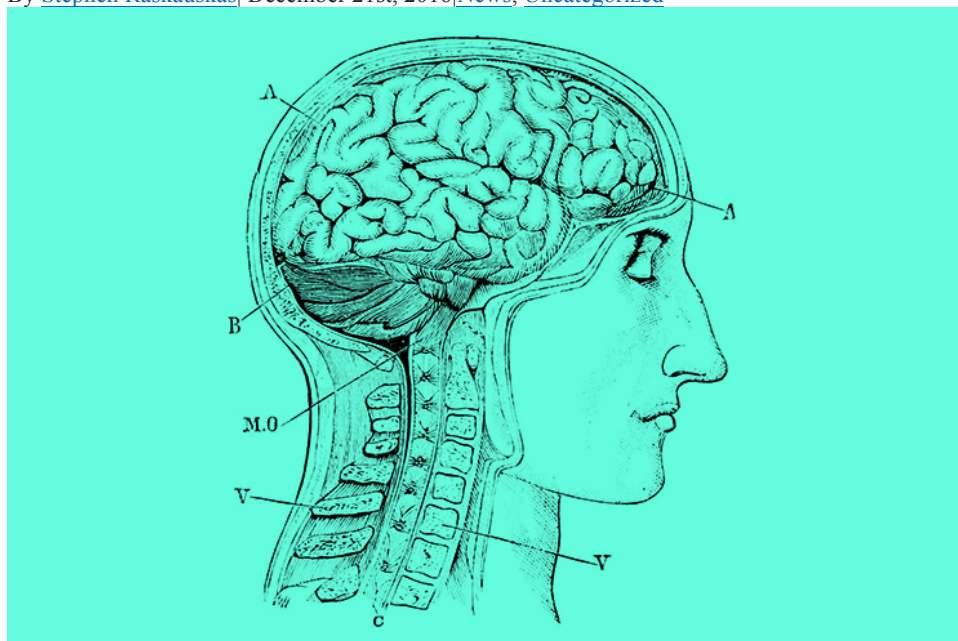


How Neuroscience Can Help You Sing “High, Loud, Healthy, and Forever”

By [Stephen Raskauskas](#) | December 21st, 2016 | [News, Uncategorized](#)



Many people love to sing. Not everyone can sing well. But what if you could re-program your brain to help you sing better?

Singer and teacher [Meredith Colby](#) uses advances in neuroscience to help her students improve their voices. Now you can learn her methods in her new book *Money Notes: How to Sing High, Loud, Healthy, and Forever*.

“I wrote the book because I realized that after 20 years of teaching, I actually had a method,” Colby said. “For the first 10 years I was actively working on a method, I didn’t know I was developing it (which in retrospect is a good thing, because I would’ve been far less patient with myself!). I was just reading brain books and applying ideas about neurology to my singing students.”

“We have learned more about the human brain in the last 20 years than we have in the last 3,000,” Colby said. “Doing some of my own research, I developed the Neuro-Vocal Method.” The method, according to her book, “uses breath support and exaggerated placement to identify and strengthen the pure head register and chest register tones, and then to teach the larynx to move smoothly between them.”



Meredith Colby

Colby was not motivated to publish her method until she saw what was happening in her own brain while singing. “When I was given the opportunity to lie in an fMRI for 90 minutes and do experiments that I did with my students in lessons, I saw that what I thought was happening is indeed happening, it was an extremely exciting day,” she said. “I felt very eager to share this information.”

Though Colby’s book offers advice for anyone to help improve their voice, it does not, strictly speaking, present methods for teaching a classical, or *bel canto*, style of singing. “I have primarily been teaching pop singers, many of whom had worked with other teachers who were classically trained. But these singers can become frustrated trying to apply classical singing methods to pop singing.”

Colby thinks that *Money Notes* may service teachers just as much as students. “Hopefully this book can provide voice teachers an opportunity to add to what they teach. They should be able to broaden what classical singers can do and also be able to service pop singers.”

Why don’t more voice teachers teach popular singing styles? Colby thinks it’s because of “ignorance about the genre and insecurity or fear that they might be harming their students by teaching them pop method.”

Though *Money Notes* provides lots of information for students and teachers alike, perhaps one of the most useful aspects of the book is that over half of it is composed of easy-to-learn exercises. For those who can’t read music, Colby provides a digital library with videos and audio examples to supplement her book.

If you want a sneak peek at some of the exercises you’ll find in Colby’s book, she said that the first one, “Breath and Buzz,” is great to try. “No one can screw it up, even if you haven’t read the book or don’t know the theory behind it. You can even do it in a space that’s not a good acoustic environment, like the car, where you’re also likely to have bad posture and ambient noise.” Check out this easy warm up, shared with Colby’s permission, below.

WARM-UP EXERCISE #1: BREATHE & BUZZ

Part: Warm-up

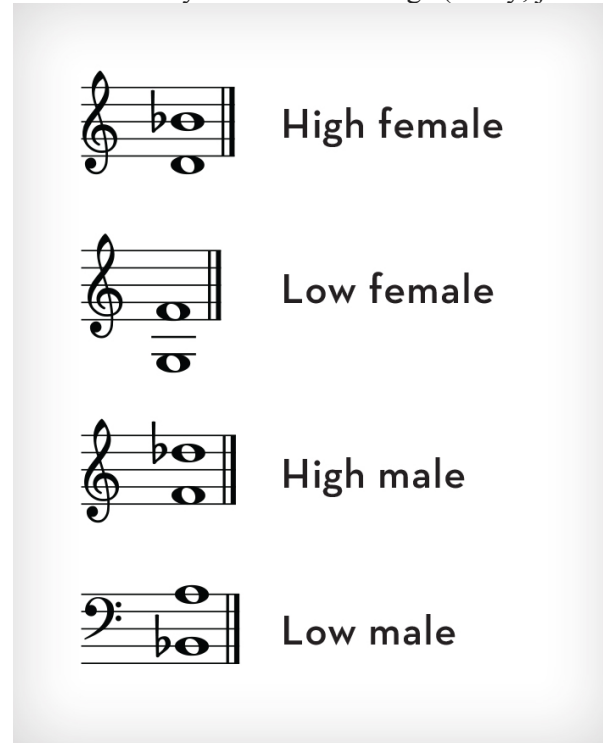
Elements: Breath, chest register

Range: Super-duper comfort zone

Time Spent: 2-3 minutes

Purpose

This exercise gets you centered and focused on the physical feelings you'll use most in your exercise session, specifically a low breath, a breath that is not grabbed, forward placement, and supported tone. It also brings you into the present and helps you concentrate on what you're doing. This exercise asks you to do two things (really, just two things): breath and buzz.



The image displays four musical staves, each with a treble or bass clef and a key signature of one flat (B-flat). Each staff contains a single note, represented by a whole note with a stem and a flag. The notes are positioned as follows: High female (treble clef, G4), Low female (treble clef, G2), High male (treble clef, G3), and Low male (bass clef, G2). The labels 'High female', 'Low female', 'High male', and 'Low male' are placed to the right of their respective staves.

THE EXERCISE

Breathe: Use the note pattern below. Put on your Singer Posture, take your Singer Breath. Your sternum is lifted and your ribs are up off your diaphragm, allowing it to move freely. Take a couple of these breaths to remind yourself that you're breathing the way you do when you're asleep.

This is the easiest exercise you're going to see here. Take this opportunity to really, really pay attention to your posture as you breathe. Try to keep your sternum lifted. Keep it from sinking and having to be lifted up again. You may have to think, *Lift, lift, lift* as you phonate on your buzzy "n" sound. Give yourself a chance to feel your abs helping you take in breath by relaxing. They can only do that when your rib cage is already lifted before you begin to inhale.

Buzz: Normally when you hum, you hum on an "m" as in "Mary." Here you'll be humming on an "n" as in "Nancy." Your jaw is loose, your lips are relaxed and not touching, and as you phonate into that "n" position you'll notice that you're experiencing a buzzy feeling in the bridge of your nose, and/or your cheekbones, and/or your front teeth.

Once you've got those two things, start phonating on the pattern that follows. Go up a few semi-tones until you perceive a slight change in your voice, then turn around and descend as far as you're comfortable (no pushing!).

NOTE: These pitches are to demonstrate the pattern only. The suggested range is a guideline. Please use the pitch range that works for you.



CHECK FOR FORM

- Are you standing with your Singer Posture **as you phonate**, with feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage?
- Are you feeling a gentle buzz in the bridge of your nose OR under your eyes OR near your front teeth?
- Is your jaw hanging loosely, with your top and bottom front teeth about half an inch away from each other?
- Are you taking an easy, low breath during the beats of rest?
- Is the buzz completely connected? (By that I mean it stays the same all the way through each tone pattern. It doesn't go away and come back or get quieter and then get louder.)

TROUBLESHOOTING

My chest is moving up and down.

- Use a mirror to watch yourself. Focus your eyes on your sternum and try to keep it lifted and open as you phonate. Or try to keep it still and relaxed—not moving. Your body doesn’t necessarily tell you when your posture is sinking, but your eyes will.
- As you phonate, think, *Lift, lift, lift, lift*. You won’t really be lifting any further, but in defeating the habit of dropping your sternum as you phonate it will feel as though you’re lifting.
- You may be waiting until the split second before you phonate to grab your breath. In that case it’s almost impossible not to breathe high in the body. Take the whole three beats to take an easy, low breath. But don’t work too hard. You’re going for focus, not work.

I don’t feel my abs engaging.

- You may be looking for a big feeling. Your abs aren’t working very hard at all. Feel for engagement rather than effort.
- Your chest may be habitually moving up and down without your awareness. Use mirror.

I’m not feeling the buzz.

- You may be making an “l” or an “m” sound, not an “n” sound. Try saying “hunn” as in “honey” to begin the tone and find the tongue placement. Another good word for this is “tin.” Be sure to land on the “n” sound, though. Don’t stay on the vowel. It’s the “n” that’s giving you the buzz.
- You may be going for too much volume. You’re looking for a normal speaking volume. Don’t work too hard.
- You may be making a “pretty” sound. Make a very plain, speech-like sound instead.
- You may have the buzz but you’re looking for something big. This is a small feeling in the front of your face.
- You may be phonating on pitches that are too high. This exercise should be done on the pitches of your natural speaking range.
- You may be clenching your teeth. Remember to keep the jaw loose and the teeth from touching.

I feel the buzz, but not all the time.

This one is a big deal, and there’s only one reason for it: inconsistent breath support. You want to “keep the bumblebee in the air,” as I tell my students. This is the very first exercise where you focus on your placement in order to get your abs to engage in the needed breath support. So:

- Focus your attention on your buzz. Really hold the intention to keep the buzz consistent throughout the pattern, not just on the individual pitches.

- Be willing to let it feel sloppy. For hit-the-note kind of people, connecting a line can feel sloppy. Let that be okay for now.
- Pay special attention to not grabbing your inhalation, but instead taking a slow, relaxed breath during the three beats given.
- It may help to think of the buzzing as being a tad louder. Just a tad, though.

I just can't make that darn "n" sound! I keep opening to the vowel right away.

- If you really, really can't make the "n" sound, then just hum on an "m" as a person normally would. If you do hum on an "m" you need to:
- Be aware that your tongue is staying forward, gently touching the back of your lower teeth,
- Be aware that you're not grabbing your breath and lifting your rib cage (otherwise known as "gasping") when you open your mouth to take a breath, and
- Keep it easy and plain so you can experience the buzzy sound, which may be less pronounced using the "m" sound.
- Once you get the hang of humming through pitches on the "m" sound, try the "n" again.

MODIFICATION

This exercise can also be used to warm up the head register. In fact, if the singer is the type who defaults to the head register it's better to start this exercise higher and lighter than what is indicated here. If using this exercise in head register, start with a gentle tone about a major third or fourth higher than is indicated in the instructions. Don't go too high. Stay comfortable.

To learn more about Meredith Colby or *Money Notes*, visit her [website](#).