not work well. Have them whisper if they want to do it in rehearsal while another section is being rehearsed. Slow the tempo down to where it can be done in rhythm, then speed up the tempo, keeping in rhythm until the desired tempo is reached.

Tone Production is a tricky issue to teach, especially for beginners. Showing how warm air (vocal breath) is focused into fast air (wind or air stream) is very helpful. Have students whisper sing loudly on Tah and slide the pitch up and down as they would to sing (warm air). Note: no vocal chords are used when playing. While whispering Tah, have them form their embouchure into an Ooo shape, "grabbing" the air with their lips and focusing it into a strong sounding air stream (fast air). It will have a similar sound to the letter F, but it is all lips and air, no teeth. Corners will be firm and the sensation will be that the air is being pulled out, or "sucked right out of you". A good playing exercise is to have students play a whole note, rest for a measure and continue repeating this in tempo several times to learn how to play the note and build strength.

MUSIC: Duets from band class books, Yamaha Band Ensembles book 1 - Alfred 5252 Trombone/Baritone + 5253 Tuba, Pop Duets For All - Belwin ELM 00078, Duets For All - Belwin PROBK 01331 Trombone/Baritone + PROBK 01332

LOW BRASS ENSEMBLE
Harvey Phillips and Norlan Bewley

Middle School
"Building Reflexes"

WARMUP: Continue with Low-Middle-High. Also use it to learn lip slurs.

LB ENSEMBLE: Start with TRIOS. Have everyone play the A part, the B part, then the C part. Divide the parts in a variety of combinations so everyone plays each part, all learning the different musical roles of melody, harmony, and bass line. Demonstrate how to adjust balance as the melody rotates through the ranges of the ensemble. Move to simple quartets as the students progress.

ISSUES: Reflexes are faster than thinking. The coordination skills required for each instrument must be learned correctly then repeated until they become reflex. Get it right then do it right over and over again. We are creatures of habit - whatever we do the most we will do automatically, so we must use this to our advantage or it will work against us. The body only understands ACTION to build reflexes, so Rhythm is the key. Students will bend the Rhythm to get around undeveloped coordination. All technical skills must bend to the rhythm to develop coordination. Reflexes = Coordination = Timing = Rhythm, so everything must meet at the Rhythm.

Lip Slurs are more easily learned by using the throat to move the vocal breath higher and lower, much like singing. Students tend to force the slurs, especially up, with volume rather than air speed from the throat. Once learned, smoother slurs come from enforcing rhythm upon them. Sloppy slurs lack rhythmic coordination. Lips slurs are flexibility from learning to moving the tone in rhythm.

Tone Production will improve by having students open their throat more for a fuller sound. This requires sliding the lower teeth below the bottom lip to allow a more open throat. Always keep the chest up for proper breathing. This is the key to correct posture. It's much easier to play when full of air, so breath as often as needed to learn to stay full.

Rhythm Positions/Fingerings should remain in continued use to build reflexes.

Low Brass Ensemble is a useful motivator for students at this age. They are shifting from always playing the melody in the beginner book to sheet music that is often mostly whole notes. Most feel neglected musically, and without supplemental challenges, will be ill prepared for the demands of High School music. Feeling overlooked and unimportant within the band leads many (often brighter students) to quit, so scrutinize the low brass and demand high performance skills from them to build their confidence and sense of worth. Consider programming more low brass features or have the low brass ensemble play at concerts.

MUSIC: Yamaha Band Ensembles book 2 - Alfred 5262 Trombone/Baritone + 5263 Tuba, Pop Trios For All - Belwin ELM 00090, Trios For All - Belwin PROBK 01397, Pop Quartets For All - Belwin ELM 00102

LOW-MIDDLE-HIGH Warmup

Norlan Bewley

Trombone/Euphonium

1 / open

2 / 2

8

3 / 1

16

4 / 1-2

5 / 2-3

24

6 / 1-3

7 / 1-2-3

32

Tuba

open

40

2

1

48

1-2

56

2-3

1-3

64

1-2-3

Detailed description: The image shows a musical score for Trombone/Euphonium and Tuba. The Trombone/Euphonium part is written in bass clef with a key signature of one flat (B-flat) and a common time signature. It consists of eight staves of music, each starting with a measure number (8, 16, 24, 32, 40, 48, 56, 64) and a rhythmic pattern. The Tuba part is written in bass clef with a key signature of one flat and a common time signature. It consists of two staves of music, each starting with a measure number (40, 48) and a rhythmic pattern. The Trombone/Euphonium part includes a box labeled 'Trombone/Euphonium' and the Tuba part includes a box labeled 'Tuba'. The score is divided into two sections by a double bar line at measure 32.

LOW-MIDDLE-HIGH Warmup

Norlan Bewley

The warmup exercise is written in C major and consists of six lines of music, each with a treble clef and a common time signature (C). The notes are as follows:

- Line 1: Labeled "open". Notes: C4 (open), E4 (open), G4 (open), B4 (open), C5 (open).
- Line 2: Notes: C4 (open), F#4 (2), G4 (open), A4 (2), B4 (open), C5 (open). Fingering: 2, 1.
- Line 3: Notes: C4 (open), D4 (b1), E4 (open), F4 (b2), G4 (open), A4 (open). Fingering: 1-2.
- Line 4: Notes: C4 (open), D4 (open), E4 (open), F4 (open), G4 (open), A4 (open). Fingering: 2-3.
- Line 5: Notes: C4 (open), D4 (open), E4 (open), F4 (open), G4 (open), A4 (open). Fingering: 1-3.
- Line 6: Notes: C4 (open), D#4 (2), E#4 (2), F#4 (2), G#4 (2), A#4 (2). Fingering: 1-2-3.

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www.norlanbewley.com

CAMPTOWN RACES

arr. Norlan Bewley

Trombone/Euphonium

The musical score is written for Trombone/Euphonium in 4/4 time, with a key signature of one flat (B-flat). It consists of three systems of staves A and B. The first system (measures 1-5) is marked *mf*. The second system (measures 6-11) includes a fingering box with the number '9' above the staff and another below the staff. The third system (measures 12-16) concludes the piece with a double bar line.

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CAMPTOWN RACES

Tuba

arr. Norlan Bewley

The musical score is written for Tuba in 4/4 time, featuring two parts: A and B. The key signature has two flats (B-flat and E-flat). The dynamic marking *mf* (mezzo-forte) is present at the beginning of each system. The score is divided into three systems of four measures each. The first system (measures 1-4) shows both parts playing a rhythmic pattern. The second system (measures 5-8) includes measure markings '6' and '9' in boxes above the staves, indicating specific measures. The third system (measures 9-12) continues the rhythmic pattern. The score concludes with a double bar line at the end of the 12th measure.

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MINUETTE

J.S. Bach arr. Norlan Bewley

Trombone/Euphonium

The musical score is written for Trombone/Euphonium in bass clef, B-flat major, and 3/4 time. It consists of two systems of three staves (A, B, C). The first system contains measures 1-5. The second system contains measures 6-9, with first and second endings indicated by '1.' and '2.' above the staves.

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MINUETTE

J.S. Bach arr. Norlan Bewley

Tuba

A

B

C

6

1.

2.

1.

2.

1.

2.

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LOW BRASS ENSEMBLE
Harvey Phillips and Norlan Bewley

High School
"Upgrading With Details"

WARMUP: Rhythm warmup. Learn to match pitch, articulation, release, tone. Learn to take a breath as a rhythm.

LB ENSEMBLE: Quartets in orchestrated parts. Low brass must often change musical roles quickly, and must determine which role they are playing at the moment to lead, accompany, bring out a fill, or drive the bass line appropriately. They must learn to play their parts independently well in order to play together well. Independence allows them more awareness to match or stand out as needed. Develop greater understanding of how to play different styles of music - symphonic to jazz and their related variants, so students know how to completely switch stylistically as the music demands. Use rhythm positions/fingerings to learn difficult passages.

ISSUES: Matching is a simple yet critical musical skill that is typically overlooked. The tuner is a great reference but students must then match the pitch together that they just played individually. Many don't understand this and think they are now in tune once checked by the tuner, as if "in tune" is a finite state of arrival. Emphasize matching rather than flat or sharp. This is an "eye-opener" for many students. Once they learn that they should tune this way, matching articulations, note releases, and tone can be developed. Projection is a tone production concept that is often unfamiliar to students. They think they sound fine because their tone surrounds them instead of going to the listener, so they sound close to themselves and distant to the listener. With projection, they sound distant to themselves (behind the tone) and close to the listener (back of the hall). A characteristic tone requires projection, and the lack of it is a major reason why the tone is not big or full. Without projection, no matter how loud they try to play, they will never sound big because the tone does not carry so it goes nowhere. Dynamics require contrast to be effective. Students have trouble achieving dynamic contrast because they think only in terms of volume. Dynamics require much more.

Dynamics = volume + articulations x mood.

A loud tone with a soft articulation will not sound loud and a soft tone with a loud articulation will not sound soft. Articulations change the perception of the tone, and must be matched accordingly with the proper volume to achieve the desired dynamic effect. For brass, TAH - TOH - TOO are the loud articulations, DAH - DOH - DOO are the soft articulations. They are mixed and matched by degree with volume to produce a huge variety of dynamics and tone colors determined by the mood of the music played. It is not literally how loud or soft (volume) the music actually is, but rather the perception of how loud or soft the mood of the music seems that creates dynamic contrast.

Inhale and Exhale should sound different. Students usually try to make them the same. Inhale with HO (no resistance) and exhale with TAH (resistance - vocal breath).

Practice in a loud whisper inhaling HO and exhaling TAH: HOOO - TAAAAAAH

Breathing as a rhythm is the next step in applying the HO-TAH breath. Most students only have one breath that is the same speed and timing, regardless of the music. Assign a rhythmic value to every breath and learn to take a quarter breath, eighth breath, or sixteenth breath so the breathing becomes a part of the music. Non-rhythmic breathing is often why breaths are so apparent in phrasing. Rhythmic breaths disappear into the music, which is important for low brass as they need lots of air. But never take a half breath (just kidding).

Sniff Breaths are very useful for low brass, particularly tubas. The mouth breath is the main way to breathe and should be used to fill-up with air. Sniff breaths are supplemental breaths through the nose used only to stay full of air when it is difficult to find a place to get a mouth breath. Just remember: a sniff breath will not get you full of air, but only help you stay full of air until you can get another mouth breath.

Tonguing faster is something students always want (and need) to learn. It is mostly a matter of learning to say TAH and DAH clearly as fast as desired. When students try to tongue faster, they say TUH instead of TAH. This closes the throat, which chokes the tone and shuts down the tongue. Practice saying TAH out loud and as the speed increases, listen carefully for TUH, especially when the tongue starts to stumble. Replace every TUH heard with TAH, keeping the rhythm smooth and even. Learn to say TAH as fast as you can, basically, much like learning to say a tongue twister.

Sight-reading is dreaded by students because they don't know how to prepare for it. Make sure they understand that they need to look over the music right before they play it, even if they only have a minute. Give them a check-list of what to look for: 1) Key signature - What is it, does it change? 2) Time signature - What is it, does it change? 3) Accidentals - Are there any, what are they? 4) Rhythms - Find the trickiest rhythms and sound them out. 5) Signs - Are there any repeat signs, coda signs, DC, DS, first and second endings and where do they go back to? This helps locate potential problem spots before beginning to play, so there are NO SURPRISES. No one instantly becomes a great sight-reader, so establish a list of priorities: Get the rhythm first, then get as many fingerings/positions as possible, then get as many notes as possible, in that order. It's not perfect, but it is the logical way to develop the coordination skill (with practice) to get them all. Students tend to stop and want to go back and play something they miss over again, so teach them to Keep going, no matter what. The way to do this is to get the rhythm first, so they can get back on when they get off. "*The right note at the wrong time is still a wrong note*" - Harvey Phillips. They must learn to recover quickly to develop as sight-readers. As their skill grows they can begin to pick-up the articulations, dynamics, style, and interpretation as well.

MUSIC: Pop Trios For All - Belwin ELM 00090, Pop Quartets For All - Belwin ELM 00102, Quartets For All - PROBK 01431, Flex-ability Pops - Belwin 0628B, Low Brass Ensemble Series - Bewley Music 11LB through 12LB

Trombone/Euphonium/Tuba

RHYTHM WARMUP

Norlan Bewley



The LOW BRASS ENSEMBLE

The Low Brass Ensemble is a new type of performance opportunity for all low brass players. It is a cross between the Trombone Choir and the Tuba/Euphonium Ensemble, which are both popular groups. They each exclude the other half of the low brass section however, so the goal of the Low Brass Ensemble is to allow all of the low brass instruments to participate in one group.

The instrumentation for the Low Brass Ensemble is trombone 1, trombone 2, euphonium, and tuba. The music is all 4-part writing, so the Low Brass Ensemble can be used for chamber music as a quartet, or with multiple players on each part as a large ensemble, even using the entire low brass section if desired. From an educator's perspective, it can be an easier ensemble to assemble than an all trombone or all tuba/euphonium group, plus it involves all of the low brass section.

This instrumentation is the best sounding, but the Low Brass Ensemble is very flexible if adjustments need to be made. It works with just about any combination of the low brass you may have, as long as the players can handle the part. Examples: 3 trombones and tuba, 3 euphoniums and tuba, 1 trombone, 2 euphoniums, and tuba, etc. From an educational standpoint, participation is the key.

The Low Brass Ensemble is a wonderful sounding ensemble! It combines the brilliance of the Trombone Choir with the richness of the Tuba/Euphonium Ensemble. As it is a new group, literature is limited. Norlan Bewley has written Low Brass Ensemble music for use in his **Performance Through Participation** clinics, and is developing a music series in book form for the Low Brass Ensemble.

This handout is available for download at: www.norlanbewley.com

WATER MUSIC FANFARE

GF Handel arr. Norlan Bewley

Allegro Moderato

Trombone 1 *f*

Trombone 2 *f*

Euphonium *f*

Tuba *f*

5

9

Tbn. 1 *ff*

Tbn. 2 *mf* lead *ff*

Euph. *mf* *ff*

Tba. *mf* *ff*

10

Tbn. 1 *ff* *f*

Tbn. 2 *p* *ff* *p* *f* *mf*

Euph. *p* *ff* *p* *f* *mf*

Tba. *p* *ff* *p* *mf*

15 19

15

Tbn. 1

Tbn. 2 *f* *mf*

Euph. *f* *mf* *lead*

Tba. *f* *mf*

23

20

Tbn. 1 *mf*

Tbn. 2 *mf*

Euph. *mf*

Tba. *mf*

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THE LOW BRASS RENAISSANCE SINCE 1950
By **Harvey G. Phillips**

Since 1950 there has been a renaissance (rebirth) of low brass pedagogy, performance, literature, and equipment. This rebirth of performance standards causes one to consider previous standards. In doing so, we recognize that great brass performance did not start last week, great playing has been with us for a very long time. Unfortunately, it is not possible to hear recorded performances of Jean Baptiste Arban, but acknowledging the incomparable legacy of his "Complete Method" compels us to consider that he was a virtuoso performer. A few brass soloists became international celebrities: Jules Levy and Herbert L. Clarke (cornet and trumpet); Arthur Pryor (trombone); Simone Mantia and Leonard Falcone (Euphonium); William Bell (tuba). These low brass players are recognized by their rare recordings and related stories. Others by their reputations only, such as Gardell Simon and Gordon Pulis (trombone); August Helleberg, Fritz Geib, John Kuhn, and Fred Pfaff (tuba). It is interesting and sad to note the lack of solo repertoire available to all these outstanding musicians. Most of their feature solos they wrote for themselves. Major composers of their generations were either ignored or kept to themselves.

After 1950 a new attitude prevailed. I began seeking out composers, making appointments to illustrate my instrument. I discovered that a composer's life is consumed by sounds, all sounds. Every composer I approached was enthusiastic. I get frustrated and angry when I contemplate how many composers might have written for low brass if only they had been asked. (Ravel, Bartok, Stravinsky, Copland, etc.). Finally, low brass players have come to realize that **NO INSTRUMENT CAN RISE ABOVE ITS REPERTOIRE**. A dialog has been established between composers and low brass players. The future looks good.

In 1950 I was introduced to brass chamber music by The New York Brass Ensemble, The Gotham Brass Ensemble, Simon Karasick's Brass Ensemble. I liked it. Chamber music turned me around. I played on every piece, with a singular responsibility as opposed to the orchestra, ie: counting sixty-five measures, playing twelve, more or less, then sitting out an entire movement. More times than not, The New York Brass Ensemble performed as a quintet. So, in 1954 we formally became The New York Brass Quintet. From that brass quintet the world has become proliferated with hundreds of quintets performing from an impressive, ever growing library.

Through the late sixties and into the seventies new organizations were formed to represent the brass instruments: The International Horn Society (IHS); The International Trombone Association (ITA); Tubists Universal Brotherhood Association (T.U.B.A.) later changed to International Tuba- Euphonium Association (ITEA), and last the International Trumpet Guild (ITG). In 1976 and 1984 brass congresses were held under the auspices of the four brass organizations. Thus one can see that a brass renaissance continues to flourish and there is no turning back. When you're on the bottom, the only way is up.

ANSWERS IN ADVANCE

Harvey Phillips - equipment:

The "Harvey Phillips" model Holton TU 330 CC tuba with a Conn 2 mouthpiece.

Norlan Bewley - equipment:

The "Harvey Phillips" model Holton TU 331 BBb tuba with a Bach 7 Megatone mouthpiece, the "Urbie Green" model Martin TR 4501 trombone with a Bach 8 ½ BW mouthpiece, the Holton TR 160 open wrap trombone with a Bach 5GL mouthpiece, the Holton B302R euphonium with a Bach 5G mouthpiece, and the Besson 968 S compensating euphonium with a Bach 5G mouthpiece.

TROMBONE - EUPHONIUM - TUBA

Recommended Accessories

There are many other fine mouthpieces and products for low brass. This list represents choices that are reliable, affordable, and relatively easy to find for most students and educators.

TROMBONE

Small Bore .480 to .509

Mouthpiece: small shank

Bach 12C, Yamaha 45C2 - smaller

Bach 7C - standard

Bach 6 ½ AL, Yamaha 48 - larger

Bach 5GS, Yamaha 51C4, Bach 5G, Schilke 51, Yamaha 51 - even larger

Large Bore .547

Mouthpiece: large shank

Bach 6 ½ AL, Yamaha 48 - standard

Bach 5GS, Yamaha 51C4, Bach 5G, Denis Wick 5AL, Schilke 51, Yamaha 51 - larger

Bach 4G, Schilke 52, Yamaha 52 - even larger

Hand slide Lubricants: Reka Super-Slide, Slide-O-Mix, Binak 495, Trombotine, Cream (many brands)

Tuning slide Lubricants: Leblanc Slid-Eze, Schilke Tuning Slide Grease, Yamaha Tuning Slide Grease

Rotor oil for trigger: Holton, Binak 495

Mutes:

Straight - Tom Crown

Cup - Humes and Berg

Plunger - Lowes, Home Depot, Wal-Mart (old fashioned style)

Harmon: JoRal Bubble

EUPHONIUM

Mouthpiece: small or large shank

Bach 6 ½ AL, Yamaha 48 - smaller

Bach 5G, Schilke 51D, Yamaha 51D - standard

Bach 4G, Denis Wick 4AL, Yamaha 52, 53 - larger

Denis Wick SM 3 - even larger

Valve oil: Holton, Binak 495

Tuning slide Lubricants: Leblanc Slid-Eze, Schilke Tuning Slide Grease, Yamaha Tuning Slide Grease

TUBA

Mouthpiece:

Bach 12, Yamaha 67C4, 68B - smaller

Bach 7, Conn Helleberg, Schilke Helleburg, Denis Wick 3, Yamaha 66 - standard

Perantucci 48, 50 - larger

Valve oil: Holton, Binak 495

Tuning slide Lubricants: Leblanc Slid-Eze, Schilke Tuning Slide Grease, Yamaha Tuning Slide Grease

MOUTHPIECE INFORMATION **Comparison Chart and Major Brand Links**

Ten Questions with Doug Elliott - Good embouchure information
<http://www.trombone.org/articles/library/10q-dougelliott.asp>

Guide To Brass Mouthpieces
<http://www.abimusic.com/brmpcfaq.htm>

Trombone/Euphonium Mouthpiece Comparison Chart
<http://www.dougelliottmouthpieces.com/seriescharts/ltchart.html>

Tuba Mouthpiece Comparison Chart
<http://www.dougelliottmouthpieces.com/seriescharts/tuchart.html>

Yamaha Mouthpiece Comparison Chart
http://www.yamaha.co.jp/english/product/winds/product/spec/other/mp_spec/p_main2.htm

Schilke Mouthpiece Comparison Chart (click on pdf)
<http://www.schilkemusic.com/>

Bach Trombone/Euphonium Mouthpiece Catalog
<http://www.bachbrass.com/mouthpiece/mouth14.php>

Bach Tuba Mouthpiece Catalog
<http://www.bachbrass.com/mouthpiece/mouth22.php>

Conn and King Mouthpiece Catalog (pdf at bottom of page)
<http://www.cgconn.com/content/ckb.php>

Denis Wick Mouthpiece Catalog
www.normans.co.uk/pdfs/Denis%20Wick.pdf

Curry Trombone/Euphonium Mouthpiece Catalog
<http://www.currympc.com/v.php?pg=454>

Curry Tuba Mouthpiece Catalog
<http://www.currympc.com/v.php?pg=455>

Perantucci Mouthpiece Catalog
<http://www.custommusiccorp.com/Accessories/brassacc.html>