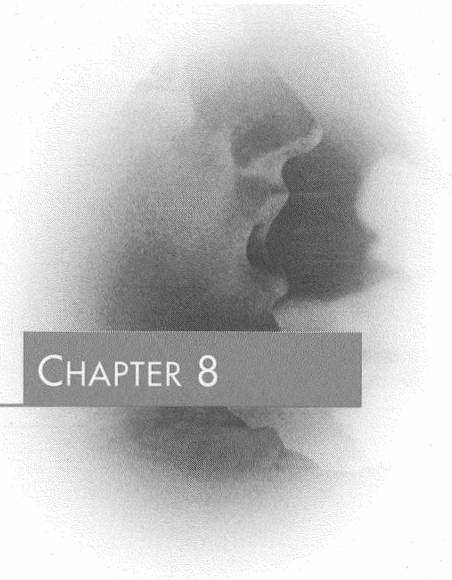
# EXCELLENCE IN SINGING

## multilevel learning and multilevel teaching

VOLUME 2: Mastering the fundamentals

CELUMBRA
Redmond, WA



# Teaching and Learning Flexible Breath

Chapter 8

Breath powers every vocal sound. It powers the sensuousness of a Debussy phrase, the broad soar of a Strauss melody, the delicate inflections of a Wolf song. Breath powers the excitement that can fill Lincoln Center. It powers every sung phrase in the life's work of a singer. Just as it does for life, breath sustains our art.

To laugh, to cry, to giggle, to call, to invite, to command, to moan, to sing—each impulse to utter a vocal sound prepares a breath before the sound. In the nursery, for example, an infant coos at her mother, and her impulse to coo prepares her little diaphragm, intercostal and abdominal muscles, viscera, posture, and vocal folds for just the right breath for cooing—not the breath for crying, not the breath for laughing, but the perfect breath for cooing.

Breath is as varied as these natural impulses to express. The breath for a dramatic fortissimo is different from the breath for a melancholy pianissimo. Breath for long, sustained notes is different from breath for short ones. Breathing for singing is never just lowering the diaphragm and keeping the ribs open; it is always more alive than "technique." It is dynamic, connected to the whole vocal system, to the whole person—to a changing mix of emotions, ideas, and spirit.

As you teach breathing, you can run the risk of becoming too mechanical and too disconnected from the human urge to sing. Some teachers avoid teaching breath because simply directing

attention to it can make it lifeless. To teach or to learn successful breathing for singing, it is always necessary to connect the technical principles to the deeper urges and emotions that prompt dynamic breathing.

## Natural Breath and Technique

When your student first walks into your studio, she is already capable of putting most breathing techniques into action—but she might not know it. From the powerful breath under a scream to the gentle breath under a whisper, she can already coordinate her ribs, diaphragm, and abdominal muscles in amazing ways. However, she will need to develop sophisticated skills to produce these complex and unconscious responses on cue and to adapt them to the demands of her voice and the music.

As you teach your student the mechanical elements of breathing technique, you can keep her breath vibrant by tapping into familiar experiences. Many of the exercises in this chapter draw upon such experiences: laughing, barking, moaning like a ghost, and other lighthearted, playful actions that will help her breathe deeply. She'll realize that she already knows a great deal about breathing, and that an urge to express can be as much a basis of breathing in singing as technique.

Following are some of the basic mechanics she'll need to become conscious of:

- Lowering her diaphragm easily and completely, which allows her inhalation to flow deep into her body
- Opening her ribs and keeping them open, yet flexible, throughout a phrase

- Keeping the shape of her vocal tract independent of her breathing
- Ensuring that her outgoing air pressure is continuous and smooth, even as it increases and decreases

You also need to point out the four phases of the cycle of breathing and help your student learn to manage them:

- Inhalation. During the *inhalation* phase, your student relaxes her exhalation muscles while maintaining good posture, thus letting the air "fall" into her body.
- Suspension. During the *suspension* phase, she crosses over from her inhalation to her exhalation. She stops the processes of inhalation and begins the processes of exhalation.

  This phase is important because many students do not make a smooth transition from inhaling to exhaling. Instead, they introduce tension into various parts of their bodies and start the exhalation and phonation with an off-balance body. It is a phase in which a student can have many bad habits.

  Your student can artificially suspend this phase, extend it so that she is neither inhaling nor exhaling—hence the term "suspension phase." While her breath is suspended, your student can become aware of how she uses her body during the crossover, learn many ways to make the crossover, relax any undue tension, and properly set up for the upcoming exhalation and phonation.
- Exhalation. During the *exhalation* phase, her abdominal muscles tighten against her contracted intercostals, keeping her rib cage open as she begins the exhalation. As she reaches the end of the exhalation, her body gradually relaxes.

- Recovery. The *recovery* phase is like the suspension phase, but it occurs between the exhalation and the inhalation.

Once your student learns to breathe successfully, she'll carry out these technical basics at the same time that she engages her body in an urge to express an emotion. As a result, she'll breathe dynamically, driving many emotions and vocal inflections, and always with a full, continuous breath.

## What Is the Best Breath for Singing?

Before you can complete a clear picture of the best kind of breath for singing, it is necessary to see how breath connects to the other parts of the vocal system. As the vocal folds and resonator change, the breath must dynamically respond to keep the system in balance. For example, when a singer increases the tension in her vocal folds to raise the pitch, she must increase her breath pressure. If she tunes her resonator to different formants or to narrower frequency bands, her breath pressure may need to adjust a degree or two. If the musical phrase must move from mezzoforte to forte, her breath pressure must increase. (See "Optimizing the Body for Excellence in Singing," in v. 1, ch. 4, and the heading "Source-Filter Theory," in v. 1, ch. 6.)

This all means that the best breath for singing is one that provides a steady pressure of air that can easily flow from very light to very strong in order to balance the whole vocal system. Like pressing the gas pedal on a Jaguar XKR coupe, your student should be able to "rev up" her vocal system with plenty of power and precision, in finely tuned degrees of flow—and ease it back down just as smoothly.

It also means that her breathing will progress as she learns to manage the other parts of her voice. When your student is able to manage her resonance better, she will help her vocal folds vibrate more easily. Doing this will change the amount of breath pressure she needs to balance the system.

The best breath for singing balances the entire vocal system. Because the entire vocal system dynamically changes (in pitch, timbre, and dynamic level), the best breath must also be dynamic. In perfect balance, your student's tone quality will seem to move effortlessly from pitch to pitch, from timbre to timbre, and from dynamic level to dynamic level. When the whole system is in balance, your student may feel as though she isn't using any breath at all.

## Multiple Levels of Teaching Breath

On a fundamental level, your student needs to develop steady breath pressure. A beginning singer sings with intermittent pressure, like a garden hose sputtering water. By lowering her diaphragm, opening her ribs, and keeping her chest high throughout each phrase, your student can learn to use her abdominal muscles and intercostal muscles against each other to produce continuous pressure. (See the heading "Muscle antagonism," in v. 1, ch. 4.) This chapter includes several exercises that can help your student activate these muscle combinations. (For example, see "To Blow a Feather," on page 74.)

At another level, a student might have trouble changing the degree of breath pressure in response to the other parts of the vocal system. As she sings higher in pitch, for example, she might not increase her breath pressure enough, causing her to tighten her vocal folds to maintain pitch. Or she might increase the pressure

too much, overpowering her vocal folds and pushing the pitch higher. Such a student might have learned to supply continuous pressure but not how to adjust it to balance the rest of the voice. Exercises such as "To Discover a Balanced Onset," on page 142, and "To Sustain the Tone," on page 148, can help a student with this kind of breath coordination. (See also "To Explore Three Ways to Begin the Tone," on page 132 to refine these sensations.)

At yet another level, a student might not prepare to sing with a proper inhalation. She might suck in the air, causing her laryngeal muscles to become too wrought up to phonate well on the exhalation. Like a choreographer, your student needs to plan her inhalations throughout a song or an aria, being sure she sets up her phonation properly. (See "To Plan Breath For Musical Phrases," on page 94, and "To Combine Breathing Techniques with Other Aspects of Singing," on page 103.)

In addition, poor posture and unnecessary tension can crimp the air spaces in a singer's throat and chest, affecting the airflow. Remember that air pressure is closely related to the sizes of the spaces it travels through. So, in general, any body part that affects the diameters along the airway also affects breath pressure and airflow. (See ch. 5, "The air inside the body," in v. 1.) Poor posture and unnecessary tension can also block a singer's diaphragm and ribs, stifling her breath. (See the exercises "To Evaluate Posture," on page 29, "To Find the Center of Balance," on page 30, "To Balance the Head," on page 31, and "To Lengthen and Widen the Body," on page 33.)

As she becomes more advanced, your student must learn to adjust her breath pressure by tiny degrees. Beginners may only be able to adjust their breath pressure in gross amounts, and any singer can spend a lifetime refining the range between delicate and powerful breathing. To control small changes in breath pressure, your

student must coordinate many muscles, something that she can usually accomplish only indirectly, through a rich imagination and an impulse to express emotions. (See the exercise "To Inhale an Emotion," on page 71.)

## Breath Terminology

Teachers and singers use many different terms to describe breath for singing: "breath support," "breath management," "breath pressure," "breath control," "breath coordination," "appoggio," and "natural breathing." Each of these terms suggests a valid or useful part of breath for singing, but each can also suggest unintended meanings.

For example, "breath support" describes how breath holds up the system, but it can suggest stiff and static breathing, like girders that support a building; it can also suggest great effort, which can lead to tension. Similarly, although "breath pressure" accurately describes a property of breath, it can imply tension and effort, like water pressure in a garden hose. And while "breath management" and "breath control" are essential goals of technique, these terms can make a student overly conscious of processes that need to become natural.

All of these terms are useful for some aspect of breathing for singing. But like the rest of singing, breathing is more than words can describe. No simple definitions can describe an operation as full of nuances as breathing for singing—which is no doubt the reason why there are so many terms.

Words can suggest experiences, but your student will hear the words in her own way. Teachers need to be sensitive to the meanings of words. As Socrates pointed out, using word meanings precisely is essential. Teachers also need to be sensitive to the

implications of their words. A mere suggestion in a word can create a powerful idea for your student—and the idea might not be the one you intended. On the other hand, a mere suggestion might be the only way to stimulate the subtlety you want to convey. It's no wonder voice pedagogues have a long tradition of arguing intensely about vocal terms.

Use your student's singing as the critical test for how successful a term is. If her singing doesn't respond, drop that term and find another.

## Breath Problems

Your student's breath technique develops along with her freedom to express emotions. Because breath is already anchored to emotions from everyday life, working with breath can stimulate powerful emotions in your student. She may not be ready to feel those emotions freely. She may feel tremendous fear and vulnerability at the thought of really "releasing" her breath. She may become tearful, or even begin to cry. She may hold on to her breathing until she learns to explore and express her emotions easily. If this is the case, move to the level of your student's need and teach her about learning to explore and express her emotions easily—a primary part of an artist's job. (See ch. 3, "Flexibility at multiple levels," in v. 1, and ch. 17, "Teaching and learning the gestalt," in v. 4, particularly the exercises under "Stimulating Emotions.")

On the other hand, sometimes a student can't develop an appropriate breath for singing because of a physical ailment. She may have asthma or chronic pain. She may have had an accident or surgery, or something else that you don't know about. Whenever

breath problems linger after you have taught your student for a while, be ready to teach at another level or refer her to a health expert.

More commonly, breath problems result from two technical extremes: lack of awareness of breathing technique or over-control of breathing mechanics. The exercises in this chapter address the range of problems that occur within these extremes.

Your student will have more success with the breathing exercises in this chapter if she has already prepared her body for singing (for example, by using exercises from ch. 7, "Teaching and learning a supportive body," in v. 2). She can then use the exercises in this chapter to activate and become aware of her breath, to learn techniques for inhaling and exhaling, and to learn to make the finer adjustments necessary to support her tone and feel the connection of the breath to the vocal expression. (See the exercises under "Beginning, Sustaining, and Releasing the Tone," in v. 2, ch. 9.)

When you teach breathing, be prepared to stimulate your student in a variety of ways. Some singers respond easily to direct verbal instructions such as, "Breathe deep into your body," "Don't collapse your chest when you start to sing," or "Feel the connection of the breath and the tone when you sing." Other students can imitate well: you place their hands on your own ribs and abdomen, demonstrate good breathing, and they simply do it.

But most singers need additional guidance to activate their breathing and to learn how to manage their breath to support the tone. The exercises in this chapter can help you teach good breathing by:

- Presenting familiar activities
- Using poetic language and imaginative ideas

- Distracting students from conscious attention to their breath
- Offering suggestions on emotion
- Using negative practice and contrasting different ways of breathing
- Putting students in different physical positions to encourage different ways of breathing

As you do these exercises, you'll help your student overcome some of the obstacles to breathing when you encourage self-confidence, decrease fear, and help change any inhibiting beliefs about breathing (for example, "If I breathe deeply, I will look fat").

As always, be vigilant in observing your student. Learn to notice her ribs, shoulders, and abdomen. Ask yourself, "Is her breath too shallow? Too passive? Too high in the chest?" Learn to calibrate what you observe to the resulting sound and to your internal image of how she should be breathing.

## Exercises for Chapter 8

The breath exercises are grouped into the following headings: "Activating the Breath," "Inhaling," "Suspending the Breath," "Exhaling," "Recovering the Breath," "The Full Cycle of Breathing," and "Breathing in Songs."

## Activating the Breath

The following exercises activate your student's breath by drawing on familiar actions from everyday life. Do these exercises in a playful manner. Guide your student through the imaginative, creative parts of the exercises to prevent her from trying too hard to do something "right." Encourage her with lighthearted, supportive demonstrations. Most of the time, your student will begin to breathe deeply and use a diaphragmatic-abdominal connection just by performing the exercises. You can simply point out to her that she's already breathing well. Breathing does not have to be a mysterious process.

Use these exercises to stimulate your student's breathing responses, to energize her body, and to prepare her to learn about breathing for singing.

### To Bark Like a Dog

*This exercise activates the breath at the center of the body. Ask your student to playfully bark like a dog. Her abdominal muscles contract for the bark, providing a sensation that's easy and familiar.*

### PROCEDURE

Have your student put one hand on the front of her body at her waist and the other hand on her side. Encourage her to bark like a large German shepherd. She'll feel the movements of her diaphragm and abdominals at the center of her body. You can bark too—don't be shy. Enjoy the sounds you make together.

#### Variation

For the sake of fun and a bit of creativity, change the quality of the barks by giving these suggestions. Each will change the action of the abdominals.

- *Bark like a German shepherd with a deep bark—first softly, then loudly.*
- *Bark like a Pekingese with a sharp, high bark.*
- *Bark like a feisty terrier wagging its tail.*

## To Pant Like a Dog

*In this exercise, your student pants like a dog to become aware of and develop flexibility in her diaphragm. Over time, the exercise releases tightness in the diaphragm and abdominals so that, when she's singing, your student can find a full, deep inhalation.*

### PROCEDURE

Have your student place her hand on the front of her body at the waist, and ask her to pant like a dog.

A student may have trouble with the in-and-out movements near her waist, particularly if her diaphragm is tense or if she's concerned about her appearance and wants to keep her stomach flat. If so, try starting slowly, with a gentle inhalation and exhalation, stimulating some small movements at the waist. Then gradually increase the speed.

You can elaborate with verbal instructions such as these:

*Let your tongue hang out over your lower lip, and pant like a dog on a warm summer day. You have been running, and it's really hot. Feel the in-and-out movements at the center of your body.*

After a few seconds, she should be able to feel smooth, rhythmic, in-and-out movements at her waist. You can offer this exercise over many lessons, so your student can continue to develop a freely moving diaphragm.

If panting causes your student's mouth to get uncomfortably dry, have her pant though her nose.

Stay playful. If your student gets frustrated, move to another exercise.

Variation

Have your student pant for a longer time. Ask her to notice how long she can pant before getting stiff, getting tired, or losing a steady rhythm. Can she do it for just a few seconds, or can she do it longer? When the movements no longer feel flexible and easy, have her stop. If she pants too long, she may get lightheaded from too much oxygen.

## To Use Stop-Plosive Consonants

*Stop-plosive consonants ([k], [p], and [t]) are composed of three parts: a "stop" of the air, a buildup of pressure, and an explosion of air.*

*In this exercise, familiar stop-plosive consonants help your student discover the movements of her abdomen and activate the breath energy at the center of her body.*

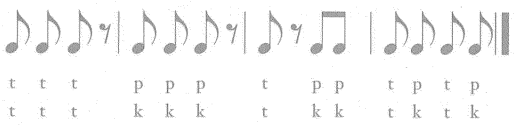
❄ *Because this is a discovery exercise, it uses more-energetic muscular action than normal singing.*

PROCEDURE

1. Ask your student to vigorously whisper the consonants below using simple rhythmic patterns. Have her whisper the unvoiced conso-

nants [p], [t], and [k]. Guide your student to pronounce each consonant clearly by using her abdominal muscles; it will take a bit of strength.

Music Example 1. Medium tempo




2. Ask her to repeat the rhythmic patterns, speaking instead of whispering. After a few repetitions, your student should be able to connect the breath movements at the center of her body with the strong articulation of the consonants.

   Be sure she keeps her chest high and produces energized consonants by using her abdominal muscles at the front of her waist. She should be able to feel muscular contractions all the way down to the pubic area.

   ❋ *During this exercise, your student should feel a precise stop for the consonants, but she must also be careful not to tighten her throat, neck, or articulators during the stop. Be sure that she feels the stop and the explosion of air at her lips for [p], at the tip of her tongue for [t], and at the back of her tongue for [k].*

## To Sip in Air Vigorously

*By combining a familiar action (sipping through a straw) with an imaginary one (sipping in air), this exercise helps your student stimulate intense breathing movements at the center of her body. The exercise helps your student become aware of just how powerful the inhalation and exhalation muscles are—and how she can exert that power*

*without tensing unrelated parts of her body such as her shoulders or neck. The movements are too exaggerated for singing, but they help her energize and activate her breath as well as separate the vigorous action of those muscles while keeping the others relaxed.*

### PROCEDURE

As your student performs the following steps, first have her imagine she is trying to drink a very thick malted milk shake through a straw and it requires a lot of suction. Then have her use that same amount of suction to sip air vigorously through the imaginary straw. The strong suction will cause the air to go deep into her body. Be sure she does not lift her shoulders or breathe high in her chest. She should be able to feel a strong muscular action deep within her body.

1. Inhale and relax. Have your student inhale quickly and vigorously through pursed lips, so that she feels the air move deep into her body and feels the center of her body expand in all directions. She should suspend her breath momentarily, then completely relax.
2. Inhale, exhale, and relax. Have her inhale quickly and vigorously, breathing in air through pursed lips and immediately exhaling through pursed lips. As she exhales, ask her to keep her rib cage open. She should feel the strong contraction for her exhalation in her abdomen. Then have her relax completely.
3. Inhale, exhale, inhale, extend the suspension phase, and relax. Ask her to inhale vigorously, exhale, then inhale through pursed lips—but at the end of the second inhalation, have her suspend her open torso, neither inhaling nor exhaling. Have her notice how relaxed and easy she can feel in her throat, shoulders, jaw, tongue, and lips, even while her torso remains expanded. Then have her relax.

   After your student has completed the vigorous breathing, ask her to inhale slowly and quietly through her nose, as if smelling a pleasant fragrance. She should breathe in easily but with the same torso expansion she used when she breathed vigorously. The vigorous movements should help her energize her body and heighten her

awareness of its sensations of inhaling and exhaling deeply while the rest of her body remains relaxed and free to move.

### To Punch with the Arms

*This robust exercise calls for punching arm movements to activate the movements of the rib cage. Your student swings her arms back and forth to help pull the rib cage open and shut, while vigorously sucking the air in and pushing it out, like air moving in a bellows.*

#### PROCEDURE

Have your student close her fists and punch with both of her arms simultaneously, in a movement like a boxer's upper cut. Then ask her to pull both fists back simultaneously and inhale vigorously, then throw her fists forward and exhale vigorously. Have her notice how her rib cage moves in and out with her breathing. Repeat seven to ten times.

### To Stimulate Fuller Breathing Using the Three-Way Stretch

*This exercise uses three body positions—a back stretch, a chest stretch, and a rib stretch—to stimulate fuller breathing. Your student breathes differently in each position, stretching tensed muscles in her back, chest, and rib cage. It's an important discovery exercise, a quick and dependable breath energizer, and a good daily exercise for "waking up" her breathing.*

#### PROCEDURE

For each of the following three stretches, direct your student to inhale through her nose deeply and slowly. She should exhale vigorously through pursed lips, as if blowing out a candle. Have her repeat each inhalation and exhalation two or more times.

1. Back stretch. Have your student bend her knees slightly and lean over in a rag-doll position. Then ask her to inhale slowly and feel her back expand, then exhale vigorously.
2. Chest stretch. With your student standing upright, have her clasp her hands behind her back and stretch them upward. Then ask her to inhale and feel her upper chest stretch and expand, then exhale vigorously.
3. Rib stretch. With your student standing upright, ask her to lift her straightened arms above her head. As she inhales, have your student reach with one hand as high as she can, like reaching to pick some grapes on a high vine. Have her reach with the other hand on the next inhalation, and alternate thereafter. She should feel her ribs stretch upwards and "out of her waist." As she exhales, have her lower her arms to a resting position.

Right after she completes the three-way stretch, ask her to stand erect, inhale deeply, and feel expansion all around the center of her body. (You can find helpful imagery for inhaling deeply in the exercise "To Imagine 100 Noses," on page 69.)

## Inhaling

When you teach inhalation for singing, you want to impart a simple foundation: in a poised posture and with a minimum set of muscles—particularly the diaphragm and intercostal muscles—you want your student to move the floor of her chest cavity downward and the bony framework of her chest outward to the sides. These movements enlarge the chest cavity, causing the air pressure within the cavity to decrease and causing air to flow in. (See the heading "Airflow in and out of the Lungs," in v. 1, ch. 4.)

Whereas these principles are fairly simple, your student may find many ways to inhale that are far less efficient. You'll notice some students huffing and puffing, gasping air in through the mouth, or sucking air in through the nose—actions that tense the muscles and interfere with pre-

paring a smooth exhalation. Sometimes you'll see a student stiffen her tongue—it will roll back, bunch up, or dip as she inhales—or you'll see her lift her upper chest or raise her shoulders.

In a beginning singer, you need to look for these and other conditions that interfere with inhalation:

- She may have poor posture, including rounded, slumping shoulders; a collapsed chest; a tense, rigid middle back; locked knees; or rigid hips.
- She may breathe shallowly, raising her shoulders to take in air.
- When she inhales, she may gasp, throwing her head back, stretching her throat, inhaling too high in her chest, and tensing the whole system.
- When she inhales, she may stare vacantly and mentally disconnect from what should be an active and engaged body.
- She may not open her rib cage or expand her back when she inhales.
- You may notice various problems in her abdomen. She may keep it tight when she inhales, or pull it in and up. (The abdomen can move in complex ways: the upper part can relax to a greater degree than the lower part, or the entire abdomen can relax at once.) Or you might see her lower abdomen release and flop outward like a potbelly, which will cause her to close her rib cage and drop her chest.
- She may "stuff" the air, expending too much effort for too big an inhalation.

❋ *A singer's abdominal muscles must relax so that her diaphragm can fully descend. But if she relaxes her lower abdominals too much, you see a distended abdomen, sometimes called "jelly belly." You also see her upper chest sink just as she begins to inhale, and her breathing is less efficient. Encourage her to inhale completely, with outward*

*movements of her side ribs, an expansive feeling across her middle back, and an outward movement at the front of her waist.*

The exercises in this section can help you teach easy, deep, full, and complete inhalation. Some of these exercises focus on coordinating the breathing muscles, but most guide students to sensations through their imaginations. This kind of imagery can help students who don't respond well to direct physical instruction or who stiffen their breathing by trying too hard to be "correct."

Be creative in working with images and sensations. Encourage students to experiment with visual and kinesthetic imagery by telling them the following:

- *Imagine that your body is a long, deep tube. Let the air fill you up from the bottom of the tube.*
- *Imagine that your body is a balloon. Feel it expand during inhalation.*
- *Breathe a warm color from the earth up through your feet, legs, pelvis, and torso, then out through the top of your head.*
- *Breathe warmth or colors into different parts of your body.*
- *Visualize a pleasant scene from your childhood. Soak in the air through your skin as you inhale.*

Some singers say they feel the air flutter behind their noses or eyes when they inhale. Some comment about the coolness of the inhaled air moving across the hard or soft palate. Offer these images and sensations, and any others you pick up in your studio. Any image is beneficial when it promotes the response you want from your student.

❋ *In these exercises, be sure your student does not overbreathe. Her lungs can become too stuffed with air, and*

*their overstretched muscles can become too tense, no longer supple enough to control the subsequent exhale.*

## To Touch the Body During Inhalation

*Your student can become more aware of how her body moves when she breathes by placing her hands on her front waistline, the sides of her ribs, and her back. Help her use her own touch to encourage easy, expansive movements of her body during inhalation.*

*Be sure your student stands with good posture when beginning this exercise.*

### PROCEDURE

Have your student touch her body in the following ways to notice how her body moves when she inhales.

1. Ask your student to place the palm of her hand on the front of her body, spreading her fingers to touch slightly below and above her waistline. Have her inhale and feel the movement of her abdomen. It should move in an outward direction, not inward.
2. Have her keep one hand on her waist and place the other on her upper chest. Ask her to inhale and notice the movements. Her abdomen should move slightly outward, but her chest should remain relatively still and should not lift.
3. Ask her to keep one hand on her upper chest, place the other hand on the side of her ribs, then inhale and notice the movements. The chest should remain still, but her ribs should move outward to the sides.
4. Have her put both hands on the sides of her ribs so that she can feel her ribs and back. Direct her attention to the movements of her ribs and back as she inhales.

In a good inhalation for singing, the center of the body should expand in all directions: forward, sideways, and across the back.

## To Inhale Instinctively

*This exercise helps your student consciously experience the instinctive need for air, which triggers a full inhalation that's desirable for singing. Ask your student to exhale completely and wait. Then have her release the tension from the exhalation—air will flow in automatically.*

- *When her body needs more oxygen, her phrenic nerve will signal her diaphragm and other inhalation muscles to bring air into her body—all bypassing conscious effort—so that a natural, full, and easy inhalation fills her body. (See the heading "Airflow in and out of the Lungs," in v. 1, ch. 4.)*

*When your student begins to inhale instinctively and discovers a new, easy breath, she may think she isn't doing enough. If she's accustomed to trying hard for big inhalations, this instinctive inhalation will seem too simple. Without the "stuffed" feeling that comes from having too much air and a stretched, tense body, she may think she doesn't have enough air.*

*Have her continue this work, and she'll soon become familiar with this new, easier breathing and find out how it supports good singing. She'll discover how pleasant it is to simply let the air flow into her body and avoid gasping, heaving her chest, or stuffing herself with air.*

### PROCEDURE

Option 1

Relaxing to inhale. Explain that this exercise is a way of "relaxing to inhale," or releasing muscles to "let the air in."[1] Then, using language

that suggests ease, instruct your student to exhale, relax, and inhale according to the following steps.

Your student might notice that at the beginning of a performance she has trouble completing long phrases that were easy to do in the practice room. When she's nervous, her body uses more oxygen. When the lungs need oxygen, an instinct causes the body to inhale more quickly than expected.

1. Blow out air. Have your student blow out her air completely. Be sure she uses her abdominal muscles to blow out the air. During the exhalation, she will feel tension at the center of her body but not in other places in her body. She must be sure that her shoulders, throat, and neck are relaxed and that she isn't pulling down or collapsing her chest. If her chest or neck feels tight, have her stop and start again.
2. Pause. Have your student halt her breathing. Have her pause for one or two seconds until she feels the instinct to inhale.
3. Let air flow in. Have your student let the air flow in. At the end of the pause, when your student feels the instinct to inhale, tell her to release the tension at the center of her body. When she releases this tension, she should feel her body expand and open, and the air should flow inward automatically, deep into her body. She should not feel that she is making any effort to take in the air; the air should seem to come in on its own.

Option 2 Adding movement. In this variation, ask your student to coordinate her breathing with movements of her body and arms. Have her exhale as she leans over and drops her arms to the floor. While she's leaning over, have her pause until she feels the instinct to inhale, and then have her let the air in as she stands up and swings her arms above her head. Her arms should swing freely up and down.

Repeat these movements several times. Each time she stands and swings her arms up, the expansive upward movement should stimulate a large instinctive inhalation. Help her coordinate the rhythm of her breathing to the swinging movement of her arms.

Option 3 Adding sound and gestures. Have your student extend one arm and index finger to point to a spot on the wall in front of her. As she points, have her say a long "psssssssss," starting the sound with a small

abdominal push. Direct her to exhale all of her air and then pause. Then, as she brings her hand up to her ear, ask her to let the air in.

Repeat this variation several times, and guide the rhythm of your student's breath by doing the sound and movements with her. The accompanying arm movement can help some students coordinate the exhalation-inhalation rhythm.

Singing a song. Use the "let-in-air" approach in a song. At the end of each phrase, stop the accompaniment. Have your student release the tension around the middle of her body, let the air flow in easily, and then begin the next phrase. (See the exercise "To Release into The Next Inhalation," on page 86.)

Option 4

## To Relax Deep Muscles Through Breathing

*When people breathe deeply, they relax muscles located low in the torso, between the two hip bones. Your student learns to visualize these muscles relaxing to let air flow deeply into her body.*

### PROCEDURE

1. Have your student sit on a chair with a hard surface and wiggle around until she can feel the bones she sits on. Ask her to visualize the muscles between these two hip bones. Have her feel these muscles relaxing as she inhales and feels air move into the low part of her body.
2. After she takes a few breaths, ask your student to imagine that as she inhales, her hips widen from side to side.

## To Smell a Rose

*When people smell a pleasant fragrance, they tend to breathe deeply without unnecessary tension. In this exercise, your student taps into a*

*familiar experience to learn a new one for singing. It's particularly helpful to a beginning student who breathes too little, gasps and sucks, or overstretches her throat when she inhales. Later, when singing songs, your student can induce a deep inhalation by remembering this image of inhaling a pleasant fragrance.*

PROCEDURE

Ask your student to imagine smelling a rose and notice her body's response. As she repeats the process, guide her to feel the sensation of a deep and gentle inhalation. Be sure that her jaw and throat relax, that her upper chest remains still, and that the expansion occurs around the center of her body as she inhales. To enrich her experience, try using this imagery:

> *Now smell a large, purple rose on a hot summer day.... Now smell a white rose on a soft spring day.... Now it's raining at sunset, and a small red rose is right under your nose....*

Continue the exercise by choosing another subject with a pleasant fragrance that your student would savor—for example, perfume, warm bread on a winter day, the scent of her favorite place from childhood, a cake baking, a sea breeze, or a pine forest.

## To Take a Surprise Breath

*This exercise uses the natural reaction of surprise to help your student discover a deep, full inhalation. Because it demonstrates how quickly air can flood the body, the "surprise breath" is especially helpful to students who are too careful or who inhale with too much effort.*

PROCEDURE

Ask your student to pretend that a surprising, sharp sound has just occurred behind her. Guide her imagination:

*You are startled. Turn and breathe in quickly, and feel the expansion all around the center of your body, in front, on your sides, across your back. Notice how quickly you were able to inhale.*

When your student inhales, be sure she doesn't raise her upper chest and shoulders but expands deep in her body around her waist.

❋ *A singer should be capable of inhaling slowly as well as quickly, although in songs, inhaling is usually quick.*

## To Imagine 100 Noses

*Here's a playful image that can help a singer inhale with good expansion at her front, sides, and back.*

PROCEDURE

Ask your student to imagine 100 noses positioned like a belt around her waist. Ask her to breathe in through every nose simultaneously and feel the full, complete, deep inhalation.

❋ *This inhalation works well as a warm-up, particularly when used immediately after the exercise "To Stimulate Fuller Breathing Using the Three-Way Stretch," on page 60.*

## To Breathe with a Double-Pronged Inhalation

*Many beginning teachers and students wonder whether they should inhale through the mouth, the nose, or both. When singing, most singers inhale through the mouth because it's faster, but all singers need to be able to breathe through the nose, the mouth, or both simultaneously—whatever is useful for the song. Keep in mind that the inhalation sets up*

*the relaxed or tensed condition of the throat. This affects the exhalation and, therefore, the phonation. In this exercise, your student learns to achieve a soft throat by breathing in through the nose and mouth simultaneously—a double-pronged inhale.*

PROCEDURE

Have your student separate her lips slightly. Then ask her to breathe in through her nose and mouth simultaneously. Draw her attention to the sensation of softness in her throat. Ask her to sing, maintaining that same sensation of softness.

❋ *This is just one example of using the breath to set up some other aspect of singing—a soft throat for phonation in this case. (See "To Combine Breathing Techniques with Other Aspects of Singing," on page 103, for more examples of how to use the breath to help other parts of singing.)*

## To Work with Different Ways of Inhaling

*Have your student try different ways of inhaling to discover contrasting responses and to become more sensitive to the movements of her body. Have her notice the movements of her body and the effect they have on her inhalations.*

PROCEDURE

Ask your student to explore contrasts with the following suggestions:

- Have her inhale with only her diaphragm and no rib movement, moving her body only at the front of her waist.
- Have her inhale moving only her ribs out to the sides and trying not to move her diaphragm or abdomen. She may not be able to do this and she may discover that, if she tries to move only her ribs out-

ward, her diaphragm and abdomen get sucked inward and upward.

- Ask her to lift her shoulders and upper chest as she inhales.
- Have her notice only the expansion of her back as she inhales.
- Ask her to lock her knees and notice what happens to her back expansion as she inhales.
- Ask her to move her ribs first and then her diaphragm as she inhales. Then have her move her diaphragm first and then her ribs.

Use these contrasts to engage her curiosity about the many ways her body can move as she breathes and how each separated movement limits the completeness of the inhalation.

## To Inhale an Emotion

*By asking your student to "inhale an emotion," you help her realize that the quality of her inhalation—whether it's fast or slow, silent or as audible as a grief-stricken gasp—has the ability to reflect the emotional quality of the text and music. Her inhalation must stay connected to the emotion of her singing.*

### PROCEDURE

Ask your student to feel an emotion and imagine it spilling out of her, saturating the air around her. Then ask her to inhale that emotion, feeling it go deep inside her. Encourage her to "breathe in the emotion through every pore of her body," to see it as a color or as an abstraction flowing in like smoke, to hear it melt into the air as it goes in—or use other imagery that will help her correlate the experience of inhaling with feeling an emotion.

#### Variation

Ask your student to breathe in the emotion through her back, between her shoulder blades. Some singers find this a powerful feeling.

## Suspending the Breath

After a singer inhales, her body shifts to begin the exhalation to phonate. During this transition, another set of muscles, and another set of processes, are activated. Your student can "suspend" this moment, in which she is neither inhaling nor exhaling.

During the suspension phase of breathing, your student has the opportunity to locate and relax any tensions. She can become more aware of faulty habits by slowing down the cycle of her breathing.

### To Suspend the Breath by Listening

*Your student can discover an easy suspension of breath by pretending to listen intently to discern a sound in the dark. She'll suspend her breath longer than she normally would in singing, giving you a chance to check the state of her body before she begins her exhalation.*

#### PROCEDURE

Guide your student with this imagery:

> *It is a dark night. You are startled by a mysterious sound. Feeling apprehensive, you take in a sharp breath and then get very quiet. Listen! Don't breathe. Be silent so that you can listen.*

Ask your student to notice the pause after the expansion of her torso from her sharp inhalation, and explain that this is a suspension of breath. Have her relax any tension in her chest, neck, or throat as she suspends her breath.

## Exhaling

Your student's eventual control of her vocal tone will depend on how well she manages her exhalation. She can control the speed and force of her exhalation more efficiently by activating her abdominal muscles and maintaining the contraction of her inhalation muscles (her rib muscles and her diaphragm). When she compresses the volume of her chest cavity, air will leave her lungs because of the increase in air pressure. (See the heading "Breath," in v. 1, ch. 4 for a discussion of the physiology of breathing.)

Here are some of the common exhalation problems you might see in a student:

- Her chest drops, or her rib cage collapses when she starts to exhale.
- She uses too much muscular control, trying to push the sound out. Or she uses too little muscular control, losing her ability to manage the exhalation.
- She squeezes the air out with her chest instead of her abdominal muscles.
- Her abdomen is tight and doesn't release for the next inhalation.

Like the exercises for inhalation, the following exhalation exercises focus on direct physical experience as well as imagery. They help your student learn about her exhalation, mostly without sound. The different options in the exercise "To Manage Exhalation for Singing," on page 81, help her learn to combine exhalation with the singing tone.

### To Blow out Candles On a Birthday Cake

*In this exercise, your student uses the imaginary process of blowing out candles on a large birthday cake to discover how to manage a long, strong exhalation from her abdominal muscles. Her rib cage does not*

*collapse, and she may feel a slight outward pressure under her sternum as the air is firmly exhaled through narrowly pursed lips.*

PROCEDURE

Use verbal instructions such as these:

> *Pretend you have a birthday cake with 100 candles. Blow out all the candles, going all around the edge of the cake to blow out every candle. Purse your lips and use a thin, steady stream of air. Feel the controlled energy for the exhalation come from your abdomen.*

If your student collapses her rib cage as she begins to blow out the candles, have her repeat the task, but suggest that she keep her ribs expanded as she begins to blow out the candles. Also remind her to use a thin stream of air through her pursed lips.

### To Blow on Hot Coffee

*In this exercise, your student blows on an imaginary cup of hot coffee to cool it. She keeps her ribs expanded to allow the abdominal muscles to control the force and duration of the exhalation.*

PROCEDURE

Ask your student to pretend she is holding a cup of steaming hot coffee. Have her blow on the coffee to cool it. Direct her attention to what happens with her body as she blows on the coffee: her ribs should not collapse and she should feel control from her abdominal muscles.

### To Blow a Feather

*In this exercise, ask your student to draw upon the childhood experience of blowing a feather. She discovers how delicately she can control the exhalation from her abdominal muscles.*

PROCEDURE

Ask you student to pretend that a feather is lying on a flat surface in front of her. Tell her to blow the feather lightly to guide it gently across the surface. Have her notice how her control of air is easy and natural, governed by the slight firming of her abdominal muscles near and below her waist. Be sure she doesn't collapse her chest as she exhales.

## To Relax by Imagining Being a Lighthouse

*Here your student's exhalation becomes an imaginary rotating lighthouse beam, extending to the horizon. The lighthouse image helps your student become more aware of her exhalation. The head movement assists exhalation—primarily because the movement releases interfering tension in her neck and distracts her from worrying about breathing.*

PROCEDURE

Have your student imagine that she's a lighthouse and her exhalation is the light. Have her rotate her head from one side to the other, purse her lips, and send a precise stream of air out to the horizon as if it were a beam of light.

## To Exhale on Staccato and Sustained Consonants

*In this exercise, your student uses sustained consonants to help control and extend her exhalation. By exhaling in different patterns on the unvoiced consonants [s], [f], and [θ] (th), she learns to feel the action at the center of her body that accompanies good exhalation.*

- *The consonants [s], [f], and [θ] are unvoiced fricatives, produced without vibrating the vocal folds.*

### PROCEDURE

Ask your student to sustain consonants as described below. For [s], she should make a sound like a hiss of air escaping from a small leak in a tire.

Option 1 Staccato sounds. Have your student hiss groups of staccato sounds using [s], according to the following steps. Be sure she uses precise abdominal action while maintaining a calm, high chest. She should control her exhalation from her waist area, which you can call "the breath center." Instruct your student as follows:

1. *Hiss eight staccato [s] sounds without inhaling between them.*
2. *Inhale.*
3. *Hiss eight staccato [s] sounds.*
4. *Inhale.*
5. *Hiss eight staccato [s] sounds.*
6. *Do several more hiss-inhale cycles.*
7. *Exhale the remaining air.*

Option 2 Sustained sounds. Again have her hiss [s] but in sustained hisses, as shown in the steps below. She should continue to feel her abdominals contract at the center of her body. Be sure she keeps her throat and neck relaxed and maintains good chest and shoulder posture. Instruct your student as follows:

1. *Hiss for four slow counts, then inhale.*
2. *Hiss for eight slow counts, then inhale.*
3. *Hiss for twelve slow counts, then inhale.*

Have her repeat the patterns with the unvoiced consonants [f] and [θ] to further manage and extend her exhalation. Be sure she sustains the

consonants without tension in her articulators. Vary the duration and rhythm of the sounds.

## To Extend the Exhalation For Longer Durations

*In this exercise, your student exhales for a short duration, which she then slowly increases to longer durations. She gradually increases her capacity to exhale for longer durations, not by inhaling more air but by using better breath management.*

### PROCEDURE

Have your student exhale a thin stream of air through pursed lips to manage the timing of exhalations of longer durations. During the last two or three counts of each cycle, ask your student to completely blow out her air so that she is stimulated to instinctively inhale for the next cycle.

- *Counting over multiples of seven helps to focus your student's thoughts on the process and to avoid the familiar four- or eight-count patterns.*

1. Inhale over 4 counts, pause 3 counts, exhale 7 counts.
2. Inhale over 4 counts, pause 3 counts, exhale 14 counts.
3. Inhale over 4 counts, pause 3 counts, exhale 21 counts.
4. Inhale over 4 counts, pause 3 counts, exhale 28 counts.
5. Inhale over 4 counts, pause 3 counts, exhale 35 counts.
6. Inhale over 4 counts, pause 3 counts, exhale 42 counts.

## To Make a Ghost Moan

*By making a "ghost moan," your student can find an easy, flowing connection of breath and tone.*

### PROCEDURE

Ask your student to moan or howl like a ghost in a haunted house, sliding her tone on [u] (oo) over a wide pitch range. Tell her to make "waves" of sound.

Be sure she does this exercise playfully so that she feels the connection of her exhalation and the sound.

## To Stand Like a Stork

*Standing on one foot like a stork can stimulate abdominal support of the tone.*

### PROCEDURE

1. Tell your student to stand like a stork. She should put her weight on one foot and bend the other knee, lifting it until her thigh is parallel to the ground. The foot of her bent leg should rest on the thigh of her other leg, the one she is standing on. Be sure she keeps her hips level.
2. Ask her to sing in this position and to notice how the position affects her breathing.

## To Touch the Body While It Is Sighing, Hissing, and Singing

*This exercise demonstrates how the body works in different ways for different tasks—such as sighing, hissing, and singing—and contrasts the strength of the exhalation needed for each task.*

PROCEDURE

Have your student place the palms of her hands on her upper chest and the front of her waist to feel how her body moves when she sighs, hisses, and sings. Ask her to describe the movements, muscle contractions, or pressures she feels under her hands as she inhales and exhales.

- Sighing. Instruct your student to inhale, then sigh out a whispered [a] (ah), as if releasing all her daily tension. Then ask her to describe the movements of her body that she feels under her hands as she inhales and exhales on the sigh.

  Under both hands, she should feel her body move outward as she inhales and feel her body move inward without effort or resistance as she sighs.

- Hissing. Have your student make a vigorous, strong hiss ("pssss"), like the sound of air leaking from a tire. Ask her to describe her bodily movements, muscle contractions, and feelings of air pressure under her hands as she inhales and exhales. Give special attention to what she does with the sides of her ribs at the moment she begins to hiss—you want her to keep them expanded. If she doesn't, ask her to hiss again and this time to not collapse her ribs as she starts the hiss. Have her describe the differences she feels between the hiss and the sigh.

  When she follows these instructions, she will probably feel the muscles at her waist contract and firm and her chest become stationary. She will also feel her chest move slightly outward just as she begins to hiss.

- Singing. Ask your student to sing the vowel [a] (ah) on a sustained pitch in the middle range of her voice, and again have her notice the movements, muscle contractions, and pressures she feels under her hands as she inhales and exhales. Remind her not to collapse her ribs as she starts to sing.

  Your student will probably notice that her body does not feel as solid and strong as when she hissed and not as soft and released

as when she sighed, but that the movements, muscle contractions, and pressures will be somewhere between those extremes. Actually, she will probably feel that her body becomes firm but with little movement or tightness. Her side ribs will not move inward but will remain expanded, and she will feel the engagement of her abdominal muscles. She may notice a slight outward movement at the sternum, more so if the tone is loud than if it is soft.

In addition to noticing how the degree of exhalation strength changes when sighing, hissing, and singing, have your student notice how all the muscles of her torso activate and move as a unit when she begins to make sounds and singing tones.

## To Explore Contrasting Ways of Exhaling

*In this exercise, your student uses a stochastic process to contrast different ways of exhaling. She exhales with different movements of her body (some of which have already been presented in preceding exercises) and notices the effect they have on her control of exhalation.*

*You want your student to explore how little or how much muscular effort is needed to control exhaling. Help her discover that the best management of exhalation comes from minimal muscular effort and by the whole torso being involved as a unit, from pelvis to sternum, as opposed to one part or another dominating the work of exhalation.*

### PROCEDURE

Ask your student to contrast different ways of exhaling. In each of these examples, have her exhale through pursed lips, using a very narrow stream of air as if blowing out a candle. Ask her to notice the duration and control of her exhalations.

Collapse the ribs. Ask her to place her hands on her sides to feel the expansion of her ribs at the end of the inhalation and to feel a slight inward movement as she begins to exhale. Option 1

Keep the ribs open. Ask her to place her hands on her sides to feel the expansion of her ribs at the end of the inhalation. This time have her keep her ribs open as she begins to exhale. Option 2

Exhale by pulling in at the waist. Have your student place her hands firmly on her waist, on the area between the inverted "v" of her ribs. Have her begin exhaling by pulling her abdomen inward at the waist. Option 3

Exhale by pushing outward at the waist. Ask your student to place her hands firmly on her waist, on the area between the inverted "v" of her ribs. As she exhales, have her contract the muscles under her hands so that her upper abdomen pushes with an outward pressure. Option 4

Exhale by using minimal torso movement. Ask your student to keep her ribs expanded as she starts to exhale and to explore how little movement she can use at the waist to exhale. Be sure that she uses a tiny opening between her lips and lets only a small stream of air exit for exhaling. Option 5

## To Manage Exhalation for Singing

*This exercise helps your student find good breath support for the singing tone by involving the whole torso. It begins with a simple everyday activity of blowing out candles and then takes the student through seven progressive steps that point out distinctions in managing the exhalation.*

*Singers manage their exhalations in various ways. One singer may focus on muscular contractions deep in her body, as low as the pelvic area. Another may feel air pressure higher in her chest. Yet another may*

*feel that her entire torso is involved in the exhalation and that no one part of her body is more prominent than another. In general, you want to teach your student how to exhale so that she does not use too little or too much air pressure for the pitch, dynamics, and tone quality of her singing.*

*More exercises for breath control are in ch. 9, "Teaching and learning flexible phonation," in v. 2, in which the focus is on breath support during the onset, sustentation, and release of the tone.*

### PROCEDURE

In this exercise, have your student focus on her exhalation and on how she can use her entire torso as a unit. Be sure she inhales deeply and completely during each option of the exercise. The first options repeat breath images presented earlier in this chapter to help connect your student's breath with her singing tone.

Option 1 Blow out the candles on a large cake. Have your student touch the front of her body just above her waist to feel the movements of her upper abdomen as she exhales. Ask her to blow out the candles on a large, imaginary birthday cake. Have her describe what she feels under her hand when she blows out the candles.

She should feel her abdominal muscles contract and become firm. She should also notice that her upper abdomen does not pull inward but presses slightly outward as she blows out the candles.

Option 2 Keep the rib cage open. Have your student touch the sides of her ribs, and ask her to again blow out the imaginary candles. This time, have her focus on her ribs at the moment she begins the exhalation. You want her to become aware of what she does with the sides of her ribs as she starts her exhalation.

When she begins her exhalation, her ribs should not collapse or move inward. The expanded rib cage offers a firm anchor for the abdominal muscles to pull against as they contract. As your student continues to

exhale, her ribs move slowly inward. She must never try to hold her rib cage open in a rigid way but should only keep her ribs from moving in as she starts a sound.

Option 3

Feel the internal air pressure under the sternum. You want to focus your student's attention on the air pressure in her chest. So, for a third time, ask your student to blow out the imaginary candles and to notice what happens in her chest, particularly under her sternum, when she keeps her ribs expanded as she begins to blow out the candles.

You may see a slight outward movement at the front of her chest when your student starts to exhale, but she may be totally unaware of it. When your student keeps her rib cage expanded and becomes aware of this slight outward movement, she may comment that her body feels stabilized and that she can feel the air pressure inside her lungs pushing outward against her rib cage, particularly at the lower part of her sternum. Be sure she realizes that this should be a gentle pressure, not a strong one.

Explain that this feeling of slight outward pressure is called "appoggio" by Italian singers. The word "appoggiare" means "to lean" and it is used to describe breath support for singing. When a singer feels as if the air inside her body is leaning or pressing against her rib cage, she will notice a greater command over the duration and control of her exhalation. Her abdominal muscles will be engaged for the control of the exhalation.

Option 4

Speak loudly. Have your student place one hand on the side of her ribs and one hand on her upper abdomen (just above her front waist, between the inverted "v" of her ribs), and say a loud resonant "Ho" with a sliding, speechlike inflection. Ask her to feel the movements of her body and to notice the connection of her exhalation and her sound.

As she calls out, your student should feel her abdominal muscles become firm, along with a "leaning feeling" under her sternum. She should become aware of the connection of those movements to her sound.

Option 5 Speak softly. The feelings from loud sounds in the abdomen and ribs can also be experienced from soft sounds. Have your student touch her body between the base of her sternum and her waist. Then ask her to speak repeated vowel sounds—such as [hi hi hi] (hee hee hee)—in a detached, staccato fashion, and help her feel the connection between breath and tone. (To get the most from this step of the exercise, be sure she uses a clear, resonant [i] vowel sound, not an airy or muffled sound.) Ask her to describe the muscle contractions and movements at the base of her sternum as she says [hi].

When your student speaks the repeated sounds and does not collapse her rib cage, her abdominal muscles will contract automatically for the exhalation. The open rib cage provides an important anchor when the abdominal muscles contract.

Option 6 Speak a phrase. Have your student speak a phrase from a song, using a slight contraction of her abdominal muscles and a feeling of slight outward air pressure at the base of her sternum. Have her listen to the tone quality of her speech. Encourage a clear, unpressured, focused tone quality. Ask your student to notice the connection of the breath to the words.

When she begins to speak, your student should notice the same outward air pressure at the base of her sternum and the same muscle contractions in her abdomen.

Option 7 Sing a phrase. Have her sing the same phrase using the same abdominal muscle contractions and outward air pressure at the base of her sternum for the same connection of the breath and words as when she spoke. Have her transfer the clear, unpressured, focused tone quality she used in speaking into her singing. Ask her to tell you what she feels with her breath.

Students often say they feel as if they are doing less when they exhale in this manner. They comment that their breathing and singing is easy, they seem to have more sound, and their entire body seems to function as a unit. They notice that their breath feels stable, solid, and comfortable.

## Recovering the Breath

After your student exhales, her body switches gears and activates the process of inhalation. Your student can suspend this transition from exhalation to inhalation so that she is neither exhaling nor inhaling, or she can recover her breath immediately without pause.

In this phase, your student may develop several problems. She may not make a clean transition from the exhalation to the inhalation; for example, she may not release her abdominal muscles. After she sings, she may reach the end of her exhalation with her posture off-balance. Or she may exhale past her point of rest and squeeze out too much air, creating too much tension. Any of these problems interferes with a smooth transition to the inhalation.

### To Pause During the Recovery Phase of Breathing

*In this exercise, your student learns to manage the recovery phase by pausing at the end of the exhalation. During the pause, she suspends her breath and puts her attention on how she crosses over from exhaling to inhaling.*

*Have her notice her abdominal muscles during the pause and notice how she can simply release the tension in them to recover her breath. Be sure that your student keeps her upper chest, shoulders, neck, throat, and jaw free of tension as she pauses.*

#### PROCEDURE

During the recovery phase in these exercises, have your student pay close attention to her body, searching for and releasing any undue tension. She should be able to pause easily, without tension.

Some students will find pausing in the recovery phase of breathing difficult. If so, they probably have a lot of tension in the way they breathe,

and you'll need to spend time helping them "release into their breathing."

Option 1 Pause during the recovery phase. Have your student breathe in a rhythmic pattern, pausing during the recovery phase of her breathing cycle.

1. Inhale-pause. Have your student inhale over four counts and, at the top of the inhalation, suspend her breath for four counts.
2. Exhale-pause. Have your student exhale her air gently through pursed lips, as if she were guiding a slender shaft of air to blow out a single candle, over eight counts. Ask her to pause after the exhalation and stand quietly in the recovery phase without inhaling for four counts.
3. Inhale-pause. Have your student simply release her abdominal tension to inhale and then continue the cycle of breathing.

Option 2 Extend the exhalation. Ask your student to repeat the exercise, gradually extending the counts for the exhalation, following the pattern below:

1. Inhale 4, suspend 4, exhale 8, pause 4. Repeat several times.
2. Inhale 4, suspend 4, exhale 16, pause 4. Repeat several times.
3. Inhale 4, suspend 4, exhale 24, pause 4. Repeat several times.

Use short counts until your student is ready for longer counts.

## To Release into The Next Inhalation

*In the recovery phase, your student typically finishes a musical phrase and crosses over immediately into the inhalation without pause.*

*In this exercise, your student learns to practice this immediate recovery of breath until it is easy and clean. She learns to activate only the*

*required muscles for inhalation by letting the air "fall" in. (Also see the option for breathing between detached notes during phonation in the exercise "To Sustain the Tone," on page 148.)*

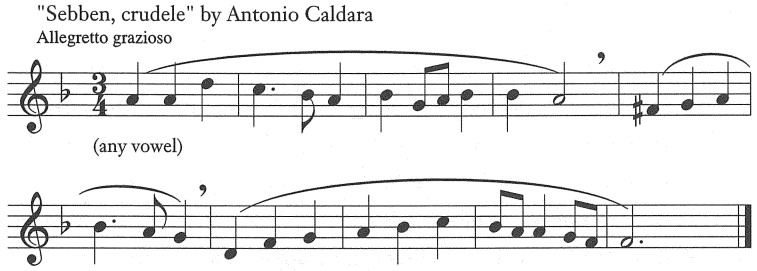
*At the end of a phrase, she should simply stop singing and stop exhaling while keeping her throat, tongue, lips, and shoulders in the same position, and then let her inhalation begin. She should focus on discovering the minimal number of muscles involved in the recovery phase—those that release from the exhalation and those that begin the inhalation.*

## PROCEDURE

Option 1

Let the air fall back in. Have your student sing the phrases of this melody. She should leave her throat open after the last note of a phrase, release the muscles around the center of her body, and let the air fall back in for the inhalation.

Music Example 2.




Option 2

Practice in other songs. Have your student repeat this process in any song that has back-to-back phrases—those without pauses between them. She should practice this exercise regularly until she learns to make a clean recovery.

## The Full Cycle of Breathing

Your student needs to become conscious of the full cycle of breathing, with its phases of inhalation, suspension, exhalation, and recovery. This awareness will give your student a map of the cycle she goes through every time she sings.

### To Practice the Sniff–Puff Breath

*In this exercise, your student stretches the limits of her breathing capacity. She improves her breath control by inhaling and exhaling as completely as possible and by extending the suspension and recovery phases while keeping her upper chest, throat, and jaw relaxed. This exercise is an excellent warm-up because it teaches advanced management of breath.*

#### PROCEDURE

Have your student inhale and exhale completely to extend her capacity for breaths of long duration.

1. Sniff then pause. Ask your student to get comfortable, either sitting or standing. Have her sniff three short breaths of air through her nose, pause for several seconds, then sniff three more short breaths and pause. Have her repeat the sniffs until her lungs are very full of air but not stuffed. While she is pausing, ask her to release her jaw, tongue, throat, neck, shoulders, and upper chest. If these parts of her body become tense, stop and start again, and reduce the number of sniffs.
2. Exhale then pause. Have your student exhale and pause briefly. Her body should be in a state of rest, in which both the inhalation muscles and the exhalation muscles are relaxed.

    ❋ *Exhaling without immediately inhaling might frighten some students, so proceed gently to the next steps.*

3. Puff out then pause. From the point of rest—without inhaling—ask your student to puff out three short bursts of air through pursed lips, then pause, then puff out three more bursts of air and pause. This is a forced exhalation, beyond the point of rest.

   Your student should control the puffs from her abdominal muscles while she keeps her chest high and relaxed. If at any time her throat or chest becomes tense, she should stop and start again. The purpose of this exercise is for her to learn to exhale as much air as possible while still feeling comfortable. When she does not get to the point of discomfort, this exercise will have a strong effect on her ability to exhale fully.

4. Inhale then pause. After a few moments, ask your student to release the tension in her abdominal muscles and let the air fall in until she feels filled up. This will be an instinctive inhalation. (See the exercise "To Inhale Instinctively," on page 65.)

   At the top of the inhalation, ask her to pause, extending the suspension phase for a few seconds. Again, while her breath is suspended, ask her to release any tensions in her jaw, throat, neck, and upper chest.

5. Sniff then pause. After letting the air in, without exhaling any air at all, your student should again sniff three breaths of air. Have her pause and check her body to release any interfering tensions.

6. Exhale to rest. Have her exhale and continue the cycle of sniff-pause-puff-pause.

Have your student repeat the cycle of sniffing and puffing six to eight times. She will notice that each time she completes the full cycle of this exercise, her inhalations become deeper and larger.

### To Practice Rhythmic Breathing

*Set up various rhythmic patterns that include all four phases of breathing: inhalation, suspension, exhalation, and recovery. Encourage*

*your student to do rhythmic breathing frequently to strengthen her breath capacity and control.*

PROCEDURE

1. Choose the counts. Choose specific counts for each phase of breathing. For example: inhale 4 counts, suspend 2 counts, exhale 8 counts, recover 2 counts.
2. Change the counts. Change the durations of the various counts until your student has finer and finer breath management skills. For example: inhale 2, suspend 1, exhale 12, recover 1.
3. Breathe during activity. Do rhythmic breathing while doing a physical activity, such as walking.

## To Expand the Breath With Body Positions

*You can ask your student to use her body to stretch different parts of her breathing. These exercises are not only useful to get her breath going, but they are relaxing as well.*

PROCEDURE

Ask your student to move her body into various positions with a full cycle of breathing for greater flexibility in her breath capacity and control.

Option 1 Leaning tree. Ask your student to raise her right arm over her head and lean her body to the left, stretching her right side, like a tree blown by the wind, while she completes two or three full cycles of breathing. Then ask her to lean to the other side and repeat. Ask her to feel the expansion along her sides.

Option 2 Rag doll. Have your student hang forward like a rag doll, flopping her arms over her head toward the floor and completely releasing her

head, neck, shoulders, and back. While she's in this position, ask her to breathe through two or three cycles, all the while keeping her whole upper torso relaxed. Ask her to notice where she feels her torso expand.

Option 3

Rabbit looking at its tummy. Ask your student to kneel down, sit on her feet, pull her elbows to her knees, and tuck her head down, like a rabbit looking at its tummy. Ask her, even though she is bunched up, to get as comfortable as possible, loosening her jaw, tongue, throat, and shoulders. While she's in this position, ask her to breathe through two or three cycles. Ask her to notice the expansion in her back.

Option 4

Flounder. Ask your student to lie flat on her back, spreading her body like a flounder. While relaxed in this position, ask her to breathe through two or three cycles. Ask her to notice the expansion in her lower abdomen and sides.

Option 5

Rocking movements. While in any of the positions above, ask your student to gently rock while breathing through two or three cycles. The rocking motion will keep the breath flexible.

For example, in the leaning tree position, she can rock sideways, as elastic as a tree. While in the rabbit position with her head tucked, she can rock gently forward and backward.

## To Become Familiar With Images of Breathing

*In this exercise, ask your student to go beyond the physiology of breath to become acquainted with her own images of breathing. Once she's aware of these images, she can experiment with changing them. Thinking about her breath in different ways can produce new sensations, which will expand her awareness and lead to more-sophisticated breathing.*

## PROCEDURE

Option 1 Your student's images of breathing. Ask your student this question: *When you think of good breathing, how do you see, hear, and feel it?*

Keep in mind that there is no single correct image for breathing, so welcome any description and encourage your student to notice more and more details about her own images. In a pedagogy seminar, when successful university professors of singing did this exercise, every professor had a different set of images.

Your student responds strongly to her own sensory representations. Her internal sensory life is always more powerful than an intellectual description of breathing.

Option 2 Shared images of breathing. Have your students share their images of breathing. Ask them to try each other's descriptions.

> ❋ *Each of us has our own image of our breathing, and we can all benefit by sharing these images. If you have a student who breathes well, share her image with your other students and ask them to try it out.*

Here are some examples of images:

- When I breathe I see light all around the center of my body, shaped like an inner tube. When I breathe in, it changes. It gets bigger, less dense, and brighter. It grows out as far as I can reach.
- When I breathe in I feel an expansiveness all around my body, even into my legs. I seem to get lighter in weight, like a floating feeling. There is a movement that ripples through my torso; sometimes it starts in one place and sometimes in another.
- I see a pink cloud around my upper chest and head. When I inhale, I get white sparkles in the cloud.
- I see my lungs like two balloons that expand when I breathe in.

- When I think about breathing, I say to myself, "Breathe," usually in an encouraging but firm tone of voice. Sometimes I hear the air moving through my head, but sometimes I hear silence.
- I think of breathing in through my feet, so the air travels up from my feet to my abdomen.
- I feel air travelling down into my legs as I breathe in. Sometimes I can see the air coming in the top of my head and moving all the way down to my legs.
- I only think of the expression of the song. I feel the emotion entering my body through my back between my shoulder blades and my attention goes to the sense of power I get from the emotions.
- I feel my hips widen as I inhale.
- I feel the air enter my body through a small opening at the sternum in the center of my chest.
- I see and feel my bronchial tubes floating in my chest when I breathe.
- When I exhale, I feel as if I am suspended, almost as if I don't use any air at all to make sounds.
- I feel as if I continue to expand as I exhale.
- When I suspend my breath, I feel peaceful and like I'm floating.

## Breathing in Songs

We cannot learn about breathing for singing without singing. Ultimately, students must learn to manage their breath within the needs of the songs they sing. In ch. 9, "Teaching and learning flexible phonation," in v. 2, and ch. 10, "Teaching and learning flexible resonance," in v. 2, we offer a discussion about breathing when integrated with singing and with every aspect of learning technique and musical expression.

In these exercises, the singer begins to look ahead to songs. For every phrase—and even every interlude—a singer has to inhale, suspend,

exhale (phonate), and recover. Whereas this might be obvious, a singer can "choreograph" the song in terms of breath. Instead of breathing without planning, you can help your student rehearse the breathing cycles throughout the song along with the other elements of music and performance.

When you consider how varied each phrase should be throughout a song, just for the sheer communication value, you must anticipate how varied the breathing should be. The following exercises offer ways to implement this dynamic aspect of breathing.

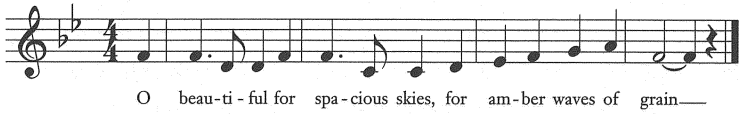
## To Plan Breath For Musical Phrases

*The speed, quality, and duration of a breath always relates to the meaning of the musical phrase. When your student plans how to breathe, she should first look for the musical phrases in the song, then plan her breaths to fit those phrases.*

### PROCEDURE

Choose a song with relatively short phrases, and ask your student to mark where the phrases start and stop. Have her practice singing the song, paying attention to the rhythm and depth of her inhalation, the shape of each phrase, the duration of the exhalation, and the release into the next inhalation.

Music Example 3. Moderato



## To Plan Small Breaths Within a Phrase

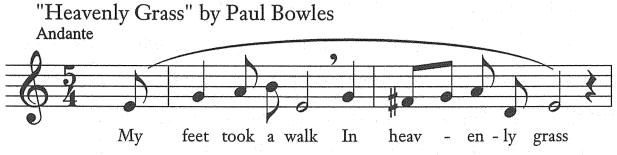
*If a musical phrase is long for your student, she needs to look for possible places where she can take small, unobtrusive breaths that will not interfere with the overall shaping of the phrase. If she focuses on the entire phrase, taking a small replenishing breath midstream need not detract from the music or the words.*

### PROCEDURE

Choose a song with a long phrase. Have your student place a small apostrophe (') above the staff where she would like to replenish her breath within that phrase.

Instruct her to practice renewing her breath at the marks, keeping her rib cage open and replenishing her breath at the center of her body. She should use the same dynamic level before and after the small breath to keep the sense of the phrase continuous.

Music Example 4.




## To Inhale as a Rhythmic Element of a Song

*In this exercise, your student learns to use her inhalation as a rhythmic element of the song. She learns to inhale on the upbeat to her singing, in rhythm with the buildup phrase in the accompaniment. Or she learns to inhale across a long phrase in the accompaniment, immediately before she sings a line that continues the melody from the accompaniment.*

❄ *When your student sings with a spontaneous reaction to a song, her inhalation tends to become rhythmic with the song naturally.*

## PROCEDURE

1. Select a song. Have your student select a song she knows well that has an introduction in the accompaniment before the first phrase of singing. Direct her attention to how she paces her inhalation before the first phrase.

2. Breathe with the timing of the music. Ask your student to complete her inhalation just in time for the entrance to her upcoming phrase in the song. She might begin her inhalation on the upbeat to her phrase, slowly across the measure before her phrase, or in sync with a particular rhythmic motif in the music. Have her find a smooth rhythmic flow to the inhalation and singing entrance and have her mark her starting point in the score for rehearsal. Ask her to breathe to signal the accompanist for her musical entrance.

3. Inhale a long breath. There are moments in songs when you want your student to take a long, slow breath through her nose. Have your student find these places in a song, mark their precise starting points in the score with an apostrophe ('), and practice these long inhalations while still maintaining her natural impulse to express. A long inhalation followed by a breath suspension may give your student time to set up a soft, floating head-voice quality. Or it may help "ground" her concentration, shift points of view in the drama, or change the emotion.

   For example, in "Allerseelen" by Richard Strauss, a long, slow breath can help your student sing with the quality of the sound growing out of nowhere, in an ethereal manner. Ask your student to make the place where she would like to begin her slow inhalation before singing the first phrase.

Music Example 5.




To Manage the Exhalation For Long Phrases

*Your student vocalizes and uses rehearsal techniques and mental imagery to gradually increase her capacity to sing long phrases.*

*These exercises give your student several ways to extend her breath for longer phrases.*

## PROCEDURE

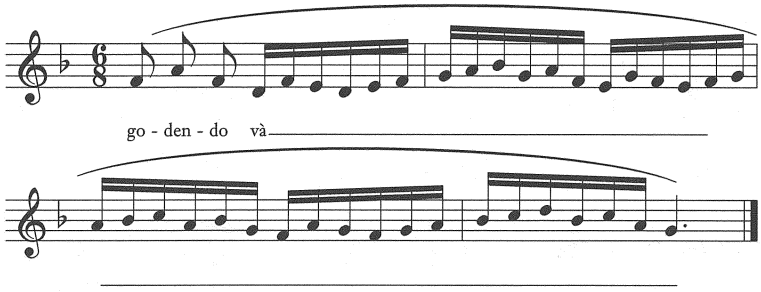
Option 1 Rehearse the phrase from the end. Ask your student to rehearse a long phrase by singing only the last few notes of the phrase. Singing these notes successfully, she programs her muscles for success.

Every time your student sings a phrase, her breathing muscles will remember her success or failure. Have her sing the final notes successfully, and her body will remember how to reproduce them with success.

1. Have her sing this long phrase from "Và godendo," by Handel.

Music Example 6. Allegretto moderato

"Và godendo" from *Serse* by George Fredrick Handel



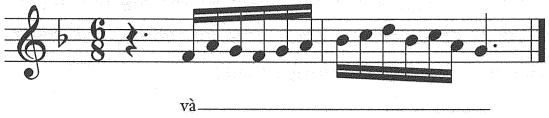

2. Ask her to sing only the last few notes of the phrase.

Music Example 7. Medium tempo




3. When she can do this successfully, add a few more notes.

Music Example 8. Medium tempo

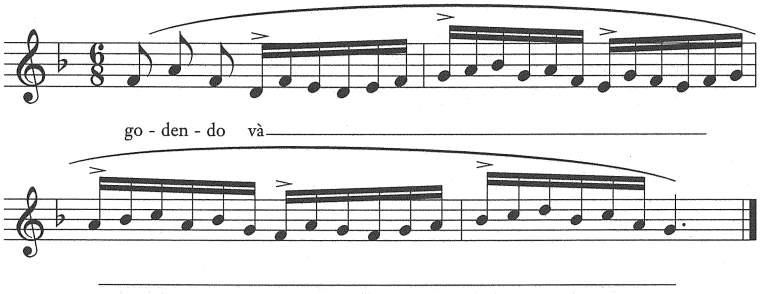



4. Continue this process until the whole phrase has been sung successfully. Your student might do it during the first rehearsal, or she might want to practice over time.

Group the notes. Have your student group long runs into shorter patterns of three or four notes and stress only the first note of each pattern. Her breath will last longer when she does not emphasize every note of a phrase or a run. Option 2

Music Example 9. Medium tempo

"Và godendo" from *Serse* by George Fredrick Handel




Think toward the last note. Ask your student to think of the end of the phrase as she begins to sing. By mentally focusing toward the last note, her breathing will take on a different quality and will last longer. Option 3

Imagine singing past the last note of the phrase. Ask your student to imagine that she continues to sing even after she has released the last note of the phrase. Her imagination will encourage the breath to last longer and remain active until the moment she releases the last note. Option 4

Option 5

a. Practice notes of long duration. Challenge your student to practice singing notes of long duration. Begin by having her sustain a pitch and count its duration. Each day (or week), ask her to extend the duration by one or more counts.

Option 6

Make up vocalises of long arpeggios and runs. Begin with short patterns, and slowly lengthen the duration of the patterns to challenge longer and longer exhalations. Always stay within your student's capacity to reinforce her success. You can even have your student participate in making up the vocalises.

Music Example 10. Medium tempo




Music Example 11. Medium tempo




Music Example 12. Medium tempo



Option 7

Breathe to express the emotion and idea. Your student's breath will last longer when she inhales with the intention of expressing an idea or an emotion, rather than inhaling just to have enough air to make it through the phrase.

Option 8

Avoid stuffing with air. When your student stuffs her body with air, she has more air than she can manage. Her body recoils, losing air more

quickly and reducing her ability to sing the phrase. Have your student inhale deeply but not too much.

Avoid ritarding too soon in the phrase. Often climactic or resolution phrases are long and include ritards. Have your student slow down only toward the end of the phrase.

Option 9

## To Breathe as a Natural Impulse to Express

*This exercise illustrates that your student communicates her emotions and thoughts to her audience by the way she inhales to sing. You must help her recognize whether her breathing supports or weakens the ideas and emotions of the song, whether she inhales to express the song or only to make vocal sounds.*

*You can help your student learn to breathe as part of her natural impulse to express by taking her through these steps.*

### PROCEDURE

1. Help your student acknowledge breathing as part of human expression. Place your student in these imaginary situations and ask her to notice the differences in the quality of her inhalations.
   - A surprised breath. *You are startled by a sharp sound behind you. You inhale in surprise.*
   - A loving breath. *You are imagining the face of a person you love. You inhale and sigh with a deep sense of pleasure.*
   - An excited breath. *You have just learned that you won $100,000 in the lottery. You yelp for joy.*
   - An exhausted breath. *You have finished some difficult work and are physically and emotionally drained. You sigh from exhaustion.*

- A shallow breath. *You have been lying in bed with a fever and chills. Your breathing is shallow, and you have little strength. You inhale to ask your nurse for some water.*
- A frightened breath. *You hear a mysterious sound at night when you are alone in the house. You breathe lightly and hold your breath so that you can listen.*
- A grieving breath. *You have lost a loved one to death. You feel you have no reason to live and are deeply depressed. You inhale and sob.*
- A laughing breath. *Something has made you laugh and laugh without being able to stop. You inhale deeply to laugh almost hysterically.*

2. Ask your student to look at a song and determine the emotions and attitudes for each phrase of the song. Have her sing the song, inhaling with her choice of emotions and attitudes. Have her notice whether the timing of her breathing changes from one emotion or action to another. Show her how she might inhale quickly with a sense of joy in one place but might inhale slowly with a sense of deliberation in another place.

   Have her practice her breathing with emotions until she understands how to connect her physical breathing to her emotional expressions. Take a section of a song and work each phrase by having her pay attention to the emotion before the inhalation, allowing her emotion to expand into her inhalation and prompt her singing.

   ❁ *Your student develops the subtexts for every line of text by building a story line for her song. (See the exercises under "Imagining the Story" and "Enriching the Story," in v. 4, ch. 16, which offer many ways to help your student enrich a song with emotions, sensory stimuli, actions, and ideas.) Have her write notes in her score to remind her of her choices of actions, attitudes, and emotions.*

Kirsten Linklater writes: "As long as we are emotionally protective, our breathing cannot be free. As long as breath is not free, the voice will depend on compensating strength in the throat and mouth muscles."[2]

3. After your student looks at some songs with the idea of including breath as part of the expression of every phrase, ask her to transfer that learning to all songs. When she has worked through the dramatic life of a song and worked it into her breathing, she will breathe more spontaneously as a part of her musical expression.

## To Combine Breathing Techniques with Other Aspects of Singing

*Because breath powers all of singing, it sets up all levels of learning to sing—from applying technique to rehearsing music or drama to implementing performance skills. The quality of breathing is perhaps the most important cue the audience empathizes with. As the audience breathes in sync with the singer, it is much more likely to be satisfied with the whole musical, emotional, communication experience.*

*In these exercises, you help your student become aware of and use breath while studying other levels.*

### PROCEDURE

As your student learns a song, show her the relationships of the breathing cycle and all the other parts of singing. Have her mark her breath in the score and use those cues to trigger her learning about the other levels of singing.

Option 1

Breath and relaxation. Use the breaths as cues to keep the mind and body supportive of singing through the song. Each breath becomes an opportunity to make the body once again ready to sing. (See the "Exercises for Calibrating the Body to Get Ready to Sing," in v. 2, ch. 7, particularly the ones that focus on breath.)

Option 2

Breath and phonation. Rehearse the song with breath and phonation exercises. (See the exercises in ch. 9, "Teaching and learning flexible phonation," in v. 2, particularly "To Relax the Throat by Suspending the Breath" and "To Sustain the Tone," in v. 2, ch. 9.)

Option 3 Breath and resonance. Rehearse the song with breath and resonance exercises. (See the exercises in ch. 10, "Teaching and learning flexible resonance," on page 189.)

Option 4 Breath and musical expression. Match the breath to the dynamics, pitch, tone quality, special effects (sforzando, subito piano, marcato, staccato, for example), and phrase shape. (See the exercises in ch. 14, "Teaching and learning the vocal line," in v. 4, and in ch. 15, "Teaching and learning the score," in v. 4.)

Option 5 Breath and dramatic expression. Set up, intensify, and anchor the evolving emotions and dramatic actions throughout the song by cueing them to the breath. (See the exercises in ch. 16, "Teaching and learning the story," in v. 4, and in ch. 17, "Teaching and learning the gestalt," in v. 4.)

## To Communicate with an Accompanist through Breathing

*In this exercise, your student explores how to communicate with her accompanist through her breathing. When your student inhales in rhythm with the music and with emotion, her accompanist is much more likely to understand the timing of her entrances, tempo changes, and other musical qualities.*

### PROCEDURE

Ask your student to practice different ways of breathing to communicate with her accompanist.

Option 1 Starting the song together. Have your student practice using her breath to start the first phrase of the song with the accompanist—to use her breath as a conductor uses a baton.

The timing of her breath should match the rhythm of the music for an easy, clean musical entrance. Be sure that the student does not breathe

too late, causing her to start singing behind the beat or with a jerky musical entrance. Nor should she start breathing too early and lose the natural spontaneity of her entrance.

Changing the speed of the inhalation. To explore how to use her breath, have your student randomly alter the speed of her inhalation, as in a stochastic process, to find the best breath for leading the accompanist. Ask her to start the song several times with different tempos and to communicate the new tempo to the accompanist only by the rate of her breathing. Option 2

Breathing with the emotional quality of the upcoming phrase. As she inhales for each phrase, have your student "inhale the emotion" and attitude she wants for that phrase. Option 3

Changing the emotional quality. Ask your student to inhale with different emotional qualities for the accompanist to follow. Option 4

Again, notice whether she actually changes the quality of her inhalation, the timing of her inhalation, or the tempo of the song as she changes the emotions. If the changes are too slight, help her exaggerate.

ENDNOTES

1. The phrase "let the air in" was made popular by Kirsten Linklater in her book, *Freeing the Natural Voice* (New York: Drama Book Specialists, 1976).
2. Ibid., 12.