

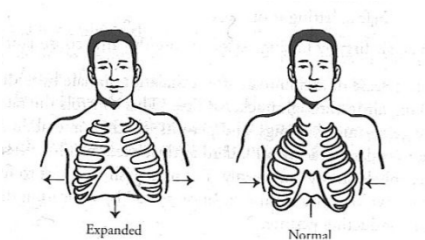
## **Breathing; the life blood of good singing.** **Jeannine Stemmer, 2011**

“Let every thing that hath breath praise the LORD. Praise ye the LORD.” Psalm 150:6

Proper breath support while singing is essential for appropriate tone quality. This session will give insight to the technique of breath management while singing and even speaking.

### **Breath Management for Adolescent Singers**

- Allen (1986) claims that the same breathing techniques that work for older students are effective for the adolescent singer as well, but visual and physical illustrations help young students to make the connection easier.



Diaphragm Illustration (Cooksey, 1999, p.41)

- Phillips (1985) studied the effects of group breath control training of students in grades 2, 3 and 4. Phillips’ participants met twice weekly for 18 weeks and were given 10-12 minutes of specified breath control training. The results of his research showed significant effects on the singing ability of the students. The findings showed that breath control training as early as second grade was effective.

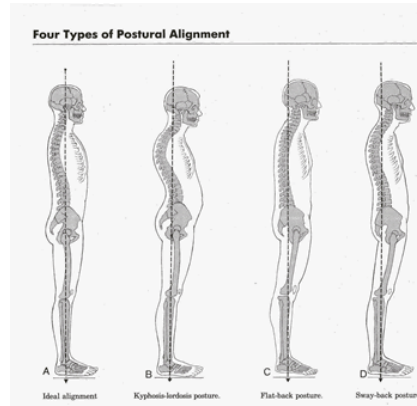
### **The Diaphragm**

Diaphragm: the muscle that separates the abdomen from the chest. When contracting this muscle for inhalation, the lungs are expanded (MedicineNet, 2004)

- According to Lewis (2004), the diaphragm is not a passive organ but a very powerful muscle. However, tightness in the belly can restrict the movement of the diaphragm.
- Hall (2006) describes the diaphragm as an “up-turned dinner plate” (p.1).
- Jones (2000) supports this idea through his research by stating “only a small stream of air (consistent in pressure) should be used to sing” (p. 1). Jones is an advocate of lower back breathing and claims that over breathing makes it impossible to release tension. “Alan Lindquest once told me to take a thimble full of breath and put in the lower back” (Jones, 2000, p.1).

- To truly understand the concept of diaphragmatic intercostal breathing one must understand the anatomy of it.
  - The diaphragm helps to lengthen the thoracic cavity enabling breath to flow through the lungs.
  - The intercostals and abdominal muscles help shift the internal organs creating more space in the chest cavity.

## Posture



Posture Illustration (Gardner, 2011)

- “Tell the students not to underestimate how much energy they lose from having poor posture.” (Skoog, 2004, p. 45)
- According to Boardman (2004), “without proper posture, breath support and pharyngeal space, resonance and vitality of tone are not possible.” (p. 46)

### Posture Exercises

- ✓ The Three in Three exercise:  
students are to stand with feet together, firm legs and buttox and bring attention to the spine. Students are to bring their arms up over their heads and allow air in through their noses. They are then to blow the air out through their mouths as they bring their arms down to their sides. The process is repeated three times. (Boardman, 1996)
- ✓ The Charging Breath exercise:  
This exercise requires the same posture as the “Three in Three”. However, students are encouraged to bring air in through their nose and hold it as they quickly rotate their arms up and back eight times. They then blow the air out and repeat the process two more times. (Boardman, 1996, p. 29)

## Diaphragmatic Intercostal Breathing VS. Chest Breathing

- Most young students take a shallow, upper chest breath that involves their head and shoulders leading to much tension (Stultz, 1999).
- Once a student starts to understand the difference between chest breathing and diaphragmatic intercostal breathing, he or she should be able to continue to enhance the technique on his or her own.

### Diaphragmatic Intercostal Breathing Exercises; Making the Connection

- ✓ The Lay on Your Back Breathing Exercise:  
Students lie supine on the floor, pulling their shoulders down while remaining relaxed. In this position, they are unable to slouch and are therefore more likely to breathe deeply and properly, allowing them to expand their middle section. (Smith, 2006)
  - ✓ The Sit Down With Elbows on Knees exercise:  
This exercise permits the individual to feel the expansion naturally. (Cooksey, 1999)
  - ✓ Seals in a Pool  
Explain that a diaphragm has 2 parts, an inner layer and an outer layer. The outer part expands outward as you take a deep breath while the inner part comes up to tap the lungs as you sing. Take a deep breath and expire on a oo that is repeated over again.
  - ✓ The Pant Like a Dog breathing Exercise:  
Students pant like a dog, subconsciously taking a proper diaphragmatic breath and raising their soft palates to promote the connections of the breath in singing. (Skoog, 2004)
- According to Cooksey (1999), the three main problems that will show on individuals when attempting to learn proper diaphragmatic breathing are as follows;
    1. High chests and relaxed abdomens
      - When the individual fails to hold their chest high and relax the abdomen during inhalation.
        - A possible solution for this problem is to highlight the importance of posture. One should encourage the individual to place his or her hand on the abdomen and feel the expansion as he or she gradually inhales through his or her mouth.
    2. Shallow breaths and raised shoulders
      - When the individual takes shallow breaths and raises their chest and shoulders too much when inhaling.
        - A possible solution and technique for this problem is to move the shoulders up and down during inhalation and relax. Another solution is to reinforce the Sit Down With Elbows on Knees exercise.
    3. Reverse muscular action.
      - When the individual pulls their stomach in during inhalation
        - A possible solution for this problem is to remind the individual that the stomach must relax in order to expand.

### Diaphragmatic Intercostal Breathing Exercises; Fixing the Problems

- ✓ The Floor Exercise:  
Quietly lie on the floor on your back. Place your hands on your upper chest. Breathe deeply five times making sure chest does not raise.

### Diaphragmatic Intercostal Breathing Exercises

- ✓ The Counting Game Exercise: Students stretch their capacity for air by counting aloud until they need a breath. (Stultz, 1999)
- ✓ The Hissing Snake Breathing Exercise: Students take a deep breath through their nose and mouth. They slowly expel the air, making a long sssss sound, and they raise their hands when they run out of breath. (Stoltz, 1999)

### **Research Question**

#### Does teaching breath control affect choral tone

The purpose of this study was to find simplified methods for breathing, appropriate for adolescent female students that could potentially help them manage their diaphragm and abdominal muscles. These exercises could encourage choral directors to implement breath management in their routines, thereby improving vocal tone problems in their choirs.

Sixteen female subjects representing two sixth-grade classes in a K–12 private school in Miami, Florida were selected to be a part of a treatment group that was used to study the effects of breath control in improving choral tone. The sample was evaluated by three Florida Vocal Association adjudicators on the basis of their group singing before and after treatment. The findings showed a significant difference when comparing overall choral tone quality pre-test scores with post-test scores. In conclusion the study showed that teaching simplified techniques of breath management to adolescent female singers' increased performance assessment ratings in tone quality.

### **The Teacher's Voice**

“Our voice is a teacher's most valuable asset.” (Veira, 2011 p.1)

- A teacher's voice needs to project
- A teacher's voice needs to be pleasant to listen to
  - Adding Variety through;
    1. Volume
    2. Pace
    3. Pitch
    4. Modulation (How we adjust the tone of our voice to convey mood)

#### Can Breath Management Help with the Teacher's Voice?

- If you consistently breathe into just the upper region of your lungs your breath support will encounter tension in the throat and mouth (Veira, 2011)

#### Warmups for the Teacher's Voice

- Yawn
- While placing hands on ribs, breathe in through your nose and silently release the breath through your mouth. Inhale for 3 seconds, hold for 3 seconds and exhale for three seconds.
  - Incorporate tone by exhaling on a AAAAAAAAAA, OOOOOOOH, EEEEEEEEEE, MMMMMMMMM and NNNNNNNNN.
  - Now practice combinations with rising and falling pitches.
- “papapa/bababa/tatata/dadada/kakaka,/gagaga”
- “The tip of the tongue the teeth and the lips”
- “Make me many, many more” (Veira, 2011)

## Tips to Prevent Voice Problems

- Limit your intake of drinks that include alcohol or caffeine. These act as diuretics (substances that increase urination) and cause the body to lose water. This loss of fluids dries out the voice. Alcohol also irritates the mucous membranes that line the throat.
- Drink plenty of water. Six to eight glasses a day is recommended.
- Don't smoke and avoid second-hand smoke. Cancer of the vocal folds is seen most often in individuals who smoke.
- Practice good breathing techniques when singing or talking. It is important to support your voice with deep breaths from the diaphragm, the wall that separates your chest and abdomen. Singers and speakers are often taught exercises that improve this breath control. Talking from the throat, without supporting breath, puts a great strain on the voice.
- Avoid eating spicy foods. Spicy foods can cause stomach acid to move into the throat or esophagus (reflux).
- Use a humidifier in your home. This is especially important in winter or in dry climates. Thirty percent humidity is recommended.
- Try not to overuse your voice. Avoid speaking or singing when your voice is hoarse.
- Wash your hands often to prevent colds and flu.
- Include plenty of whole grains, fruits, and vegetables in your diet. These foods contain vitamins A, E, and C. They also help keep the mucus membranes that line the throat healthy.
- Do not cradle the phone when talking. Cradling the phone between the head and shoulder for extended periods of time can cause muscle tension in the neck.
- Exercise regularly. Exercise increases stamina and muscle tone. This helps provide good posture and breathing, which are necessary for proper speaking.
- Get enough rest. Physical fatigue has a negative effect on voice.
- Avoid talking in noisy places. Trying to talk above noise causes strain on the voice.
- Avoid mouthwash or gargles that contain alcohol or irritating chemicals. If you still wish to use a mouthwash that contains alcohol, limit your use to oral rinsing. If gargling is necessary, use a salt water solution.
- Avoid using mouthwash to treat persistent bad breath. Halitosis (bad breath) may be the result of a problem that mouthwash can't cure, such as low grade infections in the nose, sinuses, tonsils, gums, or lungs, as well as from gastric reflux from the stomach.
- Consider using a microphone. In relatively static environments such as exhibit areas, classrooms, or exercise rooms, a lightweight microphone and an amplifier-speaker system can be of great help.
- Consider voice therapy. A speech-language pathologist who is experienced in treating voice problems can provide education on healthy use of the voice and instruction in proper voice techniques.

(National Institute on Deafness & Other Communication Disorders, 2002)

## Not Healthy Voices (Consult a doctor; otolaryngologist)

- Hoarse or raspy voice
- Suddenly deeper voice
- Often raw, achy or strained
- Effort to talk
- Repeatedly clearing your throat

(National Institute on Deafness & Other Communication Disorders, 2002)

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