Vocal Health & Hygiene
For Professional Voice Users

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About Me

• Born & raised in the Sewickley, PA area

• Undergraduate & graduate work at Duquesne University

• Clinical experience at the DU Speech-Language-Hearing Clinic, UPMC Voice Clinic, & Metropolitan ENT

• Fellowship in advanced diagnosis & treatment of voice & swallowing disorders at Oregon Health & Sciences University in Portland, OR.

• President & Founder of Sewickley Area Theatre Company
Overview

• Who are **professional voice users**?

• Setting Boundaries: SLP v. Voice Instructor

• Anatomy & Physiology of Normal Voicing & Vocal Technique

• Speaking Voice v. Singing Voice

• Disordered Voicing

• Vocal Health & Hygiene

• Voice Myth Debunking
Who Are We Speaking About?

- Professional voice users:
  - Singers
  - Actors
  - Teachers
  - Clergy
  - Orators
  - Politicians
  - Receptionists
  - Tech Support
Boundaries: SLP v. Voice Instructor

• Speech-Language Pathologist: licensed & certified to treat communication disorders (poor voice = poor communication)

• Typically, SLP Voice Specialists have advanced training and/or performance backgrounds

• SLP Voice Specialists often work in conjunction with otolaryngology (ear, nose, & throat) physicians

• SLP’s who specialize in voice frequently specialize in swallowing disorders (dysphagia)
## Boundaries: SLP v. Voice Instructor

<table>
<thead>
<tr>
<th>SLP Voice Specialist</th>
<th>Voice Instructor</th>
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</thead>
<tbody>
<tr>
<td>Anatomic &amp; physiologic principles</td>
<td>Performance &amp; musicianship principles</td>
</tr>
<tr>
<td>Often work in conjunction with medical practice or hospital</td>
<td>Often work privately</td>
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<tr>
<td>Works with individuals who want to improve speaking (and possibly) singing voice</td>
<td>Works with individuals who want to primarily improve singing voice</td>
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<tr>
<td>Diagnoses &amp; treats the disordered voice using specialized medical equipment</td>
<td>May suspect voice disorders based on experience</td>
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Vocal Technique

Resonance

Phonation

Respiration

Optimal Vocal Technique
**Vocal Technique**

- **RESPIRATION**
  - **Diaphragmatic breathing**
  - In-Nose; Out-Mouth for quiet breathing
  - In-Mouth; Out-Mouth for voicing
  - Relaxing v. tensing abdominal muscles
    - Pilates/Core training
    - Yoga
  - Training efficiency for speaking
  - Training efficiency for singing
Vocal Technique

- **PHONATION**
  - **Bernoulli effect**
    - Intrinsic laryngeal muscles adduct true vocal folds
    - Subglottic pressure builds
    - True vocal folds are blown apart
    - Pressure change sucks true vocal folds back together repeatedly
Vocal Technique

• COORDINATION OF AIRFLOW AND PHONATION
  • Breath holding
  • Voicing ‘at the top of the breath’
    • Avoid releasing too much air
    • Avoid holding onto air
  • Take ONLY as much as as needed
    • Particularly important in conversation and singing
Vocal Technique

- Resonance
  - How well sound vibrates in a cavity
  - Forward and high tone placement
  - Vibration in oral/nasal mask
  - Funnel sound with mouth
Singing is an **EXTENSION** of speaking

Same physiologic principles apply in more advanced context

- Efficiency of diaphragmatic breathing
- Coordination of airflow and phonation for sung phrases
- *More exaggerated pitch variation*
- *RESONANCE!!!!!*
Speaking v. Singing Voice

- More exaggerated pitch variation
  - Laryngeal muscles (cricothyroid & thyroarytenoid) responsible for stretching and contraction of true vocal folds

- Much like the strings of a guitar
  - Long, tight true vocal folds = high frequency = high pitch
  - Short, loose true vocal folds = low frequency = low pitch
Speaking v. Singing Voice

- **RESONANCE**
  - Optimal resonance more important in singing than speaking
  - Will need more space at higher and lower pitches
  - May have to modify vowels

![Diagram showing resonance and vowel chart]
Disordered Voicing

• Medical complications
  • Structural disorders (e.g. presbylarynx, vocal fold paralysis, nodules/polyps), neurologic/neuromuscular disorders, GERD/LPR, hypothyroidism, HTN medications, long-term inhaler use

• Surgical complications
  • Head/neck/spine surgery, cardiac surgery, prolonged intubation

• Inefficient vocal technique
  • During singing AND speaking*
Disordered Voicing

- Medical complications
  - Presbylarynx
    - ‘THE AGING VOICE’
  - Benign lesions (e.g. vocal fold nodules/polyps)
- GERD/LPR
Disordered Voicing

• Inefficient technique leads to laryngeal muscle tension, which can:
  • Place unnecessary strain on the true vocal folds causing inefficient vibration
  • Engage extrinsic larynx muscles causing fatigue
  • Contribute to excessive throat clearing and coughing
  • Cause discomfort with voicing and/or globus sensation

• Singers’ ‘off-stage voices’
General Vocal Health & Hygiene

- Avoid vocal abuse/misuse
  - Yelling/shouting
  - Talking over excessive background noise
  - Frequent throat clearing/coughing
  - Whispering
  - Excessive voice use while sick
  - Using inefficient vocal technique
General Vocal Health & Hygiene

- Practice good vocal hygiene
  - HYDRATION!!!! (64 + oz/day)
  - No smoking
  - Limit alcohol & caffeine intake
  - Eat a healthy & balanced diet
  - Aerobic exercise
  - Get evaluated/treated for GERD
  - Avoid medications containing drying agents
    - Antihistimines, Decongestants, Medicated lozenges
  - Avoid dry/cold environments & pollutants
  - Use steamers/humidification if necessary
  - SLEEP!!!!
Vocal Health & Hygiene: Voice Users

- Vocal warm-up
  - Voiceless warm-ups (breathing, holding ‘s’, ‘f’, & ‘sh’, lip trills)
  - Humming/Lip trills/Tongue trills
  - Pitch glides and arpeggios throughout vocal range
  - Octave jumps
  - Staccato attacks
  - Intonation/musical phrasing

- Vocal cool-down
  - Know your range (don’t sing outside of it)
  - Use amplification when possible
• Will loading up on water prior to singing improve my performance?
  • **NO!** Water does not DIRECTLY hydrate the tissues of the vocal folds. It takes time for the body to process the water. Some is used towards essential organs, some is excreted through urine, and some is used for hydration.

• How about gargling with warm salt water?
  • **Yes & No!** While there may be some soothing effects, no long-term, physiologic benefit can be expected.
• Does drinking tea & honey or other warm beverage benefit the voice?
  • **Not necessarily.** Again, there may be some soothing benefit of the warmth of the liquid, but no physiologic benefit. In fact, tea contains caffeine, which is a drying agent, and honey contains sugar, which can increase mucous production.

• Will cough drops improve my voice?
  • **No.** In most cases cough drops have no benefit for the voice, especially the medicated or mentholated ones. These can be drying agents. The best way to deal with dry, scratchy throat is a piece of sugar-free hard candy/gum.
• Can chloreseptic spray improve my voice?
  • **No.** Chloreseptic spray desensitizes the structures of the larynx, which makes it difficult to feel the sensations necessary to produce optimal voicing.

• Do products like Mucinex help eliminate mucous?
  • **Yes.** Mucinex (drug name: Guaifenesin) thins mucous secretions, making them easier to clear. This drug is activated by proper hydration. Mucinex-D/DM can be a drying agent.
• Should I maintain a ‘low laryngeal posture’ (keeping the larynx low) while singing?
  
  • **No.** While an abnormally high larynx position during singing typically indicates strain, don’t try to suppress movement. The larynx is biologically designed to move (rising and descending). Fighting against normal biology can increase laryngeal strain.
Video Quiz

Which demonstrates better vocal technique?

A

B
Video Quiz

Which is the trained singer?

A  

B
Thank You!

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