Teaching

Beginners and the Chromatic Scale

By RoAnn Romines and George Hayden

“Young brass students have difficulty understanding what a partial is, so we refer to them as levels. The word level makes students feel special as they become able to play each new one.”

The chromatic scale is the secret to playing well. The development of young musicians can be slowed or halted by such physical problems as hand position, mouth placement, jaw alignment, posture, breathing correctly, and support or carriage of the instrument, as well as by faulty equipment. Learning the chromatic scale early will help directors and students monitor and correct all physical and equipment problems. A student cannot play the chromatic scale when there are problems with equipment or playing habits.

It may be best to teach the chromatic scale in sectionals and to start it within the first six months of study. Because each instrument has different problems, trying to learn the chromatic scale in a full band rehearsal would be a nightmare. Make sure everyone warms up on the chromatic scale in addition to other elements you require of them. Have the entire section play their chromatic to check elements. We sometimes approach the chromatic as a game of who can play the most notes with good technique throughout the range of the instrument.

Flute

The major concerns on the flute are pitch, tone, hand position, head joint position, and breathing. Begin students on low F, working to develop a dark, wide, beautiful tone. Monitor the head joint in relation to the mouth, making sure the corners of the mouth are pouting, and students are using the diaphragm to develop the air stream and vibrato. We teach vibrato early, because it helps students develop a proper air stream. Allowing a small, weak sound will only lead to difficulty in coming months; we encourage beginners to play at a solid mezzo
forte. When students can hold a strong low F for one minute, proceed down to E, D, and C, maintaining and checking the air stream, correct breathing, pouting, diaphragm and vibrato. Students should be able to play low C within a few weeks, and within a month flutists should be able to produce a C scale in two octaves. When students can play a C scale in two octaves and an F scale in one octave with correct posture, technique, and sound, then they are ready for the chromatic. Students have already mastered low C and can move to the high C, so adding the higher notes will be easy; playing past high C is all air stream, posture and mouth placement. Students and teachers need only monitor the physical elements of playing. This is the check list we give flutists:

Do not roll the instrument moving between B flat, C, C# and D.
Keep the pout.
Maintain great hand position.
Do not to pull the corners of the mouth back to produce the higher notes.
The headjoint should not slide back and forth when playing.
The head should not move drastically.
The air stream is should be constant, with no breath during the two-octave C scale.

Teachers should check to make sure the equipment is not interfering with the low C. Sometimes the pads for the F, E, D, low C, and Eb keys may not seal or hit the tone holes at the same time, and this will cause students problems. The flute will feel more difficult to blow through and will not speak correctly.

**Clarinet**

The clarinet has the longest chromatic scale (low E to altissimo G) and requires the most attention. Without proper reeds, mouthpiece, ligature, hand position, mouth placement, position of the right thumb, air stream, pressure of teeth on mouthpiece, or breathing, beginners will have many problems. The major concerns for the clarinet are usually difficulty jumping the partials, poor tone, tonguing, pitch, and inability to play high notes well.

The chromatic scale for the clarinet will fix all the bad habits; it is simply impossible to play the chromatic scale correctly and play the instrument incorrectly. To reach high G, a strong, healthy reed must be used. Superb mouth placement and tongue position are required to play all the notes. Without a good hand position students will be unable to play a smooth, uninterrupted chromatic. Wrist positions, thumb position, pinkies, mouth, teeth, tongue position, air stream, and weight on both thumbs are all important; the list for the clarinetists to monitor seems endless.

Clarinetists should be able to hold an open G and a low E for one minute without hearing or seeing any adjustments before moving to the chromatic scale. For the clarinet, a simple cheat sequence can provide quick results:

*Two pinkies, one pinkie, left pinkie, no pinkies, inside pinkie, two fingers, one*
fingertip, fork, C, C#, D, fork, E, F, F#, G, G#, A, B flat. Then, start all over, adding the register key. After high C, it is two fingers, one finger, fork, C, C#, D, D#, fork.

The C#5 (left pinkie) will usually chirp because the fingers slide around. Also, check that at the high C the embouchure is still good. The last eight notes are the high notes after the High C above the staff with the left hand first finger pulled away.

**Saxophone**

The quality of the mouthpiece, reed, and ligature will have a substantial amount to do with students’ success. Students should have an excellent neck strap; a poor one will cause a multitude of problems. Check how saxophonists sit. The saxophone should be positioned in the center with a slight angle to the left to relax the wrists. Check the pads for G, low C, and the octave key. These keys tend to shift if the instrument is not cared for properly, and if the pads are sticking, the student may not be swabbing out the instrument after playing.

The full range of the saxophone is one of the easiest to learn. When a saxophonist can play a written B4, and the teacher can press the octave key and the tone jumps to the higher B, then the student is ready to move down the saxophone to A, G, F, E, D, and C in one breath. In addition to watching tone, pitch, and tonguing carefully, teachers should make sure students can play the low C and the higher notes without moving the jaw or lips. Monitor the jaw and stability of the teeth against the mouthpiece, making sure there is no movement of the mouthpiece and instrument when adding the right hand. Check to see if the upper teeth and jaw are aligned properly. Before going to the chromatic scale, students should be able to play F#5 with correct pitch and breathing for 1 minute. For the chromatic scale, teach the side C key and forked F#.

**Brass**

The brass chromatic is best taught in pieces and then reassembled later. Young students have difficulty understanding what a partial is, so we refer to them as levels. The word level makes students feel special as they become able to play each new one. After being able to play a long concert F, we teach students to produce the seven fingerings or positions of level two descending from concert F down to concert B, taking the time to teach the science of the instrument. The instructor will disassemble a trumpet and show students the length of each of the tubes. We show students how the valved instruments directly relate to the trombone. It is easy to see the trombone getting larger, but we show how the trumpet is actually getting larger too as we descend through the fingerings.

The physics of sound is discussed, and I connect this lesson to weather too. Cold air (a cold front) moves faster and warm air (a warm front) moves slower. Students get a thorough lesson on how air travels through the instrument. When the horn gets longer, the pitch goes down. We connect this to intonation lessons. If
the sound is too high (sharp), making the horn longer will slow the air down, which brings the pitch down. If a note is too low (flat), make the horn shorter; the faster air has a shorter distance to travel, and thus the pitch goes up.

Once a student can play level two well, we move to level one, concert B flat down to concert E. Soon after, we learn level three—concert B flat down to concert G flat (only five fingerings). Remind them to keep the abdomen tight. Four levels is our required minimum for the first year of instruction, although each student will likely be ready for level four (four positions or fingerings) at a different time. Some students usually make it to level five (three fingerings), and we teach students that level six goes back to five fingerings. Students may not have the ability to play that high B flat yet, but they will enjoy learning about those notes to be intrigued enough to try.

Once the brass players feel good about playing the first two or three levels descending they simply turn it backwards from the way they learned it, beginning with their lowest note. The fingering pattern should first be memorized descending, in line with teaching students how the instrument is built. Brass players may need to play down to their concert E at first, but a goal is for them to be able to produce the note immediately without having to work down.

After the brass players can play the chromatic scale well, we then show them the fingering chart and brag about how many notes they can play. Every student plays their chromatic for us with a tuner and a piano several times a school year to make sure they are matching pitch and playing an in-tune minor second. Horns, trombones and tubas especially must hear the correct pitches and match. Trombones must learn that each position is wherever it is. Each note is an Easter egg hunt, and they must find the pitch with the ears, mouth and hand.

When the brass students are comfortable with a number of levels, we encourage them to begin lip slurs, where the different partials are produced without changing fingerings. To make it fun, we ask brass students to create their own bugle calls. We also use this opportunity to remind brass students that warm, slow air produces low tones and fast, cold air helps to produce the higher notes. We ask the student to put a thin stream of air on the tip of their finger and then blow warm air on their hand as if they are fogging up a window on a cold winter day. Students remember this when they physically experience the sensation of this lesson.

Make sure students produce the highest notes with a tight belly and some tension of the embouchure within itself, but not great tension between the player and the mouthpiece. Students should not push the mouthpiece hard into the face to produce the high notes. Show them what a pinched and forced sounds are. Encourage brass players to stretch themselves out of their comfort zone but only to play an amount of the chromatic scale that they can do well and do correctly for grade, chair or clinic auditions. Sometimes less is more.

**Reading the Chromatic Scale**

Once students can play a portion or all of the fingering chart in the beginning...
band book, we want them to know all the notes for the generally accepted range of their instrument. Although we may cover the chromatic by teaching the skill and then showing them what they have done, we certainly want them to have a thorough understanding of what they are doing. We always include an in-depth lesson on enharmonics and an explanation of the piano and all percussion keyboard instruments. We also move to larger fingering charts and encourage students to research on the internet to learn the entire range of their instruments.

We also like to show students that not only do the notes have two names, but they can be spelled two different ways on the staff. The students can give you many examples of homonyms, words that sound alike but are spelled differently. We show students how a C# looks on a staff and how the composer might spell the note on the staff as a D flat, but it still has the same sound.

Along with spelling comes reading. When the students practice the chromatic, they may have the finger combination memorized, but we insist that they look at the notes so they know what they are doing. They must be able to recognize the notes in their literature so that they learn to read. We tell students that they will probably do fine when they see a B flat in their literature, but they might just panic for a moment when they see an A#. Point out and highlight these notes as they are discovered in students’ music.

The chromatic scale is the key to success, the key to good tonal support and pitch, and eventually a requirement for technique. Students must know all the tendencies of all the notes on their horn and all the flaws of their instrument. Each and every note must be in tune. Major equipment problems are addressed and hopefully improved upon to help the student succeed quicker and easier. If a student has a problem with the chromatic, then there is a problem with the basics.