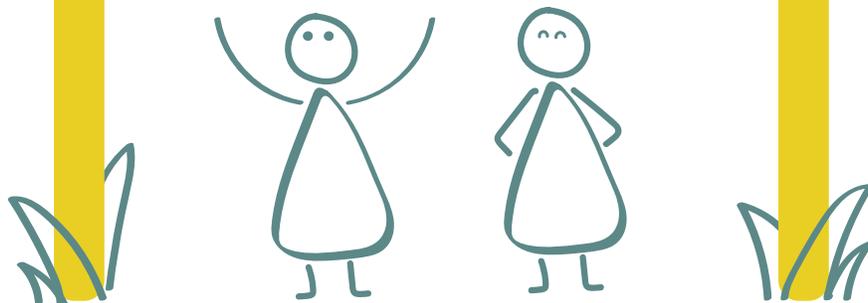


Session 3

Getting to Know Your Physical Voice



Photo by Chelsea Hackett



Session 3: Lesson Plan

Session Objectives

- To understand how the basic mechanism of the voice works
- To gain agency over your physical voice through learning more about your body

Key Terms

- Power: *the strength and force of your voice*
- Source: *the physical body parts that create the sound of your voice*
- Filter: *parts of the mouth and jaw that can be moved to change the sound of your voice*
- Vocal folds: *twin membranes that vibrate to create the sound of your voice (sometimes referred to as vocal cords)*
- Diaphragm: *the muscle beneath the lungs that supports the voice*
- Agency: *the capacity to make decisions about one's own life and act on them to achieve a desired outcome, free of violence, retribution, or fear*
- Pitch: *the highness or lowness of a sound, a musical tone determined by the frequency of sound waves*

Supplies Needed for Session

- Poster of Vocal Diagram
- Poster of 10 Characteristics of an Empowered Voice
- Your group's Guiding Values
- Journals
- A computer or TV monitor to show a voice mechanism video of vocal folds

Feeling Your Voice and Naming Intentions for the Day | 5 Minutes (0:00 - 0:05)

- Have participants lie on their backs on the ground in a circle with all their heads to the center of the circle. Another option is to have participants lean back in a chair.
- Guide them through a slow and silent meditation, pausing between questions.
- You can use the words we have provided here, or create your own meditation.

Meditation Script

Everyone close your eyes and notice your breathing. Pay attention to what happens in your body when you breathe.

Where do you feel the desire to let in a new breath?

How does the breath enter your body?

Where does the breath go?

How does it exit?

Keep your eyes closed and let out your breath on a warm rich “mmm” sound. Make it a sustained “mmm” sound, only stopping to let in another breath to keep going. Imagine seeing the vibrating sound of your voices in your own body.

Where does the “mmm” sound resonate in your body?

What role do your lips play in making this sound?

Now switch to an “ahhh” sound.

What happens with the jaw when making the “ahhh” sound?

What does the tongue do?

Now, begin making the sound “la, la, la”.

What does the tongue do to make this sound?

Where does the tongue touch inside the mouth to make this sound?

Notice how your body is creating this sound.

What supports the sound?

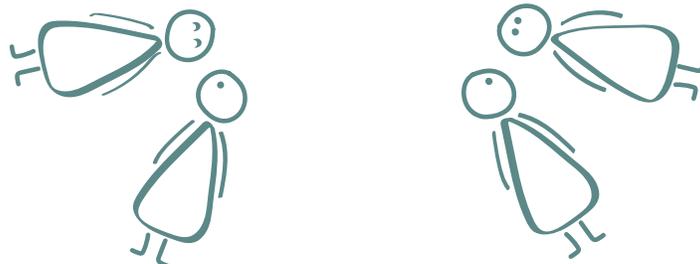
Where does the sound begin?

How do the mouth, tongue, and lips change the sound?

Still lying down, reach one arm up and stretch it over your head to stretch the intercostal muscles between your ribs, reaching a few times to feel the stretch. Then switch, and do the same with the other arm.

As you breathe, put your hands on your ribs and feel the ribs expand with each breath.

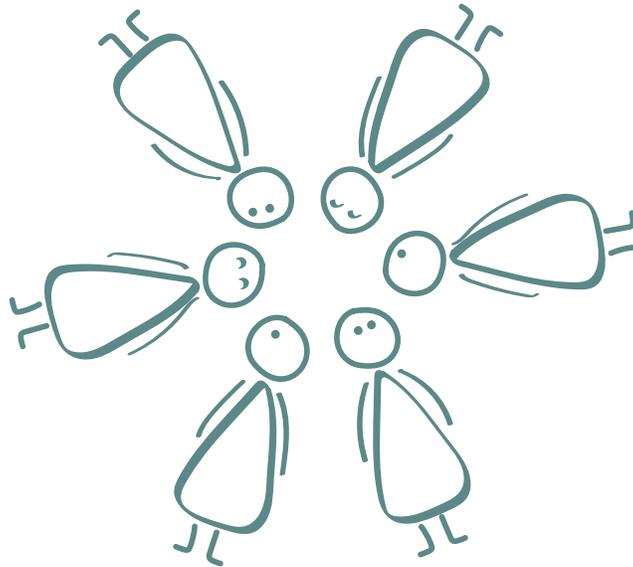
Remain lying down with your eyes closed.



Objective for the Day

(Told to the participants while they are still laying down.)

Our voice has many parts. It is personal, in that it expresses what we think and believe, it is relational, in that it helps us to relate to others, and it is physical, something that we create with our bodies. Our voices can impact the physical world around us by creating air waves and by the content of what we say. Today we will be exploring how our physical voice works.



NOTE TO THE FACILITATOR

Visualizing the Physical Voice

By showing students footage of the vocal folds, they can gain a greater understanding of their own body mechanics and have more ownership over their physical voices.

In preparation for this next segment, download or open a computer to the following YouTube videos:

<https://www.youtube.com/watch?v=hp-gCvW8PRY>

<https://www.youtube.com/watch?v=v9Wdf-RwLcs>

Also, display the poster of the Diagram of Your Voice and keep this up in the space where you have your sessions. (See Resources for a larger image)

Getting to Know Your Physical Voice | 30 Minutes (0:05 - 0:35)

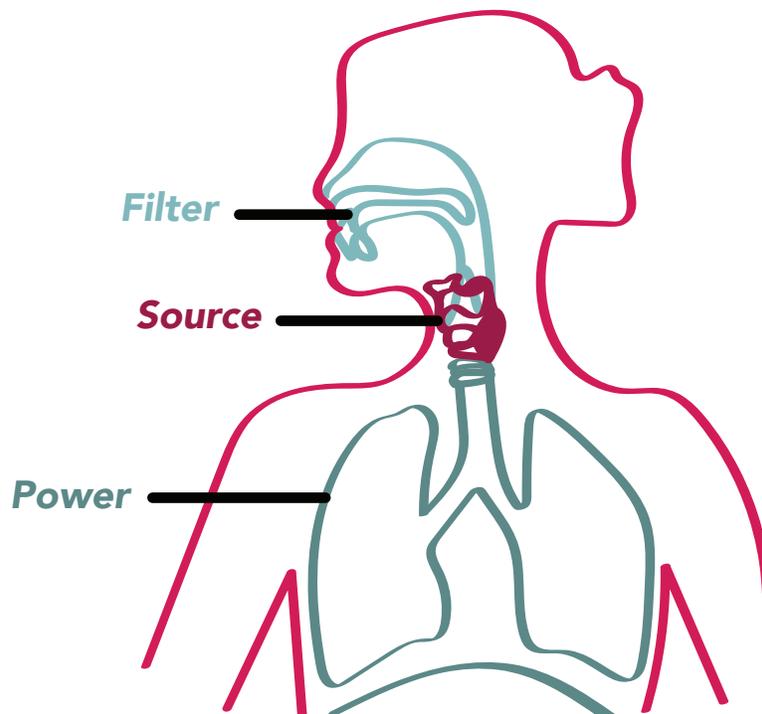
We have structured the following lesson as a script detailing the various mechanisms of the voice, their purposes, and how they are connected.

The more you know about your body, the more you are able to make choices about your body. Some of you may have learned about your reproductive system and how it works. Knowing more about that allows you to make informed choices. The voice is very similar. There is a whole system at play in your body that creates your voice that you may not know about. The voice doesn't just come from your throat. We break the mechanisms that create your voice down into three parts: The Power, the Filter, and the Source.

The Power for your voice comes from your lungs and your diaphragm, the Source of your voice includes your vocal folds and larynx, and the Filter for your voice is your mouth—tongue, teeth, and lips. Your voice is created when air moves out of your lungs and passes your vocal folds, and then is shaped into different sounds by your mouth.

The more you know about how your voice is created physically, the more you will be to control how you use your voice, and to support your voice in being healthy and heard.

We are going to do a few exercises to explore the three different parts of our voices: the Power, Source, and Filter.



Power for Your Voice: Lungs and Diaphragm (the muscle under the lungs)

This is an exercise to feel your diaphragm and lungs. The first thing we are going to do is take a deep breath in filling your lungs.

Some of you may have raised your shoulders when you breathed in. Sometimes we think that raising our shoulders gives us more space for our lungs. In fact, we expand our ribcage and push out our stomach when breathing deeply.

This time, instead of raising your shoulders, I want you to place a hand on your stomach and a hand on your ribcage. Take a deep breath in and feel your stomach and ribcage expand as you are taking a deep breath.

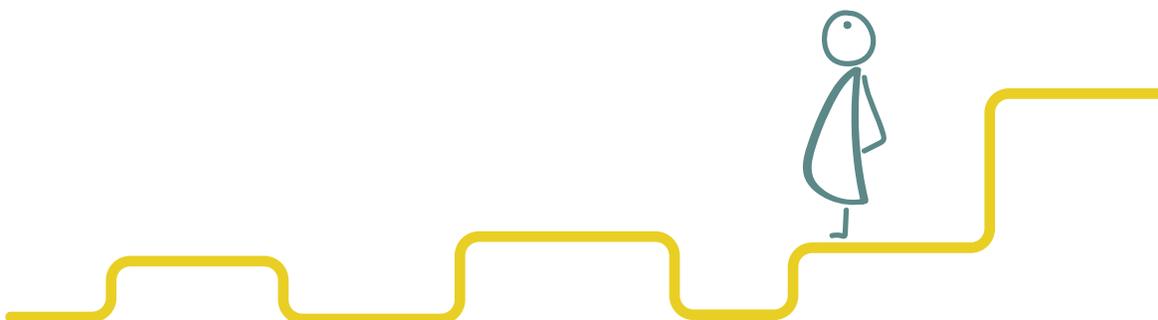
The reason these expand is because of your diaphragm. The diaphragm is a thin, dome-shaped layer of muscle and tendon that sits beneath your lungs. When it is relaxed, it looks like an expanded umbrella or opened parachute. When it contracts, it flattens down, making more room for the lungs to expand as they fill with air. This expands your rib cage. Also, when the diaphragm contracts it pushes down your internal organs, which pushes out your stomach.

For this segment, show the provided YouTube Video that shows the diaphragm in action:

<https://www.youtube.com/watch?v=hp-gCvW8PRY>

The beauty of your diaphragm is that it works without having to think about it—that's why you may not have even known it existed! However, by learning more about it, we can understand how it works to give more power to our voices. When we relax—allowing our ribcage and stomach to expand when we breathe—it gives the diaphragm the space it needs to do its job well.

We are going to take three deep breaths while relaxing to allow our ribcage and stomach to expand.



Exercise to feel the power of the diaphragm and lungs

Now we are going to try an exercise to feel how powerful our diaphragm can be. Make the sounds “ha”, “ha”, “ha”.

Be aware of your diaphragm muscle working to give power to your voice. Can you feel it moving to support each “ha” sound? It is contracting and relaxing with every “ha”.

Repeat making the “ha” sound, noticing where the power for your voice comes from within your own body.

Exercise exploring the lungs and diaphragm

Make a smooth unbroken “eeee” sound for as long as you can. That breath is coming from your lungs.

The more you practice making smooth, controlled sounds like the “eee” and quick sounds like the “ha, ha, ha”, the more “breath control” you have. This means that you can control how quickly the air is released from your lungs. Singers and actors use exercises like these to ensure they have the power they need to sing long notes or speak long passages.

This is the power for your voice!

Source for the Voice: The Vocal Folds and Larynx

The next part of your voice that we are going to explore is the Source. The source includes your larynx—also known as voice box—and your vocal folds. The larynx is a hollow organ in your throat that holds your vocal folds. I keep saying vocal folds and you may not know what I mean, but I am going to show you!

For this segment, show the provided YouTube Video that shows the vocal folds or vocal cords in action:

<https://www.youtube.com/watch?v=v9Wdf-RwLcs>

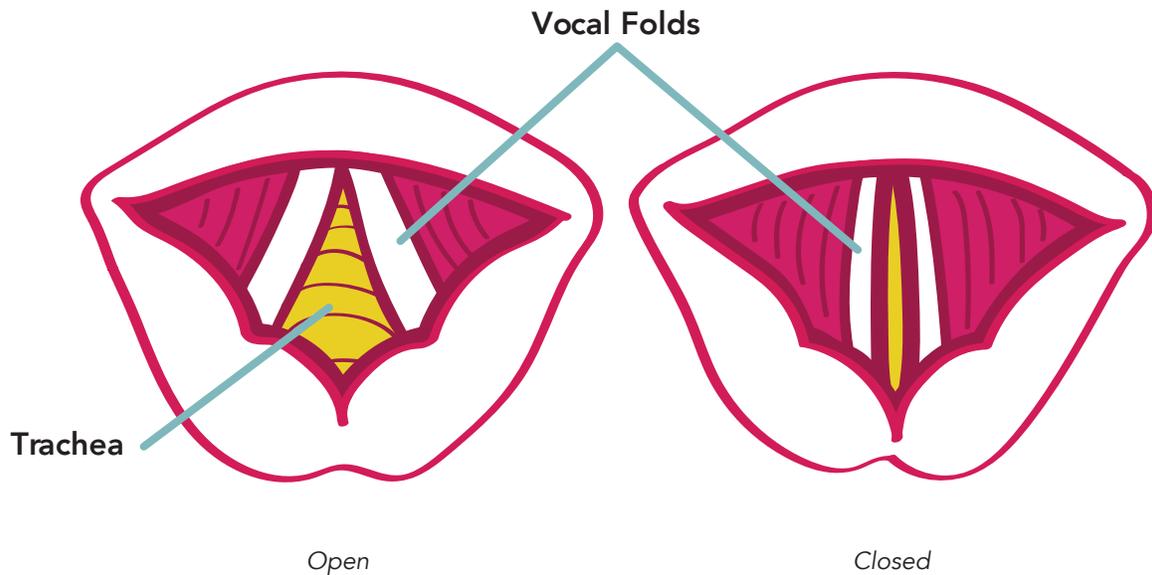


The Vocal Folds or Vocal Cords are twin membranes that stretch horizontally across the larynx. They are open when you inhale a breath, closed when you hold your breath, and they vibrate when you sing or speak. That vibration is your voice!

There are some important things to note for women's and girls' voices too. Women typically have thinner vocal folds than men. This contributes to women having typically higher pitched voices. It also means that their voices are more susceptible to what are called "vocal injuries".

(*See links to research on this in Resources)

The voice can get injured if the vocal folds are put under strain. This can happen quickly when you scream or force a note when singing, or it can happen over time when using your voice in unhealthy environments. Some important tips to keep your voice healthy and safe are: refrain from screaming, coughing, and whispering; stay hydrated; avoid loud situations where you have to speak over music or crowds; avoid smoking and excessive caffeine use; and rest your voice when it is tired—don't try to push through when you have been talking all day or are experiencing cold or flu symptoms.



Exercise to feel the vibration of vocal folds

Everyone gently place your fingers across your own throat at the base of your neck. Everyone make an “ahhhhhhhhh” sound.

Feel the vibration being made by the vocal folds. The movement of air through the vocal folds produces the vibrations that make sound.

Make a high “ahhhh” and a low “ahhhh” sound. Go between the high and low pitches like a slide. How did that feel with your fingers?

Repeat again, noticing what happens physically in your body. Also notice how you can control how high and low your voice goes. That is called the pitch.

The larynx controls the pitch and volume of your voice: how high/low and how loud/quiet it is. When you had your hands on your throat, you may have felt movement. That is the larynx moving to control the pitch of your voice.

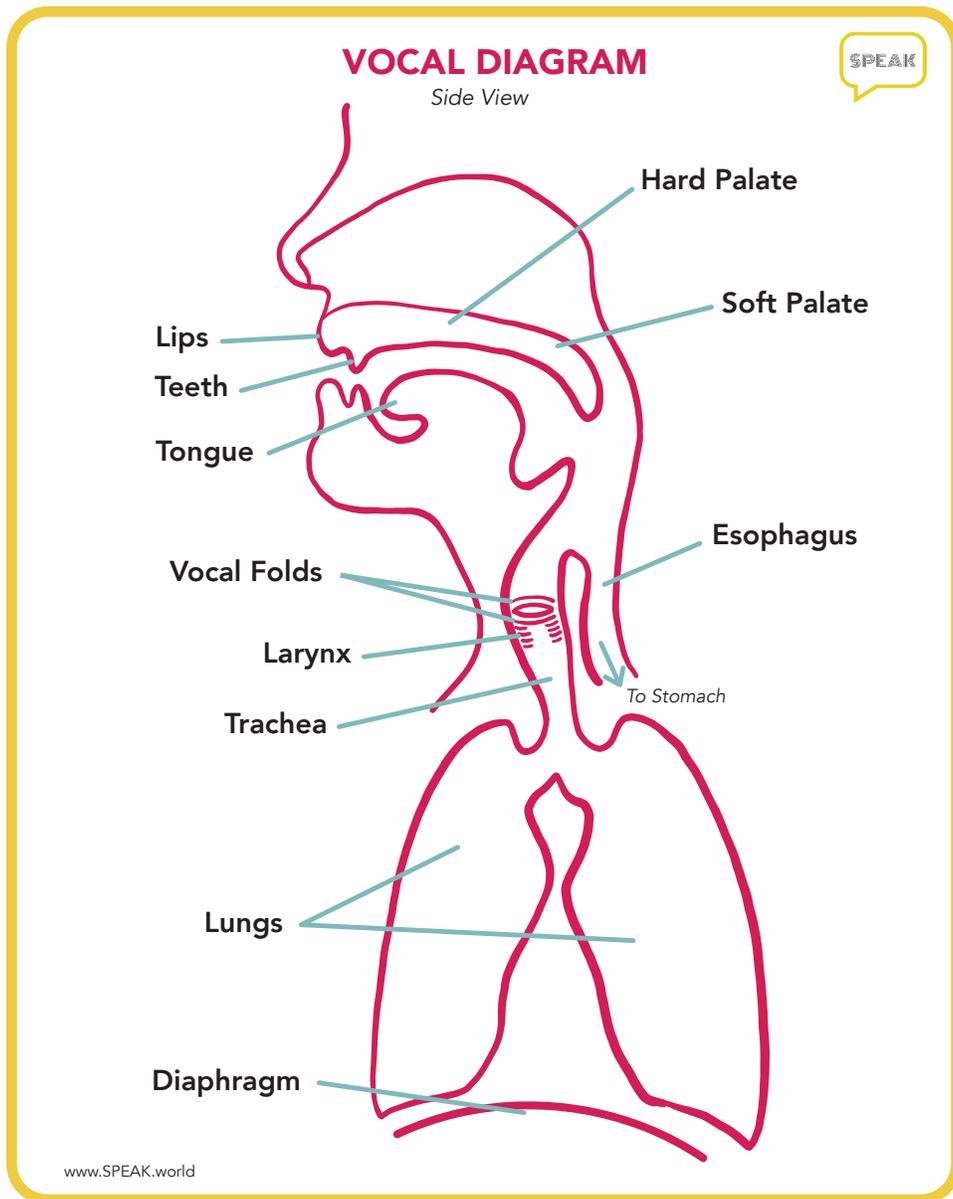
Now that you know more about the source of your voice, pay attention to how you feel when you are in different postures. How does it affect your voice when you slouch? When you sit up comfortably?

Filter for our Voice: mouth, lips, teeth, tongue, palate, and jaw

Finally, we are going to explore the Filter for your voice. We have already explored where your breath comes from, how it is supported by the diaphragm, and the role of your vocal folds and larynx in producing sound. Now we can explore how your mouth, lips, teeth, tongue, palate, and jaw all shape that sound.

Movements of the tongue, palate, jaw, or lips change the sound of our voice in many ways. We can control many of these filters to make our voices clear and expressive.





Exercise exploring how lips help to shape the voice



Make the sound "ma" several times.

Then make the "pa" sound several times.

Notice what is touching to make that sound. What do you do differently to make those two different sounds?

Repeat "ma, pa" while noticing how different parts of your mouth are filtering the sound.

Exercise exploring how the lips, tongue and teeth help filter the voice

Make the “fah” sound several times. What is making contact with the upper teeth?

What does the tongue do? The jaw? The lower lip?

Now say “da”. What is making contact with the upper teeth? The hard palate?

What does your mouth do to begin making that sound, and what happens at the end of making that sound?

Repeat, “fah, da” while noticing how different parts of your mouth are filtering the sound.

Exercise exploring how our tongue helps to filter our voice

Now we are going to make two sounds back and forth: “la” and “ta”.

Notice how your tongue moves to shape the sound of each vowel as you say “A, E, I, O, U”. What does the tongue do differently to make the different sounds?

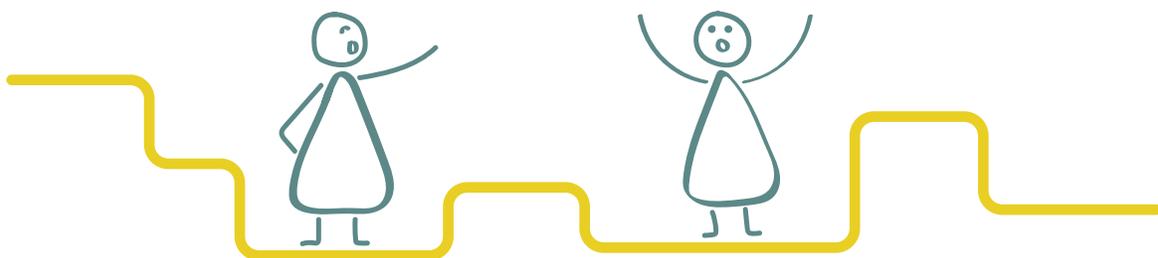
Exercise exploring how the soft and hard palate help to filter the voice

Yawn, while making an open “ahhhhhhhh” sound and feel the soft palate opening to make more room for your voice.

Notice how this is like the yawn that you do in your daily exercises. What happens in your throat when you make this open “ahhhhhhhh” sound while yawning?

Now inhale while making a whispered “kah” sound.

Can you feel the soft palate at the back of your throat open?



Exercise exploring how the jaw helps to filter the voice:

Make an “ahhhh” sound while having your jaw move up and down, creating a larger resonating space in your mouth.

Let your jaw drop 4 times. Repeat.

How does the quality of your voice change when your jaw drops, making more room in your mouth?

As you just explored, your voice is complex and is produced by your entire body. The more you know about your voice, the more you can use it to communicate what you want to say. Knowing about your physical voice also helps you take better care of it, and make intentional choices. Throughout the rest of the sessions, we will continue to explore the way your voice feels in your body and how to keep it expressive and healthy so you can successfully communicate what you want to say.

Embodying Our Voices | 10 Minutes (0:35 - 0:45)

- In groups of three to five, ask students to use their bodies to create the mechanisms of the voice. Review the parts on the diagram
- Guide students in using their bodies to create the Power, Source and Filter into one connected moving image.
- Do this quickly without over thinking, and be creative! (Give 2 minutes to create the images.)
- Share the images with the rest of the group!



Filter

Source

Power

The Things We Take | 8 Minutes (0:45 - 0:53)

- Make a standing circle.
- Ask the students one or more key reflective questions and have select students share their responses.
- Suggested questions:



How, if at all, does understanding how your voice works change your understanding of your voice?

Does it change how you feel about your voice?

Do you feel more like your voice belongs to you if you know how it works?

Does it make you feel like you are the one to control your own voice?

Closing Ritual | 2 Minutes (0:53 - 0:55)

- Do the Closing Ritual that your group created. We suggest you consider having it start in a circle facing inward, has everyone declare an affirmation about vocal empowerment (example below), and has some collective movement (example below).
- Here is one example, create a Human Kaleidoscope. Standing in a circle, have everyone in a circle facing inward, someone starts leading the action and everyone else follows the lead such that if someone were watching from above, it would look like a kaleidoscope. Explore various levels, speeds, and textures. After one person has led for a while, that person says someone else's name and that second person leads for a while. Then that person names the third person. The third person leads for a bit and then brings all their hands low and center and leads everyone by saying **"We have empowered voices"** (all turn to face the outside of the circle while swooping their arms raised high over their heads), **"and we are taking them out into the world!"**

Journal | 5 Minutes (0:55 - 1:00)

- Give students 5 minutes or more to complete the page in their journals.

Works Cited

*Research shows evidence of gender disparity in voice disorders. Women are more inclined to have vocal health issues than men related to “laryngeal physiology, hormone differences, other non-laryngeal physiology, and non-physiological and/or behavior characteristics (Hunter, Smith, & Tanner, 2011). For example, women’s thinner vocal folds may increase women’s risk because there would be less tissue to damp/absorb vibratory forces (Roy et al., 2004).

Hunter, E., Smith, M., & Tanner, K. (2011). Gender differences affecting vocal health of women in vocally demanding careers. *Logoped Phoniatr Vocol*, 36(3), 128–136. <https://doi.org/10.3109/14015439.2011.587447>

Roy, N., Merrill, R., Thibeault, S., Parsa, R., Gray, S., & Smith, E. (2004). Prevalence of voice disorders in teachers and the general population. *Journal of Speech, Language, and Hearing Research*, 47, 281–293. [https://doi.org/10.1044/1092-4388\(2004/023\)](https://doi.org/10.1044/1092-4388(2004/023))

Session 3 Resources

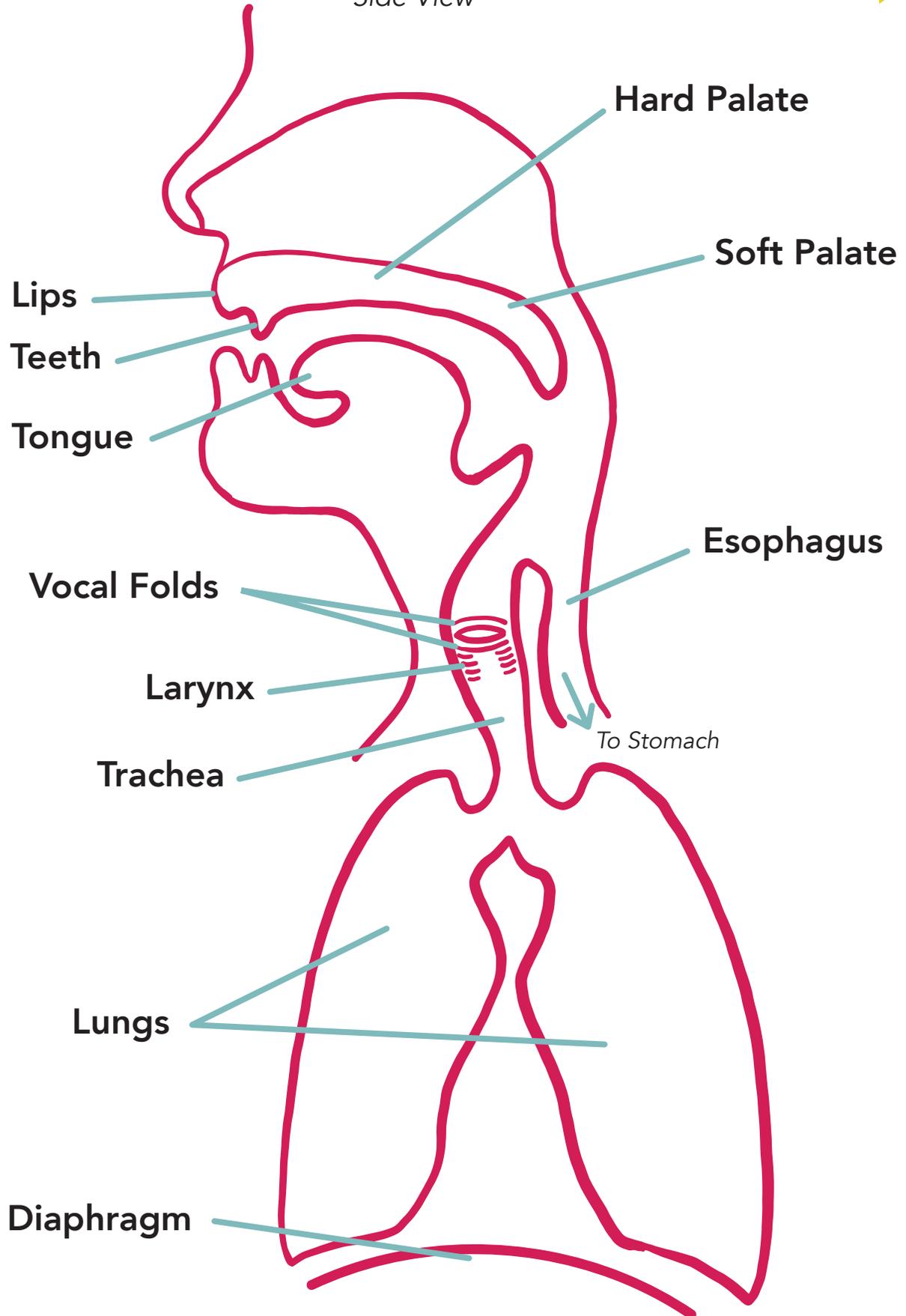


Photo by Chelsea Hackett



VOCAL DIAGRAM

Side View



POWER, SOURCE, FILTER

