

Work-based learning - BMPF 7326

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**Exploring the perceptual experiences of singers using a French nasal vowel as an
approach to facilitate belting**

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Project Proposal

Research Question

How does the use of French nasal vowels affect the singer's experience of singing and their perceived ability to facilitate a belt sound?

Context

As a voice teacher working primarily with advanced and professional singers, I have witnessed the demand for a belt aesthetic in contemporary genres of singing (Zuim, Stewart, and Titze, 2021). However, compared to Western classical vocal pedagogy, there is a need for proven instructional strategies for singers who need to facilitate this aesthetic in a sustainable way (Moniz, 2022). This pilot project aims to contribute to the effort of identifying tools that can be practical for voice teachers who wish to teach a sustainable approach to belting.

Justification

Research indicates a relationship between articulatory engagement, vocal tract shaping, and vocal acoustics (Leppävuori et al., 2021). The articulation of French nasal vowels requires a slightly retracted tongue position, which results in a partially narrowed vocal tract (Carignan et al., 2015). Similar pharyngeal narrowing has been observed in twang, which is characterised by the ringing quality that is often utilised in contemporary commercial music (Perta, Bae, and Obert, 2021), and has been shown to improve sustainability in belting (Moniz, 2022). This pilot study will explore the experiences of singers who are instructed to use a French nasal vowel as an approach to learning articulatory engagement and vocal tract shaping consistent with twang, with the goal of improving vocal economy in singing.

Intended Impact

This project was conceptualised within a pragmatic research paradigm, in which research is aimed at representing truth, as well as identifying problems and finding practical solutions to them (Brinkmann, Jacobsen, and Kristiansen, 2020). I intend to explore the potential application of a French nasal vowel as a tool in vocal instruction by gaining singer-centred insight regarding its perceived ease of execution, effects on vocal production, and aesthetic outcomes.

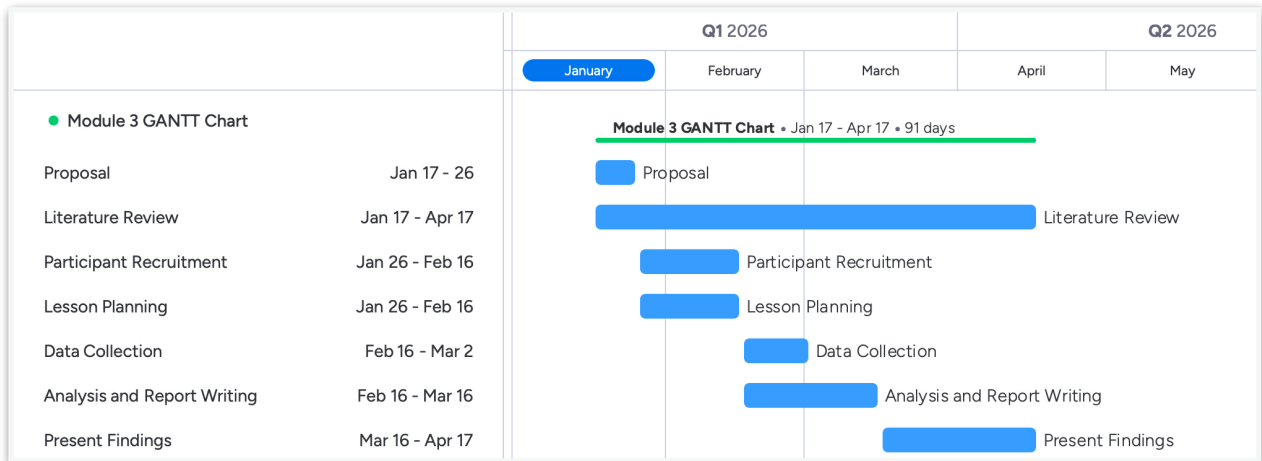
Outlined Intention

In this action research study, data will be collected through qualitative methods. Voice lessons will be conducted with six students, wherein a selected French nasal vowel and vowel nasalising modifications will be used as a strategy to support students in facilitating a belt

sound. I will observe the exercise outcomes, which will be recorded as field notes, and conduct semi-structured interviews to collect data on participants' experiences and insights. Data will be triangulated using reflective journals to be completed and submitted by participants, as well as audio recordings and transcripts.

Expected Timeline

The project timeline is represented by the following Gantt chart (Fig. 1):



Work-Based Learning Project Gantt Chart (Fig. 1)

Ethics and Insider Research

Because the research will be conducted in the United States, I consulted the Guiding Principles for Ethical Research, published by the United States National Institutes of Health (2025), to prepare for possible ethical concerns. Clear communication of expectations and participation requirements will be necessary to avoid emotional or physical harm, to ensure that singers understand the scope and limitations of the project and the practitioner, and to clarify that by agreeing to participate in the study, singers indicate that they are adults with no conditions that may preclude them from safely receiving voice training. As the researcher and vocal instructor, I will establish and communicate a clear plan for conducting the lessons to facilitate transparency, ensuring as much objectivity as possible and mitigating the influences of existing student-teacher relationships that may affect outcomes.

Learning Outcomes

The aim of this pilot study is to examine the perceptual experiences of singers when instructed to use a French nasal vowel and vowel nasalisation as a means of achieving twang through vocal tract narrowing for belt production. This articulatory teaching strategy will be assessed in

light of the participants' observations regarding its practicality, effectiveness, sensorimotor outcomes, and aesthetic outcomes. Through this study, I hope to develop my research and analytic skills, with the intention of making contributions to the development of pedagogical tools for vocal instruction. I also hope to improve my understanding of the relationship between articulation, phonation, and acoustics. Finally, as I reflect on the findings of this study, I hope to identify areas of potential growth and improvement in my own teaching.

Project Report

Introduction

There is a need for well-studied pedagogical tools for vocal instructors who wish to teach singers in the contemporary commercial music sub-genres (Moniz, 2022), particularly in styles of music such as pop and musical theatre where there is high demand for vocally intensive aesthetics such as belting (Zuim, Stewart, and Titze, 2021). There have been considerable advances in research that have increased our understanding of these vocal tasks from the perspectives of physiology and acoustics (Sundberg, Thalén, and Popeil, 2012; McGlashan, Thuesen, and Sadolin, 2017; Saldias et al., 2019), but to my knowledge, there is a gap in research that is dedicated to examining the experiences and perspectives of singers themselves as they are applying specific tools for vocal conditioning, habilitation, and performance. By contrast, my daily practice as a vocal instructor revolves around singers' insights, inviting students to contribute their own perceived experiences during training so as to incorporate their perspectives into learning goals and teaching strategies (Crocco and Meyer, 2021). This study mirrors that same approach to pedagogy, but on a larger scale, by examining the experiences and perspectives of singers to assess the practicality and effectiveness of French nasalised vowels in facilitating twang for sustainable belt vocal production.

Please see Appendix 1 for a glossary of commonly-used technical terms.

Literature Review

This literature review utilised forward and backward chaining as well as pearl growing strategies for locating relevant sources. Priority was placed on peer-reviewed works from the past ten years, although some exceptions were made for relevant references found in grey literature and studies that were published prior to the exclusion period. Search terms included, but were not limited to: nasal vowels, vowel articulation, nasalance, nasality, twang, belting, electromagnetic articulography, vocal acoustics, accent learning, motor learning, pressed phonation, and cognitive load.

Introduction to belting

Belting is an aesthetic quality that is used in many sub-genres of contemporary commercial music (Zuim, Stewart, and Titze, 2021), and is often characterised by higher sound levels and a vocal quality that resembles yelling in speech (Sundberg, Thalén, and Popeil, 2012; Sundberg and Thalén, 2015). McGlashan, Thuesen, and Sadolin (2017) use the terms *overdrive* and *edge* to characterise belting, which are perceptual terms used that impart “shout-like” and “screamy” (p. 385e.20) attributes to belt vocal production.

Belting shares some physiological similarities with hyperfunctional dysphonia (Saldias et al., 2019). Compared to other forms of singing such as Western classical and musical theatre legit, belting has been reported to involve a higher closed quotient, which measures how long the vocal folds are adducted in a vibratory cycle, as well as higher subglottic pressure, which measures the amount of air pressure that accumulates beneath the vocal folds to initiate vibration (Ikävalko and Laukkanen, 2025). These conditions, coupled with the widespread use of belting in contemporary music genres, create a need for teaching strategies that can impart singing habits that promote sustainability, which this study hopes to help address.

Pedagogic tools for belt singers and voice teachers

There is great demand for contemporary commercial music (CCM) among listeners and singers who are studying and performing its many sub-genres (Bartlett and Naismith, 2020), with belting being a very common aesthetic feature (Zuim, Stewart, and Titze, 2021). Due to its functional similarities to high-intensity speaking as described above, singers have been found to incur a higher risk of injury when using this stylistic device without effective training (Sielska-Badurek et al., 2018).

Training protects singers who perform belt-style singing compared to individuals who have had no singing training and who engage in similar vocal tasks (Ikävalko and Laukkanen, 2025).

There are a number of organisations that offer training for vocal instructors who wish to teach CCM singing styles efficiently, including belting (Complete Vocal Technique, 2026; Estill, 2026; Institute for Vocal Advancement, 2026; Shenandoah University, 2026), and despite past assertions that none of these methods are supported by empirical data (Bartlett and Naismith, 2020), some of these institutions have, in fact, made contributions to voice research themselves (Estill, 2026; Complete Vocal Technique, 2026). In addition to teacher training programs, there are a number of training programs that cater directly to vocalists who wish to learn belting technique independently (Henny, 2026; Manning, 2026).

Studies are revealing helpful information about vocal acoustics and physiology that may help inform the practice of safe belting (Sundberg, Thalén, and Popeil, 2012; McGlashan, Thuesen, and Sadolin, 2017; Saldias et al., 2019). However, research on this topic has been predominantly quantitative in nature. I have not found any studies that used a qualitative approach to explore singers' perceptions of ease and sustainability when using specific pedagogic tools. Qualitative approaches, such as the one utilised for this study, could offer a richer, more nuanced perspective (Brinkmann, Jacobsen, and Kristiansen, 2020), which could complement empirical data for the development of singer-centred teaching strategies.

Pharyngeal narrowing and twang

One aspect of belting that will be explored in this study is twang. Complete Vocal Technique (2023) differentiates between *necessary twang* and *distinct twang*, wherein the former is barely perceptible apart from the presence of vocal clarity and an increase in volume and the latter is a more intentionally bright and sharp sound. Research shows that twang is generally achieved through pharyngeal narrowing and has been shown to contribute to belt vocal production by increasing vocal intensity, thereby improving sustainability by reducing impact stress while belting (Perta, Bae, and Obert, 2021; O'Hrens et al., 2025). However, other factors may negate this improved sustainability, such as excessive subglottic pressure, vocal fold thickness, and initial glottal angle (Zhang, 2020; Zhang, 2021; O'Hrens et al., 2025). The correlation of pharyngeal narrowing with hyperfunctional dysphonia, particularly in the presence of a raised larynx and the absence of a wider jaw and lip opening, implies that its impact on sustainability is not guaranteed (Saldias et al., 2019). The appropriateness of pharyngeal narrowing as a tool for belting may also depend on intended aesthetic outcomes, with some styles of belting requiring greater pharyngeal narrowing than others (Rudisch et al., 2025). Different singers may have varying views on the effectiveness of pharyngeal narrowing as a pedagogic tool, depending on each singer's existing singing habits, level of proficiency, and desired aesthetic outcomes.

These findings suggest that a degree of individualisation may be necessary when applying twang to belt production, from a mechanical and an acoustic perspective. Examining singers' subjective experiences, as is the aim of this study, may help identify areas where such individualisation may be necessary and practical.

Using vowel nasalisation as a pedagogic tool for twang belt production

The common usage of vowel modifications in vocal instruction (Moniz, 2022) may increase the likelihood that other articulatory tools would be practical for use within a voice studio setting,

especially where other articulation exercises and strategies have been used in the past. This study aims to examine this concept in application.

From an articulatory standpoint, it has been shown that a nasalised /*ã*/ vowel as used in the French language is generally produced with a retracted tongue position and a narrower pharyngeal opening compared to its oral counterpart /*a*/ (Carignan, 2014; Carignan et al., 2015). This makes the nasalised /*ã*/ vowel a potential articulatory tool for facilitating twang vocal production during vocal exercises. While these studies were conducted with non-singing speakers, past findings support the theory that a similar strategy may be used in singing (Sundberg and Thalén, 2010). These findings help inform the vowel selection for the vocal exercises used in this study.

Carignan (2014) observed that a nasalised French /*ã*/ vowel resulted in a lowered second vocal tract resonance as a result of the lowering of the soft palate, and possibly also due to the protruded and rounded lip shape required to form the vowel. Acoustically, it is generally ideal to boost the second vocal tract resonance past the A3-E4 pitch range when belting in order to maintain a spoken quality beyond the chest register (Herbst, Story, and Meyer, 2023). This suggests that the nasalised French /*ã*/ vowel may be a helpful articulatory tool for exploring pharyngeal narrowing and twang belt production, but may not be ideal for direct use as an articulation strategy in performance due to its effects on vocal tract resonance. This influences the way this articulatory strategy will be adjusted when working with the participants on song application.

Literature Review Summary

These findings illustrate the demand for vocal instruction tools designed for singers who wish to use belting for performance (Moniz, 2022; Ikävalko and Laukkanen, 2025), and they suggest potential for an articulatory strategy that capitalises on the connection between belting, twang, and vowel nasalisation (Sundberg and Thalén, 2010; Perta, Bae, and Obert, 2021; O'Hrens et al., 2025). Through research design that centres the experiences of the singers, this study aims to examine this articulatory strategy, with the goal of contributing to the ongoing study and development of pedagogical tools for contemporary vocalists.

Methodology and Methods

Research paradigm

This study was grounded in a critical realist ontological foundation, which frames reality as both material and contextual (Terry and Hayfield, 2026). Critical realism offers a lens through which the gaps between knowledge and experience can be bridged, especially with the aim of finding solutions to practical challenges (Willis, 2023). As such, pragmatism was a fitting epistemological foundation for this study, as it prioritises the usefulness and practical nature of knowledge (Brinkmann, Jacobsen, and Kristiansen, 2020). Interpretivism was also considered as an alternative paradigm, with its emphasis on the subjective experiences of individuals (Buzzanell, 2017). However, this study aimed to explore individual experiences as a means of assessing a pedagogic tool, and this emphasis on problem-solving was best suited to a pragmatic epistemology (Brinkmann, Jacobsen, and Kristiansen, 2020).

Methodology overview

A qualitative methodology was used to gather in-depth individual perspectives, provide context, and conduct analysis and interpretation (Braun and Clarke, 2024; Lim, 2024). In keeping with the pragmatic paradigm, the project was designed as an action research study, combining practice with reflection and integrating practitioner insight into the collection and interpretation of data, connecting extant research to practice and presenting solutions to existing challenges (Costello, 2011; Lim, 2024). An alternative methodology such as general inquiry may have also facilitated a rich exploration of singers' experiences, but it would have lacked the element of identifying and addressing a specific challenge (Lim, 2024).

Qualitative methods

Participant insights were gathered through a variety of qualitative methods in order to ensure richness and depth, as well as to provide triangulation for findings collected (Lim, 2024). The methods used were:

Open-ended questionnaire

An intake form, designed as open-ended questionnaire, was used to collect information on participants' singing and language background, vocal training, and belting experience. I found no existing templates for the questionnaires and interview outlines,

so a customised questionnaire was designed based on my experience as a voice teacher, as well as the knowledge gleaned from the literature review.

Semi-structured interview

A semi-structured interview outline was created for the data collection session to ensure that necessary points were covered, such as perceived vocal quality and perceived ease of execution. Additional questions were included as they emerged.

Observation, recordings, transcripts, field notes, and reflective journal

Observation took place during the data collection session, and field notes were taken during the transcription and review of session recordings. Participants were asked to complete a reflective journal after their session as a means of sharing their insights independently.

Sampling methods

Participants were selected from the education team at the Institute for Vocal Advancement (IVA) through purposive sampling, following specific qualifications to ensure their ability to safely participate in the vocal tasks and that the insights collected were relevant to the research question (Bhardwaj, 2019). These qualifications included:

- Unimpaired vocal health, free of illness, injury, or pathology
- Inter-singer similarity in levels of singing experience, defined by the number of years of vocal instruction, performance, and/or teaching experience

The sample size was limited to six female participants, with consideration for the project timeframe and the logistics of the data collection process as outlined below, allowing for a more in-depth reflexive analysis (Braun and Clarke, 2021). See Figure 2 for the participant profiles.

Data collection process

The data collection methods were chosen and sequenced in accordance with existing suggestions for action research (Costello, 2003; Lim, 2024).

Participant	Years of Singing Experience	Genres Performed	Singing Skill Level	Primary Language
P1	> 35	Predominantly classical training, pop, jazz, singer-songwriter, country, musical theatre, chorus, vocal jazz, choirs	Experienced vocal instructor and professional vocal performer	US English
P2	> 25	Musical theatre, pop, soul	Experienced vocal instructor	UK English
P3	> 30	Musical theatre (legit and contemporary), choral music, vocal ensemble	Experienced vocal instructor and professional musical theatre singer	US English
P4	> 30	Musical theatre (legit and contemporary), pop	Experienced vocal instructor and professional musical theatre singer	US English
P5	> 30	Contemporary worship music, pop, R&B	Experienced vocal instructor	Australian English
P6	> 35	Worship music, choral music, musical theatre, golden oldies (40s, 50s, and 60s), classic rock	Experienced vocal instructor and professional vocal performer	US English

Participant profiles (Fig. 2)

Timeline

Data collection was conducted in four phases, illustrated in the following table (Fig. 3a and 3b):

Phase 1: Recruitment and planning
Participants were personally invited through private message to participate in the study. An information sheet and consent form were provided to brief participants on research study details, including participant expectations and rights to anonymity and withdrawal. Participants were then asked to complete the intake form through an unpublished web form.
Phase 2: Onboarding
After recruitment, participants were invited to schedule their sessions through an online calendar. In preparation for their session, participants were instructed to learn an excerpt from Celine Dion's "Where Does My Heart Beat Now?" (Johnson and Rhodes, 1990), which was selected because of the singer's French Canadian English dialect, to provide the participants with exposure to the target accent (Alghazo, Jarrah, and Al Salem, 2023). A practice track, accompaniment track, and sheet music were provided.
Phase 3: Data collection
Data collection took place within a 2-week timeframe, and each singer participated in one 30-minute session. A lesson plan was created to ensure uniformity and transferability wherever possible (Cope, 2014; Daniel, Asil, and Carr, 2024), except for semi-structured interview segments, which varied slightly between participants in response to their unique responses. The lesson plan started with a vocal warm-up using semi-occluded vocal tract exercises, which have been shown to reduce phonation threshold pressure and extrinsic muscular tension (Savareh et al., 2023). The provided song excerpt was then used as a means of assessing belt vocal performance. The initial assessment was followed by a series of vocal exercises using a nasalised French /ã/, followed by vowel modifications to fully nasalise (perceived at 100%) and then partially nasalise (perceived at 10%-15%) selected vowels in the lyrics, to facilitate varying degrees of anterior to posterior pharyngeal narrowing and vallecular occlusion as a means of producing twang (Perta, Bae, and Obert, 2021). A second assessment using the same song excerpt was then used to observe changes to the singer's experience. Semi-structured interview segments were integrated throughout the session to explore the singer's insights and experiences.

Data Collection Timeline (Fig. 3a)

Phase 4: Reflection and analysis

Data was analysed using reflexive thematic analysis, wherein I applied my viewpoint as a practitioner-researcher as a frame for analysing participant data (Braun and Clarke, 2022). Coding was oriented towards inductive analysis, wherein the data served the purpose of answering the research question and exploring individual insights in light of existing information and my own perspectives as the researcher (Braun and Clarke, 2022; Terry and Hayfield, 2026). Themes were primarily identified at the semantic level, as this pilot study mostly concerned itself with capturing the experiences of the participants, but latent themes were also captured as they emerged (Campbell, 2021). This analytic strategy allowed me to capitalise on my own perspective as a researcher-practitioner (Braun and Clarke, 2022; Terry and Hayfield, 2026). Deriving themes at the semantic level offered an explicit way of viewing the data collected through this pilot study, which was not filtered through a pre-existing theory (Braun and Clarke, 2022), but can serve as a foundation for an evolving inquiry (Braun and Clarke, 2021).

Data Collection Timeline, cont. (Fig. 3b)

See Appendices 2-3 for research instruments used in this study, including information sheets, consent forms, intake forms, and the lesson outline.

Insider research

My position as an insider researcher informed my data analysis strategy to ensure that my involvement contributed rather than detracted from the outcomes (Braun and Clarke, 2022). To minimise power imbalances and relationship dynamics that might influence the participants' free expression (Lewis and Quinnell, 2024), I selected singers who are not my own students and who are also voice teachers with similar levels of instructional experience.

Ethics

All forms containing participants' personal information were saved offline in a password-protected drive and personal information was redacted from transcripts and reports to ensure participant privacy (Lim, 2024). Participants were offered an opportunity to review their transcripts and were informed of the extent of their participation in the study to ensure transparency (Daniel, Asil, and Carr, 2024). They were also informed of their ability to withdraw

at any point during the study. Ethical approval for this project was provided by the University of Wales Trinity St. David.

Findings and Analysis

Analysis of the data yielded the following themes, which are summarised below (Fig. 4) and outlined in detail in the following sub-sections.

Theme	Description
Belting is subjective and situational	Singers had a generally unified concept of an optimal belt sound, but presented a variety of individual observations of their own belt performance, illustrating the variability in the experience and mechanics of belt.
Accent exposure is a factor in the effectiveness of articulatory tools	All participants had some level of exposure to French language, raising questions about how dialects and cultural backgrounds might affect a singer's experience of articulation-based teaching strategies.
Variable mechanical experiences can still lead to uniform acoustic results	There was variability in the way the articulatory tool impacted the singers' belt production while arriving at similar acoustic outcomes, demonstrating that variable paths may lead to similar results.
Mentally harder but vocally easier	The tool resulted in improved experiences with belting but presented challenges for several of the singers that pointed to a learning curve related to sensorimotor control and coordination.
Potential for vocal economy does not automatically change singing behaviour	Participants observed themselves involuntarily defaulting to existing articulatory and singing habits that were counterproductive to the exercises, revealing limitations in the tool's effectiveness as a habilitative tool.
A more efficient and less aggressive path to a belt sound...with caveats	Observations pointed to the importance of individualisation to account for singers' cultural backgrounds, mechanical tendencies, and performance needs.

Summary of themes (Fig. 4)

For intake form responses, full lesson transcripts, and reflective journal responses, please see Appendices 4-6. For a full list of codes and initial themes, please see Appendix 7.

Theme #1: Belting is subjective and situational

Participants generally associated an optimal belt sound with power, referring to the high intensity of belting that can be perceived as volume and often correlates with high subglottic pressure (Ikävalko and Laukkanen, 2025). Attributes such as thickness and fullness were also generally mentioned, which participants often associated with chest voice dominant registration and has been described by McGlashan, Thuesen, and Sadolin (2017) as overdrive. Participants listed ring or cut as an attribute of an optimal belt sound, which can be described as a clear, resonant quality that enables the voice to project through a space (Raveendran and Yeshoda, 2026). Lastly, all participants mentioned the need for sustainable vocal production, noting that an optimal belt sound is one that can be recreated while mitigating vocal fatigue or injury.

Although the participants generally shared similar definitions of an optimal belt sound, there was also a shared emphasis on the subjective and situational reality of belt production. Even in their observations of their own voices as they performed the initial song assessment, there were differences in the way that they described their own perceptions of belt. Figure 5 illustrates the participants' responses when asked to evaluate their own belt during the first song assessment of the session.

Participant	Response
P1	I will spread that [vowel]...until the cows come home...It was too heavy for as wide as it was at the top.
P2	I think I would prefer there to be more depth in what I just did there. I found that was a little high frequency , but it was very easy.
P3	I would just evaluate it as being more head dominant in those upper notes.
P4	I think it's successful in that I can maintain a chest dominant sound... maybe a little...shouty . But overall, like, I feel like it has some stretch at the top. Like I'm not totally hitting [a] wall.
P5	Seven. Seven .
P6	There's some really great moments...But... that was an okay first run .

Self-evaluations of current belt production (Fig. 5)

The array of responses demonstrates the variability in the participants' perceptual observations and self-assessments of their belt sound. This variability is to be expected from a group of singers with different singing backgrounds. It reflects the participants' assertions that belt is situational in its application, as well as the sensations and functional strategies that a singer might associate with it. This variability is well-documented by studies illustrating different sub-styles of belt (Sundberg, Thalén, and Popeil, 2012) and the different vocal tract configurations observed in those different styles (Rudisch et al., 2025). Understanding the participants' differing views on the acoustic qualities, laryngeal coordinations, and physical sensations associated with belting provided context that informed the analysis of data collected in this study.

Theme #2: Accent exposure is a factor in the effectiveness of articulatory tools

None of the six participants are French speakers, but all have had prior exposure to French language through education or encounters with French-speaking individuals. All of the participants have also used French nasalised vowels in their vocal training, and all have used French nasalised vowels in teaching other singers. However, none of the participants have used this articulation strategy to cultivate twang vocal production for belting.

Target accent exposure is helpful for increasing the likelihood of success when adopting a new or foreign dialect (Alghazo, Jarrah, and Al Salem, 2023), so it can be inferred that the participants' experiences with the French language gave them an advantage in executing the articulatory tools used in this study. Being voice teachers themselves, participants raised questions and observations about how French language proficiency, or lack thereof, may relate to the effectiveness and feasibility of this articulation strategy:

P1: It's been a long time since I've spoke[n] French. I had six years in school and then had a French client a long time ago. But...my pronunciation was never great. And so... my only hesitation would be...what if [a singer] can't find the sound?

One participant, in particular, noticed that it took considerable focus to facilitate the tongue positioning required for the /ã/ vowel, which caused her to lose focus on other articulatory elements such as mandible position:

P2: It was relatively easy to use—although Renee had to correct me on the amount my jaw dropped as I applied it so there's clearly a tendency there for me to forget what else is going on in my system when focu[s]ing purely on the tongue position required to

create that sound. I think if I were a native French speaker that would be less of an issue since that coordination would be far more intuitive.

Cognitive load theory is an approach used in multiple instructional fields, including language instruction, built on the premise that the inherent difficulty of a learning task increases as the learner is introduced to more elements and challenged to hold those multiple elements in working memory simultaneously (Gao et al., 2013). P2's observations demonstrate how introducing the new element of vowel nasalisation while maintaining other elements such as mandible positioning increased the difficulty of the task.

The following participant's response also demonstrates how a singer may not personally identify with the target accent, which could play a role in how much mental energy they spend on self-monitoring, as well as how confident they feel about adopting the target accent.

P5: I was just concentrating on making sure I feel some of this in my nose because I'm not French, and I wanna make sure that I'm doing the sound justice in my Australian throat.

Impacts of accent familiarity are explored further in the following themes. Future studies may help reveal how the absence of French language exposure may impact a singer's ability to adopt these same tools, and how accent exposure in general may play a role in the development, selection, and execution of articulatory strategies used within vocal instruction.

Theme #3: Variable mechanical experiences may still lead to uniform acoustic results

When asked about their impressions of the exercises used during the lesson, some participants reported experiencing quick and dramatic results, from the fully nasalised vowel exercises to the partially nasalised vowel substitution in the song (P1, P3, P4, P6). Others were less comfortable with the fully nasalised vowel exercises and the fully nasalised vowel substitutions during song application, but were more comfortable with the vowel substitutions when instructed to reduce the nasalisation to 10%-15% during the song application and assessment (P2, P5). One participant struggled with nasalising the /æ/ vowel in /sæʊnd/ and /wi'ðæʊt/ (P5). Despite this variability, all participants reported improved ease and increased power by the end of the exercises and song application process. Their observations illustrate the different ways that the tool impacted their vocal production and improved their function and sound.

P3: It helped me feel like I could "hold on" to a bit more of the sensation of the bottom as I went up...Felt almost like an insulated funnel that was keeping me from falling out.

In light of P3's self-reported tendency to sing with a more head voice dominant sound when attempting to belt, she observed that the exercises and adjustments allowed her to retain more thickness and chest voice qualities in her voice, possibly due to aryepiglottic constriction causing a decrease in the rate of air passing through the glottis, which may have been helpful for increasing the intensity of her sound (Samlan and Kreiman, 2014).

By contrast, P6 observed that the tools and exercises allowed her to access her belt with less heaviness while still retaining the desired acoustic qualities for the vocal task.

P6: For me, as a singer who tends to use too much weight when belting, I appreciate the opposite tendency of this French nasal vowel. It gave me a feeling of weightlessness while achieving a "belted" sound.

The observation of weightlessness implies increased vocal economy while still achieving a belt sound using twang through vowel nasalisation, an outcome that is consistent with modelling predictions on vocal economy in twang-like voices (O'Hrens et al., 2025).

Findings in Carignan (2014) report that there can be variability in the way French speakers produce nasalised vowels while still facilitating a sound that is perceptually and acoustically uniform, supporting the premise that humans orient speech movements around the desired acoustic outcomes more so than articulatory coordination. Rudisch et al. (2025) also found inter-singer variability in laryngeal coordination when performing the same belting sub-styles, and Perta, Bae, and Obert (2021) observed variability in twang production, with both studies presenting similar patterns of variable articulatory coordination yielding uniform acoustic results in a singing task. Although the present findings revolve around subjective and perceptual rather than mechanical observations, they also reflect the pattern of variable mechanical paths leading to similar acoustic outcomes in vocal production. This calls into question the need for rigidity and cultural homogeneity when using articulatory strategies to coach singers. These findings suggest that individualised, acoustically oriented, and culturally situated approaches to teaching voice may yield similar acoustic results, with possibilities for flexible and creative teaching strategies, particularly when accounting for localised dialects and accents. Exercises may use vowels that can be executed with more accuracy and ease based on the singer's primary

language, or tools may be derived using phonemes from the singers' linguistic backgrounds that achieve nasalisation and twang through coarticulation (Chanethom and Mather, 2019).

Theme #4: Mentally harder but vocally easier

Nasalisation presented different challenges for some participants, but the challenges appeared to be more related to sensorimotor control rather than the experience of the vocal task itself. Some participants (P2, P3, P5) struggled with nasalising the wide /æ/ vowel due to a combination of prior articulatory training and dialects, and required external feedback to maintain the shape and nasality of the /ã/ vowel rather than letting it narrow into an /õ/ or shift into a more oral /a/.

Renee: [during Exercise #3] That's it, lean into that French /ã/.

P1: I wanna finish it so bad.

The term “finished” in this case refers to a vowel sound that is more performance-ready. In the case of P2, whose primary accent is US English, the nasalised /ã/ vowel is an “unfinished” articulation strategy that would ultimately need to regain more orality in order to sound more natural or speech-like in her dialect.

As noted in theme #2, P5 noted that she generally focuses on the perception of where the sound was being projected rather than the sensation of articulatory engagement, which required considerable self-monitoring and focus during nasalisation:

P5: Sensation wise, it felt good to sing, just a little challenging to do it correctly in the lyrics to begin with...It's not the simplest, easiest feeling to find, but once it's there, it gets easier with every try.

The task of producing the /æ̃/ vowel, monitoring for nasalance rather than articulatory engagement, proved challenging for P5, which created an initial barrier to execution and lack of confidence in her performance.

Participants also noted more difficulty with applying nasalisation to the word /wɪ'ðæʊt/ compared to the word /sæʊnd/:

P4: That one [/wɪ'ðæʊt/] was somehow harder to make the adjustment from with the /æ/ to the /æ̃/. But...the /sæ/ to the /sæ̃/, that was it easier in my brain.

This particular challenge may have been a result of coarticulation. In the word /sæʊnd/, the /æʊ/ diphthong is followed by the nasal consonant /n/, which promotes nasalisation through coarticulation (Chanethom and Mather, 2019). This condition that is not present in the word /wɪ'ðæʊt/, wherein the /æʊ/ diphthong is followed by the plosive consonant /t/. The preceding consonants may also be playing a role, with /s/ facilitating a more lifted tongue dorsum compared to the /ð/ (Kim et al., 2012), which may be assisting the production of the /æ/ vowel.

Given their prior accent exposure, it may be inferred that these participants were already working with some level of an advantage regarding their familiarity with the French accent and nasalisation. However, their reported challenges indicate a level of mental effort involved in this articulatory strategy which varies from person to person. Although the exercises and adjustments ultimately yielded positive outcomes in the participants' experience of belting, the mental effort required for execution may prohibit other singers from using this specific tool effectively when primary dialects, speech patterns, and singing habits conflict with the vocal tract coordination required for nasalisation and twang. For example, as demonstrated above, English speakers typically nasalise vowels through coarticulation with nasal consonants, rather than producing them as independent phonemes (Chanethom and Mather, 2019), which makes application challenging for English-speaking singers when the target vowel is not preceded or followed by a nasal consonant.

Theme #5: Potential for vocal economy does not automatically change singing behaviour

O'Hrens et al. (2025) found that vocal economy decreased among singers using twang, despite modelling that suggests twang production would improve vocal economy. They suggest that singer behaviour, namely, an increase of subglottic pressure during twang production, may have negated the potential benefits of the vocal tract shaping strategy (O'Hrens et al., 2025).

Similarly, some participants in the present study encountered challenges in the initial stages of vowel shaping during their lessons due to the interference of existing counterproductive singing behaviours. For example, when asked to share her observations of her experience after the vocal exercises on the fully nasalised /ã/ vowel, P2 noted:

P2: I feel especially on the sustains, quite a lot of back pressure...I feel a lot of...build up of the air that's not escaping.

Because the scope of this study only focuses on the participants' experiences and perceptions, it is not possible to know with certainty what was causing the feeling of excessive pressure for

P2. However, she notes later in the lesson that it may have come from her own tendencies to use excessive subglottic pressure:

P2: That's what I like...that sort of strategy for is because I feel like it stops me from increasing the pressure past the point because...I do have a tendency to go for too much volume and it can get too much. So that helps me not to over-blow it.

A study by Zhang (2021) found that singers may still sing with elevated subglottic pressure with twang, which results in an increased phonation threshold pressure, negating the potential benefits of twang on vocal production. The observations presented by P2 demonstrate how a singer might experience this in practice, even as they are using an articulation strategy that is shaping the vocal tract for greater efficiency. P2's self-reported "tendency to go for too much volume" points to the way that a singer's existing vocal habits may influence the effectiveness of an exercise or an articulatory strategy. In this case, vowel nasalisation as a tool was not an automatic fix, as it still required external feedback and guidance, especially as it pertained to volume (P1), jaw position (P2), and lip aperture (P3 and P4). It can then be inferred that this tool is not a standalone solution, but can be part of a more holistic pedagogic tool kit.

Theme #6: A more efficient and less aggressive path to a belt sound...with caveats

All participants reported that the nasalisation strategy was ultimately successful in facilitating twang, which, in turn, increased power, improved fluidity and promoted connection between registers, improving the perception of ease and economy. More specifically, it was noted that this strategy worked relatively quickly compared to other strategies used by participants to prepare for belting:

P6: I think it's very practical...based on the exercises I was using to work on this song...this one...feels like a quicker route than some of the other exercises I was using. This feels like a quicker route.

The efficiency of this tool comes with limitations, which was demonstrated by other participants. One challenge was that of self-monitoring the sound in an effort to ensure that the aesthetic results were desirable and on target for genre demands:

P1: So...then I look to you as another set of eyes and ears and say, did that satisfy the sound?

A similar observation was noted by other participants in the earlier phases of the lesson, noting varying levels of uncertainty regarding the amount of nasality in the sound and the need for more depth and warmth to balance out the brightness of the vowel. It has been illustrated by Sundberg, Thalén, and Popeil (2012) that there can be a discrepancy between the singer's intention and the listener's perception when it comes to certain sub-styles of belting, particularly when it comes to attributes classified as *ringy*, *nasal*, and *brassy* (p. 46), and the participants' uncertainty regarding the timbral qualities of their belt sound demonstrates the challenge resulting from this discrepancy.

P2 reported that the fully nasalised vowels in the exercises and song application were in excess of what she felt were necessary or physically comfortable:

P2: On the first pattern that you gave me, I felt my larynx rise in a way that was not comfortable. I was having to clear my throat quite a lot at the end of each...at the end of each one.

However, the same participant noted that the partially nasalised vowel felt more physically comfortable and similar to their own personal belting strategy. This suggests that individualising the tool may be necessary for accommodating varying definitions and expectations of belt sound that are driven by genre-specific demands, professional expectations, and individual singer goals. It also suggests the benefits of tailoring vocal exercises and vowel modifications to account for linguistic, vocal, and cultural backgrounds, and accommodating varying degrees of sensorimotor control as well as pre-existing vocal habits.

Limitations

The sample size was intentionally kept small, and participants were chosen out of a selective pool with regards to biological gender, languages spoken, and skill level, to ensure some level of transferability (Cope, 2014; Daniel, Asil, and Carr, 2024) and allow for in-depth reflexive analysis (Braun and Clarke, 2021), but the small sample size limited the amount and variety of data collected. This study was also conducted over a limited time period, which did not allow for observations on long-term progress and impacts of exercise repetition and habituation.

Future Directions

This study revealed possibilities in creating individualised and culturally situated articulatory tools and exercises to teach singers twang vocal production for belting. It may be worthwhile to conduct further research on articulation and coarticulation patterns in other languages and the

relationships between these patterns and vocal acoustics. Such knowledge would be valuable in building a foundation for developing tailored instructional strategies that utilise the singer's primary language, accent, and language/accent exposure as a basis for the selection of vowel-consonant combinations in vocal instruction, which may optimise teaching strategies, and in turn, the learning process. It may also be helpful to study patterns of mechanical variability leading to the same acoustic outcomes in articulation during singing, and how these patterns may be interpreted to create responsive teaching strategies that minimise cognitive load.

Conclusion

This qualitative exploration yielded meaningful insights into the experiences of singers who were tasked with using French nasalised vowels as a tool for twang vocal production in belting. The outcomes reflect the established relationship between vowel nasalisation and pharyngeal narrowing resulting in twang vocal production (Carignan et al., 2015), as well as the potential benefits of twang vocal production in belting (Perta, Bae, and Obert, 2021; O'Hrens et al., 2025). The findings demonstrate a need and opportunity for developing individualised vocal instruction strategies that reflect a holistic view of singers' linguistic and cultural backgrounds in conjunction with other factors that may typically be addressed in vocal instruction, such as existing vocal habits, skill level, sensorimotor capabilities, and performance expectations. Understanding the relationships between articulation, vocal function, and vocal acoustics, could offer a useful basis for the selection and design of vocal instruction tools aimed at achieving functional results such as twang while using articulatory strategies that capitalise on singers' existing speech patterns. This approach, which is grounded in singers' experiences and backgrounds, presents potential benefits in decreased cognitive load associated with articulatory teaching strategies (Chanethom and Mather, 2019), which may result in a learning experience that is not only more efficient but is also culturally relevant.

This study greatly improved my understanding of the relationship between articulation and vocal production, especially in the context of singers' linguistic and vocal patterns. The practice of collecting data and conducting reflexive analysis challenged me to view my practice of vocal instruction in a more rigorous way, to think more holistically and critically of my pedagogic tools, and to engage with my experiences in a more insightful manner. Several concepts emerged from this project that warrant further research which will fuel further growth, particularly in the areas of articulation, vocal acoustics, and motor learning. However, the practices involved in this project have had a direct and positive impact on my daily practice as it is in the present.

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Appendix 1: Glossary

- **Belting** - a style of singing that is often used in several sub-genres of contemporary commercial music such as pop, rock, gospel, and musical theatre (Zuim, Stewart, and Titze, 2021), and is often characterised by high power, volume, intensity, and a vocal quality that resembles yelling in speech (Sundberg, Thalén, and Popeil, 2012; Sundberg and Thalén, 2015).
- **Distinct twang** - a manner of vocal production that involves pharyngeal narrowing and that is easily distinguishable through an intentionally bright and sharp sound (Complete Vocal Technique, 2023)
- **Impact stress** - the force of collision per unit of contact area between vocal folds during phonation, a contributing factor to vocal fold trauma (O'Hrens et al., 2025)
- **Initial glottal angle** - the angle that is formed by the vocal folds at rest, which determines the distance between the vocal folds prior to phonation (Zhang, 2016)
- **Necessary twang** - a manner of vocal production that involves some level of pharyngeal narrowing, resulting in a very subtle shift in vocal quality characterised by clarity and a relative increase of perceived volume (Complete Vocal Technique, 2023)
- **Nasality** - a perceived acoustic vocal quality that is interpreted as sound coming through the nasal passage, generally resulting from a combination of articulatory movements, including lowering of the velum, tongue retraction, and pharyngeal constriction (Desmeules-Trudel and Brunelle, 2018)
- **Nasalance** - the percentage of acoustic energy passing through the nasal cavity relative to the sum of acoustic energy passing through the nasal and oral cavities (Dow, 2020)
- **Phonation threshold pressure** - the lowest amount of subglottic pressure necessary for the vocal folds to vibrate (O'Hrens et al., 2025)
- **Ring/cut** - a vocal attribute that can be described as a clear, resonant quality that enables the voice to project (Raveendran and Yeshoda, 2026)
- **Subglottic/subglottal pressure** - the amount of air pressure that accumulates beneath the vocal folds required to initiate vibration (Ikävalko and Laukkanen, 2025).
- **Twang** - a manner of vocal production that involves pharyngeal narrowing and produces a ringing quality and increased intensity in the voice (Perta, Bae, and Obert, 2021)

Appendix 2: Information Sheet and Consent Form

Participant Information Sheet

For singers of contemporary music genres such as pop and musical theatre, belting is a highly sought-after skill. This research study will explore the experiences of singers who are instructed to use specific vowel shapes as an approach to learning how to belt sustainably. By participating in this project, you will help contribute to what we know about the effectiveness of certain vowel shapes when used as teaching tools in voice lessons. Your thoughts and feedback will shape our understanding of the learning process from the singer's standpoint, which can provide a starting point for further study while also improving the tools that we are already using as voice teachers today.

What will this research project entail?

In this study, you will be asked to participate in the following:

One private (one-on-one) voice lesson with the researcher and instructor, Renée Maranan, where you will be coached through some vocal exercises and a pre-selected section of a song. These lessons will take place over Zoom, and will be recorded for reference and analysis.

Interviews with the researcher, which will be conducted at the beginning of the lesson, partway through the lesson, and at the end of the lesson.

Reflective journals will be requested from you, which you will complete and submit electronically after the lesson has taken place.

It would be helpful for participants to know that the researcher will be making notes of any observations made during or after the lessons and interviews.

How will your information and the collected data be used?

All recordings, written observations and notes, submitted journals, and interview transcripts will be stored offline in a password-protected folder in an external hard drive. Data will only be used for analysis and reflection; none of it will be shared with individuals or organizations outside of the study. Participant names will not be included in the final report and presentation. All collected data will be discarded at the end of the study.

Participant Consent Form

I, _____, voluntarily agree to participate in this research study.

I understand that even if I agree to participate now, I can withdraw at any time.

I understand that I can refuse to answer any question involved during the research process without any consequences of any kind.

I have had the purpose and nature of the study explained to me in writing, and I have had the opportunity to ask questions about the study.

I understand that participation involves:

- Taking one private voice lesson with Renee Maranan, which will be recorded
- Participating in interviews before, during, and after the voice lesson
- Completing and submitting a reflective journal I understand that I will not benefit directly from participating in this research.

I agree to my interview being recorded.

I understand that all information I provide for this study will be treated confidentially.

I understand that in any report on the results of this research, my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview that may reveal my identity or the identity of people I speak about.

I understand that disguised extracts from my interview may be quoted in the final report and presentation.

I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities. They will discuss this with me first, but may be required to report with or without my permission.

I understand that signed consent forms and original audio recordings will be retained in a password-protected folder in an offline external hard drive until the final report presentation.

I understand that a transcript of my interview, in which all identifying information has been removed, will be retained for the duration of this research project until the final report presentation.

I understand that, under the Freedom of Information legislation, I am entitled to access the information I have provided at any time while it is in storage as specified above.

I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Renée Maranan, Researcher
lessons@reneemaranan.com

Louisa Morgan, Research Supervisor
louisa@voicestudycentre.com

By signing below, I acknowledge and agree to the above terms of this research study.

Participant Signature

Participant Name

Date

I believe the participant is giving informed consent to participate in this study.

Researcher Signature

Researcher Name

Date

Appendix 3: Lesson Plan and Scale Patterns

Introduction

- Singers will be asked to come to their lesson having done a general vocal warm-up.
- In case singers experience health issues, illness, or acute vocal fatigue on the day of their lesson, they will be asked to contact Renée to reschedule their lesson.
- Prior to the voice lesson, singers will be asked to learn the chorus from “Where Do All the Lonely Hearts Go” by Céline Dion (see attached sheet music, page 3).

Lesson structure

I. Discovery

- I. Renée will discuss the information provided by the singer through the Intake Form
- II. Any additional questions or information presented by the student will be discussed
- III. Renée may ask follow-up questions based on the intake form submission
- IV. Renée is to reiterate that the primary goal of this lesson is not to ensure improved vocal function for the singer, but to assess their experiences when using the articulation strategy being studied
- V. Additional questions:
 - I. How confident are you in your ability to produce a belt sound?
 - II. How satisfied are you with your belt sound today?
 - III. How would you describe an optimal belt sound?

II. Warm-up

- I. Lip buzz on octave arpeggio, starting top pitch at F#4 to top pitch of G5
- II. Lip trill on 1.5 octave pattern, starting top pitch at C#5 to ending top pitch of G5

III. Song Assessment #1

- I. Sing the song excerpt with accompaniment
- II. Self-assessment: How would you evaluate your belt sound as it is?

IV. Exercises

- I. /d/ staccato on octave arpeggio, starting top pitch at B4, ascending in key to top pitch E5 and descending to top pitch G4
- II. /d/ legato on 5-tone diatonic pattern, starting top pitch at E4, ascending in key to top pitch E5
- III. /d/ legato on octave arpeggio, starting top pitch at B4 ascending in key to top pitch E5 and descending in key to top pitch G4
- IV. /d/ legato on octave arpeggio and sustaining the 8th degree, starting top pitch at B4, ascending in key to top pitch E5 and descending in key to top pitch G4

V. Interview questions:

- I. What do you observe when you articulate that vowel?
- II. What is engaging? Where do you feel the voice resonating?

V. Song Application/Vowel Substitution

- I. In the phrase “where is the sound,” ask singer to substitute /sæʊnd/ with /sæʊnd/
 - I. Assess the singer’s experience
 - II. Assess the singer’s perception of their timbre
- II. In the phrase “I can’t live without,” ask singer to substitute /wiðæʊt/ with /wiðæʊt/
 - I. Assess the singer’s experience
 - II. Assess the singer’s perception of their timbre
- III. Ask the singer to self-monitor and reduce the intensity of the nasalised vowel by 10% or 15%
 - I. Assess the singer’s experience
 - II. Assess the singer’s perception of their timbre

VI. Song Assessment #2

- I. Sing the song excerpt with accompaniment
 - I. Assess the singer’s experience
 - II. Assess the singer’s perception of their timbre

VII. Final interview

- I. What was your impression of the vowel strategy used in this session?
- II. What are your thoughts on the practicality of this strategy as a tool for singers working on belting repertoire?
- III. How would you describe its effect on the feeling of ease when performing the assigned song excerpt?

VIII. Thank you and instructions for reflective journal immediately after lesson

Scale Patterns

Octave Arpeggio



1.5 Octave Arpeggio



Octave Sustain



5-Tone Pattern



Appendix 4: Intake Form Responses

INTAKE FORM: P1

Name: [P1]

Where are you currently located? Nashville, TN

What is your primary language? English

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. French, very minimally

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. Yes - Japanese, Korean, Portuguese, Italian, Spanish - very minimally

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. Voice lessons on and off for over 35 years. Studied classically on the college level. Pop, Jazz, Singer-songwriter, Country, some MT, chorus, vocal jazz, choirs, some musical theater

Please describe your history of vocal training, including number of years, genres, and techniques. Voice lessons on and off for over 35 years. Studied classically on the college level SLS, IVA, Somatic Voicework, understanding of Estill, understanding of Lynn Martin's breath techniques

What is your voice type or fach? Lyric Soprano

Please describe your experiences with belting. As a young person, my experiences with belting were very challenging. I was encouraged to take chest voice as high as it would go and push a lot of air to do that.

What is your gender? Female

What is your age range? 45 and above

INTAKE FORM: P2

Name: [P2]

Where are you currently located? UK

What is your primary language? English

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. Basic French and German (and even more basic & poorly pronounced Mandarin!)

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. I regularly teach singers who speak and sing in Mandarin, Japanese, Korean and Spanish. I have also worked with singers in the past who sang in Italian, Maltese, German, French and Norwegian.

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. Voice teacher for 25 years. Trained in Musical Theatre but never worked professionally in the West end- only in some local productions. Also worked in a function band for several years singing cheesy pop and soul classics.

Please describe your history of vocal training, including number of years, genres, and techniques. Voice lessons from childhood. 25 years with SLS and IVA teachers. Have also had lessons on extreme vocals and accent coaching.

What is your voice type or fach? Alto-Mezzo

Please describe your experiences with belting. I belt in a musical theatre style often.

What is your gender? Female

What is your age range? 34-44

INTAKE FORM: P3

Name: [P3]

Where are you currently located? Saratoga Springs, UT, USA

What is your primary language? English

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. No

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. Yes. I teach singers internationally, but who can usually- to some degree- speak English as a second language. I have studied phonetics and dialects as an actor/performer and am exposed to accents and other languages as a singing teacher.

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. I am a professional singer and vocal performer with a lifelong background in music and performance. I grew up singing and was actively involved in choir and theater through middle school and high school. I began formal vocal training in college, where I studied musical theater and performed with a traveling vocal ensemble that toured both throughout the United States and internationally, including performances in Scandinavia.

My career has been primarily focused on musical theater. I spent two years based in New York City, auditioning and performing professionally (2015-2017), performed in a national tour and other professional shows. My strongest and most recognized performance styles include Broadway/contemporary musical theater and legit vocal styles.

In addition to my theater work, I enjoy singing R&B, pop, and gospel, which I have explored largely through independent and personal performance rather than formal production settings.

Please describe your history of vocal training, including number of years, genres, and techniques. I began formal vocal training in college (2007-2011), with an emphasis on musical theater, particularly contemporary and legit styles. During this period, my training included belt

technique as it was commonly taught at the time. As a result of that approach, I experienced vocal strain and was later diagnosed with pre-nodules, which prompted a shift in both my technique and pedagogical foundation.

Beginning in 2008, I transitioned into speech-level singing–based training, initially studying with [REDACTED] and later studying for several years with [REDACTED]. From 2008 through the present (2026), I have continued studying speech-level–based technique on and off, deepening my understanding of vocal balance, efficiency, and healthy coordination.

My primary technical foundation is rooted in speech-level singing, now taught and developed through the Institute for Vocal Advancement. This approach has allowed me to rehabilitate my voice, maintain long-term vocal health, and develop the flexibility needed to sing across a wide range of styles including contemporary musical theater, legit musical theater, pop, R&B, soul, and country.

Summary:

Years of vocal training: College training plus ongoing study from 2008–2026

Primary technique: Speech-Level Singing / IVA methodology

Genres trained: Musical Theater (Contemporary & Legit), Pop, R&B, Soul, Country

Key outcomes: Vocal rehabilitation, sustainable technique, stylistic versatility, vocal balance

What is your voice type or fach? Coloratura Soprano

Please describe your experiences with belting. My experiences with belting have been complex and formative. Early in my training, particularly during college, belting was the area in which I experienced the greatest vocal and emotional difficulty. I am a very light, high soprano, yet I was encouraged to sing repertoire in keys and stylistic demands that were not appropriate for my instrument. The belting expectations placed on me emphasized volume, weight, and power in a way that did not align with my vocal physiology.

As a result, I spent many hours attempting to force a belt sound that was largely chest-dominant (yelling in chest basically), driven by excess air pressure, high laryngeal position, and muscular tension. Exercises often relied on exaggerated “belter’s bite,” facial tension, and pushing for loudness rather than balance. This led to vocal pain, instability, frequent cracking, and significant fear and anxiety when singing in front of peers. Eventually, the physical strain resulted in a diagnosis of pre-nodules, and I nearly stepped away from singing altogether.

Beginning in 2008, I transitioned into speech-level-based training, studying with [REDACTED] and later for several years with [REDACTED]. Through this work—now continued through the Institute for Vocal Advancement—my voice was rehabilitated and my technical foundation fundamentally changed.

It is important to be noted that speech-level singing does not approach belting as a primary or formative technique. Instead, it emphasizes vocal balance, efficient coordination, and mixed voice development. Because of this, the majority of my post-collegiate training has focused on healthy mix and registration balance rather than high-intensity, stylistic belt sounds. As a result, my direct experience with traditional or stylistic belting beyond my early college training is intentionally limited.

Today, I approach belting with both caution and curiosity. While I have the technical understanding to sing with intensity in a balanced way, exploring higher-intensity sounds in the middle of my voice—particularly those associated with contemporary belt styles—is an area I would like to continue developing in a safe, informed, and supportive environment. Belt or mix/belt has always been a bit of a mystery for me in my voice. With my vocal and emotional trauma, I've found it very difficult to explore without feelings and triggers creeping in, which has made it quite difficult to explore- though I very deeply would like to "figure out" what it means in my voice. Especially because the Musical Theater industry wants it and calls for it. I honestly very desperately want that piece for myself, so this is a great opportunity to explore with someone I very much trust!

What is your gender? Female

What is your age range? 34-44

INTAKE FORM: P4

Name: [P4]

Where are you currently located? Raleigh, NC, USA

What is your primary language? English (American)

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. No

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. Took Spanish in high school, works with clients who speak other languages, primarily Spanish, a number of Korean and Japanese singers, a variety of other European languages

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. Started training with contemporary mixed voice teacher at 12 yo (now 36), maintained that kind of instruction throughout teen and adult years; mostly sing MT; in 20's, got more comfortable singing pop (self-taught) of varying genres

Please describe your history of vocal training, including number of years, genres, and techniques. Mostly SLS trained from 2002 to 2013; training with some traditional bel canto instruction in college for 4 years

What is your voice type or fach? soprano

Please describe your experiences with belting. Mostly self-taught belter; started trying to explore in mid-20's to really achieve a chest-dominant belt (not a mix belt); worked on that with some teachers but mostly been a self-exploration

What is your gender? Female

What is your age range? 34-44

INTAKE FORM: P5

Name: [P5]

Where are you currently located? Sydney, Australia.

What is your primary language? English.

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. No.

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. I teach singers with many different first languages, but I don't speak anything other than English.

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. Singer and performer since a young child - 30 years.

Please describe your history of vocal training, including number of years, genres, and techniques. No technical voice lessons until early twenties. I have only learned SLS (functional technique). Genres - contemporary worship, pop, r&b.

What is your voice type or fach? Brighter soprano, with lower soprano qualities. Fuller chest voice but bright head voice.

Please describe your experiences with belting. Belting feels more uncomfortable to me - my voice prefers to mix with more head dominance than chest dominance.

What is your gender? Female.

What is your age range? 34-44

INTAKE FORM: P6

Name: [P6]

Where are you currently located? Florida, USA

What is your primary language? English

Do you speak any other languages? If yes, please list them below, indicate your level of fluency and describe how frequently you use each language. n/a

Have you had any experience or exposure to other languages? If so, please list them below and indicate your level of experience. Some Spanish

Please describe your history as a singer or vocal performer, including number of years, genres performed, and other information you would like to share. Singing was always a family affair. Mostly in church as a child. I started performing with my sisters at church and family gatherings and community venues. In my later High school years I began singing in choirs and audition groups performing in the community. Then began doing community musical theatre. I have sung in an adult women's harmony group singing 40s, 50s, and 60s music. This group lasted about 8 years. Was a member of a classic rock cover band as a backup singer and occasional soloist for about 3 years. Continue to sing in various community theatre productions and choirs.

Please describe your history of vocal training, including number of years, genres, and techniques. I took choir classes in junior high and then my junior and senior year in high school. In my 30s I took some lessons (4 or 5) with various private teachers. In 2006 I began taking lessons with an SLS teacher and then continued as I started the Teacher Training program with SLS. My early training was in classical "technique" then moved to SLS technique.

What is your voice type or fach? Mezzo Soprano

Please describe your experiences with belting. My experience with belting was mostly from my own listening and imitating artists such as Barbra Streisand, Celine Dion, Bette Midler (to name a few). My training with SLS and IVA have given me better understanding of the mechanisms and I feel much more comfortable with belting. My challenge is letting go of the weight while still achieving the "sound" of belting. Also, teaching my own inner ear and nervous system that the feeling of "weight" is not what makes a belt "powerful".

What is your gender? Female

What is your age range? 45 and above

Appendix 5: Transcripts

Transcripts have been AI-generated from audio recordings using Descript. Data-sharing with Descript has been turned off to ensure that all content remains private and will not be shared with Descript for AI-training purposes. All transcripts were personally reviewed and edited by Renée Maranan for accuracy, and participants' personal information have been redacted.

Semi-structured interview transcript: P1

Renee: Wonderful. Okay, so, um. Just to kind of go over what we're gonna be, uh, working on today. Um, today we're going to be doing some exercises. The, the, the premise of this study is exploring the use of nasalized French vowels as a means of helping singers to facilitate a belt aesthetic or a belt sound. Okay. So this is not really meant to be like a, you know, just like a, a voice lesson in the way that you and I typically understand it. It's really more an exploration. Okay.

P1: I love it.

Renee: Does that make sense? Do you have any questions about that?

P1: No.

Renee: Okay. Wonderful. Wonderful. So before we, uh, before we get into it, um, did you have a chance to do a vocal warmup today?

P1: A little bit. Yeah, I did a little bit.

Renee: Okay. Wonderful. Do you feel like you need a little bit of a warmup before we, before we dive in?

P1: No, I think we can go in if you want. Yeah.

Renee: Okay. Wonderful. Awesome. So, um, let's kind of go over. Uh, let's go over some of the, some of the information that you provided through the intake form. Thank you so much for doing that, by the way.

Um, okay. So I see you do have some exposure, uh, to French. You, you've got, you, you speak a little bit of French. Tell me a little bit about it.

P1: *Un petit peu. (Laughter)*

Renee: *Un petit peu. (Laughter)* Yes. Very, very minimally. That's, that's great. That's great. And it seems, it shows here that you also have had some experience with other languages, Japanese, Korean, Portuguese, Italian, and Spanish also very minimally. Tell me about what experience you've had with those languages.

P1: Just working with singers from those cultures.

Renee: Awesome. Yeah, yeah. Amazing. Okay, so voice lessons on and off for over 35 years. Studied classical college level.

P1: (laughter)

Renee: I know, right?

P1: You're like, why aren't you a better singer? (Laughter)

Renee: I ask myself that question every day. Literally. (Laughter)

P1: Kidding. (Laughter)

Renee: Okay, so we've got some pop, jazz, singer-songwriter, country, some musical theater chorus, vocal jazz choir, some musical. So you've got a lot of a wide range of different genres that you've played with as a singer and as a performer. Um, is there one that you typically gravitate towards or one that you feel especially, um...

P1: Probably like singer, songwriter, pop kind of stuff. 'cause once upon a time I wrote my own music. I don't anymore, but like, but that is sort of the world I'm...I mean, I do a lot of musical theater with students, but I'm sort of squarely in that.

Renee: Yeah.

P1: You know?

Renee: Yeah.

P1: Singer songwriter world right now.

Renee: Mm-hmm. Okay, cool. And several different, um, techniques that you've trained with, of course, you know, SLS, IVA, Somatic Voice Work. Wonderful. And some understanding of Estill and Lynn Martin.

Renee: Okay. Amazing. Um, lyric Soprano. Very challenging experiences with belting as a young person. Um, okay. So you were encouraged to take chest voice up...

P1: To the rafters.

Renee: ...as high as possible.

P1: Yeah.

Renee: So how did that affect your voice?

P1: You know, when you're young, you get, you, you can get away with a lot more than when you get older, right? After 30, it all sort of...falls apart, or can, right. Like if you, if you have less than optimal, um, sort of vocal habits.

Renee: Mm-hmm.

P1: Um, yeah. And it was just, you know, bigger, more open, wider, more air pressure.

Renee: Yeah. Yeah.

P1: Just, you know, not, not like 180 degrees different than what I started learning from...you know, SLS and IVA.

Renee: Yeah. Yeah. And so, um, as far as, uh, obviously because you've been trained in other methods since then, um, how, how do you feel about your belt now?

P1: Belt is such a difficult, it's such a difficult word, right? Like, because it's like, what is belt? Right? So, you know, and, and because I'm old, right? So belt used to really specifically mean taking chest, chest up, right? Taking – and it's not really that, it's now, I look at it now as like, you know, there's connection between chest and head and then the valve might be opened.

Renee: Yeah, yeah. Right, right.

P1: Yeah.

Renee: And so if somebody were to ask you for a sound, like a belt sound, right. Um, uh, how, how confident or comfortable. Do you feel producing that sound now?

P1: Pretty comfortable.

Renee: Pretty comfortable?

P1: Yeah.

Renee: Yeah. And how satisfied are you with the sound that you do make when you go for a belt aesthetic and you're singing?

P1: Um, pretty satisfied, I will say that...just because of the, um, you know, my...that classical training in there.

Renee: Yeah.

P1: I have a just...the vibrato comes out all the time in my voice, and I wish it didn't, but there's a lot of vibrato in my voice.

Renee: Yeah, yeah, yeah. So wishing that you could moderate the vibrato a little bit more effectively, but other than that, you feel satisfied with the sound, the power,

P1: Pretty satisfied. Like, get so for a long time, I think there, I think that there is a, this thought that, you know, louder is better. Right, and you and I know that louder complicates things and that when things are balanced, um, volume is a byproduct.

Renee: Right.

P1: So, you know, when you're, when you've been hitting your head against the wall for so many years, it's, that's a habit that's hard to break, too. And I'm still guilty of it. I still wanna give it all I've got, and inevitably it doesn't work. You'll probably hear that in a minute. (Laughter) But does it, but does that make sense? So, so when I sort of. So when I take a step back and everything's balanced and it sounds strong, you know, like there's a part of me that's like, does that need to be louder? But through a microphone, it would sound like a Mack truck.

Renee: Mmm.

P1: And that's another thing, you know, it's like what I hear in here (gestures to ears) is not what's being heard out here (gestures outward). And so it, it took me a long time to come to, to, um, a, a comfort level with that.

Renee: Yeah. Right. Right. Amazing. So how would you then, in your own words, how would you describe, um, an optimal belt sound?

P1: Yeah, that's a great question. Um, so opt – ha ha ha – for me, right?

Renee: Yeah. For you.

P1: Optimal belt sound is still gonna be balanced. It's still gonna be relatively balanced. Like, do I wanna hear strain or tightness or squeak – no, I don't. I don't. Because I, because, and do I wanna hear the larynx elevate? No, I wanna hear it resting, but, but...I'm, I can appreciate people who are going after something a little bit more, um, sort of on the edge of that belt quality, because, you know, their job demands it.

Renee: Mm-hmm.

P1: So I'm not saying I'm not, I'm not, yeah. Discounting that. I think that's a very real thing. And I think as teachers we have to, we're trying to serve, you know, many people at once in some ways.

Renee: Yeah, for sure. But balance is still –

P1: Balance.

Renee: Yeah.

P1: Yeah.

Renee: Okay. Awesome. Thanks. Thank you for that. Okay, so let's jump right in. Um, so I have an outline just to kind of keep these sessions, you know, more or less uniform. For the purposes of this study, I have a structured lesson outline that I'm going to follow here.

P1: Okay.

Renee: So it's a little bit different than the way that we normally would teach. And so I may be, and you're my first one, so I may be a little bit clunky, so just –

P1: That's okay.

Renee: – bear with me. Bear with me. Okay.

P1: You're gonna be great.

Renee: Yes. Thank you. (Laughter) So we're gonna go ahead. I know that you're a little bit warmed up, but I do have a couple of warm-up exercises that I've written into the outline, so we're just gonna go through those real quick.

P1: Alright.

Renee: Um, let's start with a lip buzz. Can you do a [demonstration] or [demonstration] or a [demonstration] – a lip buzz.

P1: All right. Do you want me to use, what about a straw? Um, is that, or is that like not everyone would have one.

Renee: Yeah. Yeah. Let's, let's see, let's do that. If you can do a lip buzz. Let's do that.

P1: Okay. [lip buzz]

Renee: Can you, can you hear me?

P1: Yeah.

Renee: Good.

[Lip buzz exercise]

Renee: One more.

[Lip buzz exercise]

Renee: Thank you. Thank you. Okay, one more SOVTE. Let's do [demonstrates lip trill exercise]

[Lip trill exercise]

Renee: Take a second to breathe. If you're feeling a little lightheaded, I don't want you passing out. (Laughter)

P1: No, I'm okay, I'm okay. (Laughter)

[Lip trill exercises]

Renee: Good job, really, really good. Okay. Amazing. So, um, I have asked you to learn an excerpt from "Where Does My Heartbeat Now?" So are you ready to sing that for me?

P1: Yes.

Renee: Yes? Okay, great. Let's do it. So you, I gave you the accompaniment. I, I trust that you got the link to the –

P1: I did, I did. I just realized I needed it on my phone. I was using it on my computer. Bear with me one second. Sorry about that.

Renee: No worries, no worries.

P1: Do we not go through that every day with every person?

Renee: No, I am the, I'm literally the worst in my own lessons. I'm like, I don't know. What should I sing? I don't know. Let me see.

P1: Okay. Why is that happening? Like you're coming up as, did you send it from a different email when you,

Renee: Um, uh, lessons@reneemaranan.com.

P1: Okay.

Renee: Do you, do you want me to –

P1: That's it. I got it.

Renee: You got it?

P1: Yep. Okay, great. Your other email came up. Okay. So, instrumental clip. Beautiful. Okay. Do you want me to go right into it?

Renee: Yep. Just go right into it? Yeah.

P1: Okay. Sorry about that. Do you want the “Where do silent hearts go?”

Renee: Nope, just go into the chorus. That was just to give you a bit of running room.

P1: Yeah, that's what I thought. Okay. Oh no. How'd that happen? Sorry. Bear with me.

Renee: You're good.

P1: Sorry, sorry, sorry.

[Song assessment #1]

Renee: Great.

P1: I will spread that...until the cows come home.

Renee: I was So, I was gonna ask you, how would you evaluate your...your belt sound as it is right now?

P1: So it's, it was too heavy for as wide as it was at the top.

Renee: Mm-hmm.

P1: Right. So for me, it's like I either need to pull back in the, in the volume, or I need to narrow the vowel.

Renee: Yeah.

P1: That's the way I look at it.

Renee: Yeah. Yeah. Okay. Amazing. So let's go through some exercises. Uh, we're gonna practice the French, the French nasalization for a bit. Okay. And then we're gonna do some vowel substitution. Okay. So let's try /ã/ vowel.

P1: /ã/.

Renee: Yep, yep. We're gonna do it on this pattern. [Pattern demonstration] And you'll have to bear with me as well. I'm getting over a cold, so my demonstrations are not perfect yet today, but that's basically just what I want. Mid volume starting up at the B4 at the top.

[Exercise #1]

Renee: Nice job. Okay, great. Let's start an /ã/, um, on a five tone. So we're gonna start here. [Pattern demonstration] We're gonna go up, and then we're gonna come back down. I'm looking at my lesson plan and I'm like, Hmm. Interesting choice, Renee. Okay, so –

P1: I know. No, I'm with you.

Renee: I'm just –

P1: And, and how bad that I'm like, let me check that note because my mind can't like –
(laughter)

Renee: Okay, that's okay. (Laughter) So, ah, so again, keep the volume consistent. We're going for like a middle volume, even a little bit below middle volume so that we're not getting too loud. Okay. And legato.

[Exercise #2)

Renee: Now, try to maintain that French nasal vowel all the way up to the top. So, careful not to go into /ãə/ – /ã/

[Exercise #2 cont.]

P1: Top of chest.

Renee: Yep, yep, yep....That's great.

[Exercise #2 cont.]

Renee: Yeah, yeah, yeah. I know. It's tricky. One more. Oh, sorry.

[Exercise #2 cont.]

Renee: I know. Tough. Can we do one more?

P1: See who I am as a person? (Laughter)

Renee: (Laughter) You are...all of us as a person. This is all of us. Okay. One more going up and then we'll come down. Okay.

[Exercise #2 cont.]

Renee: Actually, you know what, I'm gonna cut this because for the interest of time.

P1: Okay.

Renee: Oops. Okay. That's great. I am learning as I go. Okay, awesome. So let's do an octave arpeggio, but legato this time. Okay. Okay. So /ã/ again, keep the volume middle to low, okay, like four to five out of 10.

[Exercise #3]

Renee: That's it, lean into that French a.

[Exercise #3 cont.]

P1: I wanna finish it so bad.

[Exercise #3 cont.]

Renee: Nice job.

P1: Sorry.

Renee: Yes. Nice job. Yes.

[Exercise #3 cont.]

P1: And then I let it go on the way back down. Dammit. Sorry.

Renee: It's okay. Yeah. Try it again. One more.

[Exercise #3 cont.]

Renee: Good. Two more.

[Exercise #3 cont.]

Renee: one more.

[Exercise #3 cont.],

Renee: Nice job. Really good. Getting the hang of it, getting the hang of it. Let's try one more exercise. Same octave arpeggio pattern, but with a sustain on the octave up. So, /ã/, same vowel, same volume.

[Exercise #4]

P1: I know what you're asking for.

Renee: That's it. That's it. Yeah. If you feel yourself kind of like, um, if you feel like getting a little bit hard to control, be mindful of, check your volume, and check the vowel. Like what...am I still faithful to the vowel? Am I increasing in volume here, do I need to turn it down? Let's do one more. Let's do one more.

[Exercise #4 cont.]

Renee: So, I want you to be mindful of where you felt, you know what, what were you observing when you were articulating the vowel? What was engaging in the body? Where did you feel the voice resonating? And I want you to keep that in mind. Now, we're gonna do some vowel substitution. Um, so we're gonna sing, "where is the sound". Can you sing "sound", but instead of /sæʊnd/ like the way that it's being pronounced in an American accent, we're gonna add a little bit of that /ã/, that, whatever engagement you were feeling on the /ã/, we're gonna add a little bit of that into the /æ/ vowel, "where is the /sæʊnd/? Can you try that really quick for me? You can just do it acapella. Um...

P1: yep.

Renee: Let's, uh, you can give yourself the key with the, with the clip real quick, and then, and then you can pause.

P1: Do you want (sung) "where is the /sæʊnd/?"

Renee: Just on the word "sound". That's right. That's right. Try it again.

P1: Where? Oh, just on the word “sound?”

Renee: Yeah.

P1: (sung) Where is the /sæʊnd/?

Renee: That's it. That's it. So how did that feel for you to kind of add a little bit of nasalization to that /æ/ vowel on sound?

P1: So that is sort of a little bit where I came from, right?

Renee: Uhhuh

P1: And it's funny because for a while it sort of got, not wiped out of me, but...everyone's got a little bit of [a] different idea of what they're looking for sometimes, right? So that feel[s] like, like, 'cause if you listen to, you know, if you listen to Barbara Streisand, like she does a lot of that /æ/, when she's up on those Ds and E-flats.

Renee: Mm-hmm.

P1: So, um, uh, (sung) “where is the – where is the /sæʊnd/?” I mean, it *definitely* feels easier.

Renee: It feels easier. Okay.

P1: Yeah.

Renee: What about the timbre? What do you think of that timbre?

P1: Um, so I like it be—but I...I think I like it more, Renee, because it *feels* solid.

Renee: Mm-hmm.

P1: Right?

Renee: Yeah.

P1: So, and then being able to, (sung) “where is the...” right? Like being able to start in a place that feels a little bit more finished and then sort of, you know...

Renee: Yeah.

P1: Not, it's not that we're picking and choosing, but we're, you know, in order to, to get to that D where it is in the range and to have it feel solid versus, you know, a big open push that I may not be able to balance, it feels much better.

Renee: Yeah, it feels much better. That's awesome. So can we do the same thing on the word without? So instead of /wɪ'θæʊt/ we're gonna add a little bit of nasal on the /æ/ vowel, /wɪðæʊt/, /æ̃/, can you try that as well?

P1: (sung) I can't live /wɪðæʊt/

Renee: Yeah.

P1: More?

Renee: Yeah.

P1: (sung) I can live /wɪðæʊt/

Renee: Mm-hmm. That's right. So again, what did that feel like for you?

P1: Yeah, it feels easy.

Renee: Feels easy. And how, how do you feel about that timbre also?

P1: So, okay, so what we hear in our head and what's heard out here – two different things. So–

Renee: Mm-hmm

P1: So it's, um, between you and me, right? Like for me to put together the top of my voice, I had to use a lot of pharyngeal. Sounds right.

Renee: Yeah.

P1: And so you can overdo that. So for, for a while I felt like everything up in my second break was here [demonstrates a pharyngeal sound]. So I'm a little bit gun shy.

Renee: Mm.

P1: Right?

Renee: Mm-hmm.

P1: So the, so, you know, it's like, then I, I then I look to you as another set of eyes and ears and say, did that satisfy the sound? Because in my head it was a little...I call it dying chicken, but you know. [demonstrates pharyngeal sound] You know, that's my name for it. (Laughter) It's like, oh, there's my dying chicken.

Renee: Ah, yes. And you know, in a typical session, yeah, I would definitely be giving you more feedback for sure. Um, I think it sounds, it sounds powerful, um...

P1: And it doesn't feel hard.

Renee: It doesn't sound like it feels hard at all.

P1: Yeah, absolutely.

Renee: Okay, so, um, let's do, uh, that, those two phrases, "where is the /sæund/" and "I can't live /wɪðæʊt/" and see, can you moderate the nasalisation? Can you reduce that nasalisation by maybe 10 or 15% and still get the same feel that you had originally.

P1: Yep. Lemme try that. (Sung) "Where is the /sæund/?" Um... "I can't live /wɪðæʊt/"

Renee: How did that feel?

P1: Just tune your vowel as you go. (Laughter) (sung) "I can't live /wɪðæʊt/"

Renee: Mm-hmm. Yes. How did that feel?

P1: Great. Especially the fir—the first. Yeah. Um, the, you know, sound is easier. It, and it's almost like, you know, you find the place, and then you drop your jaw to round it out.

Renee: Mm-hmm. Yeah. Yeah. That's a—and then, and then, yeah, like you said, find the place, and then you drop the jaw to round it out so you can make the adjustments once you've got there.

P1: Yeah.

Renee: And, uh, how did you feel about the timbre that time?

P1: It was better. I thought it was more finished.

Renee: More finished. Yeah. Wonderful. Okay, great. Can we sing the song again? And of course I'm not expecting, um, perfect execution or anything. You can sing the song with the accompaniment, um, and see if you can apply the adjustments.

P1: What we did. Okay. Yay.

All right. Here we go.

[Song assessment #2]

P1: That felt so much easier.

Renee: Yes, I, that was gonna be my first impre—my first question was, what was your impression of the vow strategy that we used, um, for that in this session?

P1: Yeah. Loved it. I loved it. And I thought it was faster than trying to use like a modif—like a “think about this vowel sound.” I thought it was easier for me to get the feeling versus the exact vowel shape. Does that make sense?

Renee: Ah, yes. No, that makes...that makes perfect sense. So what are your thoughts on the practicality of this strategy as a tool for singers working on belting repertoire?

P1: Yeah, I love it. It's great. Yeah, it's great.

Renee: Amazing.

P1: I, my question, so. For me what it feels like. It's like, it's like a little bit of pharyngeal with a little bit of roundness, right?

Renee: Mm-hmm.

P1: Like my question, like, 'cause you know, *un petit peu*, right. So, um, I don't, it's been a long time since I've spoke French. I had six years in school and then had a French client long time ago. But, but my pro—my pronunciation was never great. And so that would be my only, my only, hesit—my only hesitation would be like, what if they can't find the sound?

Renee: Exactly.

P1: Yeah.

Renee: And that's, that's a part of the thing that I'm gonna be writing about is the practicality of it and accounting for, you know, localized accents and dialects.

P1: Yeah.

Renee: But that's, I'm gonna be writing about it. I would be interested on your, on your thoughts on what I end up writing, because I have like a, which I'm, you know, we can have like a whole separate conversation about that. 'cause I have, yeah. Ideas. But um, that is like, suffice it to say, it opens up a broader conversation on the localization of vocal pedagogy accounting for culture differences.

P1: Yes.

Renee: You know what I mean?

P1: Yeah, yeah.

Renee: So anyways, okay. I'll leave it at that. Last question I have for you. How would you describe its effect on the feeling of ease when performing the assigned song excerpt? I, you've talked about this already, but I had it written out.

P1: Yeah. It, it just feels so much more fluid. Like, I know my, my run was messy. I should have worked on it, you know, (sung) "where has my heart...now", right? Like, 'cause and, and we're moving on an /æ/, right? So that was sloppy, but sorry, I should have given you a little bit more of my,

Renee: Oh my gosh. (Laughter)

P1: How dare me (laughter). Um, but no, I, I feel like the whole thing felt more fluid, yet at the same time, um, I do also think that a more advanced singer can pick and choose too, which is lovely. You know what I mean?

Renee: Yeah. Yeah. Amazing.

P1: Yeah. So, great.

Renee: Thank you so much, [P1].

P1: You're so welcome.

Semi-structured interview transcript: P2

Renee: Okay, so just to kind of give you some, a little bit of an introduction of what this is going to be.

P2: Mm-hmm.

Renee: Um, first thing, have you warmed up already before?

P2: Yes.

Renee: You've, you've taught, you've used your voice already.

P2: Yes.

Renee: And you had a chance to learn the song?

P2: Um, I have learned the song.

Renee: Wonderful, wonderful. Um, okay. So, and your voice is...how is your voice feeling today?

P2: It's a little on the phlegmy side, if I'm honest, but, uh, it's working for me, but it might be a little phlegmy at times.

Renee: Just a little phlegmy. Um, do you feel well enough to do the things that we have to do today to belt the

P2: Yes.

Renee: Okay.

P2: Yeah, I do. It just might be a little crunchy at times.

Renee: Okay, wonderful. Um, so just so you're aware today, this is gonna be, uh, not like the voice lessons that you and I are used to teaching, where, you know, we assess and we use tools specifically targeted to get your voice from point A to point B. It's really more an exploration of how this specific articulation strategy might... You know, how your, what your experience of it is. And so for that reason, I'm not going to be going in and, you know, correcting very much. I'm going to be giving very minimal instructions. I'm gonna be taking you through some exercises, but you know, it's really, I'm just gonna take you through them. I'm not gonna be coaching you very much. Okay?

P2: Okay.

Renee: And then at the end, we're gonna have a bit of a conversation and throughout I'm gonna be asking you about how, how is this working, how is this feeling, um, to get your insight because that's really what this is, what this is for is to get your insights. Um...

P2: cool.

Renee: Okay. So just kind of going over...Thank you so much for completing the intake form. Um, so currently located in the uk primary language is English, um, speaking some basic French and German and some very poor Mandarin. Very relatable.

P2: Yes. (Laughter)

Renee: Good. Uh, and you've had some regular ex-uh, exposure to, um, Mandarin, Japanese, Korean, Spanish, and also some exposure to Italian Maltese, German, French, Norwegian through your work as a voice teacher.

P2: Mm-hmm. That's it.

Renee: Yes. Wonderful. Wonderful. So your ear has heard those languages a lot, which is helpful. Um, a voice teacher for 25 years trained in musical theater, but never worked professionally, only in some local productions. Great. Um, in a function—Ah, okay. Okay. So for like events?

P2: Yes.

Renee: Singing pop and soul classics. Wonderful. That sounds right up your alley. Amazing. Um, okay. 25 years with SLS voice lessons since childhood vo—Ex, uh, lessons on extreme vocals and accent coaching. Wonderful. Was that through, um, voice study center?

P2: No.

Renee: Ah, amazing. Amazing. Okay. Cool. Alto mezzo. And you do belt in a musical theater style often. Okay. And I think I have heard you, so, uh, tell me a little bit about how you would define, um, oh, sorry. Firstly. Yeah. How confident are you in your ability to produce a belt sound?

P2: Very confident.

Renee: Fairly confident. Okay. Um, okay. And then also what is, how satisfied are you with your belt sound today?

P2: Hmm. Ooh. Ooh, ooh. (Laughter)

Renee: Juicy.

P2: I mean, there's always room for improvement. I mean, I can make the sounds.

Renee: Mm-hmm.

P2: Could I make them better? Possibly.

Renee: Mm-hmm. Mm-hmm.

P2: That's how I feel about it.

Renee: Okay. So there's always room for improvement. So how would you describe an optimal belt belt sound?

P2: I think it is genre-specific.

Renee: Mm-hmm.

P2: And it's. Situationally specific.

Renee: Yes.

P2: But my definition would just be high intensity...

Renee: High intensity...

P2: ...singing. Yeah. Yeah.

Renee: Okay. Amazing. I'm taking notes. Um

P2: Mmm-hmm. So I think for some styles that would be more high frequency, but other styles, it would have a little more depth to it.

Renee: Mm-hmm. Okay. High intensity. Okay. Very cool. Awesome. So, okay, I'm going to take you through some exercises, and again, like I said, I'm not gonna correct you. Were just, first, we're gonna begin with a warmup. I know you've already kind of, you know your voice a bit today, but just to give you a bit of a reset.

Okay. So let's start with a lip buzz. Um, so. [Lip buzz demonstration] whichever one is comfortable for you, whichever one is accessible, and if it isn't, we'll modify it. Okay, so, so let's start with this pattern. [pattern demonstration]

[Lip buzz exercise]

Renee: Okay. Very, very good. Um, perfect. Let's do a lip trill. So starting with... [pattern demonstration]

[Lip trill exercise]

Renee: Oh, whoops. I went up higher than I needed to. Okay. Amazing. Sounds great. Okay, so let's assess where you are with the song. So I'm gonna have you sing the song excerpt with the accompaniment. Um...

P2: With the accompaniment?

Renee: Yes. Yes.

P2: I shall pull the computer up...look up your email. (Laughter)

P2: There you go. Got it.

Renee: You got it?

P2: Yeah. There. It's okay. Okay. You want me to go for it?

Renee: Yep, yep. Go for it.

P2: Sure. If I can remember it now. Here we go.

[Song assessment #1]

Renee: Okay. Okay, so how would you evaluate your belt sound as it is?

P2: Just then?

Renee: Yep.

P2: How would I evaluate it? I think I would prefer there to be more depth in what I just did there. I found that was a little high frequency, but it was very easy.

Renee: Mm. Okay. Easy. Okay. Wonderful. So, great. So I'm gonna take you through a series of exercises. Um, we're gonna be using a nasalized French vowel and, uh, we're gonna see how this plays a role in your sound and, and the experience of singing. Okay? So I just want you to observe. What you're, what you're feeling, um, how your voice is sounding. And then we're gonna talk about, uh, the impacts later on. And I would love for you to be perfectly unfiltered about all of it, which I'm sure you will. Um, but please don't, don't cut me any breaks just because you and I know each other and are colleagues. (Laughter) Okay?

P2: Okay.

Renee: All right. Very, very good. So let's start, we're gonna use an /ã/ as in croissant. Can you say that?

P2: /õ/? Or /ã/?

Renee: /ã/, that's right. That's right. It's less, /õ/ and more /ã/. Just slightly more tall than /õ/. /ã/. Okay. So let's do a staccato octave arpeggio. (Pattern demonstration)

[Exercise #1]

Renee: Um, very good. Okay. Amazing. Uh, let's do now a legato pattern. Trying to make sense of my notes here. Okay. A legato pattern starting here (pattern demonstration) Go ahead.

[Exercise #2]

Renee: Okay, great. Now we're gonna do again a legato octave pattern. (Pattern demonstration)

[Exercise #3]

Renee: Okay, now. (Pattern demonstration)

[Exercise #4]

Renee: one more. Ah.

Renee: Good. So what do you observe when you articulate that vowel? Like what is engaging, where do you feel the voice resonating?

P2: I feel especially on the sustains, quite a lot of back pressure.

Renee: Mm-hmm. Okay. Interesting.

P2: I feel a lot of...build up of the air...

Renee: Mm-hmm.

P2: ...that's not escaping.

Renee: That's not escaping. Yeah. Mm-hmm. Mm-hmm. Uh, yeah. Yeah, yeah. Okay.

P2: On the first pattern that you gave me, I felt my larynx rise in a way that was not comfortable. I was having to clear my throat quite a lot at the end of each...pat—at the end of each one. The, um, Octa patterns. I didn't feel that on.

Renee: Yeah. Yeah. Okay. Awesome. So let's do some vowel substitution on the song. So in the phrase, "where is the /sæʊnd/" we're going to kind of use this nasalization on the /æ/ vowel. So instead of /sæ/, /sæ̃/, /sæ̃/. And it's gonna be a bit exaggerated, right? So can we try that for a second? So first saying, where is the /sæʊnd/, and then where is the /sæ̃ʊnd/? Can you try that?

P2: So sorry, do that again. So, because you did it twice, so you want me to do it...

Renee: With— without just regular, “Where is this /sæʊnd/?”

P2: Okay.

Renee: And then the second time—

P2: And then the second time...

Renee: We’re gonna, we’re gonna, um, we’re gonna make that /æ/ vowel /æ̃/. Like, we’re gonna put a little bit of that French quality, as in the /ã/ exercises that we did. We’re gonna put it into the sound, into the word sound.

P2: Okay.

Renee: Does that make sense?

P2: Yes. I’ve got you now.

Renee: Okay.

P2: Okay, so first time normal. (Sung) “Where is the /sæʊnd/” Second time I’m on nasalization.

Renee: Mm-hmm.

P2: (Sung) “Where is the /sæ̃ʊnd/”

Renee: Mm-hmm. Yeah, yeah, yeah. Can we try that again?

P2: Yeah.

Renee: Let’s do it again. Just the French, just the French version of it.

P2: Just the French version?

Renee: Yeah.

P2: (sung) "Where is the /sæʊnd/"

Renee: Okay, good. So what does that feel like for you?

P2: It feels a little restrictive.

Renee: Mm-hmm. Okay. Good, good. What about, how would you describe the sound of it? No. Perfect.

P2: Um, to my ear, it sounds less resonant.

Renee: Less resonant. Okay. Yeah.

P2: But I don't know if that's what it sounds like on the outside.

Renee: Right. Okay. Awesome. Now, in the (sung) "I can't live /wɪ'θæʊt/...can't live /wɪðæʊt/", we're gonna put a little bit of that, um, that nasalization into, /æʊt/ and /wɪ'θæʊt/. So can you first see it normally and then sing it with nasalization afterwards?

P2: (sung) "I can't live /wɪ'θæʊt/...I can't live /wɪðæʊt/"

Renee: Good. I'm also noticing though, that the vowel is going from /θæʊt/ to θɛʊt/, it's getting just a little less tall for you.

P2: Okay.

Renee: Can you try and approximate the same height, but just add kind of like if you were to go. /hã/, can you say that?

P2: /hã/

Renee: But with the /ã/, the same /ã/ vowel that we were using in the exercise, /ã/. Can you say...

P2: /ã/

Renee: That's it. That's it. Okay. Try it again.

P2: (sung) "I can't live /wɪðæʊt/"

Renee: Okay. One more time.

P2: (sung) "I can't live /wɪðæʊt/"

Renee: Okay. So how about that? What was your experience?

P2: Um, I don't know. (Laughter) It was fine.

Renee: It was—

P2: That's not a very useful thing for me to say that.

Renee: It's okay.

P2: It felt fine. It felt, that felt easy. So, yeah, it felt as easy as the other one. It didn't feel easier or harder. It felt akin to, just different tonal quality.

Renee: Okay. So tell me about the tonal quality.

P2: Again, it felt more muted. It felt more contained.

Renee: Mm-hmm.

P2: Which may not be a bad thing for me because I am very loud. (Laughter)

Renee: Okay.

P2: That's possibly a positive, not necessarily a negative, that it's more contained.

Renee: Mm-hmm.

P2: Uh, I would need to hear it on the outside to know whether I prefer it or not.

Renee: Sure. Yeah. Yeah, yeah. Okay. Amazing.

P2: So we're gonna do it again and I want you to self-monitor, but this time I want you to, um. What—however, so let's say the nasalization that you are applying, let's say, let's give it a 10 out of 10. So let's say you were giving it 10 out of 10 nasal this time around. Can you, instead of giving it all of that nasalization, maybe only apply 10 to 15% of it...

P2: Okay.

Renee: ...to the words. Okay? So can we do it again on (sung) "Where is the /sæʊnd/

P2: Yeah. (Sung) "Where is the /sæʊnd/"

Renee: Nice. One more time.

P2: Yeah. (Sung) "Where is the /sæʊnd/"

Renee: Good. What about "can't live without"?

P2: (sung) "I can't live /wɪðæʊt/"

Renee: Yeah, yeah, yeah. One more time. 10, 15%.

P2: (sung) "I can't live /wɪðæʊt/"

Renee: Good. How'd you feel about that?

P2: That feels good.

Renee: Feels good?

P2: That feels a nice amount.

Renee: A nice amount? Yeah?

P2: Mm-hmm. (Laughter)

Renee: What do you think? That's okay. (Laughter) What do you think about the, you're gonna have a reflective journal after this, so you're, you're gonna be able to think a little bit and, you know, not say it to my face. (Laughter)

P2: Not say to her...(laughter) That feels...not dissimilar to what I feel like I would ordinarily do.

Renee: Mm-hmm. Closer to what you would ordinarily do.

P2: Yes.

Renee: Yes. What about the sound of it?

P2: That felt resonant for me. That felt powerful and resonant, and I like, yes.

Renee: I agree. I agree. Okay. Can we do a final reassessment? Can you sing the song again with the accompaniment and try and apply the adjustments that we made?

P2: Yes. Okay.

[Song assessment #2]

Renee: Sounds good. How'd that feel?

P2: Mm-hmm. Okay.

Renee: Okay.

P2: Yeah.

Renee: Yeah, yeah, yeah. Good, good, good. So tell me, we're just gonna go through again, just a few more questions here. Okay. I'm just kind of conscious of the time here. Um, so what was your impression of that vow strategy that we used?

P2: I like that strategy. It's one that I use in my teaching. Um, it is. It makes sense. Celine's French after all.

Renee: You'll notice I picked a a, a Quebecois Canadian to...Amazing. What are your...

P2: I think it's useful to stop me from over blowing. There we go. That's what I like that, that sort of strategy for is because I feel like it stops me from increasing the pressure past the point because...um, I do have a tendency to go for too much volume and it can get too much.

Renee: Mm-hmm.

P2: So that helps me not to overblow it.

Renee: Okay. Amazing. What are your thoughts on the practicality of the strategy as a tool for singers working on belting repertoire?

P2: I think it's. Incredibly useful.

Renee: Incredibly useful. Yeah. I mean, apparently, you use it yourself. That's great.

P2: I do use, I love a French nasale.

Renee: Amazing. I did not know that. That's awesome. So how would you describe its effect on the feeling of ease when performing the assigned song excerpt?

P2: Ask that again. Sorry, my brain... (laughter)

Renee: I'm sorry about that phrasing...How would you describe its effect on the feeling of ease? When you were performing the song?

P2: Um, to be honest, it felt relatively easy in the first place.

Renee: Mm-hmm.

P2: So it didn't necessarily make a dramatic, but it definitely felt easy.

Renee: Okay. Awesome.

P2: It didn't, by the end, at the, when you'd reduced it down, when it was at its extreme, it felt harder for me.

Renee: Mm-hmm. Yeah.

P2: When it reduced down, it felt very easy.

Renee: Yeah. Yeah. Wonderful. Amazing.

Semi-structured interview transcript: P3

Renee: Thanks for being here and for doing this.

P3: Of course.

Renee: Amazing, amazing. So, um, just to confirm, are you overall vocally feeling pretty healthy these days? How are you, how are you doing?

P3: Yeah, I am...I'm feeling pretty good today. Yeah. I haven't done a ton of, uh, vocal exercises or anything. Just been teaching a couple lessons before this, but

Renee: Mm-hmm.

P3: Otherwise, from the weekend, feeling a little bit rested. Um, good. Yeah. We're good.

Renee: Good. Good. So do you feel, I mean, I know you said you haven't done a ton of vocal exercises, but you have been teaching. Do you feel...pretty much, pretty warm for what we're gonna be doing today? Would you like to go through a quick warmup before we sing stuff?

P3: Um, a quick warmup would be amazing.

Renee: Okay. sure.

P3: Um, even just like a...a couple things going through the bridge and things like that.

Renee: Okay. Amazing. Um, we'll do that. Uh, and did you get a chance to learn the little clip that we're gonna be going through today?

P3: Yes, I am fam—I'll say I'm familiar with it.

Renee: Okay.

P3: Um, like the timing of it as I was just running through before we met. Um, I might get the little beats off just a little bit, but as far as the melody is concerned, I think I, I think I got it.

Renee: That's great. That's great. Awesome. Okay. Um, let's quickly...let's quickly talk about what we're gonna do today. So the premise of this whole study is about using nasalized French vowels as a means of helping singers to approximate the coordination that they need for belting, okay? And so that's kind of what this whole thing is about. That's what my research study is gonna be about this semester. And uh, and so this lesson is really gonna be not like, you know, the way that we would normally. Do a lesson where we're gonna have like a, you know, an agenda and like a lesson goal and then, you know, targeting exercises specifically for that. It's really more so that you can, I can, I can, you know, introduce the tool, you use it, and then you give me an idea how it feels for you and what your impressions are, 'cause it's really all about collecting information of the singer's experience of using the tool. Okay.

P3: Cool. Yeah.

Renee: Yeah. So I just want you to be very candid, like be very honest about, you know, how it's, what you're experiencing, because it's not a matter of like, proving anything right, or, you know, true. It's really just what's it feel like for you? How is it working for you? That's really what this is all about. Okay. Um...

P3: Great. Love it.

Renee: So let's, let's go over just the information that you shared in your intake form. So no, um, no experience speaking other languages, but you have had plenty of experience and exposure to other languages through teaching, teaching singers who speak English as an alternate language. And so, um, and also having studied phonetics and dialects in your acting and performing, um, career. So, but other than that, no actual, um, experience with knowing how to speak other languages. It's totally.

P3: I, I took Spanish in middle school for two years, so I...you know, but not actually, no.
(laughter)

Renee: No, no, no. Yeah, yeah. (Laughter) Okay. Um, definitely, obviously I already knew this. You're singing and performing at a high level right now. I know you're teaching at a high level, also performing professionally, mostly. Musical theater had some experience with choir, vocal training in college. Sounds like some dicey experiences with some previous vocal training with belting until you found Speech Level Singing through Jeffrey. And then that helped to set you on a different path when it comes to belting. And so it sounds like now your voice is stronger, healthier, um, uh, you're, you've learned to sing, uh, a belt sound in a more aesthetic way since starting to work with, with SLS and IVA, um, and, uh, but still kind of like...curious about...what is this? I love it. You said, um, you know, "my experiences have been complex and formative." I just, I really love that it's like, there's like an emotional aspect to it, but also there's like a lot of, you've kind of had to learn a lot to get to where you are now with belting.

P3: Yeah.

Renee: Um, and, and now you're kind of like curious about, you know, um...curious higher intensity sounds...so curious about continuing to develop a safe and informed and, you know, like supportive environment for learning how to sing belt.

P3: Yeah, yeah. Because I feel like with, um, Speech Level and IVA, um, it's very, very safe. Right? Mm-hmm. We, we stay very close to a balanced situation, and so I honestly, I mean, really don't have a lot of experience belting, um, in a musical theater style to an effective enough way that I get cast in those roles, actually. So I'm almost always pegged as more of a lyric, um, soprano type. So I actually have not like, quote unquote, "figured it out."

Renee: Mm-hmm.

P3: Like, figured out what belting means for me, because when I have explored that, even in my training in IVA it, it comes with a lot of, it's very complex because it comes with a lot of triggers and things like that, that I have to navigate. And it's very frustrating, but it's definitely a hole that I feel like a gap that I would love to continue...

Renee: Mm-hmm.

P3: ...to try to fill in.

Renee: Mm-hmm.

P3: Because, yeah.

Renee: Yeah.

P3: It's just, there's definitely...it...it has not been a selling point for me in my voice. Yeah.

Renee: Yeah.

P3: Confidence or in...regurgitating, you know, being like being cast in those types of roles, so, yeah.

Renee: Yeah. It sounds like, it sounds like in your experience there is a little bit of a gap between achieving some kind of a belt sound that is sustainable and achieving a belt sound that is marketable, that that gets you booked for gigs.

P3: Sure. Yeah. Yeah. Because I'm too safe. I tend to be far too safe and far too.

Renee: Mm-hmm. Yep.

P3: Yeah.

Renee: Yeah. Yeah. Okay, so I, I mean, I was gonna ask these follow up questions, but I mean, you know, it kind of sounds like you've, you've covered it already, but like, how confident are you in your ability to produce about sound?

P3: Um, I would say not, not confident. I can do it in a more pharyngeal style quality, but it's quite thin, I would say. And I more so have kind of just tried to lean into a thinner pharyngeal sort of resistance, um, rather than, and that's, that's kind of how I've navigated it so far.

Renee: Interesting. Okay. So I mean, the next question kind of ties into what you're talking about just now. Like, how satisfied are you with your belt sound today?

P3: Um, I would say not, not really, not really satisfied to be honest.

Renee: Mm-hmm. Mm-hmm. So how would you describe an optimal belt sound?

P3: I would describe it as a sustainable sound, but also, you know. A little bit more thickness, a little bit more of a chest dominant, um, bright, um, but kind of, um. What I'm thinking in terms of is like more of like a, a musical theater belt, which would be kind of a classic, you know, Broadway style. But I also really love pop and R&B music, so of course I would love to do some of the like Mariah Carey sort of like slightly...deeper qualities of belt as well. So I don't know if that answers your question, but

Renee: it does it ranging from sort of like a brighter, a brighter sound to a somewhat darker sound, but all-overall, it sounds like the running theme is like intensity, chest dominance.

P3: Mm-hmm.

Renee: I think those are some of the words that I heard you say.

P3: Yes. Yes. Yes.

Renee: Yeah. Okay. Okay, cool. All right, so we're gonna go through some exercises today. Um, we are going to go through a little bit of a warmup that was built into this lesson plan. I have one lesson plan that I'm using for all of you that are going through this so that it's somewhat consistent. So we're gonna take you through a, a warmup, and then we're gonna, we're gonna sing the song to assess where you're at right now, and then we're gonna take you through an exercise, and then we're gonna do some vowel substitutions, and then we're gonna go and assess again and see how you're feeling, okay?

P3: Sure. Great.

Renee: So let's start with a lip buzz. We're gonna do it on this, on this pattern. (Demonstration)

[Lip buzz exercise]

Renee: Good. Now you can use no hands or you can add a finger, two fingers, fist, whatever feels comfortable and optimal for you. Okay.

[Lip buzz exercise]

Renee: Okay, really good. Great. So let's do a lip trill. (Demonstration)

[Lip trill exercise]

Renee: Now, normally I would stop right here, but I'm gonna take you all the way back down just because I know you need a little bit more kind of like, uh, reset. So let's do a few more.

[Lip trill exercise]

Renee: Okay. Awesome. Great. You feeling good?

P3: Yeah.

Renee: Yeah. Okay. Alright, great. Let's, let's get into the song. So if you don't mind, if you could pull up the instrumentation. Do you have the instrumental track?

P3: I do. Let me check off of my phone.

Renee: All right.

P3: And you sent the karaoke track. Is it, um, the Karafun one or is it a different one?

Renee: Yeah, I actually had one that just had the link to the clip that we want.

P3: I remember seeing that.

Renee: Yeah. Let me give you, let me give you that link real quick, that way you don't have to, you don't have to message. Do you want me to text it to you?

P3: Yeah, would you?

Renee: Yeah.

P3: I remember seeing it in the, yeah...

Renee: You're gonna get this from my studio number. Okay.

P3: Okay.

Renee: Oh, that's not, hold on. Uh, copy link. Oh, no. Okay. There you go.

P3: Perfect. Got it. Oh, yep. Okay. Great.

Renee: Okay, cool.

P3: Awesome. Okay. Do you want me to have any intention behind like how I'm approaching this or...

Renee: I haven't been coaching anybody to do that, so just, just jump in however feels natural.

P3: Okay. Here we go.

[Song assessment #1]

Renee: Yeah, it's beautiful. You have such a beautiful voice. It's so pretty. Like I just like half expect little birds to come flying in through the window and like resting on your shoulders while you're singing. So pretty. Okay, amazing. So how would you evaluate your belt sound as it is right now?

P3: Um, I would just evaluate it as being more head dominant in those upper notes and... tendency to add vibrato rather than stay on straight tone because I don't know, it just wants to go there.

Renee: Mm-hmm. So that's just where it wants to go. Okay. Awesome. Let's do some exercises and let's see how this goes. Okay. So we're gonna use a, a nasalized French /ã/.

[Exercise #1]

Renee: Okay. Stay a like *croissant*, /ã/.

P3: /ã/, /ã/.

Renee: Mm-hmm. That's right. So we're gonna start with [demonstration]. Okay.

[Exercise #1]

Renee: Nice job. Really good. Okay, so while you're singing these, I want you to kind of. Observe the way, uh, um, uh, what you're experiencing as you're articulating the vowel. Like what is engaging, where do you feel the voice resonating? And just kind of pay attention to that as we go. Okay?

P3: Got it.

Renee: Um, okay. Let's sing the same vowel on a five tone. So we're gonna start here [demonstration]. Go ahead. Hmm.

[Exercise #2]

Renee: Great. Okay, so now, [demonstration] and be careful not to go into /õ/.

[Exercise #3]

Renee: Good.

Renee: Nice job. Nice job. Are we experiencing some connection issues or am I coming through okay to you?

P3: You're coming through fine to me. Am I glitchy on your end?

Renee: Not, not, not really. I think there might have just been a little bit of a lag, but you're coming across perfectly clear. Yeah. And you're fine now. Yeah. So, okay. Let's try this one more. One more exercise. [demonstration exercise #4]

P3: Awesome. And just clarifying, it's more of like the AH version of the French one rather than the /õ/

Renee: That's correct. That's right.

[Exercise #4]

Renee: That's right. Yeah.

[Exercise #4]

Renee: Nice job. Amazing. So were you able to observe where that was resonating in your body? What was engaging? Yeah?

P3: Yes. Um, I, I felt like it was sitting just, like right behind my nose.

Renee: Okay.

P3: Right behind, like in just my like sinus cavity. If I were to like pull my nose passage open, then it would just be like sitting right there.

Renee: Amazing. That's awesome. That's great. Okay, so. Let's work on some vowel substitutions here. Um, and [REDACTED] just, can you tell me, are you, are you in a rush to get to your next one at, at, uh, 5:30, or...?

P3: I have, I do have someone at five 30, but it's, I can absolutely message her and we can...

Renee: Okay. I think, I think we'll be okay, but just I wanted to be conscious of the time. Okay, cool. So let's go through the chorus. [song demonstration] So when you go to, "where is the / sæʊnd/" We're gonna replace the /æ/ vowel in "sound" to /sæ̃/. So we're gonna nasalize that /æ/ vowel. So can you try that?

P3: Sure. Yeah.

Renee: Just that one phrase. Acapella.

P3: Okay. (Sung)

Renee: That's it. That's it. Now I know you're kind of not, you're narrowing it naturally and I think that this is just because of your lovely, lovely training, right, of kind of centralizing the vowels. But let's let it be a little bit more wide, as it would normally be with the more general American accent on /sæʊnd/ So, okay. So can you say /sæʊnd/ and then /sæ̃ʊnd/.

P3: /sæ̃ʊnd/.

Renee: That's it. That's it. So a little bit of that nasal, but on a wide, /æ/, so can you try it again? Where is the /sæ̃ʊnd/ okay. Try that.

P3: (sung) Where is the /sæ̃ʊnd/

Renee: That's it. What does that feel like?

P3: Um, it feels, yeah, it just feels a little bit, uh, more open and. Brighter. Brassier.

Renee: Brighter and brassier. Okay, so let's do the other word /wɪ'θæʊt/. We're gonna do the same thing. So can you say /wɪ'θæʊt/.

P3: /wɪ'θæʊt/, /wɪ'θæʊt/

Renee: So that's the, that's just the natural, you know, like how you would say it /wɪ'θæʊt/ Right? /wɪ'θæʊt/. But instead of /wɪ'θæʊt/, we're gonna add nasalization to the /æ̃/ vowel, /wɪðæ̃ʊt/.

P3: Okay. /wɪðæ̃ʊt/

Renee: Okay. So can you sing that phrase...(sung) "I can't live /wɪðæ̃ʊt/"

P3: Yeah. Yeah. (Sung)

Renee: That's it. That's it. How's that feel?

P3: Yeah. Good.

Renee: Yeah. What do you think of the sound of it?

P3: I found it easier to find it on /sæʊnd/ than /wiðæʊt/, but probably just maybe because of the /θ/ or something.

Renee: Yeah. Um.

P3: But yeah, it just feels like it's not being corralled into an area, it's just a little bit more, more open.

Renee: Mm-hmm. Mm-hmm.

P3: Yeah.

Renee: Okay. Okay. So now I want you to self-monitor. So say for example, we've been doing that nasalization, 10 out of 10, /sæʊnd/, /wiðæʊt/. Now, I want you to bring that down and only use like 10 to 15% of that nasalization. Okay?

P3: Okay.

Renee: So can you try it again on those two phrases? So where is the /sæʊnd/? Let's start with that one.

P3: Sure. (Sung) Where is the /sæʊnd/?

Renee: Mm-hmm.

P3: (Sung) I can't live /wiðæʊt/

Renee: Mm-hmm. What do you think?

P3: Just the thought of it. Yeah. It's definitely helpful. Mm-hmm. It definitely is helpful for me.

Mm-hmm. Feels, it feels a little bit like, um. It gives a little bit of security to it. Rather than just, it like going out into, yeah, space, it's like, it's like a little bit of a feeling of safety.

Renee: Amazing. I love that. I love that description. Okay. Do you wanna try it again with the accompaniment, that whole clip, and see if you can apply that 10 to 15% nasalization on those two words? Just those two words?

[Song assessment #2]

Renee: Nice job. Very good. Awesome. So what was, what was your impression of that vowel strategy that we used?

P3: Um, it just, yeah, kind of similar to what I was saying, where it's like, it's like I'm going for like, um, like an unabashed, like, just like open sound, but with the, the thought, even the thought of that slight *nasale* quality. Mm-hmm. Mm-hmm. It just feels like it's not gonna run away from me. Yeah. It feels like it's a little bit more safe.

Renee: Yes, yes, yes, yes. Amazing. Okay, so tell me about, uh, what are your thoughts on the practicality of the strategy as a tool for singers who are working on belting?

P3: Oh, I think that's, I honestly, like even in my own, uh, practicing, um, and exploration, the *nasals* have been almost some of the only tools that have been able to help me truly find that connected experience through my first passage. Um. All of the other tools, um, like where I have a consonant where I'm, you know, it feels like there's a handhold that I'm just like using, but with the *nasale*, it's the, it's like it allows me to find more of that connected experience in an exposed way, but in a safely exposed way, if that makes sense.

Renee: The safely exposed. I love that. I love that.

P3: So I think it's super practical for, for singers. I feel like it, yeah. It's almost like, it's almost like bowling. Where the bumpers are up. Where it's like, it's not gonna go too far away. Like it's always kind of gonna like, keep you in, in that, like you're gonna hit the pins.

Renee: Mm-hmm. Yeah. Yeah.

P3: It might feel a little bit like wiggly and wobbly, but like, you're gonna hit the pins, you're gonna hit the target.

Renee: Yeah. You're gonna hit the target. Yeah. Yeah. Um, last question. So how would you describe its effect on the feeling of ease when performing the song?

P3: I think the feeling of ease, at least for me, comes from that feeling of trust that, uh, that comes. So it's almost like your body is. Like not as threatened by it because you have the tool to kind of hold onto through that.

Renee: Amazing, amazing, amazing. Well, thank you so much. I know you gotta go, so I'm gonna text you the link to the reflective journal. You, uh, if you, when you have the time to today, if you could complete that, it shouldn't take that long. Um, but then that way, while it's fresh in your memory. Please fill in your candid thoughts about your experiences today. That would really, really help me out. I really appreciate it.

P3: Love it. So cool. Yay. I love this, and I feel like it's a tool that's not, not utilized enough. For sure.

Semi-structured interview transcript: P4

Renee: Okay, so, sorry. Um, other languages, you said Spanish.

P4: I took Spanish in high school.

Renee: Yes. Okay.

P4: I have a limited knowledge of that in high school.

Renee: And in your teaching, do you work with, um, singers who speak other languages or sing in other languages?

P4: Yes. Okay. Probably Spanish primarily. I've worked with a lot, not a lot recently, but, um, Korean and Japanese singers. Um, and then, you know, a smattering of other mostly European languages. French, a little Italian.

Renee: Okay, perfect. Please describe your history as a singer or vocal performer, including number of years genres performed and other information you would like to share.

P4: I started training with a contemporary mixed voice teacher when I was 12. I'm now 36, so that was back in 2002. And maintained that kind of instruction throughout my teen and adult years, um, I mostly sing musical theater. And in my twenties, got more comfortable, mostly self-taught, singing pop of varying genre.

Renee: Okay. Please describe your history of, well, you kind of went over this already, your vocal training, including number of years, genres and techniques, and you kind of talked about it already.

P4: Yeah. SLS, I was like SLS trained from 2002 until 2013. Um, IVA, I had some, some more traditional bel canto classical instruction for four years in college.

Renee: Okay. Okay. Four years. Okay. What is your voice type or fach?

P4: soprano?

Renee: Okay. And please describe your experiences with belting.

P4: I am a mostly self-taught belter. Started trying to explore what that was like in my voice in my mid-twenties to really achieve like a chest dominant belt. Not a mix, not a mixed belt. Um, have worked on that with some teachers, but it's mostly been a self-exploration.

Renee: Okay. Okay. And age range is 35-44. Okay. Amazing. Um, that was the form and there's a couple of follow up questions that I will ask. Let me get my lesson plan up. Okay. What happened to my lesson plan? There it is. All right. And of course, let me plug in my computer 'cause it's about die.

P4: Great, great, great.

Renee: All right, so, um, what is, okay, so how confident are you in your ability to produce a belt sound?

P4: Fairly confident...up to a certain, uh, point or stylistic expectation.

Renee: What would that be?

P4: Um, okay. I feel fairly confident producing a chest dominant belt sound up until about the start of my second passage...um, in a brighter twangier pop style, not so much in, um, I guess just like in accordance with my voice. Like I just have a thinner voice and it's never gonna... sound thicker than that. Um, gosh, I don't know how to describe that. I feel fairly confident, I feel fairly confident I can navigate my way into a chest dominant belt.

Renee: Mm-hmm. Okay. And how satisfied are you with your belt sound today?

P4: Um, moderately. I would love to spend more time on in this, like in a more rigorous way to explore other colors and like ability there moderately.

Renee: Okay. And how would you describe an optimal belt sound?

P4: Uh, for myself personally? One that is, uh, easily repeatable. Uh, fairly comfortable. Um, um, has both cut and depth to it. Isn't all just twang or squillo. Um. Something that has, like, something that I could give vibrato on, something that I could modify the vowel on. Again, something that's not stuck in a rigid, this is the only way I can make that much sound. Um, that feels to me like what my goal for belting is and would be. And also something that doesn't feel like, uh, uh, I'm gonna flip into a mix or the voice is gonna give out and have to make a different choice halfway through.

Renee: Okay. Amazing. Okay. So thanks for sharing all of that information. I appreciate it. Um, so just to kind of give you a bit of, uh, a background on what this study is about and what we're gonna do today. So I, my research is all about the use of, uh, the nasalized French vowels to facilitate, to help facilitate a belt sound. Um, and so this, uh, this session is not going to be like a, you know, like a voice lesson in the way that you and I might normally expect it to be, where we would assess and kind of like target your, um, specific vocal needs and then use vocal exercises, uh, to address those. It's really, I'm gonna take you through a standardized lesson plan that I've been using with everybody else, and then we're going to. You know, sing the clip of

the song, and it's really mostly to get your. Insight into what the experience was like for you in using that tool. And it's, you know, I want you to be totally unfiltered about your responses. Um, and there's also going to be a reflective journal afterwards. It's not gonna take that long to complete, really. Um, and there are no right or wrong answers. Like, I'm not trying to prove anything at all by doing this. We're really just exploring what is it like for the singer. So, um. No, absolutely. I have no stakes in the results at all.

P4: Um, being compensated by...

Renee: Yeah, yeah. Right, right.

P4: The French, language (laughter)

Renee: This has not been sponsored by any entity in any, the only entity paying for this is me by paying for the tuition for this program. So there is no, no, I have no skin in the game. Okay. Amazing. Um, how warmed up are you today or Right now?

P4: I'm, I'm fairly warm. I've been singing. For a little bit. Yeah.

Renee: Okay. Okay. We're gonna do a quick vocal reset, and then we're going, uh, we're gonna sing the song and then, and then we're gonna do some exercises. So let's start with (demonstrating lip buzz) you can do that with just the lips. You can do it with the finger, the fist, whatever feels best for you. And we're going to do it on this pattern. (Demonstration)

[Lip buzz]

Renee: Wonderful. Okay. Let's do (demonstrating lip trill)

[Lip trill]

Renee: Nice job. Okay. Really, really good. Why don't we jump right in. If you could please go ahead and sing the little excerpt of this arm.

P4: You got it. Let me just. This is such a great tune.

Renee: Isn't it?

P4: I knew I knew this song. Yeah, I knew it. It's so good. Also, but the music video, I'd never seen the music video. I was like, baby Celine.

Renee: She's so iconic. Do you have, do you have the clip, the, the accompaniment clip?

P4: Uh, I can pull it up. Yeah. I, oh, okay.

Renee: I just wanted to make sure that you had it in case.

P4: Okay. Do you, would you like it with that, or you want...

Renee: Yeah, just because, yeah, just because everybody's been singing.

P4: Yeah. You got it. Yeah. You got it. Yeah. Let me just copy this to myself over here. One sec. Copy.

Renee: She's so iconic and continues to be iconic.

P4: I know. Did you love her documentary? I feel like you probably...

Renee: I have not watched it because I was afraid of getting too emotional, so not watched it, but she's back, so that's amazing.

P4: Yeah, it's really amazing. Okay. All right. Let's play this clip. What in the world? What did I do? No, copy this. Sorry, Renee. It's okay. Here it is. Here it is there. Weird.

[Song assessment #1]

P4: Okay, that's, here we go. That was a one time through.

Renee: I love that. I love that. Let's go through it again, just the second. Okay. Um, the second, uh, no, the, the third line. (Sung) Yeah. So it's, uh (sung) Yeah, that's where it goes up on that line. So, can we try that again without the, without the accompaniment first?

P4: Yeah. Just the, like, the second time through.

Renee: Yeah.

[Song assessment #1]

Renee: Nice job. Beautiful. Amazing. Yes. That sounds beautiful. So how would you evaluate your belt sound as it is right now?

P4: Um, I think it's successful in that I can maintain a chest dominant sound. I think it's like maybe a little, like a little shouty. But overall, like, I feel like it has some stretch at the top. Like I'm not totally hitting a, a wall. Um, but I would love to, for it to have more nuance and like, just like sound cooler and better.

Renee: Yeah. Yeah. Yeah. Okay. Amazing. So let's, uh, let's try some exercises and then we'll reassess the song afterwards. Okay. So let's do a /ã/, a French, /ã/, kind of like *croissant*. That's right. So we're gonna do (demonstration)

[Exercise #1]

Renee: Uh, nice job. Okay, let's do same vowel on a five tone. So we're gonna start here (demonstrating)

[Exercise #2]

Renee: Ah, wait, and let's just make sure we we're maintaining the shape of that a vowel and not kind of widening into /æ/.

[Exercise #2]

Renee: Good. Nice job. Beautiful. Okay, let's do the same again, same vowel, /ã/ (demonstration)

[Exercise #3]

[Exercise #4]

Renee: Nice job. Really, really good. So what do you observe, um, what did you observe while doing those exercises? Um, when you were articulating the vowel, what did you feel was engaging? Where did you feel your voice resonating?

P4: I feel, um, I feel like it's very, um, metallic is like the word that comes to mind. It's, it's very, it has a lot of ping to it, but the /ā/ has, uh, has some depth to it. I feel, I feel like there is a deeper feeling, slightly deeper feeling in the vocal tract, like in the back of my throat. Um, I feel like I'm getting this like little buzz sensation in my lower register on that, on that particular route. (Demonstrating) I don't know if I can quite conjure it, but occasionally I'm not sure if that's like, maybe I'm a little over compressing, I'm not entirely sure. Um, but overall it feels good. I was playing around with straight tone and then to have vibrato, does it still manage to keep the same feeling of thickness? But overall it's a nice sensation.

Renee: Yeah. Amazing. Okay, cool. So let's do some vowel substitution in this song in the line. "Where is the /sæʊnd/" So we're gonna replace that /æ/ vowel in "sound" with /sæ̃ʊnd/. So we're gonna nasalize that /æ/ vowel. Can you say /sæ̃ʊnd/?

P4: /sæ̃ʊnd/

Renee: That's it. So where is the /sæ̃ʊnd/? Can you exaggerate that nasalization there?

P4: Mm, mm-hmm. (Sung) Where is the /sæ̃ʊnd/

Renee: That's it. That's it. So what does that, what's that feel like for you?

P4: That feels so easy.

Renee: Mm. Amazing.

P4: That doesn't feel like any heaviness or tightness.

Renee: Yeah. What, what's your, uh, perception of the timbre?

P4: Bright. But not tinny. Not, not super thin.

Renee: Yeah. So there's a little bit of depth to it still.

P4: Yeah.

Renee: Cool. So same thing in the phrase, (sung) "I can't live /wɪ'θæʊt/", can't live /wɪ'θæʊt/ to /æ/ (sung) can't live /wɪðæʊt/. And you can feel free to take it as...all the way with the, with the unfinished sound of that.

P4: Okay. Yeah. I can't live with the, I can't live /wɪðæʊt/.

Renee: So again, yeah. What does that, how did that feel?

P4: Yeah. That one was somehow harder to make the adjustment from with the /æʊ/ to the /ä/. But the, the /sæ/ to the that was it easier in my brain. Yeah. But still good. Yeah, it's still good.

Renee: Yeah, yeah, yeah. Okay, so now I'm gonna ask you to self-monitor and you're gonna apply the same adjustment, but instead of it being all the way nasalized, we're gonna bring it down to just using like 10 to 15% of that nasalization on both of those phrases. So let's start with (sung) "Where is the sound? Let's start with that phrase first.

P4: Okay. Hmm. (Sung) "Where is the /sæʊnd/ that only echoes through the night? Where does my heart beat now? I can't live /wɪðæʊt/, without feeling it inside"

Renee: Nice job. How did that feel?

P4: Good. That felt, that felt great.

Renee: Yeah. Yeah, yeah. Yeah. Amazing. And sound. What, what did you think of the timbre of it?

P4: I, I think personally I liked it. I feel like /wɪðæʊt/, maybe is still not quite as vibrant as it ought to be. It's kind of hard to tell.

Renee: Yeah. Yeah, yeah. Yeah. That's interesting though.

P4: But hat feels good.

Renee: Yeah. Okay, cool. So let's, let's reassess, let's sing the excerpt again and leave in those adjustments.

P4: Okay. With the track?

Renee: With the track. Yes.

P4: You got it. Okay. Okay. Go somewhere else. Go over here.

[Song assessment #2]

P4: Good. I think like the top notes feel good. The one that feels funky is...heart. Heart. I think heart, yeah...is hard. On the B flat.

Renee: Yeah. That's the B flat. Um, yeah. But that, that would be something we would work on for sure in a lesson. But those top notes, um, very interesting, very interesting how it shifted after the fact. Um. Okay, so final...I know that feels very unsatisfying 'cause normally we would be like, let's dive in, but...

P4: All good.

Renee: Okay. Just like final kind of wrapping things up, what was your impression of the vows strategy that we used in this session? For those two phrases specifically?

P4: Helpful. I think my feeling of belting there wasn't too far in my personal sensation from what we did. I mean, the adjustment to take to really nasalize it and really use the tool, um, was certainly more than I had done or like used to try and get there, but then when it was like, okay, let that influence it, it was like, okay, that's, I think that was somewhat similar to the strategy I was using to get there. Um, so in that case, it's, it's actually quite helpful for me because I feel like I'm already tending toward that kind of a feeling anyways, at least that's how I perceive it in my own voice. Um, so now to have a more exaggerated version of the tool that I could use in the future, um, makes sense for me. It's not like something I've never experienced that would be harder to integrate. This is actually felt to me fairly, uh, easy to integrate.

Renee: Yeah. Yeah, yeah. Yeah. Okay, cool. What are your thoughts on the practicality of this strategy as a tool for singers working on belting repertoire?

P4: I think it's solid. It's interesting because I, I tend to use a French nasale more when working with legit singers on, like, on legit music than when I ever do working on belting. Um, I tend to go /ae/ for, and I guess you could argue that there's some version of /ã/ kind of on your way from an /ae/ to an /u/ depending on how you got there. But this is interesting to me and I would like to explore seeing it used more because I think it's a little less overly aggressive or depending on a really, really thick coordination. Um, this is probably outside of the realm of your study, but I'm also curious, like if you were giving this to somebody and it wasn't giving – and they weren't defaulting into a chest dominant connection, would you adjust that? Like, would you ask them to, to do that? Or do you feel like this tool does the job, does that already? I'm curious. We'll chat offline another time.

Renee: We'll chat offline about, I have many thoughts, but yes, that would be outside of the realm of this specific paper, but possibly within the overall arch of my study because I'm doing articulation as a whole for my themes. So

P4: Because I'm curious if it like just tends to drive mix-y for most women naturally, like as a default, that would kind of be my feeling, in my own voice and in my experience as a teacher. But I, I'm curious how it shows up Yeah. As you've been working with other people.

Renee: Yeah. Yeah. Yeah. Okay. So next, how would you describe its effect on the feeling of ease when you were performing the song excerpt?

P4: Mm. Um, it just immediately released uh, any heaviness that I was feeling or any kind of shouting that I was feeling, felt like it popped it into a really resonant place without a lot of effort. Um, and achieved that both brightness and depth that I'm after. Again, I think some other strategies of mine usually are, /eh, eh, eh/ so bright. So bright, lacking in depth right from the get go. But this one manages to do both. That manages to get a little bit of both. Which I like.

Renee: Amazing. Okay. Cool. Well, thank you so much. That was, that. That covers it. Um, I'll be putting the link to the reflective journal in the chat. So if you could take a few minutes, um, right after we get off this call, just to kind of fill that in and then that would wrap up your participation in this study and yeah, it's, it's very, very interesting. You sound great. Your belt sounds amazing. It sounds really good.

P4: That's so nice. Thank you. We're gonna have to work on that next.

Renee: Yeah, that's right. Sounds good.

Semi-structured interview transcript: P5

Renee: Okay, wonderful. Let's go over, um, the intake form that you filled out. Thank you so much for doing that. Um, so primary language is English, no other languages spoken at the time, but exposure to a, a bunch of different languages, uh, through your teaching. Um, been a singer performer for, uh, about 30 years now. Um. Uh, technical lessons started in the twenties. In your twenties, not in the 1920s. Twenties, in your twenties. Um, through SLS and through IVA, mainly singing contemporary worship, pop and R&B, um, bright, a soprano with lower soprano qualities, fuller chest voice, and bright head voice. Wonderful belting feels more uncomfortable. I don't, for some reason, that surprises me. Um, voice prefers more mixed with more head dominance than chest dominance for some reason, I get, I, this makes me realize I've never actually heard you sing a full out song before. Like, I think I've heard you sing a little bit at an IVACON but I've not actually heard you sing like a, like an like a whole song. And so for some reason I, I think I had it in my mind like, oh yeah, she's, you know, mainly working, you've had a long history with worship music. She probably belts all the time. So that surprised me.

P5: Don't, I don't want to.

Renee: Great. Amazing. Amazing. Okay, cool. So, um. Just to reiterate that the primary goal for this lesson is not to ensure improved vocal function, actually, but to assess your experience when using an articulate the articulation strategy that I'm studying, which is French, uh, nasalized, French vowel. So, um, so this is not gonna be like our typical voice lesson where we do

P5: That's fine. Yeah.

Renee: Cool. So questions, uh, to, to add to the ones that, on that were on the intake form, how. Confident are you in your ability to produce about sound?

P5: Can we just define your de, can we go through and clarify your definition of belting please? Just so actually we're on the same page.

Renee: Yeah, actually that was, that was one of the things that I was gonna ask you anyways later on, like how would you describe an optimal belt sound?

P5: My definition of belt is a chest dominant sound and I think you and I both know some voices are able to produce that with more muscular chest dominance and others can produce a chest dominant sound with more head controlled or head voice dominant, um, muscular function. So my definition of belt would just be a chesty sound, whether or not that is mostly controlled by chest dominant muscles or head dominant muscles.

Renee: Mm-hmm. Cool. Okay. So how confident are you then in your ability to produce that belty sound, regardless of the mechanical, um, coordination?

P5: Yeah, yeah, yeah. Probably like a seven and a half out of 10. Does that help?

Renee: Yes, it does help. So, and how satisfied are you with your belt sound today?

P5: I don't know yet. I'll tell you when we work on the song

Renee: in general though, like, yeah, maybe not, not so, not so specific as like today, but in general, in this, in this, um, chapter of your singing development and journey, how con, how satisfied are you with the belt sound that you normally can produce?

P5: Oh, pretty satisfied. I mean, I know that I can always work harder on it. It's just finding the time to work on it. Um, being that it is quite a demand on the voice.

Renee: Yeah. Right.

P5: But for the most part, I'm, let's, between you and me as teachers, if I'm demonstrating a belt sound to a student, I'm confident that I can make it sound belty on the big open vowels.

Renee: Yeah. Cool. Awesome. So, okay, we're gonna go through a little warmup and then we're gonna assess. I, I trust that you had time to work on the song, the, the excerpt of the song that we're gonna be working on today. Yeah?

P5: Yeah.

Renee: So we're gonna assess with that and then we're gonna do some exercises and then go back and reassess. So, um, just to make sure that I'm clear, your voice is feeling healthy today. No issues.

P5: Yep.

Renee: Okay, cool. And you've had some time to warm up earlier today, or is your voice

P5: I have, yeah, I have done a little bit. Wow. I have done a bit of a warmup. Yes.

Renee: Alright. We're gonna take you through a quick warmup, so I'm not gonna take you through anything extended. And then, um, and then, yeah, yeah, yeah. Cool. So let's begin. We're gonna start with a lip buzz. This is like a kazoo or a blowfish, however you like to call it. You can use it just your lips or with a finger or with a fist, whatever feels the most comfortable for you. And we'll do it on this pattern. (Demonstration)

[Lip buzz warm-up]

Renee: Good. Very nice. Okay, let's do a lip trill. (Demonstration)

[Lip trill warm-up]

Renee: Nice job. Awesome. Okay, let's begin by singing the clip with accompaniment, if you're ready.

P5: Let me get my accompaniment. Whoop. All right. So it's from, uh, is it 55 seconds?

Renee: Yeah, there's actually a clip already pre-cut for you on the website. Let me, I can get that for you if you want.

P5: Yeah, I've, I don't have the website loaded, but I've just got a regular karaoke. Do you want, or do you wanna drop the track into the Zoom chat or can I search for it?

Renee: Yeah, I'll get it.

P5: Okay. Um.

Renee: This is, I honestly love dog. Okay.

P5: I've had it on repeat for like 24 hours.

Renee: I appreciate your diligence. Thank you. So, okay, so whenever you're ready, go ahead and start.

P5: Okay. Hope this isn't too loud for you. All right, here goes. Here we go. Wish me luck!

Renee: You got this. You got this?

P5: Alright.

[Song assessment #1]

Renee: Nice job. Beautiful. Hey, do you happen to have like another device on you like a phone or something that you could play the music out out of?

P5: Yeah, let's do that.

Renee: Yeah, let's do that. If that's okay. Um, do you want me to send it to you on WhatsApp?

P5: Oh. Only if that's easy for you. Yeah. Only if it's an easy drop.

Renee: Yeah. Yeah. Should be. Gimme a sec.

P5: Yeah. So even though those speakers are separate, is that too, is that too loud?

Renee: It's, it's a little too loud. Yeah. I mean, maybe, maybe if you turn them down, maybe it would be better, but I just wanna make sure that the sound isn't compromised for the results.

P5: Of course. Yeah.

Renee: Yeah. Okay. Gimme a second and I will send it to you on WhatsApp.

P5: Oh, you're the best. Thank you.

Renee: Oh sure. No problem.

P5: How fun is it having like technical stuff in a lesson when you're like watching the minutes tick by.

Renee: Yeah, yeah, yeah. Okay. Uh, copy and oh my gosh, my, I don't know if you can hear my daughter out there like singing. She's got a...

P5: I can't actually I can't.

Renee: Oh my God.

P5: No, I can't.

Renee: Okay. There we go. Sending it to you now. Okay.

P5: All right. Got it. Thank you. Yeah. All right. Oh, that's through my Bluetooth. It's actually, I'll just, I'll just disconnect. It's out in the other room.

Renee: Oh, okay. Okay, okay.

P5: Sorry. I was not expecting that to happen.

Renee: It doesn't sound at all like it's coming from nearby.

P5: It's not coming from my phone. Alright. Here we go.

[Song assessment #1]

P5: That'll do like that?

Renee: Yes. Wonderful. Okay. Wonderful, wonderful. Awesome. Okay, so how would you evaluate that belt sound that you got today?

P5: Seven. Seven.

Renee: Good! Seven's great. Okay. Let's do some vocal exercises. We're gonna use a, uh, a, a nasalized French /ã/ like *croissant*, um, and we're gonna use that one vowel on a bunch of different exercises. Okay. So can you say, /ã/? Perfect. Perfect. So, ah, sorry. Starting from there.

[Exercise #1]

Renee: Wonderful. Okay. Let's do a five tone on that same vowel starting from here. Nope. I was like, that's not right. (Demonstration)

[Exercise #2]

Renee: Oh, nice job. Wonderful. Okay, let's do again, same vowel. We're gonna do it on this pattern (demonstration)

[Exercise #3]

Renee: Right. That's right. You know what I, one thing I forgot to say earlier is that the, so the goal of this exercise is really to gain insight into your experiences. It is not at all like meant to prove the effectiveness of like, I have no skin in the game here at all. So really just, just so that you know, you are invited and encouraged to be as candid as possible in your observations, there is absolutely no pressure to prove me right. In anything like, I'm, I'm not invested. Right?

P5: Okay.

Renee: Okay, good. One more exercise. (Demonstration)

[Exercise #4]

Renee: What, so what did you observe when you were articulating that vowel? Where did you feel it engaging? Where did you feel it resonating?

P5: Well, I feel it behind, up behind my soft palate. Um, but yeah, I, I wouldn't say I pay too much attention to sort of vibrations anywhere else other than how much is coming out of my mouth and how much do I feel in my nose, especially with a nasal. Um, so I'm very aware that it is going to feel more nasal by definition.

Renee: By definition. That's right.

P5: Yeah. So I was just concentrating on make sure you feel some of this in my nose because I'm not French, and I wanna make sure that I'm doing the sound justice in my Australian throat.

Renee: Yes. Right, right. Wonderful. Okay, amazing. So we're gonna do some vowel substitutions real quick. Um, we're gonna do, uh, "where is the /sæʊnd/" So instead of, instead of going (sung) "where is the /sæʊnd/" we're gonna add, we're gonna nasalize that /æ/ vowel. So however you felt that nasal, I want you to engage that same thing on /sæ̃ʊnd/, okay?

P5: Oh, that's so Celine.

Renee: Yeah, that's why I picked her. Okay, so why don't you try that? You could do an acapella if you want. Just as long as we've got the right key.

P5: What is the note? I'll just check the note. Yeah. Okay. (Sung) "Where is the /sæ̃ʊnd/"

Renee: That's it. That's it. And you can do the /ã/ vowel, but if you want, if you can maintain the nasal and go to the sound, the wider /æ̃/ vowel.

P5: Okay.

Renee: Um, you can do that as well.

P5: Okay. (sung) "Where is the /sæ̃ʊnd/" That's hard to do.

Renee: It is hard to do. Yeah. Yeah, yeah, yeah.

P5: How do you widen ave and keep it nasal?

Renee: Yeah, try it again. Just do your best.

P5: Yeah. Um, oh, oh yeah. Yeah. I've just gotta find that feeling, I think. (Vocalizing) /æ/ (sung) "Where is the /sæʊnd/" That's hard to do. Yeah. Yeah. I don't know if I can actually do it.

Renee: Nope. You, you actually did, I think you did. Um, it sounded like you did anyways to my ear. Um, so that was tricky. That was your experience.

P5: It was a little bit difficult to get to, well, tricky to find the nasality of the French nasal feeling in a wider, more open vowel. Yes.

Renee: Mm-hmm. Okay. Interesting.

P5: Harder for me to do that.

Renee: Yeah, yeah, yeah. Okay, so now let's try the same thing in /wɪ'θæʊt/, now it's not very much difference in terms of the, the shape of the vowel, but we're gonna do the same thing. Going from /wɪ'θæʊt/, /wɪ'θæʊt/ to, /wɪðæʊt/, /wɪðæʊt/

P5: (sung) "I can't live /wɪðæʊt/. I can't live /wɪðæʊt/."

Renee: Mm-hmm. That's right. Yeah. Good. How did that feel?

P5: Not normal? Yep. Absolutely not. My normal, like normally on open vowels, I'm. Looking for oral resonance. Not a nasal feeling.

Renee: Yeah. Right, right. Okay, so we're gonna do the same. We're gonna do similar thing. I'm gonna ask you to self-monitor and do the same two phrases, but this time reduce the nasalization of the vowel down to like 10%, 15%. So if you were going for full nasal, like a fully nasalized feel earlier, I only want you to go for like 10% of that feeling this time. Okay, and let's do one those, okay. Same two phrases.

P5: Okay. (Sung) "Where is the /sæʊnd/? I can't live /wɪðæʊt/." No, I'm doing that again. (Sung) "I can't live /wɪðæʊt/"

Renee: Mm-hmm. How did that feel?

P5: That's the least amount of nasality I can find without it not being nasal at all.

Renee: Yeah. Yeah. Right, right, right. And so how did that feel? How was that experience and how, what did you think of the sound of it?

P5: Um, it felt a little more secure in my throat, I feel, or in my experience of those vowel types. Um, it felt a little more secure, like the nasality part, it was just harder to find quickly. Um, like I would need to just spend time refining that to feel like I've really got it in the pocket, so to speak. So, yeah, on with the less nasality, it definitely felt a little easier. Easier to find, easier to stabilize. Um, and yeah, not as much work.

Renee: Right, right, right. Okay, so now we're gonna do another reassessment. If you could sing the excerpt again with the accompaniment and see if you could apply those adjustments this time.

P5: Sure. Okay.

[Song assessment #2]

P5: I get that wrong every time I actually know it. But anyway.

Renee: It's okay. It's alright. So what did you think, what was your impression of that vow strategy? Um, once everything was said and done and you reassessed with again?

P5: Um, good question. Um, this is fun, by the way. I, I like what you're, what you're doing here. It does make you think, I do think it, improved possibly the intensity or the clarity of the sound, um, going in that direction. Now, could I do a better job of it? Yes. Yeah. But you know what I mean? Like, I do feel like if, if I had time to refine the actual exercise, I feel like it would greatly improve the intensity of the sound, and it would cut harder. Like it would not necessarily sound edgier, but I feel like the intensity would cut through more than having more oral space potentially.

Renee: Right, right, right. And so what are your thoughts on the practicality of the strategy as a tool for singers who are working on belting repertoire?

P5: Yeah. I think specifically for belting as an application for that sound, great. I think it's one very effective method that can take pressure off the voice but improve the intensity of the sound.

Renee: Right, right. Yeah. Amazing. And how would you, well, you kind of already talked about this. How would you describe its effect on the feeling of ease when performing the assigned song excerpt?

P5: Yeah. Um, feeling of ease in producing the notes. So just in the voice production side, I think slightly easier, yes, to gain that intensity. Um, you have to concentrate though, like it does take a little bit of practice just to get to find the feeling of what it actually is. Only because if you're not used to it, then you're gonna need to work to find what that actually is.

Renee: Right. Yeah. Like mentally, if you're not, if you're not used to it, you, you do have to kind of try and search for it.

P5: Yeah.

Renee: Amazing. Well, that, I know that kind of was like fast, fast, fast, fast, fast. But I wanted to be respectful of your time so you can wash your dishes. Um, just one last thing I'm gonna send you in the chat, the link to the journal, if you could complete that, it doesn't have to be right now, but as long as you could complete it while the memory is still fresh in your mind, I really appreciate it.

P5: No, thank you.

Semi-structured interview transcript: P6

RENEE: Okay. Amazing. Let's get right into it. Um, so, uh, just gonna go over the information that you shared through the intake form. Thank you so much for filling that out. Um, okay, so primary language is English. No other languages spoken, um, uh, but have had experience or exposure to other languages, like some Spanish, um, in teaching. Are you exposed to other languages through the students that you teach?

P6: Um, minimally.

RENEE: Minimally, okay. Okay. So let's see. So history as a singer. Um. Family affair, mostly church. I love that. Started performing with sisters at the church, family gatherings. Started singing in high school, in choir and audition groups, and then community musical theater, and then in an adult women's harmony group. That's amazing. Um, for eight years. Classic rock cover band. That's amazing. And then continuing to sing in community theater productions and choirs. Great. Um, so we took some choir classes in junior high and then junior and senior year in high school in your thirties, took some lessons with private teachers, then started taking lessons with an SLS teacher, and then continued to become a teacher yourself. Now with IVA. Amazing. Um, mezzo soprano, and. Belting mostly from your own listening and imitating artists like Barbara Streisand, great. Celine Dion, Bette Midler, classic, the classic divas. Um, and so. You've got a better understanding of the mechanisms and you feel more comfortable with belting. But the challenge is letting go of the weight while still achieving the sound of belting and then teaching your own inner ear and nervous system that the feeling of weight is not what makes belt powerful. Yeah. Not defaulting to that heavy feeling. Amazing. Okay. Thank.

Okay. So I have some additional, uh, additional questions that I wanted to ask. Um, how confident are you in your ability to produce a belt sound?

P6: Um, um, it depends on the day. It depends on, on what I'm doing, but I would say it runs around 75%.

RENEE: Mm-hmm. Yeah. Yeah. Yeah. Okay. And so how satisfied are you with your belt sound today?

P6: Not satisfied.

RENEE: Not...not. Care to elaborate?

P6: Um, uh, it depends on the song. You know, it just depends on, you know, songs that, songs that, where the belt has got to, uh, be in the bridge are a little less confident than belting above the bridge or, um, just at the beginning of the bridge. Does that make sense?

RENEE: So you, when it's within the passage, you feel not as confident with belting, but if it's above or just before the passage, you feel more comfortable

P6: Yeah. In the beginning of that passage. Right. You know? Just, you're not, if the song doesn't have to live above and it doesn't have to go through, it just has to go into, belting, I'm super confident, I'm, I'm quite happy with it. But if it has to be, if it has to be, which you would just have to choose this Celine Dion song, which is literally between the A and the D, that's where I have the least amount of confidence. So this is fabulous.

Renee: Okay, great. Amazing. Um, so how would you describe an optimal belt sound?

P6: How would I describe it?

Renee: Yeah.

P6: Um, I would describe an optimal belt sound as something that, um, has volume, uh, but still, uh, I think, I think the greatest ones really still sound, still have somewhat of a, a ring to them. Not necessarily a full ring, but, um, they're just, they just seem open, free and full. Not just one-sided. They don't sound heavy. They don't sound light. Um, but, but it just carries. That, that's an optimal belt to me.

Renee: Okay. Okay, great. Awesome. How is your voice feeling today? Have you warmed up at all?

P6: Yes, I'm fully warmed up. Um. Again, I wouldn't say my voice is at, I feel at a hundred percent, but it's, but it's, it's up there, so

Renee: it's, it's, uh, it's good enough for

P6: it's responsive, so it's okay.

Renee: Okay. Okay. Responsive. Okay. Um. You have practiced the song enough to know that it's, it's comfortable. You're comfortable singing the, the excerpt, right? It's not, um, yeah. Okay. Okay, cool. Let's, uh, let's do a few warm up, I know you've warmed up already, but I, I'm going to, I take everybody through a little bit of like a warmup, quick warmup, and then we're gonna assess by singing the clip with the accompaniment, and then I'm gonna take you through some exercises and then some vowel substitution, and then we're gonna reassess. So just to reiterate, the primary goal of this lesson isn't to ensure improved vocal function necessarily. It's really to assess your experience when using the articulation strategy that we've, that we

selected, which is a Nasalized French, /ã/, a nasalized French vowel. Um, so this, this is gonna be a bit different from the way that we would normally expect a voice lesson to be where there's like a functional goal and we, you know, we use targeted exercises for that individual. It's really like, I'm gonna give you a tool, I want you to observe how it feels, I want you to observe how it makes you sound, and then I want you, and then I'm gonna get your thoughts. That's really what it is. Also, I wanna make sure that, you know, I am not invested in the success of the tool itself. Like, I have no skin in the game. The, I am totally encouraging everybody to be as open and candid as you can be with the feedback, um, because the whole goal of this isn't, I don't have any, you know, I, I'm not trying to prove anything, right. Um, I'm just trying to explore the singer's experience when using the tool. That's really what it's about.

P6: Cool.

Renee: Okay. Awesome. So let's start with a warmup. We're gonna do a lip buzz. So either (demonstration) whatever you feel the most comfortable with. Um, and we're gonna do that on this pattern. (Demonstration) Oh, sorry, sorry, sorry. I knew that was too high. Oh, starting down here. Oops.

[Lip buzz]

Renee: Nice job. Okay. (Demonstration)

[Lip trill]

P6: Nice job. Okay. Awesome. Feeling ready to sing?

P6: Mm-hmm.

Renee: Okay. Let's, uh, start by singing the excerpt with the accompaniment.

P6: Okay.

Renee: And if you have the accompaniment, I found that it works best if you had it playing from a separate device than the computer.

P6: Okay.

Renee: Um, if you need, I can text it to you.

P6: Uh, I I can get it. Yeah. Right there.

Renee: Are you using the instrumental clip that I had on, uh, on the website? Okay, awesome.

P6: Yeah. You just want the excerpt, right?

Renee: Yep.

P6: Do you mind if I sing a little bit before that?

Renee: Nope.

P6: Ah, hang on.

[Song assessment #1]

Renee: Cute. Such a rock star. It's so cool. Okay, so how would you evaluate your belt sound right there?

P6: Um. There's some really great moments, uh, running through that A is, there's, I have, I think there's some weakness there that I haven't been able to get rid of yet from being sick, because that doesn't normally happen. And by normally, I mean in the past. But, um. But, uh, it was, that was a, that was an okay first run. Yeah.

Renee: Okay. First run. Okay, great.

P6: I, I did better earlier this morning when I was working.

Renee: When you didn't have a, a pair of eyes looking at you.

P6: Okay. I mean, I, I felt pretty good about that for, for, um, other than there's a, there's a couple of notes in there that, that got, uh, a little too much, uh, in extrinsic involvement. Other than that was all right.

Renee: Okay. Awesome. So let's work on some exercises. So we're going use a French /ã/. Okay. Say a. A, like *croissant*, /ã/.

P6: /ã/

Renee: Uhhuh. So we're gonna do (demonstration)

[Exercise #1]

Renee: Nice job. Okay, let's do same vowel. We're gonna do that on (demonstration)

[Exercise #2]

Renee: Oh, sorry. I wasn't supposed to take it down. Sorry about that. Okay, let's do legato (demonstration)

[Exercise #3]

Renee: Nice job. Okay, one last exercise (demonstration)

[Exercise #4]

Renee: Nice job. Okay, awesome. So what did you observe when you articulate that vowel? What is, what's, what do you feel engaging, where do you feel your voice resonating?

P6: Um, um, going up those higher notes, I feel more nasal resonance. Um, and, uh, the, I can feel like what I call a, a vertical pharyngeal. So not horizontal, where you kind of feel back of tongue and it felt there, it's, I could feel this a little more, uh, vibration of the sound through my vocal tract.

Renee: Okay. Um, okay. Yeah. Great.

P6: Still, there's still a note in there that wants to wobble.

Renee: That's okay. That's all right. That's all right. Okay. We're gonna work on some vowel substitution. So we're gonna use in the, in the phrase, "where is the /sæʊnd/" I better make sure that I am singing the right key here. Um, so where is the...? So instead of /sæʊnd/, /sæʊnd/. We're gonna say /sæ̃ʊnd/, /sæ̃ʊnd/, whatever that coordination was that was getting you that nasalization in the exercises, I want you to apply it to the word sound as well. So can you say, (sung) "where is the /sæ̃ʊnd/?" See what I mean? Like really applying that nasal on that, on that word. Can you give that a, a try?

P6: (sung) "Where is the /sæ̃ʊnd/?"

Renee: That's it. And you can still keep it the same width if you want. "Where is the /sæ̃ʊnd/?" Can you try that?

P6: (sung) "Where is the /sæ̃ʊnd/?"

Renee: That's it. That's it. Yeah. How does that feel and what do you think of the sound of it

P6: Oh, it's, it's great. It's got the, it's got the loudness without the weight. Um. It's got that, uh, megaphone kind of feel.

Renee: Right? Awesome. Okay, we're gonna do the same thing in the phrase "I can't live /wɪ'θæʊt/", so /wɪ'θæʊt/, we're gonna apply that nasalization on /æ/, /wɪ'θæ̃ʊt/ goes to, /wɪðæ̃ʊt/, (sung) "can't live /wɪðæ̃ʊt/". Can you try that?

P6: (sung) Can't live /wɪðæ̃ʊt/.

Renee: That's it. That's it. Can you try widening it back to the, the same opening that you had earlier, but just with the nasalization?

P6: (sung) Can't live /wɪðæ̃ʊt/

Renee: Amazing.

P6: Wow.

Renee: Yeah? How does that feel? What do you think?

P6: Great. Great. It's got the, it's got the more of the ring in it without, you know, going heady

Renee: Mm-hmm. Awesome. Okay, so now I'm gonna ask you to self monitor and reduce the intensity of the nasalization. So instead, if you were doing like a 10 out of 10 /æ/ nasalized sound earlier, I want you to bring it down to light 10 or 15%.

P6: Okay.

Renee: Whatever that is. Yeah? Yeah. So let's start with, uh, (sung) "where is the /sæʊnd/?" Go from /sæʊnd/ to like 10, 15%.

P6: (sung) "Where is the /sæʊnd/?"

Renee: That's it. Okay. Can you try and go for the vowel that you had originally?

P6: Where is the /sæʊnd/?

Renee: Okay, now, can't live /wɪðæʊt/. Can you try that?

P6: (sung) "Can't live...can't live /wɪðæʊt/" Whoo, that's better.

Renee: Yes.

P6: If I am...(inaudible)

Renee: Yeah, I'm pretty sure. Let's, let's make sure. Um, but I'm pretty sure it is...still on key. So what, what did that feel like? What did you think of the sound of it?

P6: Uh, uh, much easier, meaning the weight was the, the. I say, weight, the extrinsic muscle didn't feel like it needed to jump in...

Renee: kick in. Mm-hmm.

P6: Didn't feel like it was like, I gotta help you do this. That's, that's a lot of what happens. Like, I'm gonna go there and it's like, (guttural) "huh". And this...but (sung) "where is the /sæʊnd/?" It

didn't feel like it was gonna fall apart or (sung in a lighter-sounding coordination) “/sæʊnd/” or go up in there.

Renee: Mm-hmm. Yeah. Yeah. Sounds great. Can we try the clip again with the accompaniment? And keeping those adjustments, 10 to 15% nasal on those two vowels.

[Song assessment #2]

Renee: Woo amazing!

P6: ...sail through.

Renee: Yes. Yes. So what was your impression of that vowel strategy that we used today?

P6: Uh, it's, my impression is it's a great way to, to get, um, to get, to keep the resistance? 'cause it, we, you know, or in plain words, it keeps my vocals together without, um, without adding the extra muscle. Um, so it was just an ease to, it was just easy to go into it. But doing it with the exercise before that just really, um, gave me more confidence that the note was gonna be there.

Renee: You felt like it was a helpful setup?

P6: Yeah. So that when I went to sing it in the song, I knew where I was going. I knew, I knew I, the feeling was, was familiar.

Renee: Mm-hmm. What are your thoughts on the practicality of the strategy as a tool for singers who are working on belting repertoire?

P6: Well, um, what was the question?

Renee: How practical do you think is the strategy as a tool for singers who are working on belt?

P6: I think it's very practical. Yeah. Um, especially for those who, who in belting. I, I think because based on the exercises I was using to work on this song mm-hmm, and then this one, it's, uh, it, it feels like a quicker route than some of the other exercises I was using. This feels like a quicker route. So, yeah, it's very practical.

Renee: Awesome. How would you describe its effect on the feeling of ease when you were singing the excerpt?

P6: Um, friendly. Um, if I put it in one word, it was very friendly. To find the ease. Yeah. To allow the ease, I should say. Um. Because it wasn't a feeling of, of, (grunt) huh? This, it was a feeling of, (free) huh, this, if that makes sense.

Renee: So not a feeling of pushing up against or pushing weight up, but more a feeling of narrowing or what would you say?

P6: Focusing. That's kind of what this looks like to me. Yeah. Like focusing a light, I would say it's a more of a focusing feeling rather than, uh, a resisting feeling actually.

Renee: Hmm. Okay. Amazing. Awesome. Well, thank you so much. That completes the interview portion. Now you just have one more thing that I need, uh, from you would be to complete the reflective journal. So this is, it's not long. It'll only take a few minutes, but if you could do that, if you have time to do that now while it's fresh in your mind, and then that way you don't have to worry about it later on, that would really be a great help. And, um. Thank you so much for participating.

P6: You're, thank you for asking me. This is, this was eye-opening. ... I was thrilled to help you out and do that because that's definitely. That that's an, I have not used that exercise in a super long time. So that's, that's a good reminder.

Appendix 6: Reflective Journal Responses

REFLECTIVE JOURNAL: P1

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. I've worked with them with other instructors guiding me but very little. The teachers generally would use pharyngeal sounds but that may also have been due to where I was in my own vocal development.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? I really liked it a lot. I think it was an efficient way of getting a student into a easier belt sound.

What did you observe in terms of its effects on your own physical experience of belting? I noticed that it made my belting feel easier, more flexible and more fluid. I didn't have to "think" as much, no major vowel modifications required. While I experienced more nasality in my internal proprioceptive feedback, I also believe I heard more nasalance overall in the sound. **What did you observe in terms of its effects on your sound/timbre?:** It definitely gave me a bit more nasalance, more forward resonance (if you will). By holding that sound and dropping my jaw, I was able to reduce some of the nasality without sacrificing the ease (but I had to find it first).

What are your thoughts on its ease of execution? More power, more ease, more flexibility, more fluidity and much less effort

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? I believe it would require another set of ears for language speakers who don't have nasals native to them. I think it could go too far and a student might overdo it. But, for students who have those sounds in their native language, I think it would be useful.

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? I think I came pretty darn close?

Any other thoughts or insights you'd like to share? Great study! Love it!! Thanks for having me. :)

Can Renée contact you directly to discuss any further questions regarding your experiences in this study? Yes

REFLECTIVE JOURNAL: P2

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. Yes- I use French nasals a lot with my students-mostly to encourage better registration. I find them useful to encourage a move out of chest voice and into mix. They are also great for singers who tend to over-blow, building up too much air pressure, as they create more back pressure that becomes uncomfortable when using too much air.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? I liked the use of the nasal on a more open vowel. I typically use more [ɔ̃] (on), and [œ̃] (un) sounds but for a beltier coordination it makes perfect sense to navigate towards [ɑ̃] (an). I found the full use of the nasalisation too extreme for my needs but when asked to just use 10-15% of it found it very comfortable.

What did you observe in terms of its effects on your own physical experience of belting?

I found it as equally comfortable as my original approach by the end of the lesson- perhaps it reigned in my tendency to be too loud in some places.

What did you observe in terms of its effects on your sound/timbre? The sound was very resonant and clear. I would love to hear it from an outside perspective because I know that my internal perspective on my voice is typically skewed and it's only when I listen back that I can tell how loud and toneful my voice becomes with any new approach.

What are your thoughts on its ease of execution? It was relatively easy to use- although Renee had to correct me on the amount my jaw dropped as I applied it so there's clearly a tendency there for me to forget what else is going on in my system when focussing purely on the tongue position required to create that sound. I think if I were a native French speaker that would be less of an issue since that coordination would be far more intuitive.

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? If I used a mirror to check that I wasn't changing the mouth positions too much I think it would be pretty easy to apply by myself.

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? It felt finished to me when we reduce the nasality to 10%.

Any other thoughts or insights you'd like to share? I would be interested to try this on songs that sit higher in my voice (beyond E5) where I'm more likely to overblow notes and might need something like this more.

Can Renée contact you directly to discuss any further questions regarding your experiences in this study? Yes

REFLECTIVE JOURNAL: P3

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. Yes, I have used French nasals in my training, and they have been very helpful for me. Only a couple of teachers have incorporated them, typically over the first passaggio on a sustained vowel. I have primarily used the French "AH," "OH," "EH," and "AE" nasal qualities.

They have been especially effective in helping me maintain connection through my first passaggio. I have historically struggled with transitioning from the top of my chest voice into my head voice without experiencing a "flip" or a sensation of hopping over a fence. Using French nasals—often on octave scales—has helped me maintain continuity and coordination through the middle portion of my voice. They have served as a reliable tool for encouraging connection rather than separation in that transition area.

At the same time, I have observed in my own teaching that French nasals- if relied upon too heavily- can become a crutch. Some students lean too heavily into the nasal quality, which can raise the larynx and introduce unnecessary manipulation or a loss of balance and resistance in the voice. Especially if they start this nasality in the bottom.

Overall, however, I have absolutely found French nasals to be a valuable pedagogical tool. I am

interested in continuing to explore how they can be used effectively- and love how they were incorporated as a tool for belt.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? I loved it! I thought it was a very strategic way to help keep the reins on something that for me could have otherwise resulted in pulling up weight or battling too much thickness and manipulation. It felt like a safe way to explore.

What did you observe in terms of its effects on your own physical experience of belting? It helped me feel like I could "hold on" to a bit more of the sensation of the bottom as I went up. I felt it stretching and thinning, but there was this hand-holding effect I felt on my voice that allowed me to continue up and still feel strong and connected to the bottom. Felt almost like an insulated funnel that was keeping me from falling out.

What did you observe in terms of its effects on your sound/timbre? It lent itself to a slightly more nasal quality, and because of the vowel it sounded brighter and more forward.
What are your thoughts on its ease of execution?: Definitely increased the ease of execution. It gave me a stronger sense of stability, safety, and trust while I was exploring more open and expansive vowel qualities.

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? It would be feasible. But I still prefer an instructor guiding me through it. After I was aware of the specific vowel she wanted, I feel pretty confident I could replicate it alright on my own.

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? I am not sure. Honestly I would have to listen back to tell. I wasn't able to get enough of a gauge on it to tell.

Any other thoughts or insights you'd like to share? I want to understand this tool more as an avenue to teaching belt and helping students explore a belt quality. It's interesting and I think could be very effective for so many!

Can Renée contact you directly to discuss any further questions regarding your experiences in this study?: Yes

REFLECTIVE JOURNAL: P4

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. : Yes, mostly in more legit or classical musical theatre settings.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? Interesting and useful! It really did the trick for me personally: allowed me to find both cut and depth in the sound and release any heaviness or squeeze i was previously feeling.

What did you observe in terms of its effects on your own physical experience of belting? It got me to a much more finished stylistic sound. Overall, the tool wasn't too far from the approach I was using to get a belt sound on this song, at least from how I perceived my own voice.

What did you observe in terms of its effects on your sound/timbre? Gave more depth and flexibility, allowed a little vibrato to come in (more free sounding!)

What are your thoughts on its ease of execution? I'm familiar with this french nasal sound, so it was fairly quick to lock into and use personally.

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? Very feasible.

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? Quite close to finished!

Any other thoughts or insights you'd like to share? Loved it! Fun to focus on just ONE tool on a handful of arpeggios and then apply to song.

Can Renée contact you directly to discuss any further questions regarding your experiences in this study? Yes

REFLECTIVE JOURNAL: P5

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. Yes and always a positive experience in that it feels like they take pressure off my voice.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? I can see how the nasal was helpful in this area of vocal range and style of singing with Celine Dion being the example. The nasal did seem to keep my intensity high with less effort, however the tone of my voice was obviously more nasal and slightly less oral resonance. Sensation wise, it felt good to sing, just a little challenging to do it correctly in the lyrics to begin with.

What did you observe in terms of its effects on your own physical experience of belting? As above, it increased the intensity of my tone without increasing my effort.

What did you observe in terms of its effects on your sound/timbre? Timbre became more focussed, less bottom end.

What are your thoughts on its ease of execution? Moderate - it's not the simplest, easiest feeling to find, but once its there, it gets easier with every try.

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? I personally would be fine with that only because I am a vocal coach myself so I've had practice and I need to be able to teach it also.

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? 7/10. I just need more practice on refining the execution and really trusting it. So more reps in the gym before performance.

Any other thoughts or insights you'd like to share? This was fun to try!

Can Renée contact you directly to discuss any further questions regarding your experiences in this study? Yes

REFLECTIVE JOURNAL: P6

Have you ever worked with French nasal vowels in past vocal training or performance? If so, please describe your experiences. Yes but it's been a long time. It was mostly in the beginning of my teacher journey.

What were your overall thoughts on the use of the French nasal vowel in this voice lesson? it took away the feeling of weight but didn't lose any resistance.

What did you observe in terms of its effects on your own physical experience of belting? I noticed I was able to keep appropriate resistance with the increased volume of air without adding any extra weight or extrinsic muscle.

What did you observe in terms of its effects on your sound/timbre? It gave me more of what I would describe as a "megaphone" sound.

What are your thoughts on its ease of execution? I did have to remind myself not to raise the tongue too much. But other than that this tool is pretty easy to implement and allow to work.

How feasible do you think would it be to try and replicate the French nasal vowel adjustments on your own without the help of an instructor? quite feasible

How close do you think you came to a "finished" or performance-ready sound after using the French nasal vowel strategy? I'd say I'm about 90% there. Need to spend a bit more time to make it consistent.

Any other thoughts or insights you'd like to share? For me, as a singer who tends to use too much weight when belting, I appreciate the opposite tendency of this french nasal vowel. It gave me a feeling of weightlessness while achieving a "belted" sound.

Can Renée contact you directly to discuss any further questions regarding your experiences in this study? Yes

Appendix 7: Codes and Initial Themes

Initial Themes	Codes
Background	Prior French training
Background	Multilingual exposure
Belting Challenges	Moderating vibrato
Belting Challenges	Relationship between volume, belt aesthetic, and vocal function
Belting Challenges	Old belting habits are hard to break
Belting Challenges	Hard to self-assess whether belt is loud enough
Belting Challenges	Tendency to overestimate volume needs
Belting Challenges	Self-monitoring isn't effective during singing/belting
Belting Challenges	Spreading vowels is a habit
Belting Challenges	Belting tends to involve too much weight
Belting Challenges	Need to reduce volume
Belting Challenges	Need to narrow vowel
Belting Definition	How do you even define belt?
Belting Definition	Old: Bringing chest register up
Belting Definition	Now: Connecting chest and head register + acoustic shaping
Belting Definition	Optimal belt should be aesthetic and sustainable
Belting Definition	Optimal belt sound is genre-specific
Belting Definition	Optimal belt sound is high-intensity
Belting Definition	Sometimes belt is high frequency, sometimes with depth
Belting Definition	Belting should be repeatable
Belting Definition	Belting should have both cut and depth
Belting Definition	Belting should accommodate vibrato and vowel modification
Belting Definition	Belting should have a consistent depth/quality through phrase
Belting Definition	Belting should have a chest-dominant sound
Belting Definition	Belting is demanding on the voice

Initial Themes	Codes
Belting Definition	Belting should be perceptually loud, full, and ringing
Belting Definition	Belting should sound open and free
Belting Habits	Instinct is to remove nasalisation from /ã/
Belting Habits	Instinct is to increase volume into the first passaggio
Belting Habits	Pharyngeal sounds were a helpful tool for developing connection
Belting Habits	Easy to overdo pharyngeal sounds
Belting Proficiency	Comfortable with belting
Belting Proficiency	Not confident in belt technique
Connection	Nasalized /æ / allows for smoother connection from chest to to belt range
Connection	Nasalized vowel helps smooth transition from chest to mix
Connection	Nasalized /a/ exercise included a flip into passaggio
Connection	Nasalized vowel made belt feel more flexible and fluid
Current Conditions	Aging voices have more limitations
Current Conditions	Song assessment felt easy to begin with
Current Conditions	Current belt strategy is “too safe”
Current Conditions	Current belt strategy doesn’t have enough weight
Current Conditions	Belting is a complex/emotional topic
Current Conditions	Belting is an area of frustration
Current Conditions	Belting is an area of improvement
Current Conditions	Belt sound has not been marketable enough for me
Current Conditions	Not confident in belt technique
Current Conditions	Confident but not comfortable with belting
Current Conditions	Current belt strategy requires too much weight
Current Conditions	Currently dissatisfied with belt sound
Current Conditions	Current belt sound is not marketable

Initial Themes	Codes
Current Conditions	Belting is easier above the passaggio
Current Conditions	Belting is more difficult in the first passaggio
Ease	Feels easier with the nasalized /æ /
Ease	Belting on /sæund/ easier than /wiðæʊt/
Ease	May be difficult for singers with no French exposure
Ease	Nasalized exercise causes increased air build-up
Ease	Nasalized exercise causes uncomfortable laryngeal lifting
Ease	Full nasal vowel substitution feels restrictive
Ease	10% nasalization feels similar to existing belting strategies
Ease	10% nasalization prevents excessive air pressure
Ease	Song assessment felt easy to begin with
Ease	Full nasal vowel substitution feels more resonant and open
Ease	10% nasalization makes belting feel more secure
Ease	10% nasalization results in lowered perception of threat
Ease	Nasalized /sæund/ is free from heaviness or tightness
Ease	Nasalization is less dependent on chest voice dominance
Ease	Hard to widen and nasalize vowels simultaneously
Ease	Associate wide vowels with orality, not nasality
Ease	Full nasal vowel substitution was difficult to coordinate
Ease	10% nasalization helped reduce excess extrinsic muscle engagement
Ease	Nasalized vowel is an efficient way to facilitate an easy belt sound
Ease	Nasalized vowel removed the need for overthinking
Ease	Dropping jaw with nasalized vowel reduced nasality while keeping ease
Outcomes	Nasalization felt like an insulated funnel in belting

Initial Themes	Codes
Past Vocal Technique	Chest-dominant belt training
Past Vocal Technique	Unsustainable belting techniques used to be taught
Past Vocal Technique	Belting used to focus on open vocal tract and high pressure
Past Vocal Technique	Nasalization had been “trained out” of me
Past Vocal Technique	“Nasalized sounds are bad”
Performance History	History of vocal training
Performance History	Multi-genre performing experience
Performance history	Pop performance preference
Performance History	Multiple vocal techniques
Resonance	Nasalization helps with resonance, articulation helps with color
Resonance	Nasalized vowel is a shortcut to sustainable belt resonance
Resonance	Nasalized vowel was sitting right behind nose
Resonance	Nasalized /a/ exercise creates a feeling of vibration in lower vocal tract
Resonance	Nasalized /a/ exercise allows for smooth transition from straight to vibrato
Resonance	Paying more attention to orality and nasalance vs vibration
Resonance	Partial nasalization facilitated improved clarity/cut/intensity
Resonance	Nasalized /a/ exercise facilitated more nasal resonance
Resonance	Nasalization helps with focusing sound
Resonance	Nasalization creates cut without weight
Resonance	Nasalized vowel increased sensation of nasality
Resonance	Nasalized vowel increased nasalance in sound
Resonance	Nasalized vowel resulted in more forward resonance
Song Assessment	Song assessment was shouty
Stability	Nasalized /æ / vowel feels more solid/secure
Teaching Application	Nasalization is being used as a teaching tool for belting

Initial Themes	Codes
Teaching Application	Nasalized French vowel is a helpful teaching tool for belting
Teaching Application	Nasalized French vowel is a teaching tool for non-belting styles
Teaching Application	Full nasal exercises are an extension of existing/known belting strategies
Teaching Application	Nasalization is a less aggressive way of training belt
Teaching Application	Nasalization is less dependent on chest voice dominance
Teaching Application	How would this work with less chest-dominant singers?
Teaching Application	Full nasal exercises were a helpful setup for the song application
Teaching Application	Singers might overdo nasalization without external feedback
Teaching Application	Visual feedback (like mirror) may help execution
Teaching Application	Nasalization might be interesting to try above E5
Teaching Challenges	May be difficult for singers with no French exposure
Teaching Challenges	Singers have a variety of needs in belting
Teaching Challenges	Hard to widen and nasalize vowels simultaneously
Teaching Challenges	Associate wide vowels with orality, not nasality
Teaching Challenges	Had to find the nasalization first
Teaching Challenges	Nasalization can become a crutch
Teaching Challenges	Nasalization can result in a raised larynx
Teaching Challenges	Nasalization strategy requires external guidance
Timbre	Our timbre sounds different in our heads than in the real world
Timbre	External feedback necessary for shaping belt sound
Timbre	Nasalization helps with resonance, articulation helps with color
Timbre	10% nasalization sounds and feels more finished
Timbre	Nasalized vowel is pharyngeal with roundness
Timbre	Allows for options in timbre
Timbre	Full nasal vowel substitution sounds less resonant

Initial Themes	Codes
Timbre	Full nasal vowel substitution had minimal impact on sound/feel
Timbre	Full nasal vowel substitution feels and sounds fuller and brighter
Timbre	Nasalized /a/ exercise has ping and depth
Timbre	/wiðæʊt/ lacks vibrancy compared to /sæʊnd/
Timbre	Partial nasalization allowed for brightness and depth

Appendix 8: Ethics Form (see following pages)

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Renee Maranan			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student

3	Institute/Academic Discipline/ Centre:	WAPPAR
4	Campus:	Carmarthen
5	E-mail address:	lessons@reneemaranan.com
6	Contact Telephone Number:	+1 (253) 365-1082
For students:		
7	Student Number:	2333288
8	Programme of Study:	MA Professional Practice (Voice Pedagogy)
9	Director of Studies/Supervisor:	Louise Emanuel/Julie Crossman/Debbie Winter

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
Institute Research Committee		☐			
Other (write in) WAPPAR Ethics Board Representative		☒	28 Jan 2025		

SECTION C: Internal and External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.		
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>[List any other relevant documents here]</i>	☐

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☐	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☐	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
7		Employed	YES	☐	NO	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	Pilot Study on the Perceived Effects of French Nasal Vowels in Singing		
2	Proposed start date:	31 Mar 2025	Proposed end date:	16 Sep 2025
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how Existing Research has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i> • <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity This pilot study will be a preliminary exploration of the use of French nasal vowels in vocal instruction and how this teaching strategy impacts the singer's experience of vocal production, registration, and facilitating a belt aesthetic. Extant research indicates that there is a relationship between twang, articulatory engagement, vocal tract shaping, and vocal acoustics, but there are shortcomings in teaching modalities and coaching strategies used within vocal instruction, which make it challenging for singers to achieve the coordination necessary in order to facilitate desired vocal results. The articulation of French nasal vowels require a slightly retracted tongue position, which results in a partially narrowed vocal tract, similar to the pharyngeal narrowing that is employed in twang. This study will explore the experiences of singers who are instructed to use French nasal vowels as an approach to learning articulatory engagement and vocal tract shaping with the goal of facilitating efficient voice use in singing. This pilot study will examine the perceptual results of this strategy through the perspective of singers, offering singer-centered insight on its role in vocal conditioning, and revealing potential areas for further research and development that could translate into practical systems of teaching for vocal instructors.			
4	Research Question How does the use of French nasal vowels affect the singer's experience of singing and their perceived ability to facilitate a belt sound?			
5	Aims of Research Activity The aim of this research is to explore the experiences of singers who are instructed to use French nasal vowels as an approach to learning articulatory engagement and vocal tract shaping with the goal of facilitating efficient voice use in singing.			
6	Objectives of Research Activity This action research project aims to address the challenge of providing tangible instructions for singers who need to facilitate vocal coordinations that result in perceivably more efficient vocal production during singing. Through qualitative research methods, this study will explore the experiences of singers when instructed to use French nasal vowels as a means of facilitating pharyngeal narrowing, gaining insight into the singers' perceptions of its impacts on vocal function, ease of execution, and aesthetic outcomes, and providing preliminary guidance for its potential applications as a tool in vocal instruction.			

	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	This action research study, which is intended as a response to the challenge of providing practicable instruction to singers within the context of a voice lesson, will explore the perceived experiences of singers who are instructed to use French nasal vowels as a means of facilitating vocal tract shaping that is conducive to twang and belting. Data will be collected through qualitative methods, as outlined below: - Observations which will be conducted during voice lessons taught throughout the course of the study to collect information about implementation of the teaching tool being researched, its impact on vocal production, and the singer's response; - Semi-structured interviews to be conducted at the beginning of the study, partway through the study, and at the end of the study, to collect information about the student's experience of singing prior, during, and after the lesson, and to learn about their impressions of the tool, its effectiveness, and its application within the context of a voice lesson; - Reflective journals which participants will be asked to complete throughout the duration of the study, to offer triangulation for data collected through observations and interviews; - Audio recordings which will be collected during the voice lessons, to be used by the researcher for transcription, analysis, and triangulation for data collected through observations; - Video recordings which will be collected during the voice lessons, but will only be used for the purpose of collecting field notes and will be discarded at the end of the study; - Field notes which the researcher will complete throughout the duration of the study based on reflections during live lessons and observations of video recordings. The data collected will then be used for reflection and critical analysis, the outcomes of which may indicate whether further research may be warranted pertaining to French nasals as a possible tool for vocal instruction. The results may also offer guidance on what areas of this teaching strategy may need further exploration and development.
	Location of research activity Identify all locations where research activity will take place.
8	Research and analysis will be conducted through the researcher's private studio in Puyallup, Washington, USA. The studio is located in the researcher's home, but is an enclosed and partially soundproofed space that is separate from all living areas. Voice lessons will be conducted online through private Zoom calls, and audio will be projected through headphones so as to ensure the privacy of each session.
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.

9	The principal researcher is located in the United States, which is where the research will be conducted. The researcher has consulted the Guiding Principles for Ethical Research, published by the United States National Institutes of Health (https://www.nih.gov/health-information/nih-clinical-research-trials-you/guiding-principles-ethical-research) and have determined that there are no additional ethical stipulations above and beyond those in the UK.
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10	Use of documentation not in the public domain: Are any documents <u>NOT</u> publicly available?	NO	☒
		YES	☐
11			

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐

3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☒	☐
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
		☐	☐

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐

3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups:		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	Maximum 6 participants
11	Who will the participants be?	Participants will include professional or professional-level amateur singers who specialize in singing pop music and are experienced in receiving vocal instruction. Because this research topic focuses on an aspect of articulatory function in singing, participants must be native US English speakers or fluent in US English.
12	How will you identify the participants?	Participants will be recruited by word of mouth through the researcher's studio network. Announcements will be made through the researcher's studio e-newsletter and through personal invitation. All announcements will clearly instruct prospective participants to express their interest by contacting the researcher privately through e-mail. To prevent any public disclosure of interest to participate in the study, particularly in the case of those responding to e-newsletter announcements, a link will be prominently provided for individuals to reply by e-mail to the researcher, and replies to the e-newsletters will be directed to the researcher's private e-mail address. Prospective participants will then be informed that in order to participate in the study, the researcher asks that singers be professional or professional-level amateur vocalists, vocally fit and physically able to receive vocal instruction, and English language proficient (native US English speaker or US English fluent). Prospective participants who endorse themselves as meeting the required criteria for participation will then be asked to complete a screening form which will be used to determine their age, performing experience, vocal training experience. The screening form will also ask participants to either agree or decline to disclose the information provided in the screening form. It will be communicated that participants are not required to share any medical information, but that by participating in the study, singers are indicating that they meet all of the criteria above.

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☒	☐	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	Item 25: Audio and video recordings will be captured through the recording system built into the video conferencing software (Zoom) and will be stored privately on the researcher's password protected external hard drive. Video recordings will only be used for field notes. A spectrographic analysis program (VoceVista) will be used to facilitate spectrographic analysis of audio recordings.			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.	
1	Full risk assessment completed and appended?	Yes ☐ No ☒
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information	
	Risk to participants: - Emotional distress may be caused when coaching professional singers who are under pressure to perform at a certain caliber and who are expecting specific results to ensue from vocal instruction - Adverse physiological effects may emerge as a result of inappropriate vocal conditioning for singers who have pre-existing conditions that affect their singing, such as muscle tension disorders or vocal fold pathologies, if they have chosen not to disclose these conditions in the pre-screening process	Steps to mitigate risk: - Expectation management needs to be ensured at the beginning of the training process, to ensure that the singers understand the scope and limitations of the project and the practitioner - Recruitment criteria will be communicated during participant selection indicating that the researcher requests participants to only volunteer for the study if they are of reasonably good vocal health, and while participants are not required to disclose any medical conditions, their participation in the study is an indication that they have no conditions that may preclude them from safely receiving voice training - Vocal assessments will be conducted at the beginning of the study to rule out any audible symptoms of vocal injury
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	Performance credibility of participating singers may be scrutinized if recordings of “unfinished” vocal performances are disclosed to external parties with ill-intent. To mitigate this risk, secure handling of audio/video recordings must be ensured by storing files offline, using password-protected storage devices, and destroying files after research completion. Information about medical, emotional, or psychological conditions, or accounts of personal experiences may also be disclosed or discovered over the course of the study, which may be sensitive or upsetting to the participants and may cause fear of further disclosure to others outside the scope of the study. To mitigate this risk, the researcher will sign a non-disclosure agreement at the start of the research process assuring participants of their anonymity when presenting findings and ensuring their right to redact any sensitive information disclosed during the course of the study.	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	



	Risk to the investigator: - Risk of accusation of harm/impropriety may emerge if singers are dissatisfied with the results of the training program or were hoping for results that were outside the scope of the research project - Potential for bias may be a factor in investigating a method of teaching that the researcher considers to be a potential foundation for the future development of a proprietary teaching system	Steps to mitigate risk: - Expectation management needs to be ensured at the beginning of the training process, to ensure that the singers understand the scope and limitations of the project and the practitioner - Clear communication will be practiced and documented through published information outlining the voluntary nature of the participant's role in the study and their freedom to withdraw from the study if they feel that the risks or disadvantages to participation are no longer justifiable for them - A thorough literary review must be conducted to establish justification for the study, and methods to ensure rigour must be practiced, including data triangulation to ensure credibility, and thorough documentation of research design and process to ensure auditability
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: - Risk of adverse publicity may emerge if the research is conducted in a manner that lacks rigour or professionalism	Steps to mitigate risk: - Ensure academic rigour by implementing steps to ensure trustworthiness, auditability, credibility, and transferability, including but not limited to: thorough literature review to establish grounds for the research and justification for the research design; thorough outlining of the research design; detailed field notes to document decision-making and analytic processes; organised and process of recruitment and onboarding of participants, including documentation of recruitment criteria and completed consent forms and acknowledgement of study briefs; and secure handling of all documentation and data.
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	N/A	

	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☐	☒
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	Participants will be provided with the researcher's email address, which can be used to follow up on research results if appropriate or desired by participants. An optional feedback form will be provided for the participants to submit feedback on the research process if they wish to do so.
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	The researcher will provide a participant form that will inform the participants of the research aim, design, data collection methods, procedure, their own role as participants, and their right to withdraw from the research. The form will also provide information about the researcher's commitment to maintaining confidentiality and participant anonymity, as well as the participant's right to redact any private information disclosed over the course of the study. Participants will be asked to sign the participant form, acknowledging the terms of their participation, and confirming that by agreeing to sign up for the study they are consenting to the terms of the research, and are aware of their rights to withdraw from the study.
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	Names and email addresses will be necessary for logistical purposes, including booking private sessions. However, names will be redacted from all transcripts and will be substituted with participant numbers. No names or contact information will be used in the reports.

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
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1	“Personal data” means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
If YES, provide a description of the data and explain why this data needs to be collected:			
2	The following information will be collected in order to confirm participation in the study, submit consent forms, facilitate booking, and to use for communication during lessons and throughout the study: - Name - Email address - Participant numbers (to be used in place of the singers’ names within the report and presentation of findings)		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
If YES, provide a description of the special category data and explain why this data needs to be collected:			
4			

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		

All data will be kept in password protected external hard drives and cloud storage on the researcher's iCloud which will not be shared and is also secured through two-factor authentication. Audio/visual data will be transcribed and would be shown to participants to check accuracy of reporting. Any external hard drives used to store or transfer data will be password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder stored on iCloud.

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☒	☐
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☐
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☒	☐
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	All data will be encrypted and kept in password protected external hard drives and cloud storage on the researcher's iCloud which will not be shared and will also be secure through two-factor authentication. Any external hard drives used to store or transfer data will be password protected. All data transfers will be encrypted and password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder. The data will be stored until the completion of the project and then deleted. In accordance with the DPA2018, participants will have the right to ask to see what data is held relating to them, and this data will be deleted immediately if the participant requests this, in which case the data will not be used in the project.		
22	List all who will have access to the data generated by the research activity:		
	The principal researcher will have access to all data collected. The principal researcher's tutor may also be granted access as needed. Any participants who wish to review any data collected pertaining to them will have access only to the data relevant to them personally.		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The principal researcher.		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		



	Data will not be archived beyond the research end date. Throughout the duration of the research, all data will be encrypted and kept in password protected external hard drives and password protected cloud storage on the researcher's iCloud which will not be shared and will be secured through two-factor authentication. Any external hard drives used to store or transfer data will be password protected and will be reformatted at the end of the project in order to destroy the data. The data will be stored until the completion of the project and then deleted.		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	No		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/			
1	Signature of applicant:		Date: 6 Feb 2025

For STUDENT Submissions:

2	Director of Studies/ Supervisor:		Date:
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.



I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Renee Maranan

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Puyallup, WA 98375
USA

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www.reneemaranan.com

6th February 2025

Dear UWTSD,

RE: Pilot Study on the Perceived Effects of French Nasal Vowels in Singing

I confirm that I approve of the research proposed into "the perceived effects of French nasal vowels in singing" to be carried out by Renee Maranan, of Renee Maranan Vocal Studio, during private lessons with the company between March 2025 and September 2025.

Kind regards,



Renee Maranan