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Vocal Techniques for the Instrumentalist 2nd Edition

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Vocal Techniques for the Instrumentalist

AMY ROSINE

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Contents

Introduction

Healthy vocal production is necessary for everyone in the teaching field. Vocal Techniques courses help develop the singing voice as well as support general vocal production. Speaking or singing for several hours a day is taxing on the voice and learning to use breath support during these actions will help the voice withstand the demands of teaching. However, no voice is immune to overuse or misuse. Developing healthy habits are important to vocal longevity. Understanding how to use the voice and what to be aware of when vocal fatigue starts to set in is crucial to vocal health and stamina.

The purpose of this text is to teach instrumental music education students about vocal production as it applies to solo singing. Beginning with a foundational understanding of breathing and alignment (posture), singers will learn about the vocal instrument (anatomy), how to create a clear, pleasant, tone (phonation and resonance), pronounce words clearly (articulation and diction) and how singing can be related to the study of their major instrument.

Through exploration of their own unique instrument, students will learn to apply many of their major techniques to singing, and learn what techniques may hamper their vocal progress. They will gain confidence by singing for each other in small groups, in front of the class, and in a final recital. Learning to sing a solo from memory and communicating with an audience will help students gain poise and confidence, which translates into a more confident teacher.

This text will also discuss the application of the techniques of vocal production as they pertain to teaching young singers. Most music education students are licensed to teach K-12 music and regardless of whether they have an instrumental or vocal focus, much of elementary teaching is rooted in singing. New instrumental music education graduates may find themselves teaching elementary music or choir in their first years. Having a general understanding of the voice will set them on the right track.

1. THE VOCAL INSTRUMENT

Singing

> *The only thing better than singing is more singing.*
> -Ella Fitzgerald

The first step to being successful in Vocal Techniques is understanding that **the vocal instrument is the entire body** with no external instrument. You cannot see your instrument, take it apart or put it away; it is with you at ALL times! This may be quite an adjustment for the instrumentalist since working with a voice is especially personal. Students might initially feel helpless because they cannot directly control the voice. Over the course of decades of teaching Vocal Techniques, it has become apparent that certain instrumental playing techniques can affect the study of singing, both positively and negatively. I have the unique perspective of being an instrumentalist myself, as I began musical studies on the cello, and taught beginning and middle school band early in my career. Making students aware of how their external instrument affects singing has helped them progress faster during the semester, as well as to gain a deeper understanding of their own instrumental study, making them better educators.

Learning as much about the voice and singing process is in the

best interest of the future vocal music educator. The more knowledge and skills future teachers have about the vocal instrument, the more capable they will be in teaching themselves and others. The best recommendation is to study voice privately. Although there are many "self-teaching" resources available, reading text and watching videos cannot replace another set of human ears. It is easy to misinterpret information and there is a lot of incorrect information on the web. Young students can take one concept (i.e.: drop your jaw) to the extreme, thus impeding their process.

Besides my vocal instrument (i.e ME), what do I bring to class?

Experience – Even if you have little experience with solo singing, there are resources that you bring to class. The most important is knowledge and skill from past experiences with music and singing. Along with that comes memories from those experiences, general perceptions, attitudes, and beliefs about singing.

Tools – There are a variety of tools and equipment necessary to aid in your growth as a singer. They include items for research (books, articles, library, computer), sheet music, recording device, pencil and notebook, piano, and practice space.

What role do my peers play in the learning process?

- To offer support and healthy competition
- To provide constructive feedback during the learning process
- To be an appreciative audience

ASSIGNMENT: What is the purpose of Vocal Techniques?

Start a journal or write a letter to your instructor that addresses the following questions:

1. What do I expect to learn?
2. Who has encouraged or discouraged me in the use of my voice?
3. Who are the singers I admire and why?
4. How do I perceive my own singing voice?
5. What are my thoughts/feelings about singing a memorized solo in front of others?

HOW SINGING SOUND IS PRODUCED

All musical instruments have the first four elements in common in the production of sound. The fifth element is also common but has a different meaning unique to singing. The following chapters of this text are based on these elements.

1. **Motivation** (mind-body connection)

The brain and neurological system send commands to and receive

messages from the body. Because the impulse behind all vocal sound is emotionally and mentally driven, one must consider the role of the brain and nervous system as the motivator of the vocal process.

2. Respiration (breath energy)

Parts of the body that aid in breathing coordinate to control the inhalation/exhalation of air for vocal tone.

3. Phonation (creation of tone)

Sound is created in the larynx as the vocal folds come together. Wind instruments also use air to initiate tone, while other instruments use vibrations in different ways. Piano/strings/percussion all initiate sound by a point of contact with the instrument

The voice is quite unique because the tone is created within the larynx, in a living being, made of membranes, muscles, ligaments, and cartilages. These all coordinate in managing airflow and adducting the vocal folds to create a fundamental tone (buzzing).

4. Resonation (enhancement of tone)

Combined resonance cavities (throat, mouth, and nose) act as acoustical secondary vibrators for enhancing the fundamental buzz tone created in the larynx.

5. Articulation (shaping of tone into recognizable speech sounds)

The organs of speech (tongue, jaw, cheeks, teeth, lips, hard and soft palates, and dental ridges) coordinate in producing all sounds

of verbal communication. This necessitates the in-depth study of diction (how languages are produced) by singers.

HEALTHY SINGING

Vocal ease and health go together to create the most efficient, pleasing, resonant tone. Solid technique, which is rooted in the body, is the foundation for everything you want to do with your voice.

Physical Alignment

Freeing your body from unwanted tension has a direct relationship to your physical balance, energy, health, voice, breathing, and image.

1. A balanced, free, flexible posture is fundamental to efficient vocal production and pleasant voice quality. It keeps the muscles of the neck and back from excess tension. Let your stance feel easy, without locked knees or tension in the shoulders or neck.
2. Posture is dependent on our spine, which is the main pillar of the breathing system. Aligning the breathing mechanism (chest, larynx, throat) is the starting point for healthy singing. Having the feeling of a long spine (and neck) enables the ribs to move freely upon inhalation and keeps the chest from collapsing when exhaling. Take a few breaths to release any tension you may be feeling.
3. More muscular energy is used to be out of alignment. A common postural habit that drains energy is pushing the head forward rather than aligning it over the shoulders. When the body is out of alignment the muscles react and this creates pain and injury.

Muscles and Physical Alignment

The skeletal structure keeps the body from collapsing, much like the frame of a building. Skeletal muscles create movement of the body. Muscles cross over joints and shorten (contract) to move. When a muscle contracts the position of a joint changes. To contract and move in one direction, muscles from the opposite side of the joint must relax.

Movement takes a signal of intent from the brain (volition). When the signal stops, the muscle relaxes.

Muscular antagonism is the balance of muscle tension and relaxation between agonist (prime mover muscle group) and antagonist (opposing muscle group). It refers to the natural muscle opposition that occurs in physical activity. Too much tension in one muscle group inhibits ease of motion.

Exercise: Grounding Your Body

Finding Parallel

Without looking down at your feet, stand with your feet parallel. Look down – if they are not parallel, align them into that position. How does this feel? Be aware of the sensations of your muscles. Let your body get used to the feeling while taking deep easy breaths. Once you get used

to the sensation, do you feel more solid on your feet? More grounded?

Although this stance may feel awkward, it is a good starting point for finding an alignment that supports the voice.

from Ruth Hennessy: www.hennessywholebody.com

ENERGIZING THE BODY

The singer's body is much like that of an athlete and must be conditioned for handling the physical and mental requirements of performing. Health is of prime importance to singers. This does not imply that other musicians do not need to be healthy. ALL musicians must be in good health to perform at their peak. Wind players must be able to control their breath like singers, percussionists must have optimal motor skills, as do string players and pianists, and everyone must focus on posture as it pertains to their instrument. But while other musicians may be able to perform if they have a bad cold or even laryngitis, singers cannot. If one's physical well-being is not optimal, it also affects the voice.

Like athletes, singers must focus on fitness and exercise, diet and nutrition, and rest. These have a profound effect on the singing voice and of course, are beneficial for all musicians. When the body is healthy and fit you have more energy, which aids the progression of vocal study. Students with low energy levels tend to have more difficulty projecting sound and finding ease in singing. It may be difficult to breathe easily, or their posture is poor because the muscle effort needed to keep the body aligned feels strange or uncomfortable. Singing requires *efficient* muscle coordination

throughout the body. In the torso for breathing, the neck and larynx in creating sound, and the throat and mouth in forming words.

Singers are highly dependent on their respiratory capacity and must learn how to optimize their ability for taking in air and managing it effectively. Many singers, especially young singers, either work too hard to inhale or do not use enough energy. Raised shoulders and noisy intake of breath are signs of excessive tension. Doing physical warm-ups before singing releases tension and creates energy.

Exercise: Physical Warm-ups

These are just a few examples of physical warm-ups to help get the body ready to sing.

RIB STRETCH

Stretch arms toward the ceiling. Make sure your shoulders and neck do not become tense. While the arms are up, lean to the left, reaching the hands toward where the ceiling and wall meet. Feel your side lengthen as you stretch. Inhale, and as you exhale feel yourself lengthen more. Come back to center and stretch the other side. Focus on lengthening the side rather than pulling.

RAGDOLL

Bend over with your arms released and feel "floppy" like a ragdoll. Keep knees soft and neck released.

Instructor note: Often students will pull the head up while

bending over. A slight touch on the back of the neck will encourage the neck to release.

NECK STRETCH

Take your right hand and rest it on your head, allowing your neck to stretch to the right. Feel the weight of your hand causing the stretch rather than pulling the head to the side. Breath in and feel your neck lengthen on the exhalation. Allow the head to "float" back to center. Repeat with left hand on right side of the head.

BOBBLEHEAD

With gentle, easy movements, tilt your head side to side and front to back (think of nodding). When nodding back, make sure the jaw is slack. This should be very easy, like a bobblehead.

HEAD TURN

Turn your head to the left and right, slowly and easily. Can you vocalize while making this motion? Sing a 5-tone scale on "ah" and keep the head turning from side to side. Watch for any tension or stopping in the movement.

2. MOTIVATION

Mind-Body Connection

Mind-Body Connection

> *The brain and neurological system send commands to and receive messages from the body. Because the impulse behind vocal sound is emotionally and mentally based, one must consider the role of the brain and nervous system as the motivator of the vocal process.*
> Ingo Tize, *Fascinations with the Human Voice*

Remember the phrase "think before you act?" This applies specifically to musicians, too! I constantly remind students to "Think before you sing," or "Think before you breathe." There is a lot of thought/motivation involved in singing: how are you going to inhale and exhale, what is the starting pitch and how to approach it, what is the style of singing, how do you want to communicate the text, etc. As Ingo Tize states in the quote above, the brain and nervous system play an important role in how we sing.

Using the singing breath, here is an example of this interplay:

Breathing is a daily unconscious action, but singers and wind players must learn to control their inhalation and exhalation. Controlled breathing not only fuels our instrument but is used in a variety of ways. Conscious breathing has become a useful tool for reducing anxiety, in athletic activities, and many other facets of life.

Focusing on taking the right breath before singing a phrase can set you up for success throughout a song. Sometimes we sabotage our singing and stop thinking about breath as we get deeper into a piece and the mind is overcome by other aspects of the music. You must tell yourself WHERE to breathe and HOW to breathe until it becomes more automatic.

3 SYSTEMS OF NERVE PATHWAYS THAT AFFECT THE VOCAL INSTRUMENT

(Titze, 2010)

Limbic System

This system is activated by emotions or environment; regulates autonomic responses such as breathing and heart rate, and primal sounds associated with fight or flight responses. What is the quickest way to tell how someone is feeling? By looking at their eyes or listening to their voice.

Speech-Motor System

This system controls articulatory movement; how words are formed using the lips, tongue, jaw, soft palate; processes spoken language and coordinates the timing of lips, tongue, jaw, and laryngeal movement.

Spinal-Reflex System

This system controls the rhythm of breath flow; singing disrupts the

natural rate of breath inhalation and exhalation. Other disruptors of breath include coughing, swallowing, and yawning.

All musicians are affected by these three systems.

- Think of your major instrument and how each system is involved in playing. Do you get nervous? What are the signs? How do you respond to this?
- Communication through text may not be part of your playing, but the speech-motor system is involved with embouchure and articulation of tone on all instruments.
- Like singers, wind players control their breath differently from the normal rhythm of breathing. Even those who do not play a wind instrument may use breath as part of their technique.

Since the voice is part of your body, these three nerve pathways may affect your instrument more. You may also experience this when you play your major instrument. As you prepare for vocal performances in class, take note of how your singing is affected. Is it similar or different from your major instrument?

Below are examples of how the nerve pathways are involved in singing (and playing your major instrument).

- When we get nervous the voice or body may shake, breathing can become shallow and the mouth gets dry. We may not be able to make a loud, energized vocal sound. **LIMBIC**
- Coordination of the lips, tongue, jaw, and soft palate affects tone quality and text pronunciation. **SPEECH-MOTOR**
- Breath is the foundation of singing and learning to control something that is not controlled in daily life takes study and practice. **SPINAL-REFLEX**

ATTITUDE IS EVERYTHING

Attitude affects your mind-body connection in singing. How you perceive singing and your own voice can affect how you approach learning to sing. Thinking back to the first assignment, if there are experiences that either hindered or encouraged your vocal study, how do these experiences affect your approach to singing? A positive attitude does wonders for learning a new skill. Singing text is telling a story, and you must be creative in how to bring that story to life.

Vocal Exercises, Appendix I

Sing the vocal exercises from Appendix I, exercise 1. Sing each sentence with a specific emotion that you gain after reading the text. Experiment with different approaches to the text that bring out different emotions. How is your voice affected by the emotions?

FROM SPEECH TO SINGING

Speech and singing are functionally similar. In fact, simple folk and popular songs are similar to ordinary conversation regarding range, energy level, and vocal quality. However, dynamic singing that is energized and projected requires more energy and an outgoing manner. Full-voiced singing used in opera, oratorio, and art song

has more power, and the tone is warmer and fuller sounding. In this text we focus on full-voiced singing.

Vocal Exercise: Speech to Singing

Speak the sentence "Do I have to go? I don't want to go!" (or another sentence that elicits an emotional reaction) and progressively move from conversational speaking to singing. Pay attention to how your breath is used and if there is unwanted tension anywhere. Experiment with different attitudes. What happens to the pitch as you put forth more energy?

- Conversational (mezzo-piano) – speaking to a friend
- Elevated (mezzo-forte) – speaking to a class
- Declamatory (forte) – stage speech
- Speech-singing (recitative) – experiment with varied dynamics and pitch

Learn more about how to use emotion when singing by visiting Voice Science Works

3. RESPIRATION

Breath Energy

Wind players already know quite a bit about breathing and like singers, concentrate on the exhalation phase when creating and sustaining tone. Percussion, keyboard and string players also use breath energy while playing, just in a different way. Think about your major instrument and how your breath functions for singing compared to this instrument.

To have a better understanding of how the breath works, the singer should understand the role particular systems play in creating the breath.

SKELETAL FRAMEWORK

You may not know this, but the spine is the main pillar of the breathing system. It is attached to the ribs, which house the lungs and diaphragm. We focus on body alignment in singing because of this important relationship. Keeping the spine long aids in ease of lung expansion and rib movement, which is essential to the coordination of the singing breath.

SUBLARYNGEAL SYSTEM

The area below the larynx (sublaryngeal) includes the trachea, bronchi, lungs, diaphragm, and rib cage. Air enters through the mouth and nose and passes from the larynx into the trachea, through two bronchi (branches), and into the lungs. The body equalizes outside and inside air pressure (the amount of air exhaled is equal to that inhaled). The lungs inflate more for singing, as we inhale more fully, but avoid filling to capacity. Generally, "less is more."

Muscles of Breathing

The *diaphragm*, the second largest muscle in the body, is a dome-shaped muscle attached to the lower ribs and vertebrae that separates the thoracic cavity (chest) from the abdominal cavity. During inhalation, the diaphragm contracts and lowers. At the same time, a partial vacuum is formed in the lungs and air rushes in (think of a syringe pulling in medicine). In daily breathing the diaphragm returns to its natural position quickly, pushing air out of the lungs. During the action of singing, the singer must regulate the outflow of breath to sustain phonation over the duration of a musical phrase. This may be accomplished by contracting the abdominal muscles slowly and evenly. You can feel the movement of the ribs on the side of the torso and some of the abdominal movement, but you cannot feel the diaphragm itself. What you feel is the result of the diaphragm flattening and pushing down on the viscera. Watch this short video explaining the movement of the diaphragm: **Diaphragm Video**

The *intercostal muscles* attach to ribs and aid in inhalation and exhalation by creating a balanced flow of air pressure.

The ribs raise on inhalation and remain raised during exhalation. The external intercostal muscles elevate/expand the rib cage and the internal intercostals compress/contract the rib cage during exhalation. The various abdominal muscles aid in controlled exhalation and breath support and help steady the tone when speaking and singing. They stabilize, or balance, the actions of inhalation and exhalation. The following video link illustrates the muscles of "forced" inhalation, or inspiration. **Forced Inspiration Video**

COORDINATING BREATH

Breathe easily and deeply. Avoid the idea of taking a "big breath." Thinking of taking a huge, filling breath often leads to raised shoulders and tension in the upper chest. Feel expansion around the lower half of the body (lower abdomen and ribs in back) and allow the rest of your body to remain "quiet". Keep the nostrils open (not stretched) and inhale with a fresh breath. This will keep your nasal passageway open and ready to receive air.

Coordinating the breath should result in the following sensations:

- Full body connection from lower abdominals up to the sternum
- Relaxed, open throat (not stretched horizontally, but a vertical "lifted" feeling)
- A focused, easy tone without a harsh or breathy onset
- Head vibrations felt mostly around the eyes and bridge of the nose (not feeling like the tone is "in" the nose)

Keep in mind that not everyone is the same in what they feel.

Exercises: Breathing

- **Blow all air forcefully out of the body**. Allow the body to equalize the pressure by inhaling naturally. Do you feel a deeper inhalation?
- **Inhale 4 counts ~ Suspend 2 counts ~ Exhale 4 Counts** The inhalation should feel easy and steady. Continue with the same inhalation and suspended phase, double the exhalation to 8 and then 16. Finally, inhale 4 counts and go directly to the exhalation phase. *Modification* – exhale on [s] or [v]
- **Sing a quick, clear "ah" sigh from a medium-high pitch downward**. Feel the action of your abdominal muscles, all around the midbody, as you sing. Don't force any abdominal action, simply be aware.

Want to learn more about breathing for singing? https://www.voicescienceworks.org/breath.html

4. PHONATION

Making Vocal Sound

Vocal tone is one of the most important singing concepts to master. Creating a beautiful vocal tone involves different systems in your singing mechanism working together.

HOW VOCAL SOUND IS PRODUCED

Sound is initiated by air passing through the vocal folds in the larynx and then modified in the vocal tract, which consists of the larynx and throat (pharynx) up to the soft palate.

You can go even deeper here https://voicefoundation.org/health-science/voice-disorders/anatomy-physiology-of-voice-production/understanding-voice-production/

THE LARYNX

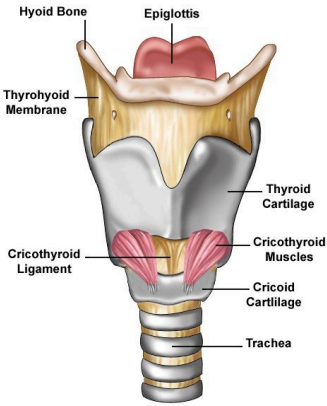
The main purpose of the larynx is to keep foreign matter out of the lungs and for thoracic pressure. Over time, it has been developed

into an instrument of wide-ranging expression. You can feel the thyroid cartilage (Adam's apple) at the front of your neck.

The larynx is made up of four cartilages and a bone:

- Thyroid cartilage
- Cricoid cartilage
- Arytenoid cartilages
- Hyoid bone

As air flows through the larynx, the vocal folds vibrate and sound is modified and amplified in the vocal tract. Changing the position of the larynx affects the shape of the vocal tract, changes voice quality and affects the efficiency of the vocal folds. The cleaner and more efficiently the folds vibrate, the clearer and healthier the sound.



Front View of Larynx

The larynx is suspended and supported in the neck by groups of paired muscles that are in front, behind, above and below. The larynx moves freely when we swallow and speak. It has a complex relationship with the throat, soft palate, tongue, jaw, neck and chest. The position of the neck and chest, movement and tension of the tongue and jaw, and flexibility or constriction of the muscles of the pharynx and neck all contribute to laryngeal efficiency and affect tone quality. This is why we put so much focus on physical alignment in voice training.

MUSCLES OF PHONATION

The vocal folds are layers of muscle, and like all muscles they contract and relax. The primary muscle of the vocal folds is the *thyroarytenoid*, which runs from the front of the *arytenoid cartilages* (also called the *vocal process*) to the inside back of the thyroid cartilage in a pair. To create sound, they *adduct* (come together). When we breathe, they *abduct* (open) and create space, called the glottis. To create higher pitches, they lengthen and become thin; for lower pitches, they relax and thicken.

The arytenoid cartilages can move in several ways. They move the vocal folds apart and can create stretch. The other set of muscles are the cricothyroid muscles, which attach to the front of the cricoid cartilage and serve to lower the thyroid cartilage, causing the vocal folds to become thinner and longer. The folds then vibrate more quickly, producing higher pitches and lighter tone quality.

Onset (attack) = initiation of tone

When muscles of breathing, airflow and onset are well coordinated, the sound is clear, -which is the ideal tone. Too much pressure creates a tense sound or glottal attacks. When folds do not come together efficiently the sound can be breathy.

Follow this link for illustrations and a video of the larynx and vocal folds. You can scroll down and watch a live video of the vocal folds in action. Looking at the Voice

Learn more About the Voice

FOCUSED TONE vs TONE PLACEMENT

A **focused tone** is the result of efficient vocal-fold vibration that is

produced as the folds come together at their full length as air passes through.

- Too much air passing through the vocal folds when speaking or singing will result in a breathy tone. *This is different from wind playing.*
- Too much sub-glottal air pressure on the folds will result in a pressed or tight tone. The vocal folds should vibrate naturally in response to airflow. Avoid trying to "make" sound happen. *This is similar to wind playing.*

Tone Placement refers to optimal physical sensations a singer feels when the tone is free and easy. (tone can be "placed" incorrectly, too) Generally, singers should feel "head" sensations above the roof of the mouth and avoid making the tone happen in the mouth and throat. This will result in unwanted tensions. There is a fine balance between encouraging the right tone and forcing it. This balance is achieved through consistent vocal exercise.

Exercises: Phonation

LIP TRILL

Trill or buzz the lips on one tone, then move the pitch up and down. You can sing phrases of songs on a lip trill to help with breath support. If the lip trill is challenging, try saying "brr" as if you are chilled. You can also try a tongue-

trill (cat's purr) or humming if the lip trill is not possible at this time.

Note for high brass players – The lips are much more relaxed than when you buzz your mouthpiece.

SIGH-GLIDE

Sing "ah" from high to low with an easy, consistent tone. This is a controlled sigh, so the air is not pushed out all at once as in a regular sigh. You should not feel tension in the throat. You can also use "wee" and "oo" to achieve an easy, resonant sound. Let this be playful – don't worry about a beautiful singing tone. The goal is easy and consistent.

PUPPY WHINE

Sometimes too much air is forced out during phonation. Using a minimal amount of energy, whine like a puppy. This should feel easy with a clear tone. After this exercise try singing the whine on a vowel to see if you can achieve the same ease.

5. RESONANCE

Enhancing the Tone

> *The Queen's voice is deep and resonant –*
> *like a physical thing, it*
> *takes up space in the room.* Sara Holland

A *resonator* is any object through which a sound wave can be filtered, amplifying and modifying the vibrations. It is part of all sound, and singers use resonance to affect the intonation, vowels, tone qualities and dynamic levels of their singing. Changes in the size and shape of a resonating cavity will affect the tone quality. A resonator can make the tone light or dark, clear or muffled, brilliant or dull. Through vocal study, singers learn to form vowels that create optimal resonance and a desirable tone.

There are two kinds of resonance, *sympathetic* and *conductive*.

Sympathetic resonators have no physical contact with the vibrating source. Vibrations are received through the air and the resonator responds sympathetically. What the listener hears is a result of sympathetic resonance. (Example: you are singing and the lamp in the room buzzes)

Conductive resonators vibrate as a result of physical contact with a vibrating body. Vibrations from the vocal folds travel along bones, cartilages, muscles of head, neck, upper chest, causing them to vibrate. However, these sensations

have little do with the external sound. (Example: vibrations you sense in your body when singing)

Factors affecting Resonance

- **SIZE**– the larger the resonator, the lower the frequency (pitch) it will respond to.
- **SHAPE** – this greatly affects resonance.
- **TEXTURE** – the composition and thickness of a resonating body; for example, the material differences between brass and wood. Generally, the harder the surface the more selective it will be. Extreme hardness results in a penetrating tone with a few strong, high partials. Too much softness will result in mushy, non-directional tone.

VOCAL RESONATORS – since they are part of the body, the vocal resonantors are much softer than other instruments. When forming vowels, you change the shape of the resonanting area, thus voice teachers are very picky about this!

Larynx – This is the primary vibrator. With its small cavity, it only resonates for high frequencies and contributes to the "ring" of the professional voice.

Pharynx –This is the most important resonator due to its position, relatvely large size and ability to change.

Oral Cavity – This is second in importance to the pharynx. Size is altered by the tongue, soft palate, jaw, and lips.

Nasal Cavity – third in importance and essential for [m], [n], [ŋ]. This is not an adjustable cavity, but it can be taken in and out of the resonance system by the action of the soft palate.

Learn more about the anatomy of the vocal tract:
https://www.. getbodysmart.com/pharynx/pharynx-anatomy

PHARYNX (vocal tract)

The quality of sound depends on the shape of the pharynx, which is very flexible and capable of forming many different shapes. The pharynx is pulled up (along with the larynx) when we swallow. The throat becomes short and narrow. When the muscles relax, the space is wide and long, the optimal size for the most resonance and freely produced sound.

The *pharynx*, or vocal tract, is made up of the mouth, nose and throat. These cavities are the *oropharynx*, *nasopharynx* and *laryngopharynx*. The laryngopharynx extends from the base of the cricoid cartilage to the top of the epiglottis. The oropharynx extends from the top of the epiglottis to the soft palate (*velum*). Together they form the largest resonating cavity. The nasopharynx is above the soft palate.

ARTICULATORS AND VOWEL SHAPE

Articulators are involved in both vowels and consonants, but vowels are what affect resonance the most. They are the core of every syllable and without a resonant vowel the tone will not carry. The main vocalizing vowels are *ah*, *ay*, *ee*, *oh* and *oo*. Other vowel sounds may be used, but singers usually begin with these five, which are pure vowels and easily produced. You may find that some vowels are easier to sing than others – this is a result of resonance.

JAW

The jaw should hang down comfortably for singing. This may be a challenge for clarinet, trumpet and flute players due to the nature of their embouchures. Think about the position of your jaw when you play your instrument and how that position compares to singing.

LIPS

The lips are the outer edge of the mouth and can affect tone quality quite a bit. The vowels *oh* and *oo* are called "lip" vowels and the shape of the lips directly affects the vowel sound. Have a clear idea of how these vowels are formed.

TONGUE

The tongue is a large muscle that can move in many ways.

In singing and playing wind instruments the tongue affects both resonance and articulation. Additionally, singers must be able to create beautiful tone while singing text.

TTo get a sensation of how the tongue moves for each vowel, rest the tip of your finger on the body of the tongue and say/sing *ah*, *ay*, *ee*, *oh*, *oo*. Feel the movement of the tongue for each vowel. See Appendix I for vocal exercises that focus on the tongue.

SOFT PALATE

The soft palate muscles lower and raise to close and open the air passageway into the nose. English uses a lowered soft palate for three sounds *m*, *n* and *ng*. All other vowels and consonants are formed with the soft palate raised. A nasal tone is not desirable for vowels; it sounds twangy and pinched and vibrations are felt in the nose. You can experiment by singing a twangy *ah* vowel and pinch the nose. The sound will be felt in the nose and will sound small and pinched. Next, sing an open *ah* and pinch the nose. The vowel should feel and sound no different.

Learn more about the function of the vocal tract and articulators here https://www.voicescienceworks.org/vocal-tract.html

Exercise: Sensing Vocal Resonance

Sing a descending sigh on [ŋ] like sing, ring

1. Say the word “sing” and hold the -ng position. Make sure the tongue is arched and loosely touching the back of the hard palate/front of the soft palate (you won’t have much sensation of this) and not pushed into the soft palate (too far back). You will hear the difference if the space is closed off by pushing the tongue back.
2. Add a vowel after the [ŋ] as in “sing-ah” and descend on the vowel.
3. You can also try to get the tongue to move into position more easily by repeating Sing-ing-ing-ing on a descending so-fa-mi-re-do pattern.

6. ARTICULATION

Text Clarity

> *The literary text deserves the same care, the same scrupulous accuracy, in short, the same respect that is demanded by the musical text... In so far as the vocal difficulties and the tessitura permit, the poetic text must be perfectly intelligible. This is a matter of elementary politeness to the listener, and of fundamental honesty to the poet.*
>
> Pierre Bernac, *The Interpretation of French Song*.

Articulation refers to the mechanics of producing speech and involves the movement and adjustment of speech organs (lips, tongue, velum, cheeks, jaw, larynx) to produce a specific sound or *phoneme*. A phoneme is one specific articulatory movement, such as forming the vowel [i] or the consonant [b]. Words are formed by groups of phonemes.

Terms associated with *articulation* as it relates

to speech:

These words are often used interchangeably, but each has a specific meaning.

Enunciation – the act or manner of pronouncing syllables, words, or sentences *clearly*.

Pronunciation – the act or result of uttering phonemes, syllables, words, and phrases *correctly*.

Diction – the use of words and comprehension in a *specific language*, in an understandable manner or style.

Composers are (usually) diligent in selecting song texts. It is the job of the singer to communicate the composer's intent to the audience by understanding the poem (or prose) and using musical cues. The three terms above contribute to how one can make words understood. The poetic and symbolic nature of singing text can be a challenge for the audience (and singer) to understand. Because of this, singers are tasked with making text understandable while still producing beautiful sounds.

PRONUNCIATION

VOWELS

Vowels are produced without any vocal tract constrictions. Since most singing occurs on vowels, students begin vocal study learning to form vowels accurately. There are subtle differences in vowels that can be affected by several things:

- individual characteristics of a vowel
- individual differences in articulating organs
- unneccesary muscle tension
- gender differences
- range in the voice
- dialects or accents
- dynamic levels

A common issue with understanding words is simply incorrect pronunciation. Say the following words with classmates, friends, or family members. Do you hear any differences in the way a word is pronounced?

ten	**miracle**
accompanist	**mischievous**
malevolent	**comfortable**
wash	**ecstatic**
calm	**clothes**
foliage	**larynx**
crayon	**garage**

When singing vocal exercises, or vocalizing, we use the vowels **ah**, **ay**, **ee**, **oh**, **oo,** which come from the Italian language, and are called *pure* vowels. The IPA symbols for these are **[a, e, i, ɔ, u].** The

study of singing began in Italy, and Italian pure vowels are best for efficient, beautiful tone production. Other vowels may be used, and are encouraged, but mastering the five basic vowels will give you a strong foundation.

English vowels can be problematic because there are so many, and hearing the difference in vowel sounds can be difficult. Thinking back to the word list above, did you hear a difference in the way students pronounced the word "ten?"

Exercise: Vowel Quality

Speak the following words one line at a time, making the vowel sounds clear, but not exaggerated. Be aware of the subtle movements in your mouth needed to make each vowel clear.

- seat, sit, set, sat
- cot, cold, cough, calf
- fool, full, fill, fell
- tin, ten, tan, ton

VOWEL MODIFICATION

Vowels must be modified through slight physical adjustments when one is singing from low to high range. It occurs primarily when negotiating the transitional notes at register shifts (*passaggi*), especially when singing higher pitches. Sing a scale on the vowel [i]. As you ascend into the higher range, notice the natural space that occurs. This is vowel modification. Sometimes a voice instructor will instruct students to modify the vowel they are singing in order to create more space inside the mouth. It is

important that the instructor use clear language *and* the student understands what is being asked.

INTERNATIONAL PHONETIC ALPHABET

Professional singers must sing in several languages and they study *diction* to help them. Diction courses teach singers how to sing in different languages. This cannot replace studying the language itself, but it is a beneficial tool for singers. When studying diction, students learn the **International Phonetic Alphabet** (IPA) to aid in pronunciation. IPA is a worldwide standardized system for transliterating speech sounds into phonetic symbols. It is also a useful tool for English singers to identify the correct way to pronounce vowel and consonant sounds when singing in their native language. You will find that the way words are spoken and the way words are sung can be quite different. The main reason is that you must sustain vowels in singing, and use more clarity in pronouncing consonants. Regional differences also affect the way words are spoken and sung. Vocal pedagogue Shirlee Emmons stated, "It is very easy to have what is known as good diction while singing poorly; the real trick is to have good diction while not letting it interfere with good singing."

IPA SYMBOLS FOR AMERICAN ENGLISH

International Phonetic Alphabet symbols represent one phoneme (sound) or articulatory movement. Although many look and sound like regular orthographic (written) letters, there are several that have unique symbols representing the sound.

VOWELS

Pure Vowels

[ɑ] f<u>a</u>ther, n<u>o</u>t, <u>O</u>ctober
[æ] c<u>a</u>t, <u>a</u>dd
[ɛ] b<u>e</u>d, s<u>ai</u>d
[ɪ] s<u>i</u>t, <u>i</u>mprove, beli<u>e</u>ve
[i] r<u>ea</u>l, <u>e</u>vil
[ɔ] c<u>au</u>ght, <u>au</u>tumn
[o] N<u>o</u>vember, <u>o</u>kay
[ʊ] f<u>oo</u>t, p<u>u</u>t
[u] cl<u>u</u>e, t<u>oo</u>l
[ʌ] s<u>u</u>n, <u>u</u>nder
[ə] <u>a</u>bove [əbʌv]

Vowel Classification

Notice the relationship of the symbols used for the closed and open version of each vowel. When singing, open vowels use a taller space than closed.

Closed

[i] [e] [a] [o] [u]

Open

[ɪ] [ɛ] [ɑ] [ɔ] [ʊ]

SPECIAL VOWEL SOUNDS

"Nasty" vowel

[æ]

cat [k**æ**t], ask [**æ**sk}, add [**æ**d]

This vowel is useful for vocalizing when the tone is breathy, weak, dark, or back. However, make sure the vowel is being produced correctly and not too tense. Singers can gain strength, brilliance, and projection with [æ] and [e] followed by [a] or [o].

Neutral Vowel "schwa"

[ə]

kitchen [k ɪ t ʃ **ə**n]**,** malicious [m**ə**l ɪ ʃ **ə**s]

This neutral vowel occurs in unstressed syllables in multisyllabic words and can be represented by several different vowels. Although the term *schwa* is German, we do use the term in English pronunciation. Most unstressed syllables are pronounced like **uh**, although some are also pronounced **ih**.

Semi-vowels/Semi-consonants/Glides

The sound is created by movement of the articulators from one position to another. The first vowel sound glides to the second vowel sound, which is sustained.

[j] you [**j**u], music [m**j**uz ɪ k]

[w] quick [k**w** ɪ k], want, witch

[ɹ] right [**ɹ**a ɪ t], rest **[ɹ** ɛ st**]**

R-Colored Vowels

These vowels are followed by the letter r, which affects the sound of the vowel. Although the symbol changes for stressed and unstressed, the sound is the same.

[ər] (unstressed) fath**er**, wat**er**

[ɜr] (stressed) b**ir**d, w**or**d, **ear**ly

Diphthongs

Two vowel sounds in one syllable. Emphasis is placed on the first vowel, which is a tense/closed vowel.

[aʊ] house, owl

[aɪ] sight, aisle, rise

[eɪ] weigh, able, aim

[oʊ] own, know, sew

[ɔɪ] joy, boil

CONSONANTS

[ɹ] real, strain

[k] cat, kitchen, quick

[z] zoo, words

[θ] thing, path

[ð] this, weather

[ʤ] jar, gem

[ʧ] chain, achievement

[ŋ] sing

[ʃ] shoe, sash, nation

[ʒ] garage, collage

The following consonants are all pronounced the same as the orthographic (written) letter.

[b],[d],[f],[g],[h],[k],[l],[m],[n],[p],[s],[t],[v],[w],[z]

Each consonant symbol represents all spellings of the same sound.

[k]

cat = [**k**æt]

kid = [**k** ɪ d]

quit = [**k**w ɪ t]

[z]

say**s** = [s ɛ **z**]

exact = [ɛ g**z**æ**k**t]

wi**z**ard = [w ɪ **z**ərd]

TYPES OF CONSONANTS

Consonants can be identified by manner of production and whether voiced or unvoiced. Understanding these identifying factors help singers produce words correctly, clearly and efficiently.

CONSONANTS IDENTIFIED BY MANNER OF

PRODUCTION

- **Plosive (stop-plosive) [p], [b], [d], [t], [g], [k]**

  The air flow is completely prevented from passing through the mouth or nose and then released suddenly.

- **Fricative [f],[s],[v],[z],[ʃ],[ʒ],[ð],[θ]**

  The airflow is partially interrupted, producing a noisy sound.

- **Nasal [m],[n], [ŋ]**

  The vocal tract is blocked within the oral cavity, but the dropped soft palate allows air to travel through the nasal passageway.

- **Lateral [l]**

  The tongue tip lifts to touch the teeth and teeth ridge and the breath flows past one or both sides of the tongue.

- **Affricative (Combination Consonant) [ʧ], [ʤ]**

  The sound is produced by a stop-plosive followed by a fricative consonant, forming a single sound.

VOICED/UNVOICED CONSONANTS

Several consonants can be paired in that they have a similar articulatory movement but either engage the vocal folds vibrate (voiced) or have air pass through the glottis (unvoiced).

VOICED	UNVOICED
[b] bust	[p] pool
[d] ground	[t] grout

[g] gown [k] clown
[z] zoo [s] school
[ʃ] shoe [ʒ] garage
[t ʃ] choose [dʒ] just
[v] voice [f] fool
This site provides a video that illustrates voiced/unvoiced sounds

EXERCISE: Identifying consonants by the manner of production and whether voiced or unvoiced.

Identify each consonant in the lyrics below by the manner of production.

O beautiful for spacious skies for amber waves of grain.

/ ɔ bjut ɪ fʌl f ɔ r spe ɪ ʃ əs ska ɪ z f ɔ r æmbəɹ we ɪ vz ʌv gɹe ɪ n/

- voiced
- unvoiced
- fricative
- lateral
- nasal
- plosive
- affricative
- glide

7. LEARNING and PERFORMING VOCAL SOLOS

Solo singing allows you to shine and do your own thing! As you develop your singing technique many positive things happen: increased self-esteem and confidence, feelings of well-being, and being lifted spiritually and emotionally.

SONG STUDY

As with studying any piece of music, effective learning requires separating the composition into specific components. The addition of text makes singing unique in this respect.

1. Read background information on the song and composer. Appendix C includes a resource list.
2. Study and read aloud the text for meaning and clear pronunciation. Speak the text with ease without following the composer's rhythm. Get to know how the word and phrasal stress naturally falls, then see if this lines up with the composer's intent.
3. Make sure you know the meaning of every word in relation to the context of the text. Use a dictionary to find alternate

meanings.

4. Sing the melody without text or rhythm. This allows you to find the shape of the melodic line without rhythmic parameters.
5. Learn the melody and rhythm accurately and study the harmonic structure. Do cadences fall in line with punctuation? If you are familiar with the song, make sure you are following the melodic and rhythmic indications of the arrangement you are studying.
6. How do you sing the vowels compared to speaking? Circle any words that you are unsure of the vowel pronunciation when singing.
7. Use appropriate dynamics.
8. Make decisions on phrasing and breathing points – #2 will help with this.
9. Mark your music clearly.

MEMORIZATION OF TEXT

Memorizing text can be easy for some, challenging for others. Here are some strategies:

- Write out the text and practice speaking the text OUTLOUD as a story, without rhythms or music. Use inflection, as if you are reading a story to children.
- Use rhyming words in each verse or phrase to trigger memory.
- Be aware of assonance (the same vowel sound) and alliteration (same consonants) which help with textual flow and memory. Composers use these two techniques to make text interesting to sing and to hear. They help words "roll off the tongue," and will create a legato line.

SONG PERFORMANCE

Singers are obligated to present the musical and dramatic content of a song as intended by the composer and poet/librettist/author. Ownership of a composition is created by including elements of the singer's personality and how he or she is affected by the music.

The following guidelines will help you perform with confidence:

- Enter the room or stage with confidence. Your body language will establish this.
- Walk to the "crook" of the piano (if a grand piano), or either the left or right of an upright piano; whichever puts you closest to center stage.
- If the audience applauds as you enter, offer a sincere "thank you" bow.
- Calmly and clearly introduce yourself (if appropriate), state the title and composer of your song.
- Take a moment to compose yourself – take a deep breath, release any tension and focus on the task at hand. You can do this step before you walk on stage.
- Let your accompanist know you are ready to begin – this can be communicated through posture, breath, or a specific focus. You can nod to the accompanist, but that is usually not necessary.
- Your main task is to deliver the meaning of the song – let this take over, and the technical processes will fall into place.
- Stay involved in the performance through the final note of the song, which is often in the piano part.
- After the performance acknowledge applause with a gracious bow.

You must practice performing. Singing in a small recital or in front of family or friends will allow you to use the skills learned from this text (and accompanying class) to present your interpretation of a song. You can prepare for this by video recording yourself and

watching the recording. This is an excellent way to learn about your singing voice and presence. Even if you never perform a solo song again, the experience of presenting a public recital will improve your confidence, posture, and speaking voice.

8. IDENTIFYING VOICE TYPE

In choir I sing soprano, alto and tenor. So what is my voice type?

There are six basic voice types when classifying classical or operatic singing voices: soprano, mezzo-soprano, alto/contralto, tenor, baritone, and bass, with several subtypes within each. In choral music, there are four designated voice types: soprano, alto, tenor, and bass. When the choral parts are divided, the parts are usually split into Soprano 1, Soprano 2, Alto 1, Alto 2, Tenor 1, Tenor 2, Baritone, Bass.

The operatic terms are best suited to collegiate, or mature singers, and should not be applied to young voices. Using the choral terms is more acceptable, and practical, in the school setting. You will find students who insist on labeling themselves, but encourage them to sing in the entire vocal range because this will be to their benefit as their voices will change.

There are many variables to consider when describing a voice type:

- **range** – the lowest comfortable note to the highest note in the voice
- **weight** – *light* voices are bright and agile; *heavy* voices are powerful, rich, and darker
- **tessitura** – the part of the vocal range which is most

comfortable to sing

- **timbre** – unique voice quality and texture; the color of one's voice
- **transition points** – areas where the voice changes from heavy to light

FINDING YOUR VOICE RANGE

Voice type is determined mostly by where the most comfortable, resonant notes lie in the singing voice. However, beginning singers do not have the experience to understand their true range, and that this range will adjust as they continue physically grow and vocally develop. Although a female student may sing comfortably in the lower range or "chest" voice, this does not mean she is definitely alto. If this student has never learned to access the higher/lighter register of the voice, then she does not know the possibilities of her range. All young voices should be encouraged to explore and expand their vocal range. In general, most beginning singers have a medium-range voice.

A piano is the best instrument to help find one's voice range. Simply sing as high and low as you comfortably can, vocalizing on a 5-note ascending and descending scale on "ah" or other comfortable vowel. (See Appendix A, #14 for a notated exercise) Using the designations E1, E2, E3, etc., for each octave on the keyboard (C4 is middle C), find your lowest and highest comfortable singing note.

RESOURCES:

This site from musicnotes.com shows the ranges of each voice type on a keyboard Vocal Range

The following website shows the vocal ranges of several famous singers, classical and pop.

Voice Ranges of Famous Singers

VOCAL REGISTERS

According to Manuel Garcia, "a *register* is a series of homogeneous (sounding the same) sounds produced by one mechanism, as distinct from another series of sounds equally homogeneous, produced by a different mechanism." Garcia invented the first laryngoscope, and while observing the vocal folds during phonation he saw a certain configuration of the folds, which he referred to as a "mechanism.". In other words, as a singer sang a scale the configuration of the folds would remain approximately the same up to a certain point, then alter visibly. When Garcia observed this, and at the same time heard a change in the tone quality of the sound, he concluded that he was hearing a change in register.

Common terms for vocal registers are fry, chest, heavy, modal, mix, head, loft and light. For consistency in this text, registration terms will be light mechanism and heavy mechanism. These terms are preferred because there is one vocal instrument, and each register influences the other. Along with light and heavy, commonly used terms for the extreme light, high ranges are *falsetto* for the male and *whistle*, for the female. While falsetto is generally achievable by all male voice types, whistle is not as accessible to all females.

The area where you may feel a voice "break" or "shift" is the *passaggio*, a transitional area that occurs as the muscles adjust when moving from one register to another. A large part of vocal study focuses on working through these transitions. Be careful of online discussions of registration; instead refer to known pedagogues. However, be prepared to find that the more you read about registration, the more opinions you will receive!

Web resources for vocal pedagogy:

National Association of Teachers of Singing National Association of Teachers of Singing (NATS)

~*The Journal of Singing*, published by NATS is a resource for all things singing.

9. ADOLESCENT SINGERS

Voice Change

What is up with my voice???

The Adolescent Singer

When teaching middle school or high school choir, most schools take part in some kind of vocal solo contest or festival. Many young music teachers have not been taught about the special needs of adolescents in singing. Basic vocal pedagogy courses and texts focus primarily on the training of collegiate/adult voices, and elementary music courses focus on young singers. Often missing in the curriculum is discussion of the physiology and unique needs of adolescents. Care and training of the adolescent voice is of utmost importance. Teaching proper vocal habits will give singers healthy technique and the ability to better negotiate the voice change. Helping students understand that what they are going through is perfectly normal will help them continue to enjoy singing.

WORKING WITH ADOLESCENT SINGERS

DO NOT

Tell the student to "Sing quietly" or "just mouth the words"

"Hide" the changing voices

DO

Be Positive

Encourage students to continue singing through the change

Provide support and instruction

Monitor vocal changes

Teach them about their voice

- Change is normal during puberty
- Range may be smaller for a while, or a hole may develop
- Music can be adjusted to fit the changes

MALE VOICE

PHYSIOLOGICAL CHANGES IN ADOLESCENT MALES

- The onset of puberty begins around ages 12-14.
- Speaking voice descends first,
- The larynx grows about 10mm (that is a lot!) and the voice may drop an octave.
- Breaks in voice may occur – this is embarrassing, but NORMAL.

MALE VOICE CHANGES EVENTS

- Voice drops to bass range very quickly, leaving no treble range
- Voice lowers gradually while retaining the treble range
- Voice retains treble range, adds pitches in the bass range but is incapable of singing in the middle range
- Voice retains treble quality and may also comfortably sing in baritone range (rare)

FEMALE VOICE

PHYSIOLOGICAL CHANGES IN ADOLESCENT FEMALES

- The onset of puberty begins around ages 10-13.
- Speaking voice lowers 1-2 steps.
- The larynx grows about 3-4 mm.

FEMALE VOICE CHANGE EVENTS

- Increased breathiness, huskiness, hoarseness
- Insecurity of pitch
- Voice may crack, and register breaks are noticeable
- Decreased and inconsistent pitch range

ADOLESCENT VOICE TRAINING

Vocal Exercises

- Keep exercises simple, beginning with slides, triadic figures, and five-note scales; expanding to an octave.
- Use all vowels, starting the vocalese in light mechanism, working down easily into the heavy mechanism at moderate dynamic levels.
- Moderate tempo is advisable, and melismatic exercises must not be executed too fast.
- Work for clean onset (avoid glottal attacks)
- Watch breathing for signs of outward tension (shoulders, neck)
- Watch articulators (jaw, tongue) for any visible tension
- Work for ease of production in the entire body

Teaching technique

- Work for ease of production.
- Remain in a comfortable tessitura at all times.
- Sing at a moderate level to avoid strain.
- Do not allow a forced belt voice, or falsetto pushed too low.
- Concentrate on building basic technique first (posture, breathing, articulation, resonation), and diction.
- Explore registers, but do not weave in and out of different registers suddenly and expect to blend them until the voice has settled.
- Avoid range extension until basic technique has been established—work on developing the middle voice first.
- Take breaks from singing during lessons, and use that time to teach other things such as music literacy, expression, and performance presentation.
- Encourage healthy use of voice in daily life.

Selecting literature

- Look for songs with appropriate tessitura and range. Use optional notes to avoid strain.
- Choose short songs that are tuneful and contain shorter overall phrase lengths.
- Avoid songs with awkward interval leaps and rhythms.
- Avoid melismatic settings on sustained vowels; syllabic texts with moderate tempo work best.
- Piano textures should be light and double the melody when possible to support the singer.
- Texts should interest the singer and be in a language the student understands.
- Suggested literature may include, but not be limited to folk songs, hymns, collections for young singers. The *Brilee Publishing* series for changing voices is quite good. Hal Leonard and Alfred Publishing have pages dedicated to literature for adolescent singers. (see links below)

RESOURCES FOR TEACHING ADOLESCENT SINGERS

- Williams, Jenevora. *Teaching Singing to Children and Young Adults*. Oxford, England: Compton Publishing, 2019.
- Phillips, Kenneth. *Teaching Kids to Sing*. 2nd Edition. Cengage Learning, 2013.
- Gackle, Lynn. *Finding Ophelia's Voice: Opening Ophelia's Heart*. Heritage Music Press, 2011.
- Freer, Patrick. *Success for Adolescent Singers* (3 DVD Set). The 3rd DVD discusses changing voices.

RESOURCES FOR PURCHASING VOCAL SOLOS

Hal Leonard Publishing has online catalog pages for Teen's and

Children's Vocal Music. This is a great resource for literature – includes classical and musical theatre. Many books offer online audio resources – be sure to check the book description before purchasing to make sure you have the online resources if needed.

https://www.halleonard.com/search/search.action?_c&menuid=1159&seriesfeature=&subsiteid=27&dt=item#products

Alfred Publishing also has online pages for vocal music. However, there is not a special page for adolescent voices.

https://www.halleonard.com/search/search.action?_c&menuid=1159&seriesfeature=&subsiteid=27&dt=item#products

Brilee Publishing specializes in music for changing voices. Their collections include pieces by popular choral composers who write for adolescent choirs.

https://www.brileemusic.com/shop/brilee-music/brilee-vocal-books.html/

SELECT LIST OF VOCAL COLLECTIONS FOR ADOLESCENT SINGERS

FOLK SONGS

15 *Easy Folk Song Arrangements*, high/low voice. Hal Leonard Publishing.

American Folksongs & Spirituals: 75 *Songs of the American Heritage*, Hal Leonard Publishing – A good, inexpensive collection for the young beginner.

Folk Songs for Solo Singers, Vol. 1 & 2 (compiled and edited by Jay Althouse), Alfred Publishing – Vol. 2 is better for young men. Available in medium-high and medium-low. I find the high key book too high for young singers.

International Folk Songs for Solo Singers (compiled and edited by Jay Althouse), Alfred Publishing. – Good selections for more "mentally" mature singers

Ready to Sing Folk Songs...(compiled and edited by Jay Althouse), Alfred Publishing. – Includes reproducible song sheets. Good for beginners. Includes some of the same songs as *Folk Songs for Singers*, but easier with a more moderate range.

CLASSICAL SONGS

Easy Songs for Beginning Soprano, Mezzo-Soprano, Tenor, Baritone/Bass – This collection includes art songs, folk songs, spirituals, and vintage popular songs. For middle school and younger.

The First Book of Solos for....Soprano, Mezzo-Soprano/Alto, Tenor, Bass/Baritone (compiled by Joan Frey Boytim) Hal Leonard Publishing. A collection of art songs in English, Italian, German, French and Spanish. For high school and college.

Hymn Solos for All Seasons (arr. by William Cutter), Alfred Publishing. 10 hymn arrangements.

Pathways of Song, Vol. I, II, III, & IV, (compiled and edited by Frank LaForge & Will Earhart) Warner Brothers Publications, Inc. A *Best of Pathways* collection is also available.

Popular Solos for Young Singers, Hal Leonard Publishing. – Includes traditional favorites.

MUSICAL THEATRE SONGS

21st Century Musicals for Teens, young women's/men's edition. Hal Leonard Publishing. Online audio is available.

Broadway for Teens, young women's/men's edition, (compiled by Louise Lerch), Hal Leonard Publishing.

Broadway Junior Songbook, young women's/men's edition, Hal Leonard Publishing. Modified arrangements for middle school.

Broadway Junior Collection, musicals edited and modified for middle school performances.

First Book of Broadway Solos, Soprano, Mezzo-Soprano, Tenor and Baritone editions (compiled by Joan Boytim), Hal Leonard Publishing.

Musical Theatre Anthology for Teens, Young Women/Young Men's

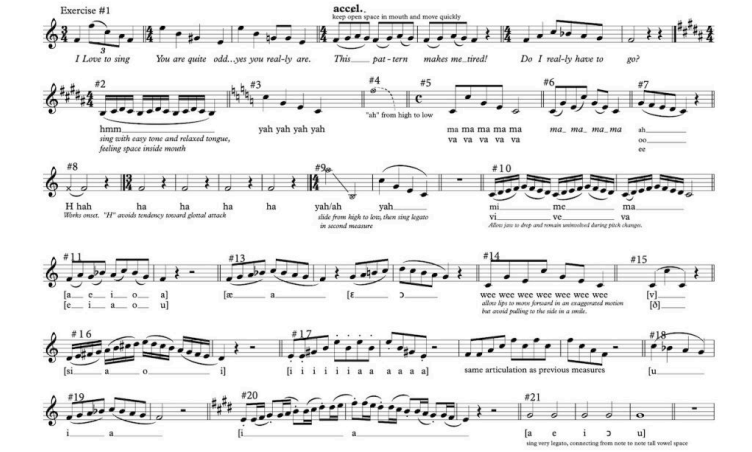
Editions, (compiled by Louise Lerch), Hal Leonard Publishing. – Excellent theatrical collection of songs for teens.

Teen's Musical Theatre Collection, young women/young men's editions. (compiled by Louise Lerch), Hal Leonard Publishing. – Another excellent resource of musical theatre literature.

Appendix

This is where you can add appendices or other back matter.

APPENDIX I - Vocal Exercises



APPENDIX II - Vocal Health

VOCAL FATIGUE

It is normal to have bouts of vocal fatigue, but when the fatigue continues for several days that should be a warning. Several things can lead to vocal fatigue: overuse or incorrect singing, stress, exhaustion, dehydration, illness. Learn to identify what causes your vocal fatigue. Hydration is very important for singers – drink plenty of water and have a humidified environment. Be aware of medication you are taking and how the voice is affected, especially allergy or other sinus medication, which can be drying.

Signs of vocal problems:

- Vocal fatigue for several days
- Loss or disturbance of tone, especially in the upper register and soft singing
- Intonation problems
- Hoarseness or breathiness
- Loss of vocal control
- Loss of Range
- Difficulty phonating

Causes of vocal problems:

- TMJ/TMD (temporomandibular dysfunction)
- Reflux – acid indigestion

- Stress – emotional, psychological, physical
- Illness
- Hormonal conditions – PMS, thyroid conditions, menopause, pregnancy, puberty
- Vocal nodules
- Ulcers, Polyps, Cysts, Hemorrhaging

VOCAL HEALTH

MAINTAINING VOCAL HEALTH is an informative resource from University of Michigan Health.

Appendix III - Singing Instrumentalists

Article written for the New York Singing Teachers Association publication *VoicePrints*

Vocal Techniques, or Voice Class for the Instrumentalist, is a required course for many instrumental music education majors seeking alllevel certification. Students take at least one Vocal Techniques course to learn proper singing technique, along with basic pedagogy and teaching techniques, as they apply to adolescent singers. For most courses, the primary focus is development of the individual singing voice. This includes breathing, tone production, articulation, musicality, and textual understanding and expression. Instrumental students develop confidence singing in front of a group, improve their general vocal quality, and learn that a healthy voice serves them well in the general and performance classroom.

The first step to being successful in Vocal Techniques is understanding that the vocal instrument is the body, rather than an external object. This is quite an adjustment, because working with a voice is very personal. Students initially feel helpless because they cannot directly control the voice. Over the course of two decades teaching Vocal Techniques, it has become apparent that certain instrumental playing techniques can affect the study of singing, both positively and negatively. I have the unique perspective of being an instrumentalist myself, as I began musical studies on the cello, and taught beginning and middle school band early in my career. Making students aware of how their external instrument affects singing has helped them progress faster during the semester, as well as to gain a deeper understanding of their own instrumental study, making them better educators. This article

identifies a variety of challenges that arise when instrumentalists learn to sing, as well as factors that are beneficial to singing.

General Challenges

There are some generalizations that can be drawn in regard to those who play a physical instrument and how that specific instrument, or instrument family, relates to singing. One of the most positive aspects of being an instrumental music major is the musicianship skills they bring to vocal study from studying the core curriculum of music. Many instrumental music majors have also had previous experience singing in choir, giving them a basic understanding of breath and how to create vocal tone.

A significant challenge that arises with instrumentalists is lack of confidence in singing and being uncomfortable as the body becomes the focus of attention. They have become accustomed to an external instrument involved in creating music, and in singing there is nothing to play through or "hide" behind. This new attention to the body creates a sense of vulnerability that makes singing very personal and for some, quite frightening. If there are students with weak musicianship, they tend to retreat into themselves and struggle with being forced "out of their shell" by singing in front of others. With these students, I enlist the help of a vocal music major to work with the student outside of class. Once they gain confidence singing, it is amazing how quickly they can progress.

Figuring out how to create vocal sound can be difficult for instrumental singers. They are going from the process of blowing, striking, plucking, or bowing to create tone, to simply hearing and reproducing tone. They have to become aware of the subtle thinking process involved in creating tone instead of physically manipulating the body to make a sound. Some students try to "make" the sound happen through hard glottal attacks or using the back of the tongue to try and create sound. I always commend them when they find

the “lack of control” that comes from using breath correctly for the vocal onset.

Vocal music incorporates a few differences from reading an instrumental melodic line. Singers read in treble or bass clef, which all music majors have learned, but solo songs are often written in treble clef only, with male voices singing down an octave. This does not seem to cause too much of a problem, but it can be an issue if students are not strong sight readers.

The most obvious difference between instrumental and vocal music is the addition of text to a melodic line. When word syllabification is laid out under a vocal line, it does not make sense to the novice singer. They have to figure out how to place the consonants into the consonant-vowel progression optimal for sung tone and intelligibility. Memorizing and communicating text is a new experience for students with no singing background. The melodic line is usually memorized quickly, but the addition of text takes more time and different strategies to solidify. There are also some notational differences that make reading vocal music different from instrumental. One of the first questions I get in class is “Why are all of the eighth notes individually flagged?” This opens a discussion about notational practices as applied to syllabification when setting text.

The communicative aspect of vocal performance is quite different from instrumental. While all performers must connect with the audience, singers have to communicate directly with the audience rather than through an external instrument. Many novice singers feel exposed and cannot figure out what to do with their bodies. While their body has previously been involved with playing the horn, drums, or bass, these external limbs now seem to have no purpose. They want to communicate but feel silly using their faces to show emotion, and their hands and arms to gesture. Looking directly at the audience is uncomfortable for instrumentalists. During class, we discuss textual meaning and how to be involved without looking silly. They may still feel awkward, but affirmations from classmates help alleviate this.

Along with these general observations, I have identified specific challenges associated with instrument families. How these challenges manifest in the student depends on where they are in their individual instrumental technical progress. Some of what I observe may be directly related to correct technique for playing their instrument, but sometimes I describe habits that are not indicative of the specific instrumental technique. When I observe what I think may be related to their instrumental playing, we talk about it in class. When there are several students who play the same instrument, it is helpful because they can check with each other to see if what I am observing is truly a commonality. I also confirm ideas with instrumental colleagues. Regardless of what I observe while teaching singing, the goal is to create correct habits for vocal production.

Wind Players

Wind players struggle with the absence of a mouthpiece as a reference for where tone is created. Woodwind and high brass players often have difficulty feeling tall space in the mouth when singing. The act of forming the embouchure can create tension in the jaw and lips, which affects jaw release and mouth space for vocal inhalation. This is completely habitual because they have worked hard in their instrumental studies! Letting the jaw hang freely, creating space between the molars, and lifting the soft palate feels very foreign. Clarinet, saxophone, and trumpet players tend to jut the lower jaw forward when they inhale. Some also raise the back of their tongue during inhalation. There is often tongue movement during pitch changes, which inhibits easy vocal production and legato singing. Double reeds have to focus on keeping the tongue behind the bottom teeth. Their instrumental technique causes the tongue to hang more retroflex in the mouth (like pronouncing the American r). Asking students to change these habits and retrain the muscles for singing takes time and focused effort.

In comparing singing to the various instruments, the trombone seems to the be the wind instrument closest to singing. From discussion with respected instrumental colleagues, this can be debated. Some believe that the flute is closest to singing because of the lack of resistance at the mouthpiece and the tongue resting behind the bottom teeth during tone production. However, the inhalation space created by trombonists, and the speed of air needed to play does not need much adjustment when singing in my experience. Also, the trombone slide can mimic a vocal slide, so that action translates well.

A challenge I have often encountered with low brass players is pitch matching. The trombone range lies within the tenor/baritone singing range, but not a treble voice range, so female trombone players hear pitches an octave lower. It is even more challenging for euphonium and tuba players because they are hearing two octaves lower! Pitch matching exercises are often necessary for these singers. Aural training to hear pitches in the correct singing octave may take individual attention. This is another way vocal education majors can be utilized. I also spend class time addressing these challenges and use the voice students to supplement what we do in class. Tuba players often struggle with breath control as it relates to singing. All wind players have to adjust to where they feel sound created and how they approach breath control for singing.

String Players

String players generally have great ears for tuning, and if they are able to grasp the process of creating sustained vocal tone, then progress follows rapidly. Posture is often the first thing I address with these students. Finding length in the spine and neck and opening the chest are often new feelings. These students spend most of their time leaning over the cello, or tilting the head to hold an instrument in the crook of neck. These students often deal with shoulder tension. Of course, all instrumentalists focus on posture,

just like singers, but they have to adjust to the singing posture rather than that of their instrument. Once posture is addressed, we move to breath and phonation. If students have never used their breath to initiate and sustain tone, expanding the body for inhalation and singing is a new sensation. Once they are comfortable with singing a melodic line, their musicality is quite good. This applies to any student who is adept musically; it will translate to other instruments. My first instrument was the cello, so I often use bowing movements to indicate legato singing. The feeling of connecting the bow correctly to the string also helps with understanding vocal onset. String players must not "grab" the string with extra pressure on the bow, just as singers do not want to use a hard glottal attack.

Pianists

Posture and releasing tension in the shoulders are the main comments I have for piano players. They need to remember to stand tall and thank of having a long spine and neck. Pianists can learn a vocal piece quickly and musically because they have the skills to play the melody and

accompaniment. This becomes another obstacle for those who do not have strong piano skills. How do they learn a piece of vocal music? Singers need to become more proficient on piano because of its connection to learning their songs. Instrumentalists also develop piano skills, but the importance of piano in the learning process it not as necessary.

Percussionists

I enjoy working with all instrumental singers, but percussionists offer a unique challenge that I love. The percussionists who have not had singing experience are often timid and tend to sit toward

the back of the room or cluster together for "support." I engage them in class discussions and often ask the percussionists for their rhythmic expertise. I have used a percussive vocal piece as one component of the class to engage the percussionists. It engages the voice energetically and is beneficial for everyone. It is easy to focus on wind players and their breath experiences, so I mindfully include percussionists by having them explain how phrasing is achieved on their instruments and if they use breath during performances (yes, they do). The biggest challenge is usually pitch matching. They are not used to hearing a pitch in their head and then reproducing that pitch. Unless they are proficient on mallet instruments, they have little experience creating and sustaining pitched tone. Despite the melodic challenges, percussionists bring excellent skills in counting, and the ability to memorize music quickly.

Strategies

A variety of strategies can be used with singing instrumentalists. Here are a few I use that address specific instruments.

BRASS AND WOODWINDS

- Work on releasing the jaw so it will hang slack; avoid forcing the jaw down.
- Keep the jaw released during pitch movement.
- Keep the tongue behind the bottom teeth and uninvolved during inhalation and pitch changes.
- Inhale with the palate lifted and keep a continuous lift while singing sustained notes or phrases.
- Use articulation exercises with consonants to release tension in the tongue and lips.

PERCUSSION AND LOW BRASS

- Work on pitch matching in various ranges.

• Use sustained pitch exercises for control of tone.

• Make use of inhalation and breath control exercises, especially slow inhalation free of tension.

STRINGS

• Work on pitch matching in various ranges.

• Use sustained pitch exercises for control of tone.

• Make use of inhalation and breath control exercises, especially slow inhalation free of tension.

ALL INSTRUMENTS

• Start building confidence immediately and begin singing the first day of class.

• Focus on long spine/neck and open chest; ease of inhalation and breath flow for singing.

• Vocalize using lip buzzes or initial [s] or [z] to help students "feel" the tone buzz and airflow.

• Discuss text and character. Acting exercises for beginners are helpful and fun.

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About the Author

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