

Texas Bandmasters Association Convention/Clinic July 25-27, 2024

Deaf Students CAN be Successful in the Band Classroom and Marching Field!

CLINICIANS: Adam Chitta, Grace Zientek

Deaf Students CAN be Successful in the Band Classroom and the Marching Field!

Texas Bandmasters Association Convention/Clinic Friday, July 26th, 2024 - 5:00-6:00 PM Henry B. González Convention Center CC 206

- Introduction
 - Adam Chitta
 - Behind-the-ear hearing aids
 - Performer & teacher
 - Middle school and high school band
 - Drum & bugle corps
 - Indoor color guard & percussion
 - Grace Zientek
 - Cochlear implant
 - Color guard instructor
 - High school marching band
 - Drum & bugle corps
 - Indoor color guard & percussion

"I am not a deaf musician; I am a musician that happens to be deaf." Dame Evelyn Glennie

- Clinic Objectives
 - Types of hearing loss and hearing assisting devices
 - Adaptive strategies for the middle/high school band classroom
 - Adaptive strategies for the marching band field

What does it mean to be deaf?

"For students who are deaf, the primary means of communication is through the visual channel. Their residual hearing or remaining hearing is not sufficient to process speech.

These students have a hearing loss that is 90dB or greater."

(Darrow, 2006)

- Objective #1 Types of hearing loss and hearing assisting devices
 - Congenital vs. Acquired Hearing Loss
 - Conductive Hearing Loss
 - Sensorineural Hearing Loss
 - One Ear or Two?
 - Ménière's Disease
 - Hearing Assisting Devices
 - Hearing aids
 - Inside-the-canal (ITC)
 - Behind-the-ear (BTE)
 - Cochlear Implant

- Objective #2 Adaptive strategies for the middle/high school band classroom
 - Full ensemble / rehearsal strategies
 - Chair/Stand Setup
 - It is OKAY to change from the norm!
 - Voice Amplification
 - Research and benefits
 - Benefits students hearing instruction AND improves teacher health
 - Metronome Setup
 - McAdams Metronome (Visual learning)
 - Sound Speaker Placement (Audio learning)
 - <u>Soundbrenner Metronome</u> (Tactile learning)
 - Breathing Exercises
 - "Shark fin" (ASL letter B) (Tactile learning)
 - Hand placement on body (Kinesthetic learning)
 - Hand movement to (inhale) and away (exhale) from mouth (Kinesthetic learning)
 - Tuning
 - KORG tuner with clip (Visual learning)
 - TonalEnergy Tuner app (Visual and Audio learning)
 - Scales
 - Solfege (Audio and Visual learning)
 - Rehearsal Numbers
 - Colors (Visual learning)
 - Letters (Visual and Kinesthetic learning)
 - Rhythms
 - Tapping on chest (Kinesthetic learning)
 - Counting the rhythm (Audio learning)
 - Clapping the rhythm (Kinesthetic Learning)
 - ReadyMade Music theory lessons
 - (Visual learning)
 - Dynamics
 - Decibel meter reader (Visual learning)
 - Number system
 - Note Length/Separation
 - Utilize visuals for students to see note length relationship from note to note (Visual learning)
 - BC Band Solutions
 - Air onto the palm (Tactile learning)
 - TonalEnergy Tuner app (Visual learning)
 - Feeling the resonance/vibrations of the instrument (Tactile learning)

- Objective #3 Adaptive strategies for the marching field
 - o Full ensemble / rehearsal strategies
 - Field placement & drill assignments
 - Communication
 - BEAM app within Ultimate Drill Book
 - Annotations within the music
 - o Live Mode
 - Non-verbal communication cues on-the-move
 - Examples from Frank Troyka's <u>Guidelines for Marching</u>
 Technicians
 - Voice Amplification
 - More students hearing the instructions = More productive rehearsals while staying in the 8-hour minimum window = More success to be had by EVERYONE! **Every second counts!**
 - Metronome Setup
 - Stick what you normally use with the metronome audio system (MegaVox, Long Ranger, stationed at back sideline, traveling with drumline, etc.)
 - Develop a system that assists in the count-offs of each rehearsal segment
 - Hearing Protection
 - Any hearing protection is better than no protection at all.
 - Hearing loss is IRREVERSIBLE!
 - Decibel overviews
- Be on the lookout...
 - Hearing fatigue
 - Overstimulation
 - Mental breaks
 - Did the students hear your instructions? Have them repeat the instructions back to you.
 - Did all students hear the question?
 - BE PATIENT. We only have pieces of the puzzle and need to fill in the gaps on our own.
- Misconceptions
 - Lipreading
 - DHH students cannot be musical... or as successful as their hearing peers...
 - Speaking LOUDER to us is not the answer.
 - Deaf does not mean dumb. We just need a little help, little more time, and little more support!
 - How can you help?

- Additional Resources
 - The Chitta Sound, LLC
 - www.thechittasound.com
 - https://thechittasound.com/2024-texas-bandmasters
 - Handout for additional teaching tools by instruments
 - Video interview with former auditory impairment teacher and speech pathologists
 - Podcast episodes
 - Blog Readings
 - Meeting Dame Evelyn Glennie / The World's Premier Solo Percussionist
 - Meeting Dennis Bubert Professional Trombone Player with Hearing Aids
 - DHH Inclusion Tips for the Marching Arts: Happy March Forth!
 - DHH Performers
 - Dame Evelyn Glennie
 - o Hip Hop Recording Artist Warren "Wawa" Snipe
 - Mandy Harvey
 - Tyler Mazone DMA Student at Michigan State University and Composer
 - Texas Health & Human Services Deaf Tuition Waiver
 - https://www.hhs.texas.gov/services/disability/deaf-hard-hearing/tuition-waiver
 - JWPepper video Hearing Health
 - https://www.voutube.com/watch?v=07Cvjs4tEZY
 - Hear & Beyond
 - How-to guide on living successfully with hearing loss
 - https://livingwithhearingloss.com/hearandbeyond/
 - ReadyMade Music, LLC
 - https://www.readymademusic.net/
 - Ultimate Drill Book / BEAM app
 - https://www.ultimatedrillbook.com/
 - https://www.ultimatedrillbook.com/beam/
- Contact us!
 - Adam Chitta
 - adam@thechittasound.com
 - Wood Middle School North East ISD
 - Grace Zientek
 - grace.zientek@cfisd.net
 - Cy Park High School Cypress-Fairbanks ISD
- Thank you!!

GUIDELINES FOR MARCHING TECHNICIANS

As a marching technician, your primary responsibilities are to help implement the procedures and methods already established, and to contribute to the effectiveness of the rehearsal by:

- 1. Monitoring for student achievement and consistency, and
- 2. Helping to improve and maintain student focus.

These can be achieved only if you have a thorough understanding of the marching technique and rehearsal procedures.

- Have a set of charts with you at all times and refer to them constantly. Monitor for accuracy of sets. Remember, **you're not a** "judge" and your job is not simply to react. You're a teacher and your job is to help the students achieve a product that is as close to perfect as you can visualize.
- Keep a pencil or pen with you and write in your drill book any special instructions for your sections (direction to march, upper body placement, horn choreography, step-off foot, etc.).
- Generally, the more important of the two ordinates in a pair is the "X" ordinate. Have them adjust the X first, then the Y. The X has a narrower margin of error since the yard lines (the X reference tools) are closer together than the hashes and sidelines (the Y reference tools). The X is also more conspicuous from the press box.
- Use non-verbal feedback (i.e., gestures) to point out errors and make corrections when the group is in motion. This allows for commentary from the tower or whomever is the primary focus of the rehearsal. The following are suggested gestures that can be used non-verbally to address several specific problems:

Problem	Gesture
Incorrect interval	Point to the larger interval to be adjusted.
Upper body facing incorrect	Point to your own sternum and rotate in the correct direction; demonstrate the "frontal plane" position and rotate your upper body in the correct direction.
Inadequate flex on a forward march	Point to your own foot and demonstrate the proper amount of flex; gesture the flex with your hand by flexing it upward at the wrist.
Out of step	Point to the person's feet and make a circular motion with your hand.
Legs not straight	Point to your slightly flexed knee and gesture a "pushing back" motion.
Heels down on a backward march	Rise up on your platforms slightly.
Excess knee motion	Point to the person's knee and gesture a straight line by slicing your hand vertically along the line of the leg.
Upper body not lifted	Place your hands below your rib cage and gesture a lifting motion.
Chin too low	Touch your own chin and lift it slightly.
Horn angle incorrect	Extend your arm parallel to your shoulder and elevate it to the proper angle (in front for brass instruments, to the side for flutes).
Elbows constricted	Put your arms in the "power triangle" and separate your own elbows.
Sternum not projecting forward	Point to the top of your own sternum and push it forward slightly.

- The best time for verbal feedback and demonstration is between reps, not during reps. Any verbal feedback during a rep should be done with short phrases to individuals or small groups. Favor non-verbal feedback when the students are in motion.
- Check with the directors before making any changes in method or style. We all must deliver consistent information.
- Make corrections BETWEEN comments from the tower. Do your best not to "step on" the person in charge of the rehearsal. If you need time to address a specific concern, get the attention of the person on the tower or the person in charge of rehearsal (e.g., raise your hand shout, "Comment" and wait for acknowledgment. You may find that much of your verbal feedback will take place as students reset for another repetition of a drill segment.
- Remind students to check their drill books, coordinate cards, or UDB app. It's perfectly acceptable to ask an individual to recite his/her coordinate. When he/she does, check that it's accurate!
- Be succinct. Avoid using 20 words when 10 will do. Only give one or two specific corrections. Remember to
 - 1. Identify the specific problem, and
 - 2. State how to correct it (keep in mind that sometimes only the correction is necessary).
- Avoid the words "try," "make sure," "alright," "that was good" (when it isn't!), "uh," "um," and "ok." They weaken your authority and reduce the distance between you, the professional, and they, the students.
- Wear shoes appropriate for marching and for demonstrating marching skills. Please, no sandals, no flip flops, no bare feet.
- Wear comfortable clothing, but nothing ragged nor disheveled. No one should confuse you with a student.
- Never use profanity or innuendo.
- Model support for the other staff members by directing students' attention to comments from the tower (non-verbally) or to whomever may be addressing the group as a whole. If you have concerns, please bring them to the head director at an appropriate time. Never contradict other staff members or express discontent in front of the students.

FLUTE

Key: (V) Visual learning: learns best by seeing; (T) Tactile learning: learns best by touching, feeling, and manipulating objects; (K) Kinesthetic learning: learns best with frequent opportunities for physical activity. Taken from Hands & VoicesTM

Common Exercises	DHH/ALL applications
Instrument carriage exercises Keep fingers on the keys Balance the flute - bottom lip, LH, RH	 Practicing with a mirror (V, T) Helps student SEE where the headjoint is being placed onto their bottom lip to create the correct aperture **Music stand must be placed at appropriate height to avoid hunched over posture and leaning in to the mirror to see** Mirror can also assist in note separation exercises Finger placements (T) Due to hearing loss, DHH students may be stronger tactile learners and strive with wanting to be accurate and precise with finger placement on top of the keys Emphasize the importance of finger placement onto the keys and their press/release responsibilities These can be done with and without the fully assembled instrument before producing sound
Breathing exercises Demonstrate correct posture Fill up to the bottom of the chair or to your feet Inhale and exhale with a calm face	 Hand placement on body (K) Place one hand on stomach (to feel air inhale and exhale) and one hand at back (to keep back straight) Shark fin (T, K) Using one hand as a shark fin (ASL letter "B") against the lips and directly under the nose As students breathe in, they can HEAR and FEEL the air move across the palm and into their body Immediately flip to palm facing mouth for exhale to FEEL the air Balloon / Bread bag application (V, T, K) Using these items will provide visual (and resistance - balloon) on the exhalation of the amount of air leaving their body
Air Direction exercises	• Pneumo Pro (V, K)

D	
 Blow in a certain direction using words like straight forward, jaw forward, jaw back, etc. 	 https://www.flute4u.com/Pneumo-Pronchtml Visual aid for students to see the speed and direction of the air Pinwheels (V, K) Amazon link Can be applicable to all instruments
Articulation exercises Tongue the note when I clap/snap I Play, You Play	 Apply to foot tapping with a metronome (Cavitt, 2012) (T, V): Articulate when their foot touches the floor Articulate when their foot touches the floor and when it comes back up Ask students to articulate 2 or 3 or 4 times on each downbeat or upbeat Have students verbalize the articulation out loud before applied to the instrument/headjoint TOO-TOO, DOO-DOO, etc.
 Note Length/Separation exercises I Play, You Play Connected, Separated 	 Utilize visuals for students to see note length relationship from note to note (V) BC Band Solutions Air onto the palm (T, K) **If comfortable for both parties** Blow into the palm of the student's hand so they may FEEL the length of the note. TonalEnergy Tuner app (V) Analysis feature shows student immediate visual feedback of the shape of the note
• Tempo exercises	 Flashing light on McAdams metronome (V) If this is placed at the front of the classroom, position to where student can see the flashing light with the tempo TonalEnergy Tuner app (V) Metronome feature has numerous selections for a visual aid (flashing block w/beat numbers, bouncing block/ball, foot tap, hand clap, etc) Vibrating metronome device - SoundBrenner (T) Device can be worn like a watch on the wrist, bicep, or across the chest Connects to app on smart device and can sync up to five SoundBrenner devices at once Helps student FEEL the pulse on the downbeat, upbeat, as well as subdivisions **Protects hearing from constant

	listening to a metronomic beeping sound** • Foot tap visual with hands (V, T) ○ Using your hands to demonstrate foot taps and have students repeat back to you ○ Saying, "Down, up, down, up"
Tuner exercises Listen to keep the note still and match your neighbors Match the note as played by the model or teacher	 ■ KORG tuner with clip (V) Tuner clip attaches to instrument and provides immediate feedback on tuning while playing ■ TonalEnergy Tuner app (V) Tuner feature has a large circle visual for tuning the note sharp, flat, and in-tune. Don't forget the HAPPY FACE when in-tune! :-) Sound feature allows student to select between tuner circle and piano layout to press which note to be played back to them ■ Piano helps display note differences higher vs lower ■ See if this can be bluetoothed to the DHH student's hearing assistance device!

CLARINET

Key: (V) Visual learning: learns best by seeing; (T) Tactile learning: learns best by touching, feeling, and manipulating objects; (K) Kinesthetic learning: learns best with frequent opportunities for physical activity. Taken from Hands & VoicesTM

Common Exercises	DHH/ALL applications
Instrument carriage exercises Keep fingers on the keys Securing mouthpiece in mouth - reed over bottom lip, upper teeth on top of mouthpiece, firm corners	 Practicing with a mirror (V, T) Helps student SEE and FEEL where the mouthpiece is being placed into their mouth **Music stand must be placed at appropriate height to avoid hunched over posture and leaning in to the mirror to see** Finger placements (T) Due to hearing loss, DHH students may be stronger tactile learners and strive with wanting to be accurate and precise with finger placement on top of the keys Emphasize the importance of finger placement onto the keys and their press/release responsibilities These can be done with and without the fully assembled instrument before producing sound
Breathing exercises Demonstrate correct posture Fill up to the bottom of the chair or to your feet Inhale and exhale with a calm face	 Hand placement on body (K) Place one hand on stomach (to feel air inhale and exhale) and one hand at back (to keep back straight) Shark fin (T, K) Using one hand as a shark fin (ASL letter "B") against the lips and directly under the nose As students breathe in, they can HEAR and FEEL the air move across the palm and into their body Immediately flip to palm facing mouth for exhale to FEEL the air Balloon / Bread bag application (V, T, K) Using these items will provide visual (and resistance - balloon) on the exhalation of the amount of air leaving their body
Air Direction exercises Blow in a certain direction using words like straight forward, jaw forward, jaw back, etc.	 Pinwheels (V, K) Amazon link Can be applicable to all instruments Target air direction onto palm (T, K)

	 Placing palm directly in front of face and aiming for "6:00" to practice fast air direction in the same place to then transfer to clarinet mouthpiece
■ Articulation exercises ○ Tongue the note when I clap/snap ○ I Play, You Play	 Apply to foot tapping with a metronome (Cavitt, 2012) (T, V): Articulate when their foot touches the floor Articulate when their foot touches the floor and when it comes back up Ask students to articulate 2 or 3 or 4 times on each downbeat or upbeat Have students verbalize the articulation out loud before applied to the instrument/mouthpiece TEE-TEE, etc.
Note Length/Separation exercises	 Utilize visuals for students to see note length relationship from note to note (V) BC Band Solutions Air onto the palm (T, K) **If comfortable for both parties** Blow into the palm of the student's hand so they may FEEL the length of the note. TonalEnergy Tuner app (V) Analysis feature shows student immediate visual feedback of the shape of the note Feeling the resonance/vibrations of the instrument (T) Have student feel the differences between note lengths being played while placing a couple fingers on the instrument "How do the legato notes FEEL compared to the detached notes?" Can be done teacher to student, student to student, etc.
 Tempo exercises Listen for the metronome Stay on the beat Play in time with your neighbors 	 Flashing light on McAdams metronome (V) If this is placed at the front of the classroom, position to where student can see the flashing light with the tempo TonalEnergy Tuner app (V) Metronome feature has numerous selections for a visual aid (flashing block w/beat numbers, bouncing block/ball, foot tap, hand clap, etc) Vibrating metronome device - SoundBrenner (T) Device can be worn like a watch on the wrist, bicep, or across the chest

	1
	 Connects to app on smart device and can sync up to five SoundBrenner devices at once Helps student FEEL the pulse on the downbeat, upbeat, as well as subdivisions **Protects hearing from constant listening to a metronomic beeping sound** Foot tap visual with hands (V, T) Using your hands to demonstrate foot taps and have students repeat back to you Saying, "Down, up, down, up"
Tuner exercises Listen to keep the note still and match your neighbors Match the note as played by the model or teacher	KORG tuner with clip (V) Tuner clip attaches to instrument and provides immediate feedback on tuning while playing TonalEnergy Tuner app (V) Tuner feature has a large circle visual for tuning the note sharp, flat, and in-tune. Don't forget the HAPPY FACE when in-tune! :-) Sound feature allows student to select between tuner circle and piano layout to press which note to be played back to them Piano helps display note differences higher vs lower See if this can be bluetoothed to the DHH student's hearing assistance device!

SAXOPHONE

Key: (V) Visual learning: learns best by seeing; (T) Tactile learning: learns best by touching, feeling, and manipulating objects; (K) Kinesthetic learning: learns best with frequent opportunities for physical activity. Taken from Hands & VoicesTM

Common Exercises	DHH/ALL applications
Instrument carriage exercises Keep fingers on the keys Securing mouthpiece in mouth - reed over bottom lip, upper teeth on top of mouthpiece, firm corners	 Practicing with a mirror (V, T) Helps student SEE and FEEL where the mouthpiece is being placed into their mouth **Music stand must be placed at appropriate height to avoid hunched over posture and leaning in to the mirror to see** Finger placements (T) Due to hearing loss, DHH students may be stronger tactile learners and strive with wanting to be accurate and precise with finger placement on top of the keys Emphasize the importance of finger placement onto the keys and their press/release responsibilities These can be done with and without the fully assembled instrument before producing sound
Breathing exercises Demonstrate correct posture Fill up to the bottom of the chair or to your feet Inhale and exhale with a calm face	 Hand placement on body (K) Place one hand on stomach (to feel air inhale and exhale) and one hand at back (to keep back straight) Shark fin (T, K) Using one hand as a shark fin (ASL letter "B") against the lips and directly under the nose As students breathe in, they can HEAR and FEEL the air move across the palm and into their body Immediately flip to palm facing mouth for exhale to FEEL the air Balloon / Bread bag application (V, T, K) Using these items will provide visual (and resistance - balloon) on the exhalation of the amount of air leaving their body
Air Direction exercises Blow in a certain direction using words like straight forward, jaw forward, jaw back, etc.	 Pinwheels (V, K) ○ Amazon link ○ Can be applicable to all instruments

 ◆ Articulation exercises ○ Tongue the note when I clap/snap ○ I Play, You Play 	 Apply to foot tapping with a metronome (Cavitt, 2012) (T, V): Articulate when their foot touches the floor Articulate when their foot touches the floor and when it comes back up Ask students to articulate 2 or 3 or 4 times on each downbeat or upbeat Have students verbalize the articulation out loud before applied to the instrument/mouthpiece TOO-TOO, DOO-DOO, TEE-TEE, etc.
Note Length/Separation exercises I Play, You Play Connected, Separated Output Description:	 Utilize visuals for students to see note length relationship from note to note (V) BC Band Solutions Air onto the palm (T, K) **If comfortable for both parties** Blow into the palm of the student's hand so they may FEEL the length of the note. TonalEnergy Tuner app (V) Analysis feature shows student immediate visual feedback of the shape of the note Feeling the resonance/vibrations of the instrument (T) Have student feel the differences between note lengths being played while placing a couple fingers on the instrument "How do the legato notes FEEL compared to the detached notes?"
• Tempo exercises	Flashing light on McAdams metronome (V) If this is placed at the front of the classroom, position to where student can see the flashing light with the tempo TonalEnergy Tuner app (V) Metronome feature has numerous selections for a visual aid (flashing block w/beat numbers, bouncing block/ball, foot tap, hand clap, etc) Vibrating metronome device - SoundBrenner (T) Device can be worn like a watch on the wrist, bicep, or across the chest Connects to app on smart device and can sync up to five SoundBrenner devices at once Helps student FEEL the pulse on the

	downbeat, upbeat, as well as subdivisions **Protects hearing from constant listening to a metronomic beeping sound** Foot tap visual with hands (V, T) Using your hands to demonstrate foot taps and have students repeat back to you Saying, "Down, up, down, up"
 Tuner exercises Listen to keep the note still and match your neighbors Match the note as played by the model or teacher 	KORG tuner with clip (V) Tuner clip attaches to instrument and provides immediate feedback on tuning while playing TonalEnergy Tuner app (V) Tuner feature has a large circle visual for tuning the note sharp, flat, and in-tune. Don't forget the HAPPY FACE when in-tune!:-) Sound feature allows student to select between tuner circle and piano layout to press which note to be played back to them Piano helps display note differences higher vs lower See if this can be bluetoothed to the DHH student's hearing assistance device!

OBOE/BASSOON

Key: (V) Visual learning: learns best by seeing; (T) Tactile learning: learns best by touching, feeling, and manipulating objects; (K) Kinesthetic learning: learns best with frequent opportunities for physical activity. Taken from Hands & VoicesTM

Common Exercises	DHH/ALL applications
Instrument carriage exercises Keep fingers on the keys Securing double reeds in mouth - correct amount of pressure from upper and lower lip to secure correct embouchure	 Practicing with a mirror (V, T) Helps student SEE and FEEL where the mouthpiece is being placed into their mouth **Music stand must be placed at appropriate height to avoid hunched over posture and leaning in to the mirror to see** Finger placements (T) Due to hearing loss, DHH students may be stronger tactile learners and strive with wanting to be accurate and precise with finger placement on top of the keys Emphasize the importance of finger placement onto the keys and their press/release responsibilities These can be done with and without the fully assembled instrument before producing sound
Breathing exercises Demonstrate correct posture Fill up to the bottom of the chair or to your feet Inhale and exhale with a calm face	 Hand placement on body (K) Place one hand on stomach (to feel air inhale and exhale) and one hand at back (to keep back straight) Shark fin (T, K) Using one hand as a shark fin (ASL letter "B") against the lips and directly under the nose As students breathe in, they can HEAR and FEEL the air move across the palm and into their body Immediately flip to palm facing mouth for exhale to FEEL the air Balloon / Bread bag application (V, T, K) Using these items will provide visual (and resistance - balloon) on the exhalation of the amount of air leaving their body
Air Direction exercises Blow in a certain direction using words like straight forward, jaw forward, jaw back, etc.	 Pinwheels (V, K) ○ Amazon link ○ Can be applicable to all instruments

 ◆ Articulation exercises ○ Tongue the note when I clap/snap ○ I Play, You Play 	 Apply to foot tapping with a metronome (Cavitt, 2012) (T, V): Articulate when their foot touches the floor Articulate when their foot touches the floor and when it comes back up Ask students to articulate 2 or 3 or 4 times on each downbeat or upbeat Have students verbalize the articulation out loud before applied to the instrument/mouthpiece TOO-TOO, DOO-DOO, TEE-TEE, etc.
Note Length/Separation exercises I Play, You Play Connected, Separated Output Description:	 Utilize visuals for students to see note length relationship from note to note (V) BC Band Solutions Air onto the palm (T, K) **If comfortable for both parties** Blow into the palm of the student's hand so they may FEEL the length of the note. TonalEnergy Tuner app (V) Analysis feature shows student immediate visual feedback of the shape of the note Feeling the resonance/vibrations of the instrument (T) Have student feel the differences between note lengths being played while placing a couple fingers on the instrument "How do the legato notes FEEL compared to the detached notes?"
• Tempo exercises	Flashing light on McAdams metronome (V) If this is placed at the front of the classroom, position to where student can see the flashing light with the tempo TonalEnergy Tuner app (V) Metronome feature has numerous selections for a visual aid (flashing block w/beat numbers, bouncing block/ball, foot tap, hand clap, etc) Vibrating metronome device - SoundBrenner (T) Device can be worn like a watch on the wrist, bicep, or across the chest Connects to app on smart device and can sync up to five SoundBrenner devices at once Helps student FEEL the pulse on the

	downbeat, upbeat, as well as subdivisions **Protects hearing from constant listening to a metronomic beeping sound** Foot tap visual with hands (V, T) Using your hands to demonstrate foot taps and have students repeat back to you Saying, "Down, up, down, up"
 Tuner exercises Listen to keep the note still and match your neighbors Match the note as played by the model or teacher 	KORG tuner with clip (V) Tuner clip attaches to instrument and provides immediate feedback on tuning while playing TonalEnergy Tuner app (V) Tuner feature has a large circle visual for tuning the note sharp, flat, and in-tune. Don't forget the HAPPY FACE when in-tune!:-) Sound feature allows student to select between tuner circle and piano layout to press which note to be played back to them Piano helps display note differences higher vs lower See if this can be bluetoothed to the DHH student's hearing assistance device!

BRASS

Key: (V) Visual learning: learns best by seeing; (T) Tactile learning: learns best by touching, feeling, and manipulating objects; (K) Kinesthetic learning: learns best with frequent opportunities for physical activity. Taken from Hands & VoicesTM

Common Exercises	DHH/ALL applications
Instrument carriage and mouthpiece placement exercises	 Practicing with a mirror (V, T) Helps student SEE and FEEL where the mouthpiece is being placed onto their mouth **Music stand must be placed at appropriate height to avoid hunched over posture and leaning in to the mirror to see** Finger placements (T) Due to hearing loss, DHH students may be stronger tactile learners and strive with wanting to be accurate and precise with finger placement on top of the keys Emphasize the importance of finger placement onto the valves and their press/release responsibilities These can be done with and without the fully assembled instrument before producing sound Visuals of mouthpiece placement from professionals (V) The Art of Brass Playing (Farkas, 1989) Professional models Coffee straw (T) Use coffee straw to determine center of embouchure Once placed correctly with the lips touching and teeth apart, place brass mouthpiece through the straw and onto the lips for correct embouchure placement
Breathing exercises Demonstrate correct posture Fill up to the bottom of the chair or to your feet Inhale and exhale with a calm face	 Hand placement on body (K) Place one hand on stomach (to feel air inhale and exhale) and one hand at back (to keep back straight) Shark fin (T, K) Using one hand as a shark fin (ASL letter "B") against the lips and directly under the nose As students breathe in, they can HEAR and FEEL the air move across

	the palm and into their body Immediately flip to palm facing mouth for exhale to FEEL the air Balloon / Bread bag application (V, T, K) Using these items will provide visual (and resistance - balloon) on the exhalation of the amount of air leaving their body Coffee straw (T, K) Use coffee straw to give direction to air flow upon exhale that will then be transferred to the mouthpiece and the instrument
Air Direction exercises Blow in a certain direction using words like straight forward, jaw forward, jaw back, etc.	 Pinwheels (V, K) Amazon link Can be applicable to all instruments Use visuals from The Art of Brass Playing (Farkas, 1989) Air direction in relation to mouthpiece placement Coffee straw (T, K) Once set onto lips at correct angle, use exhalation from the coffee straw to FEEL the air move at consistent speed onto either the pinky of hand holding the straw or opposite hand Apply to the mouthpiece at the same correct angle as the straw
 ◆ Articulation exercises ○ Tongue the note when I clap/snap ○ I Play, You Play 	 Apply to foot tapping with a metronome (Cavitt, 2012) (T, V): Articulate when their foot touches the floor Articulate when their foot touches the floor and when it comes back up Ask students to articulate 2 or 3 or 4 times on each downbeat or upbeat Have students verbalize the articulation out loud before applied to the instrument/mouthpiece TOO-TOO, DOO-DOO, TEE-TEE, etc.
 Note Length/Separation exercises ○ I Play, You Play ○ Connected, Separated 	 Utilize visuals for students to see note length relationship from note to note (V) BC Band Solutions Air onto the palm (T, K) **If comfortable for both parties** Blow into the palm of the student's hand so they may FEEL the length of the note. TonalEnergy Tuner app (V) Analysis feature shows student immediate visual feedback of the

	1
	shape of the note Feeling the resonance/vibrations of the instrument (T) Have student feel the differences between note lengths being played while placing a couple fingers on the instrument's bell "How do the legato notes FEEL compared to the detached notes?" Can be done teacher to student, student to student, etc.
 Tempo exercises Listen for the metronome Stay on the beat Play in time with your neighbors 	 Flashing light on McAdams metronome (V) If this is placed at the front of the classroom, position to where student can see the flashing light with the tempo TonalEnergy Tuner app (V) Metronome feature has numerous selections for a visual aid (flashing block w/beat numbers, bouncing block/ball, foot tap, hand clap, etc) Vibrating metronome device - SoundBrenner (T) Device can be worn like a watch on the wrist, bicep, or across the chest Connects to app on smart device and can sync up to five SoundBrenner devices at once Helps student FEEL the pulse on the downbeat, upbeat, as well as subdivisions **Protects hearing from constant listening to a metronomic beeping sound** Foot tap visual with hands (V, T) Using your hands to demonstrate foot taps and have students repeat back to you Saying, "Down, up, down, up"
Tuner exercises Listen to keep the note still and match your neighbors Match the note as played by the model or teacher	KORG tuner with clip (V) Tuner clip attaches to instrument and provides immediate feedback on tuning while playing Clip can also be applied to mouthpiece shank to provide immediate feedback on pitches played with vibrations/buzzing TonalEnergy Tuner app (V) Tuner feature has a large circle visual for tuning the note sharp, flat, and in-tune. Don't forget the HAPPY FACE when in-tune! :-) Sound feature allows student to select

	between tuner circle and piano layout to press which note to be played back to them Piano helps display note differences higher vs lower See if this can be bluetoothed to the DHH student's hearing assistance device!
--	---