Worship Team Training

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Vocal Studies Worship Team Training – Branon Dempsey
Freeing Your Voice

"Sing to the Lord a new song; sing to the Lord, all the earth." Psalm 96:1

We sing to the Lord a new song because of what He has done in all the earth, in all of creation and mostly because of all for who he is. From a singing standpoint, when we sing new songs and old songs, are we truly singing in the newness of freedom? Do we actually sing freely with no interference or barriers in the voice? Typically, most singers either use excessive force or little-to-none when they sing. Maybe in your experience, the singers who have the most difficulty are the ones who over-sing. There is a freedom that can be experienced naturally, just as natural as your regular speaking voice.

Our facial, throat and breathing muscles function normally as we speak, chew and swallow our food and to breathe with our lungs. Depending on the intensity of our actions, the muscles automatically know and adjust to the right intensity level to produce movement. The larynx (Adam's apple, voice box) is a major part of the vocal apparatus and functions as both a voluntary and involuntary muscle. The larynx is designed to work freely – involuntary. You speech and pitch is created by the passing air over the vocal cords, producing a vibration. As you exhale, your lungs work with your vocal cords to produce frequency and pitch. In a very relaxed posture and breath control, the larynx can produce speech and singing freely. In creating resonance, your initial tone from the voice box is amplified through the spaces of your vocal cords as it travels to your mouth. Ultimately, your tone and timbre are produced by the shaping of your mouth (facial muscles) as the pitches finally escape through your lips. This activity is present when naturally speaking and is ideal for singing. In speech, the larynx is at "rest position" because its not having to move up or down. In essence, the goal is to sing as you would speak. When you sing naturally, the right amount of air and vibration of the cords will produce pitch frequencies just as naturally.

Over-singing occurs in a variety of ways; when this happens, the outer muscles take control over the inner throat muscles. As muscles on the outside tighten, it can have a boa constrictor effect, preventing the larynx to move freely. When this happens, the inner muscles tell the brain to use more force, the larynx moves up or down to distribute power as the outer muscles continue to squeeze. As a result, all the muscles in your neck and throat tense up because the inner muscles are no longer able to control the tension. Therefore, the body must make up the difference. You can sense how this is a cyclic effect. In the end, your tone is unbalanced and your voice is exasperated. When your larynx is at rest position, you are able to produce balanced levels of breath control, pitch (top and bottom notes), chest and voice connectedness because your muscles are relaxed and stable.

Speech Level Singing: when you naturally speak, your larynx is at rest (middle) position. Your singing voice can duplicate this method in freeing your outer muscles to not overtake your inner vocal cords.

i. Outer and Inner muscles are relaxed at speech-level.
ii. Middle position is the blend and connected tone between chest and head voice.
iii. When breath (air), tone and muscles are relaxed evenly, you can sing high and low notes easily, evenly and connected.

*A common mistake occurs when people sing - they over-sing. If you watch American TV Talent Shows, you will see this often. Full voice is generally used, but most of the time there is little or no throttle control. As over-singing occurs, problems in the larynx as seen above happens. You can hear it and feel it when people try to "reach" those high notes or "dig" those low ones. Again, like an athlete, their most versatile and maximzed efficiency is at a "relaxed" or "rest" position. This takes time and patience to learn.

How to be Free

How do we free the larynx and/or voice? It begins with how we speak. When you speak in a soft dynamic, the inner muscles move freely apart from the outer muscles and are not inhibited. Try speaking in a quiet manner and feel the activity of the inner muscles. You will notice that the free and isolated movement comes from the cords alone. Speak the word "you," and hold the pitch over a few counts (*p* – dynamic – soft volume). Did you feel any activity from outer muscles (your neck)? Did you feel the vibration of the cords with a bit of resonance from the chest cavity? If you only felt the relaxing sensation of the inner cords, tone and resonance and not the outer muscles, you performed it correctly. At this point, your voice and speech were operating naturally.

Now try signing the same word at a stronger volume (*f* – dynamic – loud) and this time hold your head up. Sing the note. Did you feel your voice box move up? This will feel like your trying to climb the ceiling to reach the note. Now try the same word and volume, dropping your head – chin down to your upper chest. Sing the note. Did you feel your larynx move downward, like your trying to "dig" for the note? Did you experience a "pressing down" effect on your voice box?

Okay, there are two problems at hand. The first is when we move our head up or down in order to produce high and low notes. This causes the larynx to either jam-up or to press down, which produces top notes to splat or bottom notes to wobble. The second occurs when we move the larynx up or down without any head movement; in other words, the voice box is purely moved by the outer muscles. You can imagine the pressure and strain on the voice when combining both head movement and outer muscle tension. This may lead you to finally conclude why you either feel tired, pain and/or out of breath when you sing. When you overuse the muscles you cannot sing for long periods of time (for some 3-5 minutes is enough!). You cannot easily sing high and low notes and you will not be able to produce an even connectedness between head and chest voice. This can cause unfavorable effects as well as injury to the cords. Again, you will not feel free, comfortable or natural when you sing.

Head and Chest Voice

Head and chest voice is produced in two different ways: the chest voice produces notes in the lower registers; the head voice produces notes in the higher registers. The meaning of connecting the head and chest together is to achieve a general balance in singing between registers. This can be attributed to a cello string instrument; all the notes across the registers are equalized and stable. In all instruments and the human voice, there is a certain amount of movement to occur for the notes to speak. Like the strings of a cello, the voice produces pitch and frequency by the applied pressure on the cords. When I say "pressure," I am speaking in context of natural muscle pressure – not vocal strain or tension. Naturally, high and low notes speak accordingly by their given frequency. Remember high school physics class? The greater the vibration, the higher is the pitch; the less vibration, lower is the pitch. The first half of the problem occurs when we increase too much air (pressure) or add muscle tension in order to reach or dig for notes. The second half of the problem with most singers is to unlearn these bad habits of muscle tension. This anomaly stays undetected due to the lack of understanding in how the voice really works.

Singing in a "connected" manner between head and chest voice involves singing from your most comfortable low registers of your chest through your mid to upper high notes in your head all at speech level position. When you sing naturally in your upper register, both air and pressure from the cords will increase gradually for higher notes. Lower notes will require less air, but more space to achieve rich and clear low notes. As you free your voice, your register and dynamic range will maximize because the outer muscles are out of the way, leaving room for the inner muscles to function naturally. Never should you force your voice to do anything, as you may experience strain and tension.

Once you unravel the bad habits, you will notice that your voice and muscles will actually work "less" when you allow the larynx to operate freely. When you maintain a comfortable and relaxed vocal posture, you will be able to sing both high and low notes over longer periods of time with much ease.

When you sing with your larynx at speech level (rest position) your voice is using the right muscles just as they were intended.

The Break

When you learn to sing through both low and high ranges comfortably, you may encounter areas of your voice where tone, resonance and muscle activity is limited in making transitions between registers. When smoothness of the voice between notes is disrupted, this is referred to as the "break." Most often, the break is a discouragement to most singers and threatens them to discover uncharted territory in the musical space. The break occurs when the outer muscles finally initiate pressure on the inner muscles as you move between registers. This would be the famous 12 year old childlike "crack" in the voice. The outer muscles pull down and tighten (the boa constrictor effect) around the voice box. When this happens, the pitch will try to slide down the throat. As a normal synapse of the body, the outer muscles apply more pressure to prevent tone slippage. Your vocal cords will stretch in this process in order to meet the note's requirement – next your muscles jam-up. Mechanically speaking, the cords have to naturally stretch to achieve higher notes, but how the muscles influence the cords to stretch is the key – not by the force of outer muscles.

There is a way to smoothly cross the break and to sing higher notes more comfortably. The art in achieving the smoothness of higher notes is found in using the right amount of air and pitch balance – not volume. When volume is forced on the voice box, it is translated into tension. Again, higher notes speak by themselves without human force. There are many arguments between using a lot of air or to use the least amount of air in order to sing higher notes. I have found that there is a balance between the two. When you force too much air on the cords, the outer muscles will takeover the larynx because the inner muscles cannot withstand the pressure alone – this is a normal response and recovery of the body. However, when you lessen the amount of air and use just enough to let the note speak, you allow the larynx muscles to stretch by themselves – freeing you from the blistering break and the outer muscles.

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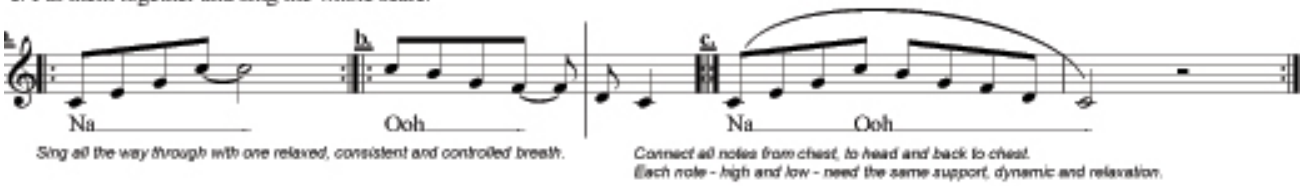
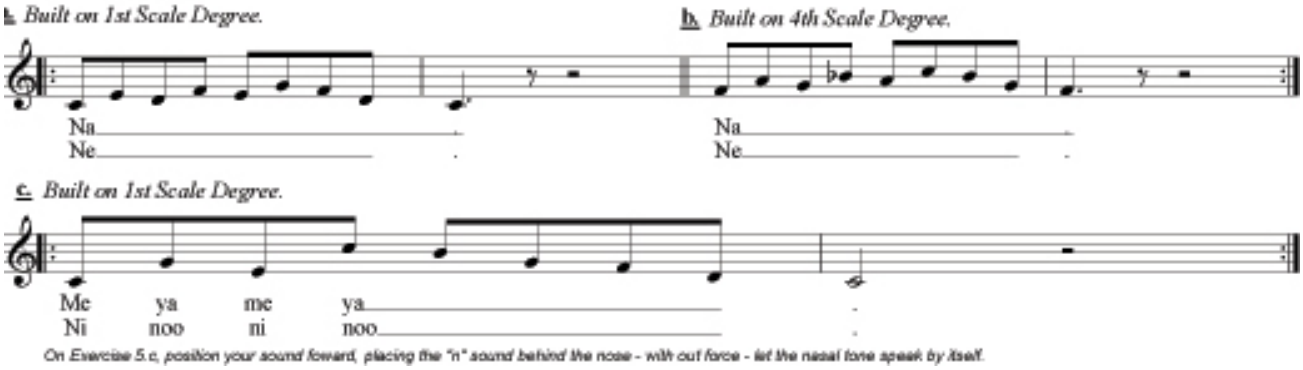
Chest Voice & Head Voice: Crossing the Bridge - Here we want to use both chest and head voice to have an even plane between low and high notes. In the middle of the register usually around A-Bb-C is the "break," you know, that difficult place in making the switch from low to high voice.Falsetto is not encouraged because it produces a disconnect from the head and chest voice as well as its dynamic can not be increased.

a. Sing Half of the scale in Full Voice (modulate by 1/2 steps each repeated exercise - scales up and down.)
b. Sing the other half in Head Voice
c. Put them together and sing the whole scale.



Skips: this exercise will work the varying registers as you keep your larynx at middle position and relaxed.
Higher notes will seem thinner - relax the cords and approach the phrse as you would speak-it.

As before, repeat each measure and modulate up or down by 1/2 steps. Try using Na's, Ne's and later try with lip-rolls.



The Resolution

When you free your voice or sing naturally at "rest position," you will find that producing notes will be easier because there is less effort involved. Your outer muscles will not takeover the larynx and your breath control will be in balance with your cords. As a byproduct, your words when sung or spoken will be clear and your tone will be transparent. Because your larynx is relaxed, you will be able to sing in all ranges with pure balance and smooth execution at every dynamic level. While you have time after this reading, sing to the Lord a new song; and when you sing – sing it naturally and free!

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