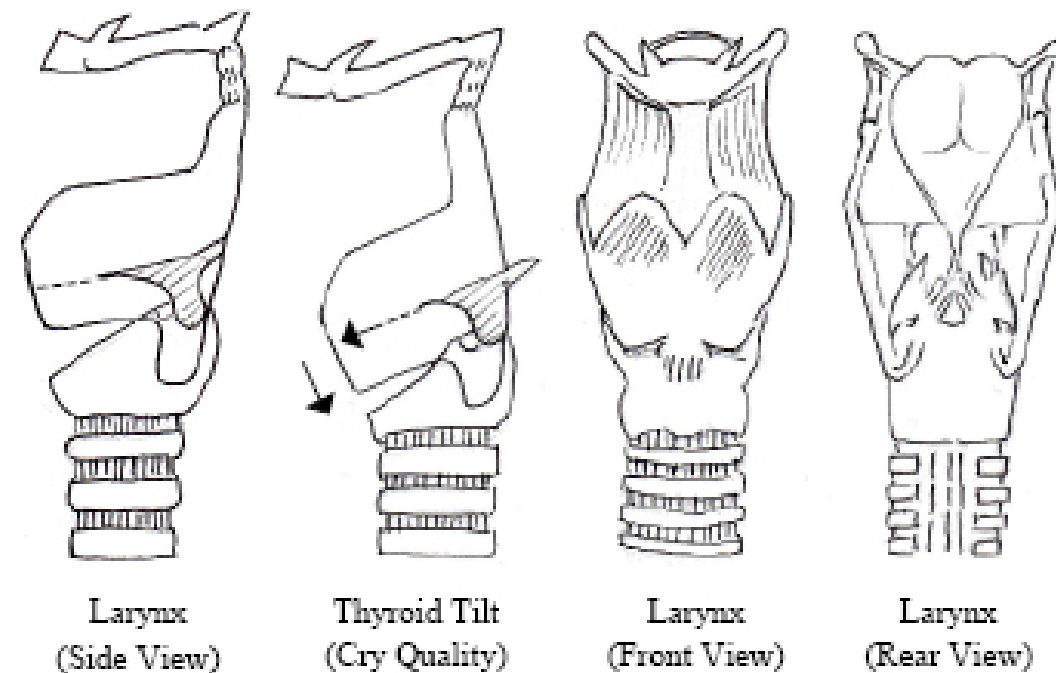
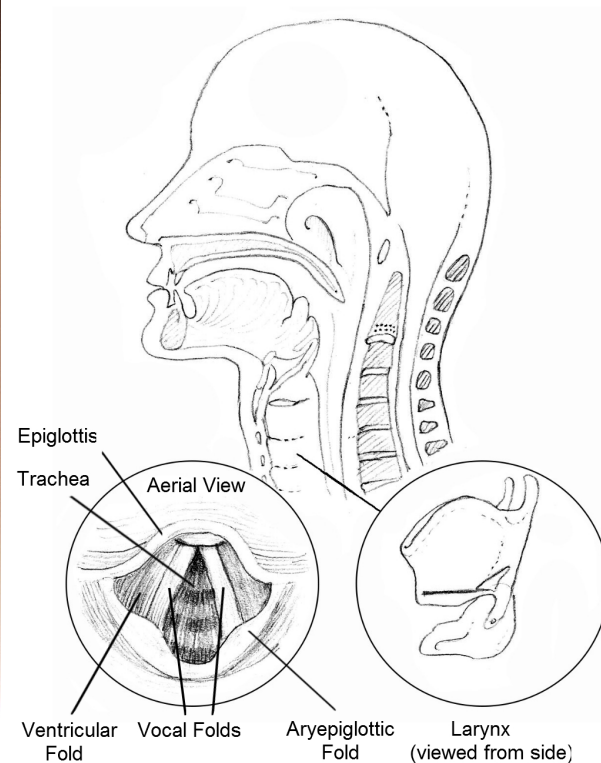




***A Study into
the role of
Mental Imagery
in connecting
Vocal Registers***

By Lee Risdale





Introduction

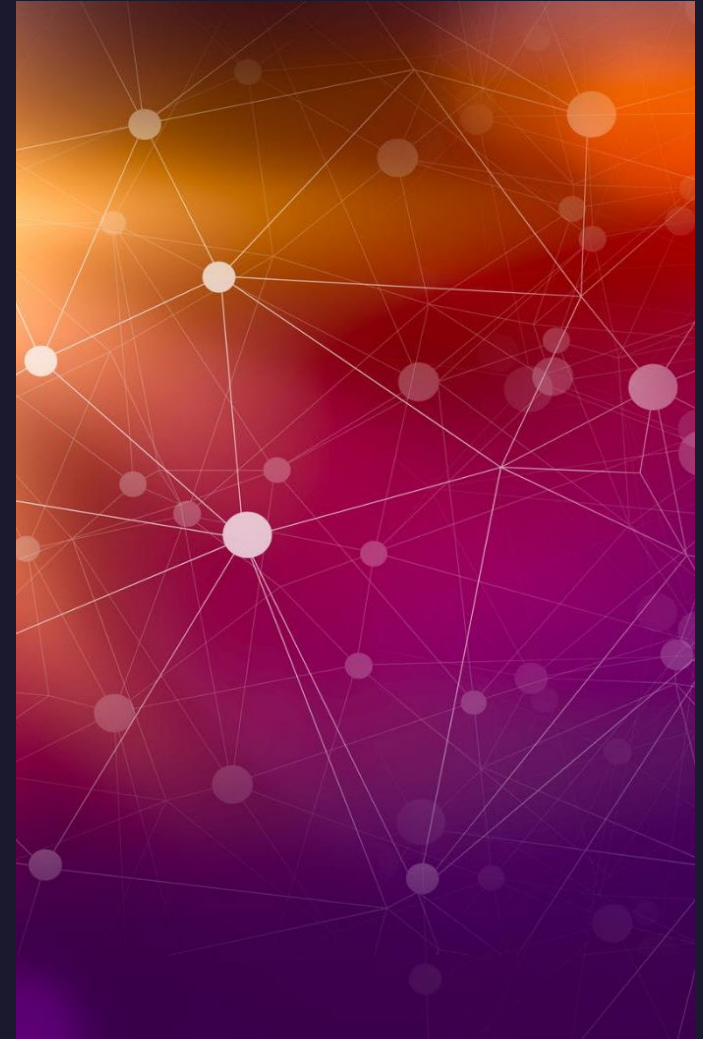
- ***A Study into the Role of Mental Imagery in Connecting Vocal registers***

Content

- Background, Aims, Objectives, Justification
- Literary Review
- Methodology
- Vocal Objectives
- Findings and Data Analysis
- Reflections, Conclusions and Recommendations

Background

- Vocal tutor and lecturer engaging in face to face and online tuition
- Seeking to develop a wider toolbox of strategies and exercises
- Observing that mental imagery tools which assist vocal pedagogy are effectively lacking in established methodologies
- Exploring a more creative framework or blended approach
- Curiosity: If imagery is interlinked more closely with science, we can refine a more inclusive, blended approach to teaching



Aims, Objectives, Justification

A STUDY INTO THE ROLE OF MENTAL IMAGERY IN CONNECTING VOCAL REGISTERS

- Testing a toolbox of Imagery strategies and exercises to assist in connecting registers
- Testing three Imagery type options with pedagogical objectives
- Drawing upon the student preference and experience to test a range of imagery options
- Imagery Tools that translate 'mind to body' effectively are lacking in established methodologies
- Exploration could lead to wider implications of creating a more blended, inclusive, and accessible teaching approach

Literary Review

- Examining the role of imagination in teaching voice pedagogy, there exists a divide of teacher methods. One that draws upon only anatomical and scientific principles *versus* teachers utilising only images and analogies, while others use a combination of both (Clements, 2008)
- Mental imagery also links to sports and dance activities, observing the four W's of imagery: *where, when, what, and why* (Bowes, 2009)
- Vocal kinaesthetic motor images (Carter, 1993) correlate well with sports psychology motor images and visual imagery is linked to patterns of motor movement (Clayton, 2005)
- Evidence demonstrates application in the fields of Athletics (Munroe et al, 2000) and in Dance (Nordin & Cumming, 2005).
- Mental imagery has been credited with the success of world class performers, champion Golfer Jack Nicklaus (Nicklaus, 1974) and Opera star Pavarotti (Gunter, 1992).

Literary Review

- Both Vennard (Vennard ,1968) and McKinney (McKinney 1994) considered the use of mental imagery a valuable tool providing that we consider a basis of *literal fact* and produce *correct mental images*.
- Fields (Fields, 2019) claimed that it is the mind that sings, not the voice, drawing upon visualisation, and Ware (Ware, 2013) describes this intuitive approach using '*like*,' '*as if*,' and *metaphoric* cues.
- We should however be mindful of creating a '*detailed internal representation*' of anatomy to ensure the student is not unnecessarily misled (DeSantis et al, 2021).
- McCoy points out that science helps build a vocal instrument, but the artistry is still required to play it (McCoy, 2012).
- In later years Callaghan observed that largely Bel Canto traditional teaching is still used by teachers to access expression and artistry within their students (Callaghan 2014). This suggests a need to modernise without diminishing this artistry.
- This points towards harnessing imagination to complement a simplified scientific explanation and delivering as a blended approach (Brown, 2021).

Literary Review – Existing Contemporary Tools

- Klein recognised 'Cognitive bodily-kinaesthetic awareness,' an ability to keep aware of subtle and precise anatomical processes that are also required to perform well in singing (Klein, 2021) and this may be important to refine complex adjustments such as 'thyroid tilt.'
- Cornett refers to "noticing out loud," describing how the mindful musician puts thoughts and observations into words (Cornett, 2019)

I am seeing...

I am feeling...

I am hearing...

- This leads Klein to recognise the merit of '*performance scripts*.' (Klein, 2021).
- Imagery that assists *registration* and *mixing* relies greatly upon the understanding that there is more contact, thicker vocal folds in the chest register than in head register. Creating a 'full-bodied sound, like a reed instrument.' (Cue related imagery)

Methodology

- ❖ Qualitative work-based project attempting to examine the perceived experiences of eight singers as they work at developing their transition between registers
- ❖ Sits between the domain of Constructivism and Interpretivism (Cresswell, 2013), observing and understanding the world in the way that others have experienced it (Kawulwich and Chilsia, 2012).
- ❖ Context-specific qualitative research provides opportunity to develop and enhance teaching and learning through the study of another's shared experience (Hopfl, 1997)
- ❖ Ethical research: The imagery online form survey gave participants the opportunity to ascribe their preference of vocal imagery cues including informed and voluntary consent, confidentiality of information shared, anonymity of participants (Halai, 2006) and this went some way in addressing the issue of an insider researcher.
- ❖ Quantitative data coded and taken from the imagery experiments demonstrates revealing key information on the success of certain types of imagery.
- ❖ Inductive analysis occurred through coding of the questionnaire and the transcripts from the imagery experiments interview. This allowed research findings to emerge without structured methodology restraints (Thomas, 2003).

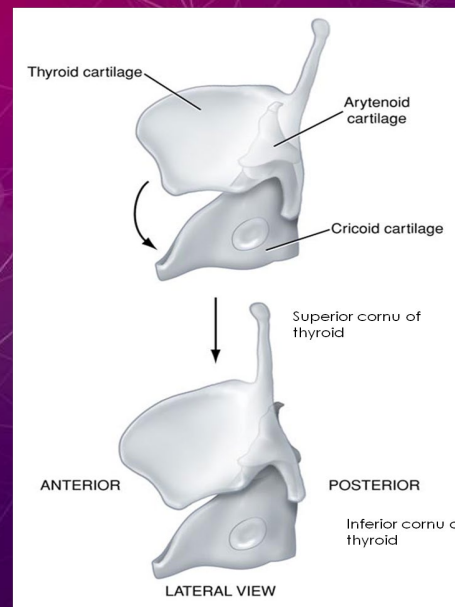
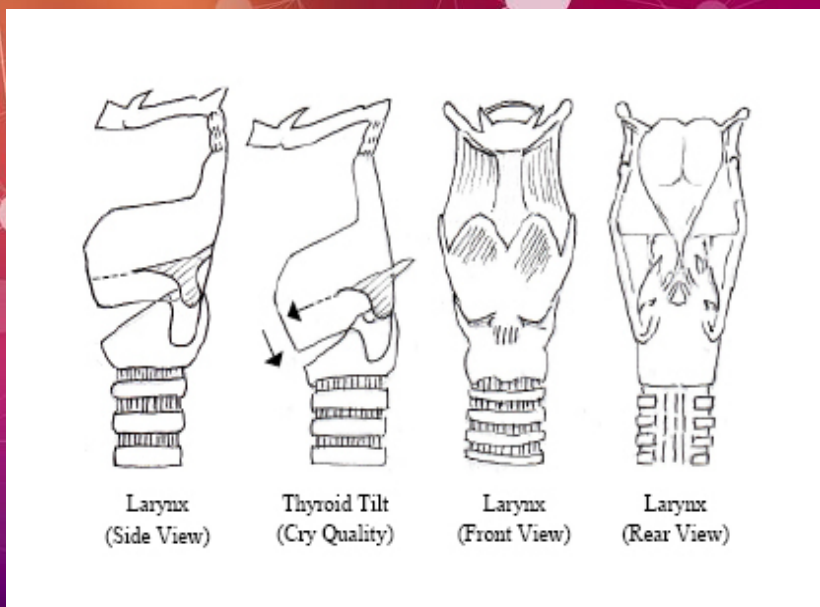
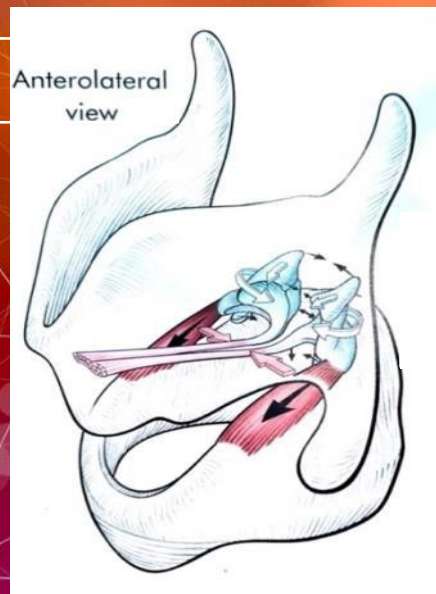
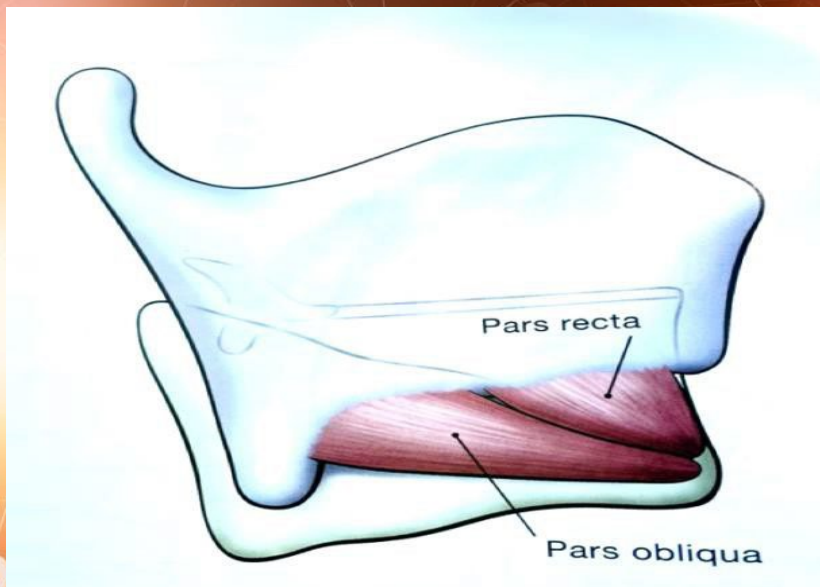
Objectives required to
Connect Registers &
Negotiate Bridges:

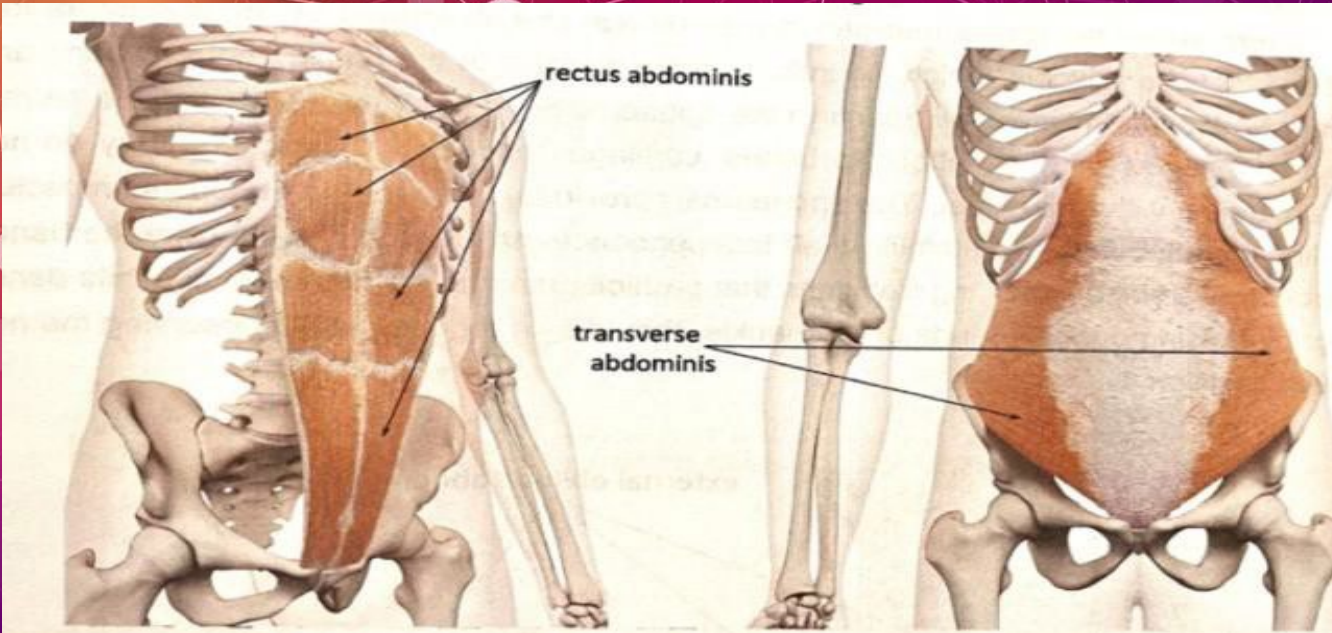
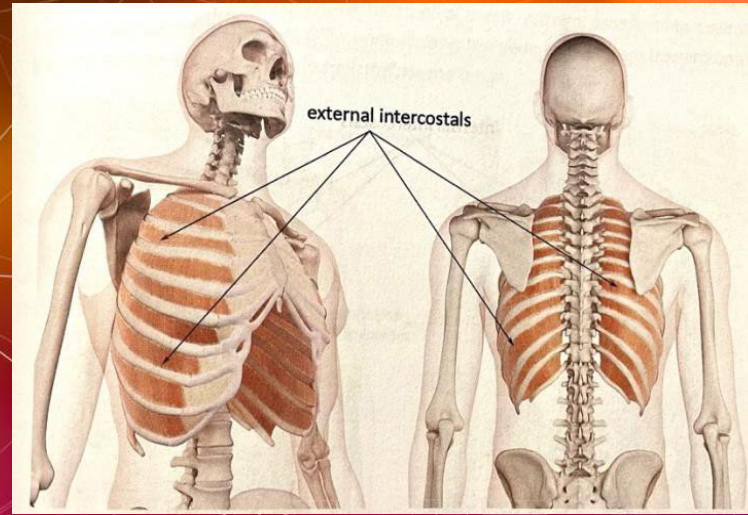
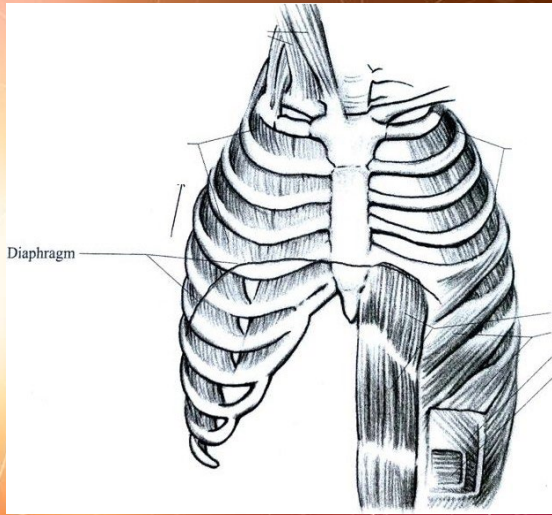
Cry Quality
Breath Control
Balanced Tone
Mix/Bridging

***Vocal
Objectives***

Cry Quality Objective

1. 'Cry' emotively into the pitch.
2. Sing it 'whiney' like a puppy dog.
3. Imagine your larynx dropping and tilting as you 'cry and lean' into the tone.





Respiration Objective

Inhale – Count of 4

Exhale – Count of 20

1. Inhale a low breath deeply into your diaphragm, then exhale slowly.
2. Imagine inhaling into a balloon in your stomach and deflate slowly as you exhale.
3. Inhale to expand your lower belly, expanding your ribcage; then as you exhale, resist by pushing (abs) out and down.



Findings & Data Analysis

Types of Imagery Tested

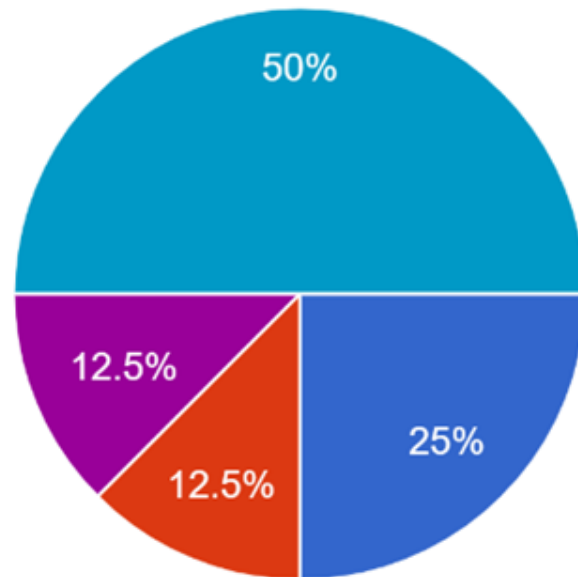
1. **Simple instructional (execution)** : (Do this; in this way)
2. **Metaphorical ; simile/metaphor** : (like an eagle; imagine ribs spreading like eagle wings)
3. **Anatomically specific ; visual scripts** : (Release 'abdominal muscles' as you *inhale* a 'low breath' and as you *exhale*, '*lean out*' with abs and expand ribcage 'high & wide')

Timestamp	Participant	A) Which of the following instructions do you prefer to access Crying Quality?	B) Which of the following instructions do you prefer to develop breath control?	C) Which of the following instructions do you prefer to develop a balanced tone?	D) Which of the following instructions do you prefer to develop a smooth register transition (Mix) ?
17/10/2022 12:54:21	1	6. Imagine your larynx dropping and tilting as you sing	6. Imagine inhaling into a balloon in your stomach and deflate slowly as you exhale	3. Imagine your voice is a violin with long, sustained vibrato	6. 'Lean into' the Sound as though singing against the wind
17/10/2022 13:13:38	2	1. 'Cry' into the pitch	8. Imagine your lungs are a hot air balloon and you're dropping sandbags to slow the release of air	6. Hum low in pitch with an edgy 'Mm' and sustain like a Cello	3. Combine 'Cry' and 'Twang'
17/10/2022 22:40:17	3	1. 'Cry' into the pitch	2. Breath into your diaphragm	4. Make the sound of a siren from low to high at same volume level	6. 'Lean into' the Sound as though singing against the wind
22/10/2022 14:01:39	4	2. Sing it whiney	6. Imagine inhaling into a balloon in your stomach and deflate slowly as you exhale	2. Sing accessing your chest and head resonance	5. Cry and 'narrow the vowel' as you sing through the bridge
22/10/2022 14:04:36	5	6. Imagine your larynx dropping and tilting as you sing	4. Inhale to expand your lower belly, expanding your ribcage; as you exhale resist by pushing out and down	5. Sing as though in conversation and articulate consonants equally	1. Sing 'Nei' through the lyric or phrase
22/10/2022 14:06:57	6	6. Imagine your larynx dropping and tilting as you sing	4. Inhale to expand your lower belly, expanding your ribcage; as you exhale resist by pushing out and down	4. Make the sound of a siren from low to high at same volume level	7. 'Lean' into the Mix
22/10/2022 14:10:58	7	5. 'Lean' into the sound	4. Inhale to expand your lower belly, expanding your ribcage; as you exhale resist by pushing out and down	3. Imagine your voice is a violin with long, sustained vibrato	6. 'Lean into' the Sound as though singing against the wind
22/10/2022 14:18:59	8	6. Imagine your larynx dropping and tilting as you sing	4. Inhale to expand your lower belly, expanding your ribcage; as you exhale resist by pushing out and down	3. Imagine your voice is a violin with long, sustained vibrato	6. 'Lean into' the Sound as though singing against the wind

Cry Quality Imagery

A) Which of the following instructions do you prefer to access Crying Quality?

8 responses

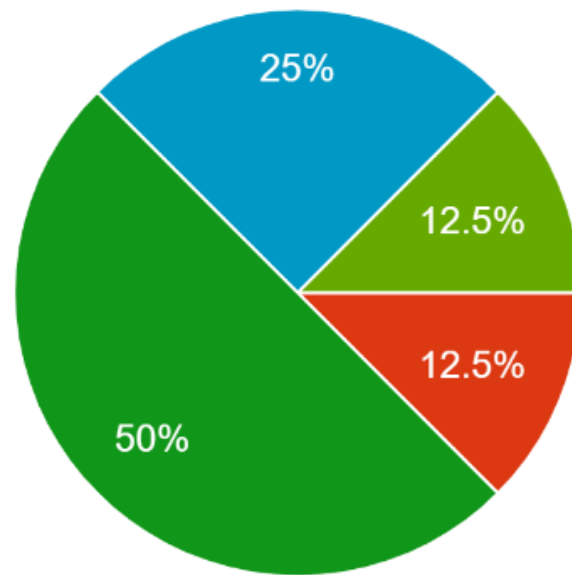


- 1. 'Cry' into the pitch
- 2. Sing it whiney
- 3. Keep 'Sobbing' into the lyric
- 4. Sing in a 'Crying' quality
- 5. 'Lean' into the sound
- 6. Imagine your larynx dropping and tilting as you sing
- 7. Imagine your larynx is a horse rearing up on hind legs as you pull back on it...
- 8. Imagine a whining sad puppy. Say "..."

Breath Control Imagery

B) Which of the following instructions do you prefer to develop breath control?

8 responses



- 1. Inhale a low breath
- 2. Breath into your diaphragm
- 3. Inhale a low breath and lean out with abs and ribcage
- 4. Inhale to expand your lower belly, expanding your ribcage; as you exhal...
- 5. Inhale and expand your belly like a...
- 6. Imagine inhaling into a balloon in yo...
- 7. Imagine your abdomen is a house a...
- 8. Imagine your lungs are a hot air ball...

Breath Control Improvement Table

	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8
Breath Control Improvement	10%	12%	16%	25%	33.3%	33.3%	60%	66%

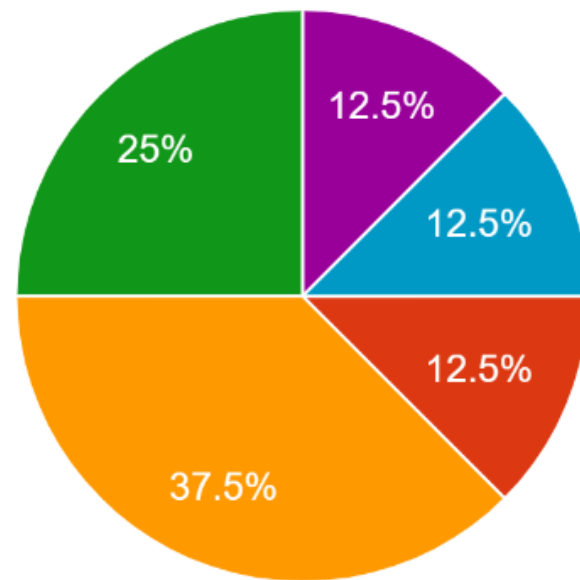
Example: 24 Seconds (Original) improved to 28 Seconds (with Imagery Cue)

Calculation: $28 - 24 = 4 \times 100\% = 400$ divide 24 seconds = 16% approx.

Balanced Tone

C) Which of the following instructions do you prefer to develop a balanced tone?

8 responses

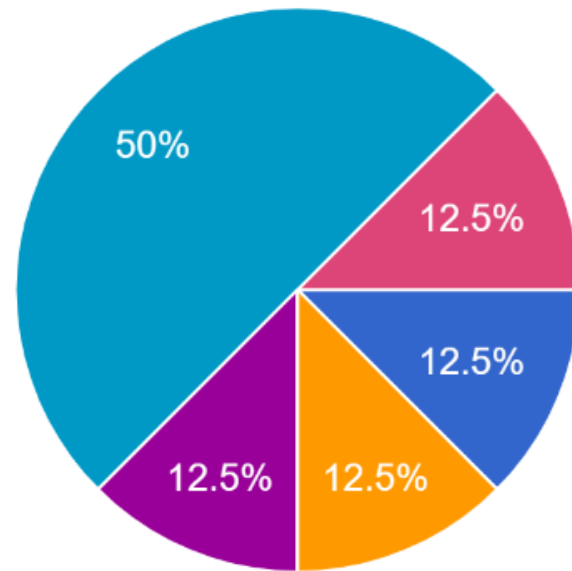


- 1. Drink the vowel
- 2. Sing accessing your chest and head resonance
- 3. Imagine your voice is a violin with long, sustained vibrato
- 4. Make the sound of a siren from low to high at same volume level
- 5. Sing as though in conversation and...
- 6. Hum low in pitch with an edgy 'Mm'...
- 7. Sing a balancing combination of co...

Mix / Transition

D) Which of the following instructions do you prefer to develop a smooth register transition (Mix) ?

8 responses



- 1. Sing 'Nei' through the lyric or phrase
- 2. 'Cry on Pitch'
- 3. Combine 'Cry' and 'Twang'
- 4. Resist your increased airflow with thick to thin vocal folds
- 5. Cry and 'narrow the vowel' as you sing through the bridge
- 6. 'Lean into' the Sound as though singing against the wind
- 7. 'Lean' into the Mix

Interviews

- Participants expressed that accurate anatomical focused imagery is helpful to access the correct vocal objective
- Participants expressed importance of recognition and engagement to 'think' and 'feel the feelings'
- Participants also expressed the desire to move towards simpler imagery cues in some cases such as 'crying' or 'leaning' - a very direct cue that translates more easily during live performance
- All participants expressed that mental imagery was helpful to them in their vocal training and practice.



Reflective examination of the personal and professional learning experience

- Mental imagery and imagery cues are an effective tool in assisting singers to connect vocal registers using motor images to achieve vocal objectives.
- Imagery demonstrated significant progress in practice.
- Comparisons were made between a basic initial instruction and then a 'student selected imagery cue' and significant improvement became evident using imagery.
- I consider beginning with descriptive anatomically focused imagery, backed up with illustrations that enable the vocalist to visualise internal processes.
- It became evident among participants that once these processes have been embedded through repetition, that **simplified** imagery phrases may be sufficient to repeat the process.



Reflective examination of the personal and professional learning experience

- Imagery can be a vital tool used as part of a blended approach that uses various kinaesthetic targeted vocal exercises to embed technique.
- Further research is required using both complex and simpler imagery cues
- Teachers should keep a record for each student of their effective imagery cue(s) and simplified cues, noting successful terminology. This is dependant upon the personal experience and mental imaging ability unique to the student (Saintilan, 2014).
- Wherever possible, encourage and collaborate with the student to create their own mental imagery by 'noticing out loud' (Cornett, 2019) so that they take ownership of it within their own practice (Viskontas, 2019).

Suggested Blended Approach: Teaching Process

1) Define the objective (e.g., Cry on Pitch).
Demonstrate vocally or play an example (auditory cue)

2) Describe the action: 'Drop' and 'Tilt' of the larynx
(anatomical referencing cue, show an image as visual cue).

3) Use accurate imagery; give options for the student.

*Imagine (your larynx is) 'dropping and tilting as you cry/lean into the pitch...' (Descriptive, metaphoric cue),
Refer to 'Noticing out loud,' using anatomical referencing.*

4) When this initial cue is embedded **replace with a simple direction** such as 'cry' or 'sob' or 'make it whiney' 'Feels like... crying into the pitch' or 'lean into the tone.'



Thank You
for Listening



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