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Contemporary Commercial Music Pedagogy: Selective Exercises for Developing Healthy Technique in Adolescent Singers

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CONTEMPORARY COMMERCIAL MUSIC PEDAGOGY:
SELECTIVE EXERCISES FOR DEVELOPING HEALTHY
TECHNIQUE IN ADOLESCENT SINGERS

by

Brittny Kempfer

A Thesis Submitted in
Partial Fulfillment of the
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ABSTRACT

CONTEMPORARY COMMERCIAL MUSIC PEDAGOGY: SELECTIVE EXERCISES FOR DEVELOPING HEALTHY TECHNIQUE IN ADOLESCENT SINGERS

by

Brittny Kempfer

The University of Wisconsin – Milwaukee, 2014

Under the Supervision of Associate Professor Sheila Feay-Shaw

In the developing world of vocal science there are still varying opinions on proper vocal techniques. The classical tradition has been developing for many centuries, however, the area of contemporary commercial music is still in its relative infancy by comparison. Contemporary commercial music, or CCM, refers to all other genres that are non-classical in nature, for example: musical theater, jazz, pop, country, folk, rock, and gospel.

Many undergraduate vocal education programs are not addressing the pedagogical differences in approaches for CCM technique as compared to classical. This is causing educators, such as myself, to have no information about how to properly teach these techniques within the ever-growing non-traditional ensembles that are becoming more and more a part of choral programs around the country.

The purpose of this thesis is to develop a set of vocal exercises that can be used for adolescent singers to develop a healthy technique within CCM styles, mainly focusing on ‘belt’ singing. This study used a qualitative approach that involved participation of four area high school choral directors, two current undergraduate vocal students, and one

experienced vocal pedagogue. The investigation of current practices was done through interviews and observations of all participants, as well as through available literature on the subject matter.

The three main research questions that guided this process were based on understanding the differences in pedagogical approaches between classical and CCM music, as well as my own misunderstandings of ‘belt’ voice: Main differences between CCM and classical pedagogy, what the ‘belt’ voice is and how it is used in CCM music, and what exercises can be used with adolescents to develop a healthy CCM technique. Triangulation of the data helped to show that misconceptions and misinformation is guiding teachers in educating their students. The four teachers observed and interviewed, even though very knowledgeable in the area of classical vocal use, lacked a complete understanding of how to work with adolescent voices in the area of CCM.

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CHAPTER ONE

Introduction

Today's music education goes beyond the Western art music to include current trends and popular music ensembles. Choral ensembles that are non-traditional, or non-classical, have come to be referred to by many in vocal music as contemporary commercial music (CCM). These ensembles are now present in education at all levels, but how many educators have actually received formal training in these areas? Many choral/vocal educators may have only received classical vocal training and assumed that would be sufficient for the needs of a choral program. With the growing popularity of these contemporary commercial music programs in choral education, it is important to acknowledge the place of these choral ensembles within our education system.

CCM in Music Education

As a choral music educator, I was faced with having to teach such choral ensembles as vocal jazz, show choir, pop, and musical theater, for which I had not received formal training. Like most choral music educators, I graduated from my undergraduate degree program assuming I had all the information I needed to begin teaching and working with young voices. Even though I appreciate my education for the strong background it gave me for teaching choral music from a Western European "classical" perspective, my teaching revealed a lack of foundational knowledge in other significant areas that I would need.

Jazz, musical theater, rock, and country are all American-originated art forms, giving them historical importance in music curriculum in the United States. In the new common core standards for the arts (still currently in draft form), creating – through imagining, planning, making, evaluating, and refining – makes up one-third of the

secondary standards (National Core Music Standards, 2013). With such an emphasis placed on creating and creativity, it seems only natural that music that can allow for such creativity would be part of the choral experience. In September 2009, the National Association for Music Education (NAfME) posted an article on their website in which renowned music educator Carol Jacobbe said the following:

[Jazz] is the one art form that allows students to be individually creative. When I teach a piece of classical literature to a choir or individuals, there is not much room to stray away from the composers' notes on the page. With jazz, the notes are just the beginning. Students can explore the melodic content while maintaining the harmonic structure. (Webb, 2009, np)

This is true not only for jazz, but for all forms of CCM.

Music of all kinds allows for great expression, but each student relates to different genres in their own way. Because of this, students may find it difficult to connect with certain music styles, resulting in a lack of musical expression in performance. These other forms of CCM music, however, could provide an easier way to foster musical expressiveness that is needed in all vocal music. Musical theater, for example, involves characterization and acting through the music that may allow students to connect with musical ideas on a higher level.

In addition to creativity and expression, the sheer complexity of jazz music supports the development of aural understanding, as well as music theory and conceptual skills. This points to the importance of CCM ensembles in our music education system.

Contemporary commercial music (CCM) covers many genres, but the area of musical theater encompasses all styles of CCM throughout its history. Because of this wide range of vocal styles, it is important to use the correct technique to meet the needs of a specific musical, or song. Since many high school choral programs incorporate

musical theater repertoire through solo works and big musical productions, concentrating on the history of musical theater is important to a stylistically correct performance.

Research into the appropriate performance approach for stylistic accuracy is essential for musical directors, however understanding the techniques needed and assisting young vocalist in developing them is a greater consideration. There are many resources available to learn about the history of a show, as well as original cast recordings to hear the correct style. Developing pedagogy for vocal techniques presents other larger concerns.

With the growing emphasis on CCM musical forms in our curriculum today, I find importance in understanding the vocal technique and pedagogy involved; not only for the purpose of producing the correct style, but more importantly to insure the vocal health of young singers. In my teaching thus far, I have begun to understand the importance of teaching students healthy technique so that they may become life-long singers and learners. In my study of the literature pertaining to this study, I have come to realize there are specific differences between CCM technique and classical technique. If these differences are not understood by vocal teachers when trying to teach younger voices, the results could cause bad habits and potential vocal injury.

The purpose of this qualitative study is to show the differences in vocal pedagogy for CCM and classical singing. Through this study I have designed a set of vocal exercises for helping to develop a *healthy* ‘belt’ voice in adolescent singers. This was accomplished through research into ‘belt’ singing techniques, and determining a definition for the ‘belt’ voice as well as observing best practices and working with experts in the field. The three research questions guiding this study included:

1. What are the differences between CCM and classical pedagogy?
2. What is the ‘belt’ voice and how is it used in CCM?
3. What exercises can be used with adolescents to develop healthy CCM technique?

Literature Review

In this literature review, three areas will be examined in more detail: Historical perspectives on vocal pedagogy; the ‘belt’ register; and the pedagogical difference between classical and contemporary commercial music singing. Each section of this review looked at current studies in these areas and started to reveal the specific research needed for this study.

Historical Perspectives

The idea of ‘chest’ voice and ‘head’ voice has been identified for centuries, by early eighteenth century teachers such as Pierfrancesco Tosi, Giambattista Mancini, and most recently in the nineteenth century, Manuel Garcia (Ferranti, 2004). According to Ferranti (2004), “during the seventeenth and eighteenth centuries all references to registers acknowledged prevalent characteristics of sound quality rather than specific mechanical principles” (p. 29) such as are used in contemporary pedagogy. The terms *voce di petto* (voice of the chest) and *voce di testa* (voice of the head) were used to describe the two registers believed to be present in singing (Ferranti, 2004). These terms for the registers are still used today by many pedagogues, including LoVetri (2003), Edwin (1998a), and McCoy (2007). After Manuel Garcia invented the laryngoscope in the twentieth century, he:

surmised that the two main registers were produced by two distinct modes of vibration of the vocal folds. He noted that in the chest voice, the folds vibrate throughout their depth and length; in the falsetto-head voice, only the inner margins of the vocal folds vibrate. (Ferranti, 2004, p. 39)

The idea of using the chest voice up into a higher range received recognition when, in 1830, “French tenor Gilbert Duprez introduced a high C ($C_5 = 523$ Hz) in chest voice on the opera stage, which some critics thought was anything but appealing. It was loud and had a raw quality” (Titze, Worley, & Story, 2011, p. 562). This caused a revolution of sorts in the opera world, when composers such as Wagner and Verdi began to prefer the “robust tenor and baritone sound” (Titze, Worley, & Story, 2011, p. 562).

When Ethel Merman sang sixteen measures on a C_5 in full ‘belt’ voice almost a century later, there began another change in theater vocal sound – this time for the female voice (Titze, Worley, & Story, 2011). The need for a sound that could carry over an orchestra and out into a large auditorium led many singers to move away from the more classical sound to the louder, brighter sound of ‘belting’.

While vocalists were ‘belting’ on stage, Judy Garland began using the “film belt” (Banfield, 2000, p. 66). Because film used microphones, Garland was able to have a more intimate and soft tone, which was a luxury that was not possible on stage at this point in time. As musical theater developed through the twentieth century, the use of amplification became much more common place, which allowed singers to dismiss the use of resonance or projection (LoVetri, 2002).

Even though the loud quality of belting was unappealing to early listeners of *Bel Canto* singing, according to Popeil (2007), “In the early years of the twentieth century, without the availability of microphones, loud singing was not only an acoustic necessity, but also turned out to be a big hit with audiences” (p. 77). As the twentieth century continued on, the use of ‘belt’ singing grew, and the demand for CCM teachers increased (Bourne & Garnier, 2010). With the increase in amplification for rock, musical theater

and even some opera, “the ears of the average listener have become accustomed to heavy, full, loud sounds as the norm in most vocal music” (LoVetri, 2003, p. 161).

The ‘Belt’ Register

Throughout vocal pedagogy history, there have been various ideas about register. The prescientific ways of defining registers as *chest* and *head* “fails to describe the actual function of the vocal folds” (Edwin, 1998a, p. 54). Edwin describes the thyroarytenoid (TA) muscles (chest voice) as the “closers” of the vocal folds, and the cricothyroid (CT) muscles (head voice) the “stretchers”.

According to Echternach, et. al. (2008), vocal registers are still highly contested, “by contrast to males, in whom marked register transitions can frequently be demonstrated on the level of the vocal folds... the registers of female voices cannot always be differentiated as easily” (p. 133). Because of this, ‘belting’ in the male voice is quite different than in the female voice. Edwin (1998b), considered an international authority in non-classical (or CCM) pedagogy, explains that:

In order to belt successfully in that [mid] range, the female singer must learn to avoid the extremes of chest and head while creating the correct chest/head mix. On the other hand, the male classical singer only needs to brighten and tighten his chest/head mixture to create a belt-like sound. (p. 61)

Defining the Belt Voice

What, then, is the ‘belt’ voice? Is it the chest voice brought up into the higher range, a mixing of voices, or something else? The following terms have been used to describe the ‘belting’ quality:

- “Speech-like or yell-like in character” (Popeil, 2007)
- “Extension of the modal or speaking voice mode into a higher frequency range or register” (Burdick, 2005)
- “Loud, brassy, sometimes nasal, always ‘twangy’” (Estill, 1988)

Edwin (1998a) explains ‘belting’ as not just thyroarytenoid muscle work, but a combination of both the cricothyroid and thyroarytenoid muscles working together to create the ‘belt’ sound. It is mainly thyroarytenoid dominant, but as the range ascends, the cricothyroid muscle use increases. The mixing of muscle use might be the principal reason many teachers and pedagogues call it a ‘mixed’ voice. Edwin also says that the muscle mixing is not just a CCM/belt technique, but is also used in classical singing.

LoVetri (2003) takes a somewhat different approach saying:

Certain teachers have proposed that belting, which is simply the chest register quality carried up above the traditional E-F₄ break at a loud decibel level, is a separate register unto itself. Research has strongly suggested that all register balance is a combination of cricothyroid and thyroarytenoid activity, and that, coupled with laryngeal height, vocal tract configuration, subglottic pressure, and transglottal airflow, is what the ear hears as tonal texture. Therefore, *belting is just a label given to a certain aspect of chest register function.* (p. 162)

When speaking of the female chest voice, as related to CCM, Allen (2004) states “it becomes obvious that each vocal register has a certain range, a certain characteristic sound, and a certain vibratory pattern of the vocal folds” (p. 268). She goes on to agree with Edwin saying that the chest voice “may be characterized briefly as the register in which the thyroarytenoid muscles predominate” (p. 268).

In the study, *Musical theater Voice: Production, Physiology, and Pedagogy* (Bourne, Garnier & Kenny, 2011), Bourne gathered information from expert teachers on their perceptions of the belt, legit, and mix in the musical theater voice from a physiological standpoint. She conducted semi-structured interviews with teachers in the U.S., Australia, Asia, and the U.K. She chose twelve teachers who were all considered experts in the area of musical theater. The responses indicated that many described ‘belt’ voice “as a chest or thyroarytenoid (TA) dominant sound with “forward,” “twangy”

vowels” (p. 438). There seemed to be some overall confusion as to the male ‘belt’ voice, and also the term ‘mixed’ voice. One teacher stated “I don’t use the word mix. I still don’t know what mixing is” (p. 439). Some teachers however described ‘mixed’ voice as “a sound that balanced chest (thick vocal folds) and head register (thin vocal folds)” (p. 439).

Popeil (1999) explains ‘belting’ to be “a general term meaning the use of the speechlike or yell-like sound in any number of vocal styles including, but not limited to, rock, jazz, country, and R&B” (p. 27). She also very specifically says ‘belt’ “uses a sensation I call ‘laryngeal lean,’ a sensation of laryngeal cartilage leaning forward against the skin of the neck as the pitch goes up. (The sensation can also be felt as the vocal cords being stretched from the front)” (p. 27).

Debate on the Belt Voice

There are many differing views on the ‘belt’ voice. Similar to the idea of register, ‘belt’ voice and its use are highly controversial with many pedagogues. Many classical pedagogues still believe ‘belt’ to be unsafe for singers. As Spivey (2008) writes:

The more prevalent opinion is held by classically trained voice teachers who argue that belting is both aesthetically offensive and deleterious to the vocal mechanism. In opposition, a smaller nucleus of voice teachers, and a substantial number of performers, defend belting as an artistically exciting quality that, with proper training, may be relatively risk-free. (p. 607)

Vocal teacher Barbara Burdick (2005) wrote:

Many teachers have an aversion to the belt sound and sincerely believe it to be damaging to students’ voices. In this writer’s experience, the belt voice can be taught in a healthy manner if teachers understand the physiological and perceptual differences between the belt and the chest voice, and learn techniques to produce it. (p. 262)

Estill (1988) wrote, “When it is good, it is very, very good and profitable. When it is badly executed, it can be vocally devastating” (p. 37).

According to Edwin (1998a), belting has been an established use of the voice for decades. Allen (2004) described the use of chest voice as an “integral part of many ethnic singing cultures...and] also a vital part of Western classical voice production with both interpretive and technical benefits” (p. 267). Voice teacher Mathilde Marchesi – and student of nineteenth century pedagogue Manuel Garcia –used exercises in her *Bel Canto* methods with students to “blend the chest register with the middle voice” (Allen, 2004, p. 267). So then the question becomes, how can we most effectively and efficiently teach the belting style of singing?

Pedagogical Differences

There are many differences between classical and CCM pedagogy. The voice is defined as having three main parts: the breathing apparatus, the vocal folds, and the vocal tract (Sundberg, 1987). Even though many parts of the voice have been studied throughout history, the two areas that will be covered in this review are the differences in laryngeal height and vocal tract shape as pertaining to classical and CCM singing.

In Bourne and Garnier’s (2010) study *Physiological and acoustic characteristics of the female musical theater voice in ‘belt and ‘legit’ qualities* (presented at the International Symposium on Music Acoustics), they examined the differences in larynx and vocal tract uses concluding:

The findings of this study support arguments by CCM experts that ‘chesty belt’ requires a different pedagogical approach than classical singing. In particular, developing the skill of singing in ‘chest’ register to relatively high pitches with a bright, forward timbre may require different technical exercises than those from classical methodologies. (np)

Many experts seem to agree with Bourne and Garnier's findings. Edwin (1998a) stated that "even though belter and classical singer share some common techniques, their end results are vastly different and reflect vastly different pedagogies" (p. 54). In a later article Edwin (2007) wrote:

Classical technique that enables the singer to sing a self-amplified sound with tall, round vowels, a vibrato initiated at onset and continued to offset, and a CT [cricothyroid]-dominant vocal source, is of little use to a belter. Classical technique serves only classical and traditional Broadway legit singing. (p. 214)

In a similar frame, Estill (1988) wrote:

While many belters can successfully imitate opera singers (often in comedy routines), many classic singers damage their voices by attempting belting...one reason would seem to be that these two qualities represent two different modes of production, with the physiology for each being distinctly unique...it would seem illogical to suppose that training techniques would be the same. (p. 42)

Hall (2007) remarked "while teaching the musical theater students at The Boston Conservatory, I found that I needed to adapt my teaching methods. Clearly, classical vocal technique, vocabulary, and repertoire were, in most instances, not appropriate for these students" (p. 569).

The Larynx

The larynx is the area of the throat in which the vocal folds are housed. The vocal folds (also called vocal cords) are muscles covered by mucous that can grow to approximately 9 to 13 mm in women and 15 to 20mm in men (Sundberg, 1987). The position of the larynx in CCM and 'belt' singing has been one of controversy worthy of discussion here.

Noted classical pedagogue, Scott McCoy (2007), conducted a study on 'belt' singing in which he looked at the laryngeal height as compared to classical singing. One misconception that is common in the vocal world is based on laryngeal height in belting.

After this study, McCoy concluded that he had “expected to see obvious physical signs of vocal distress. [However...] elevated larynges were not found. I now understand these physical manifestations only are found in *incorrect* belting, just as they only are found in *incorrect* classical singing” (2007, p. 548).

Other experts agree that the height of the larynx should be low to produce a proper belt sound. Even though belting can be produced with a higher larynx, Popeil (1999) says that, “‘good’ belting production is of a lowered larynx producing a deep, full sound free of ‘strain’ and shrillness” (p. 29).

However, Estill’s (1988) research on belting showed that the larynx “must be high to produce the brighter sound” of belting (p. 42). Bourne and Garnier (2010) agreed, saying that a higher larynx position is required in ‘belt’ singing.

Edwin (1998b) writes that belting involves the larynx in a higher position than in classical singing making no mention of the possibility of the larynx being in a lower position. Also, LoVetri (2003) wrote that the “chest register quality has been shown to have more compression at the level of the folds and may cause the larynx itself to change configuration and vertical height” (p. 162). Most CCM pedagogues agree that the larynx *can* be higher for belting than classical, but there is still disagreement on whether or not it is possible or healthier to belt with a lowered larynx.

Vocal Tract

The vocal tract, which is a combination of the pharynx and the mouth, is where resonance and amplification occur in singing. Many pedagogues agree that the vocal tract can be used and shaped quite differently for different colors and sounds. Because of

these differences, classical and CCM use of the vocal tract would need different pedagogies.

In their research, Bourne and Garnier noted that CCM singers usually sing with a more “constricted pharynx in comparison with classical singers, possibly with a megaphone-shaped configuration of the vocal tract, compared to inverted-megaphone shapes observed in opera singers” (Bourne & Garnier, 2010, np).

Since belting is “speech-like” in quality, Edwin (2007) suggested using a narrowed pharynx for a brighter sound, as well as a “horizontal mouth position for vowels and consonants” (p. 214). LoVetri addressed the effect of the vocal tract on the brightness of sound, mentioning that the head register allows the larynx to stay low in the vocal tract, which would produce a “darker, fuller tone” (LoVetri, 2003, p. 162). Therefore, using the chest voice could enhance the “ring” that is heard in belting, which could have the opposite effect on the vocal tract – heightened larynx and narrower vocal tract.

In other writing, LoVetri (2002) mentioned a study with musical theater singers in which all the vowel sounds that were considered to be “bright” were made within a smaller, narrower vocal tract. In this area, most pedagogues agree that the “brighter” sound of CCM seems to be produced by using a narrower vocal tract.

To get the bright sounds that many consider part of the ‘belt’, the vocal tract shape needs to be considered. The vocal tract would need to be altered from the classical “space” that is used to a narrower space more fitting for the CCM sound.

Pedagogical Suggestions

Many experts have suggestions for how to work with developing ‘belt’ in adolescents and young adults. LoVetri (2003) suggests developing both head and chest registers before working on belting. She also said that the head register should be developed first, “as it allows the voice to rise easily and stretches the upper limits of the pitch range. A light sound is not fatiguing to most voices and can be strengthened over time” (p. 161). From a classical pedagogy standpoint, LoVetri (2003) states that it may be difficult for students to bring their chest register into a higher range because they are thinking of it in the sense of classical ‘chest’, not CCM ‘chest’, which she says are quite different.

Allen (2004) believes that the chest voice can be introduced fairly early in a singer’s study. However, she noted that “the presence of certain vocal habits in the beginning student may necessitate avoiding the chest register until the principles of dynamic balance are established in the more extensive middle and upper middle voice” (p. 267). Allen also warned that the ‘open chest’ voice, that is heavily thyroarytenoid based, needs to be “totally avoided” above the E₄ passaggio point. This falls in line with LoVetri’s belief that classical chest voice is different from CCM chest voice.

Vocal teacher Barbara Burdick (2005) uses a variety of exercises to encourage a “bright, focused, ‘speaking quality’ (modal voice) in the low and middle registers” (p. 265). She suggested exercises that use sustained, voiced consonants to get a frontal resonance. Burdick also stated that she prefers to work with resonance building, as compared to laryngeal heightening and a narrow pharynx, because most young singers do

not have the ability yet to control their “muscular habits flexibly between the genres” (p. 266).

For beginning belt training, Edwin (1998b) suggests a “five note ascending and descending diatonic scale alternating the syllables ‘na’ and ‘nee’ [na] and [ni]” (p. 61) beginning low in the students’ range. This exercise should start out at a fast tempo to avoid vocal strain on any sustained higher notes. Edwin outlined five points that are important to remember when working with new belters:

1. Not everyone takes well to belting the first time out
2. For beginning belters, the pedagogical rule is, don’t go too loud or too high too quickly
3. For the female soprano especially, belting is a redefining of high notes
4. All belters are not created the same
5. Just as we do in our classical pedagogy, we who teach belt must watch for signs of inefficient or potentially damaging vocal habits (p. 62)

Summary

There are still many disagreements on areas of vocal pedagogy as it pertains to contemporary commercial music (CCM). Classical pedagogy has existed for well over a century now, but CCM is still considered quite new. As belting and CCM singing become more accepted in education, the studies begin to reveal that belting can be done in a healthy manner. The ideas of laryngeal height and vocal tract shape are important issues that need to be considered for this study.

The literature previously reviewed demonstrates a need for vocal exercises specifically developed in the area of CCM technique. All voices, but in particular adolescent voices, can be easily damaged if proper technique is not developed and used. Classical and CCM pedagogy do use different techniques in certain areas and it is

important to have the knowledge and understanding across areas of vocal technique when working with singers of all ages. The research questions guiding this study are relevant to understanding these differences. In my work with Ms. Tanya Kruse Ruck, as well as my observations and interviews of area teachers, I was able to explore these questions and develop exercises that can be used with adolescent voices so they may learn healthy technique and be lifelong singers.

CHAPTER TWO

In the High School setting, vocal techniques are taught primarily within choral music programs. In order to study pedagogical practices for vocal techniques, a key element for investigation is teacher background knowledge about distinctions between contemporary commercial music (CCM) techniques and classical singing for adolescent singers. A particular focus was developed on similarities and differences in vocal pedagogy with implications for developing a CCM technique for the individual voice within the choral program.

Methodology

Qualitative techniques were used to gather data on CCM techniques and practices through surveys, interviews, and field notes of choral teachers, experienced singers, and a vocal expert providing triangulation of data. An online survey was used to identify the use of CCM pedagogy in high school choral programs. The survey was also designed to elicit agreement for further participation.

A smaller group of five teachers were selected for observation of their high school ensembles, and individual interviews about CCM pedagogy and technique ideas for best practices. These participants were selected based on their responses to the initial survey questions. Issues for consideration in selecting these five participants were their experiences working with a CCM ensemble within their choral program, their personal singing experience with CCM, and their willingness to participate in both an interview and observation. One teacher withdrew from the study after it began, leaving four participant teachers.

Two undergraduate student vocalists also agreed to participate in this study, having advanced knowledge of the use of CCM techniques within their own performing. These specific students were chosen because of their ability in the area of CCM, as well as their varying musical background and vocal training – one from a classical beginning, one from a musical theater beginning. Having the perspective of proficient singers in the area of CCM was valuable from the aspect of vocal production compared to vocal teaching.

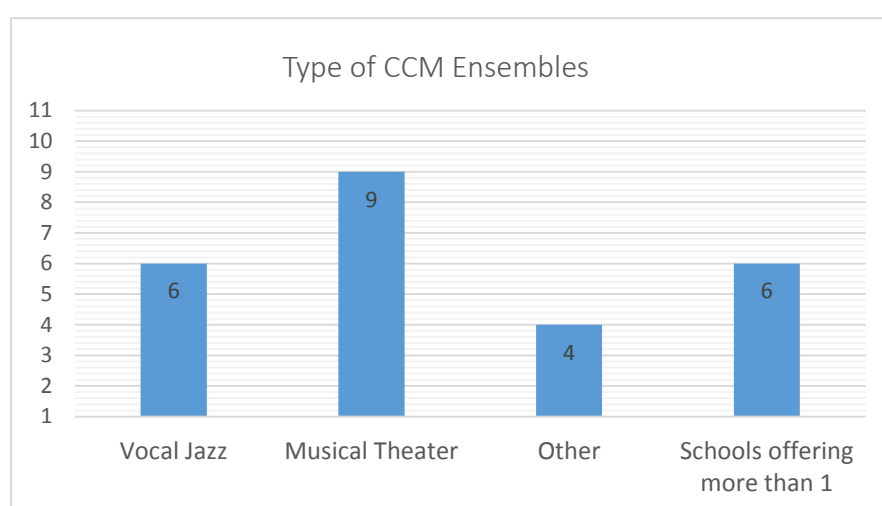
I also worked with an experienced vocal pedagogue with background in CCM to gain specific skills and to guide development of vocal exercises that can be used with individual singers within a choral program.

Initial Survey

The initial survey was sent out electronically to twenty-five high school choral directors in a large metropolitan area of the Midwest as a form of structured interview based on Fontana & Frey (1994) (see Appendix A). These choral directors were chosen based on their location, the size of the school, and the reputation of the school for having a strong choral program. The schools were all chosen because of their close proximity for ease of travel arrangements for observations. I chose to look at larger schools with the assumption that the programs would be bigger and offer more CCM ensembles. Of the twenty-five surveys sent out, eleven were returned producing a 44 percent return rate. The responses were gathered to create a general sense of CCM in area schools with the main areas considered being the level of CCM background or training that teachers have, the number of years teachers had been in their current teaching positions and the number and type of CCM ensembles offered in each school program. Nine out of the eleven

survey respondents indicated no previous background or training in CCM ensembles or techniques. Surveys were balanced between teachers with limited teaching experience in their current positions (5 teachers indicating 1-5 years), and those who had been in their positions 10 years or more (5 teachers). Only one teacher fell in the range of 5-10 years experience. The type of ensemble offerings across schools ranged from vocal jazz to musical theatre, and included other types of repertoire such as gospel (see Figure 2.1).

Figure 2.1 CCM ensembles offered in participant's school programs



Selected Participants

Participation within this study involved an electronic interview and observation of teaching techniques, or in the case of the two students, their techniques for vocal use. The teachers and vocal expert were given similar interview questions pertaining to their teaching of CCM techniques within a choral setting, and individually. The two students, however, were given semi-structured interviews of a similar nature (Fontana & Frey, 1994), but pertaining more to the singing, not teaching, of CCM techniques. All interview data can be found in the Appendixes.

One observation of choral rehearsal or voice lesson was conducted from the perspective of a complete observer (Atkinson & Hammersley, 1994). Field notes of the rehearsals and lessons were created following the practice of Emerson, Fretz & Shaw (1995). Open-coding and analysis of field notes and interview material aligned to techniques of cross-case process from Huberman & Miles (1994).

All interviews of choral teachers were completed following the observation process. The interviews were coded for teachers' use of CCM pedagogy in the classroom, and examples of vocal exercises used.

Along with observations and interviews of area teachers, two current advanced undergraduate musical theater students, one male and one female, were interviewed about their understanding and use of individual CCM technique using semi-structured questions and observed in private studio lessons for the techniques being put into practice (see transcript in Appendix B). The interviews were audio-recorded and then transcribed for coding and analysis. Open coding was used to determine themes in the data and triangulation achieved through literature review, interviews, survey responses, and observations (Janesick, 1994).

Findings of best practice techniques from the literature and observations were then taken to an experienced CCM pedagogue, where we compared all responses. Much of the discussion on vocal exercises was centered on appropriate vowel sounds and sensations to help the students "feel" the sound in a manner consistent with CCM singing. There was also a need to be able to acknowledge the differences between male and female voices when belting. There are less pedagogical differences for the male voice

between classical and CCM, so helping teachers to understand and produce these sounds should be an aim of the exercises.

Exercise examples were developed that would be most appropriate for adolescent voices in developing healthy CCM technique. In working with the CCM pedagogue, I concentrated on exercises that were simple melodically, but focused mainly on the use of the vocal mechanism to create the correct style of sound. I developed exercises specifically for belt singing in males and females, as well as accessing full “head” voice (or cricothyroid dominant) and a “mixed” voice for females. In addition, other stylistic elements, such as stiff vocal fold singing for jazz, were addressed.

Participants

High School Choral Teachers

Of the eleven original survey respondents, four agreed to further participate in the study through observations and interviews. The four teachers ranged in experience and variety of ensembles offered within their program. Across the four programs, I observed two vocal jazz ensembles, one musical theater ensemble, and one chamber choir concentrating on jazz and gospel music. The school districts represented were all public schools primarily within suburban communities. Three of the ensembles met during the scheduled school day, and one rehearsed as an extra-curricular ensemble outside of school hours. All of the ensembles had less than twenty-five singers, one having no more than twelve singers.

Richard teaches high school choir in an urban school, where he has taught for more than ten years. His main responsibilities are traditional choirs and a vocal jazz ensemble. He also helps with the school musical on occasion. I observed Richard’s vocal

jazz ensemble, which was a mixed ensemble of approximately twelve singers. This ensemble rehearses during the regular school day for fifty minutes.

James has been in his current teaching position in a suburban community for more than ten years, where he teaches traditional choir, as well as a chamber choir that works on various repertoire. I observed gospel and jazz with his chamber choir, which consists of approximately twenty students and rehearses during the regular school day for fifty minutes.

Gail has been at her current teaching position for less than five years. She team-teaches various traditional choirs, as well as a musical theater group, within a suburban community. Her musical theater group consists of approximately twenty singers, mostly upperclass students. I observed this group, which meets regularly toward the end of the school day into after school hours for three hours, multiple times a week.

Tina teaches in a suburban community, and has been in her current position for less than five years. She directs traditional choral groups as well as a vocal jazz ensemble of approximately twenty-one members, which I observed. They meet regularly for one and a half hours during the school day.

Tanya Kruse Ruck

Having recognized the need for education in the area of CCM, I felt working with an experienced pedagogue, who has the knowledge of both classical and CCM techniques, was important in the development of this study and vocal exercises. Tanya Kruse Ruck was chosen due to her performance, training and successful teaching of CCM techniques throughout her career. She has taught classical technique and CCM techniques since 2000, including at the University of Wisconsin-Milwaukee since 2006. Tanya holds

a Bachelors of Arts in Music (with a vocal emphasis) from Luther College, as well as a Masters of Music Degree in vocal performance from the Cincinnati College-Conservatory of Music. She is currently completing her Doctorate of Musical Arts at Cincinnati Conservatory as well. Her work with several vocal experts, such as Robert Edwin, Dr. Corinne Ness, and Mary Saunders, as well as her experience with both classical and CCM pedagogy helped Tanya stand out as having the desired expertise for this study.

The interview questions for this study were adjusted for Tanya to fit individual studio teaching, as compared to the ensemble teaching of the choral directors. These questions were based on my initial research questions about belting and the differences between classical and CCM techniques. Having had extensive training and education with the physiological use of the voice, Tanya was able to describe specific differences between the two pedagogies from an instructional point of view.

Student Performers

Through my work with Tanya Kruse Ruck, I was introduced to two current student performers, both advanced in their training with CCM techniques. I observed a one hour lesson for each student, as well as completing an interview with them about their singing.

Rebecca is a third year musical theater major. She has been belting since high school and has performed mainly in the musical theater genre throughout her education, with no classical training. When she entered her undergraduate program, Rebecca began having vocal health issues due to insufficient knowledge and training on CCM pedagogy. This caused her to suffer a polyp on her vocal fold that eventually needed to be removed

with surgery. Since her surgery, Rebecca has been working to redevelop her technique in a healthy way so as to avoid vocal damage in the future. Because of her understanding of the potential for vocal issues, and her struggles to learn to belt in a healthy manner, Rebecca was chosen for this study to represent the perspective of someone who recognized unhealthy singing and has transitioned to new techniques.

Nate is a senior voice major working in the area of classical and musical theater singing. Nate has been singing contemporary music genres since high school where he sang in an *a cappella* group, as well as a traditional choir. He spent the first two years of his undergraduate program primarily focused on the classical genre. However, he has been concentrating more on contemporary genres like musical theater, jazz, and pop during the last two years. Nate is well equipped in both classical and CCM techniques and can switch between them fluidly with great understanding of his vocal mechanism. His versatility in both classical and CCM techniques is what led me to choose Nate for this study.

Both Rebecca and Nate were given similar interviews in a semi-structured format. These interviews were audio recorded and transcribed for use in this study (see transcript in Appendix B). Their interview questions were based on the understanding of their singing and how to use certain techniques individually, as well as within an ensemble.

Summary

There have been many advances in vocal science over the last two decades. As the review of literature shows in Chapter 1, even with these advances, there are still many questions on how to teach CCM and belt technique in a healthy manner. Certain questions have been addressed through my work with Tanya Kruse Ruck, and interviews

with two student singers, such as: *Is belting a healthy vocal production? What are the pedagogical differences between classical and CCM?* In hopes of finding best practices for school programs, I have uncovered many misconceptions as well as a need for more education in the area of CCM pedagogy for current and future teachers.

CHAPTER THREE

Vocal Teaching in a New Musical World

Throughout the process of developing vocal exercises for the beginning contemporary commercial music (CCM) student, the need for expertise in the area was very apparent. Tanya Kruse Ruck is currently finishing her DMA in vocal performance from the University of Cincinnati College – Conservatory of Music, where part of her study has focused on vocal pedagogy for musical theater techniques. Her knowledge in the area of CCM is based on her study and teaching of it.

The importance of involving participants who are skilled at performance in the area of CCM was also recognized. Two of Kruse Ruck's musical theatre students were chosen to participate in this study to shed light on the use of the vocal mechanism within CCM and the impact that vocal training could have on the young voice. Both students are nearing the completion of their university degrees in musical theatre and come from different vocal backgrounds.

The Voice, The Body and CCM

Tanya Kruse Ruck has been teaching musical theater technique since 2000, when she began teaching undergraduate musical theater majors in CCM. In her current studio, approximately 30% of the students study musical theater, developing CCM techniques. She is trained in *Body Mapping* (which is an approach to clear, concise, and practical information about how the body moves in order to make music), and over the last 8 years she has attended many workshops on belt and non-classical singing techniques given at the National Association of Teachers of Singing (NATS) conferences by specialists such as Robert Edwin, Corinne Ness, and Mary Saunders. Tanya's experience in both CCM

and classical pedagogy made her the most appropriate voice teacher to work with in this study.

Defining the Vocal “Belt”

Musical theatre, since the period where Ethyl Merman stepped on stage, has utilized the term ‘belt’ voice to identify a specific vocal color. Kruse Ruck described the ‘belt’ voice as “a vocal color that involves a particular set of conditions within the body that allow for a TA [thyroarytenoid muscle] dominant function (not exclusively TA function) that emphasizes high overtones” (Personal Interview, March 2014, see Appendix B).

The thyroarytenoid (TA) muscles are the main muscles that make up the vocal folds. In conjunction with the cricothyroid (CT) muscles – the muscles that connect the cricoid cartilage and the thyroid cartilage in the larynx – the vocal folds are able to change length and thickness to produce the specific pitch when singing and speaking. For the female singer, when in the low range, only the TA muscles are contracted, making the vocal folds thicker and causing the closed phase of the folds (the length of time the folds actually touch each other) to be longer. As the female singer goes into the middle and upper range, the CT muscles slowly begin to contract, which makes the vocal folds longer and thinner, and causes the pitch to go up. As the CT muscles contract more, the TA muscles eventually need to completely release (usually around a D5/Eb5), allowing the CT muscles to take over fully. This CT dominant range is described by many as the female “head” voice. In the male voice, the TA muscles are the only ones contracted through their entire range, until eventually flipping into falsetto, when the CT muscles take over completely. CT dominance in the male voice is not the same “head” voice of

the female, causing much confusion to vocalists and teachers alike. The male “head” voice occurs within the TA dominant range. Also, the male voice does not produce a TA/CT vocal fold mix as the female voice does.

There has been limited research on the male ‘belt’ voice. This begs the question of whether males ‘belt’. According to Kruse Ruck, males do in fact have a ‘belt’ voice. “They [males] are using TA dominant function, as all males do in the full voice, but when belting, they do not do any vowel modification (or “cover”) in the upper passaggio” that would normally occur in the classical style of singing. As is similar for females, males will also have a wider mouth formation, and may have a higher laryngeal position and narrower pharynx when belting, in order to achieve the brighter sound associated with CCM.

Kruse Ruck speaks emphatically about the need to have different vocal techniques for singing in different genres and styles. She does not believe that a classical foundation will automatically help produce a healthy sound in other areas, stating that “there are huge differences in technical approaches, such as how the breath works in classical and belt that must be addressed”. Because of the longer closed phase of the vocal folds compared to classical singing, belting requires less air pressure, therefore less air should be taken in for singing. If students misunderstand this concept and “tank up” like they would for classical singing, they can “overblow and hurt themselves”. Kruse Ruck emphasizes that a singer can damage their voice if they approach belting with a classical breathing style, stating that “teaching students to use ‘classical technique’ while approaching literature that is to be belted is irresponsible”. In the area of vocal health, the difference in breathing from CCM to classical is important. Also, for the female singer,

the use of TA dominant function in a higher range should be monitored to be sure she does not sing too high with that function. It is common, according to Kruse Ruck, for female ‘belters’ to use a TA/CA ‘mix’ when approaching notes above an A4. Other differences, such as vowel shapes and use of vibrato are stylistic techniques that should not affect the overall vocal health of the singer.

Tanya stresses the importance of teaching vocal anatomy and function, as well as “vocal truths of all styles” in order that, particularly young singers, will understand what is physically happening when they sing. According to Tanya, students need to understand the vocal function within a musical style because they “can hurt themselves if they are using poor technique in ANY genre”.

A Comparison of the Male and Female Voice in Practice

Throughout a semester of specific study with Tanya, I observed two current undergraduate students studying CCM vocal techniques in their voice lessons with her. The background of both students, one male and one female, differs significantly in terms of their vocal history.

Rebecca

Rebecca underwent surgery to remove a polyp on her vocal folds that developed due to the misuse of her belt voice. After her surgery, she spent a full six months on vocal rest. Over the past thirteen months she has been slowly re-developing her voice through lessons with Tanya. Rebecca does not have a classical background and still struggles with accessing her “head” voice (or cricothyroid dominant function), something that likely would have been emphasized in a classical background. Rebecca has been singing in the belt style since she was eleven years old, mainly by participating in staged musicals.

Because she never received formal voice lessons until college, Rebecca was unaware of the damage she was doing to her voice with the improper use of belt, including unnecessary tension as well as singing well outside of her range. Rebecca recalls:

when I became a first year Musical theater student is when everything went wrong where I spread myself too thin. I was belting things I shouldn't have been belting. And I ended up getting a vocal polyp on one of my vocal cords. [...] And when I had the polyp I noticed a change in range. There was zero access to head voice. I always was in vocal fry. Belting was painful.

Understanding now, after having dealt with vocal trauma, how easily the voice can be damaged, Rebecca is very diligent in her work to make sure she is developing a healthy technique that can be long lasting in her career.

Through her lessons with Kruse Ruck, Rebecca has been working on developing her full vocal range – including cricothyroid (CT) dominant singing. She does concentrate mainly on ‘belt’ technique, or TA dominant singing because that is her main focus of study, but also spends time working through all functions of the voice knowing that some CCM singing may be facilitated beyond belt technique. She feels most comfortable and proficient working within the ‘belt’ range, and plans to pursue a career in musical theater.

Even though Rebecca does not have much experience using CCM techniques within ensembles, she spoke in her interview of using less vibrato to match the vocal tones of the entire ensemble around her by stating “[i]n an ensemble, I’d focus a lot on holding in my vibrato to try to blend in. Kind of matching the tones around me” (personal interview, March 2014, see Appendix B).

Rebecca describes the ‘belt’ voice as “having a smaller area of resonance and use of singing voice”. ‘Belt’ is a “concentrated sound” like a “laser piercing through a back

wall”. When she first began belting, she explains that it felt “really easy” to her and she was unaware that she was doing anything incorrectly with her voice. However, she feels that she may have “overextended” her range while singing in high school and early college, belting much too high above the treble staff, therefore causing damage to her voice that resulted in the vocal polyp. Rebecca described having a lot of unrecognized tension in her singing before, and still struggles slightly with it. She was unaware of this issue until after her vocal rehabilitation, explaining now:

I can’t really think of how I did it incorrectly. I guess it would just be overextending my range. Belting G’s and A’s. And I guess just holding a lot of tension instead of letting it naturally flip into the head because I was so scared of it that I just contained everything.

However through her training with Tanya she is learning to trust in her voice and know that she doesn’t “have to do anything to make the sound come out” in terms of pushing and creating tension in her throat. Her former association during high school with ‘belt’ singing needing tension has caused many problems, and it is still something that she works very hard on alleviating.

Throughout the process of re-learning how to ‘belt’, Rebecca still has many struggles that she faces, including understanding the misconception of tension being associated with the ‘belt’ voice. She has gained more knowledge of the vocal mechanism overall, and it has helped her to recognize the capabilities, as well as the limitations, of what her specific voice can do. Even though Rebecca has already grown significantly in her understanding, she is still developing her classical technique. Because of this, she is unable to articulate verbally the differences between the two techniques.

When asked about the importance of vocal health in singing, Rebecca said she knows when her production is healthy when she doesn’t feel any “grabbing” in her voice.

She stressed the importance of knowing that “you shouldn’t be doing it if it hurts” and “vocal health is more important than sounding like Idina Menzel”.

Kruse Ruck uses a series of flashcards with students that each have a specific vocal “recipe” written on them such as “stiff fold”, “TA dominant”, “CT dominant”, and “mix”. When working with her students, she will discuss these different recipes, or vocal functions, and address how they can be used within a certain style, or even many within a single song to maintain good vocal production. In observing Rebecca’s lesson, Tanya would ask her to produce a certain function, and Rebecca would respond accordingly. To be able to do this requires a significant understanding of the voice and a strong kinesthetic awareness of what is happening physically to create the sound. When asked, Rebecca was able to verbalize what she was feeling and doing to change her sound or color with the CCM style. Despite not thinking that she could explain the difference between classical singing and CCM techniques, she was able to describe her own vocal mechanics.

Nate

Nate has been concentrating on CCM techniques only sporadically until two years ago when his study became more focused on these techniques. He has a stronger classical background, through vocal training and choral singing in college, but has always felt ‘belting’ to be more natural, stating:

Musical theater, contemporary to pop styles came a little more naturally to me and I think it does for most high school singers, especially now-a-days because that’s what you’re more exposed to. (Personal interview, March 2014, see Appendix B)

Nate has developed strong technique within both CCM and classical styles, singing in ensembles in high school and college such as vocal jazz, contemporary *a*

cappella groups, musical theater, and traditional choir. Because of this range of experience, and his training with Kruse Ruck, Nate is able to switch between both styles fluidly and with ease as his repertoire requires.

When asked how to use CCM techniques within an ensemble, Nate explained that he would not use all the same techniques as solo singing, but the use of less vibrato and wider vowels would still be appropriate for ensemble blend. In his experience, with many different voices all trying to have a unified sound, the importance of using less vibrato and the same vowel shapes will help with potential tuning issues. He also works to achieve the use of less color choices, or “shifts” when singing in an ensemble. Conforming the sound to the ensemble is more important compared to singing solo where there is more liberty to “make more color changes and do more things with the line”.



In Nate’s opinion, the ‘belt’ voice is a high intensity sound that occurs in a higher register for the male voice compared with the lower/middle register for women. There is less air pressure, and a more focused tone in ‘belt’ singing, with more of a narrow space in the vocal tract used. Coming into singing ‘belt’ from already having classical experience, Nate spent time on not modifying the vowels, as is the practice in classical technique. Other differences in production include no (or less) vibrato, and more concentrated air use with less air pressure. He explained that, for him “belt is that change from really pushing a lot of air through to really concentrating the air and focusing the sound more”. He also spoke of the difference in resonator space, with CCM not being as “big” as classical by saying, “it’s not those big open spaces. It’s a little more closed off especially since you’re using less air”.

When asked about vocal health, Nate stated the importance of understanding the differences between the classical and CCM techniques because differences, such as the use of breath, can potentially create a problem for young singers. With knowledge of specific differences between the two techniques comes understanding the vocal mechanism and the function it has in each style. Realizing that belting does not involve “grabbing” in the throat is also a main point Nate describes: “The big thing about belt is understanding and being able to differentiate between having a really focused and concentrated breath stream, and having a strained and held and muscled breath stream”. Trying not to make an artificial sound can help to alleviate the possibility of “grabbing” or having unnecessary tension in the voice, as Nate states:

For an individual singer, it’s more just about understanding your own voice and understanding the voice and the mechanism in general. And not trying to create someone else’s sound, but create your own sound with similar colors.

In observing Nate’s lesson, he worked on many vocal colors and sounds that helped to show many differences between classical and CCM styles. These were done through the vocal “recipes” mentioned earlier in Rebecca’s lessons, as seen in Figure 3.1.

Figure 3.1 CCM and Classical Comparison (taken from Corinne Ness Lectures, 2012)

CCM	Classical
Divergent Resonation 	Convergent Resonation 
No Vibrato – except for effect	Vibrato on onset
Consonant importance	Vowel importance
Higher Laryngeal relationship (typically)	Lower Laryngeal relationship
Thick fold production	Thin fold production
Less air flow/pressure	More air flow/pressure
Engaged Buccinators (muscle at side of face, controls mouth movement)	Released Buccinators
Lower Palate/Nasal sound	High Palate/Non nasal sound
Higher tongue	Released forward/lower tongue
TA Dominant function	CT Dominant function

Even within a single song, Nate might need to change sounds to create a brighter ‘belty’ sound, or a lighter ‘stiff fold’ sound for more intimate moments. The male belt voice was also discussed in great detail. Both Nate and Kruse Ruck spoke of how males always sing with a TA dominant function, even in classical music, with the exception of singing in the falsetto register/mode. This is quite different from the female voice that does not naturally use TA dominance throughout the range, varying between TA dominance, TA/CT combination, and CT dominance. This function in the male voice makes it possible for males to ‘belt’ with only slight modifications to their technique.

Both Nate and Rebecca emphasize the importance of singing ‘belt’ with a released tone being sure to eliminate any tension and “grabbing” in the throat and neck muscles. Nate describes the ‘belt’ voice as a focused and concentrated sound, which can lead to a misunderstanding by some students and cause them to “more inherently grab to keep that nice tight sound”. Being sure to emphasize with students that a ‘belt’ sound does not involve tension – which Rebecca admitted to having associated the two when she was in high school – is important to the vocal health and longevity in CCM singing.

Summary

The importance of understanding vocal anatomy as it relates to singing is apparent when observing and interviewing these trained singers. Both students are able to articulate what is happening vocally while singing, and therefore more able to change their use of the voice to reflect the sound or color that they need for a specific musical style. The expertise that Tanya Kruse Ruck has developed through her training and the application of those ideas from vocal pedagogy to her teaching are apparent in her work with students. Her students have gained much knowledge of vocal use and anatomy, and

are able to carry that knowledge into healthy performance practice, which will be explained in more depth in Chapter Five.

CHAPTER FOUR

The Individual Voice within the Choral Setting

Contemporary music ensembles are now present in education at all levels, showing up in vocal jazz, musicals, and show choirs. With the growing popularity of these contemporary commercial music (CCM) programs in choral education, it is important to acknowledge the place of these choral ensembles within our education system. With that also comes the importance of recognizing the need for CCM vocal pedagogy on an individual level.

In an attempt to observe CCM pedagogy in practice, surveys were sent out to twenty-five high school choral directors in a large metropolitan area of the Midwest. Of these twenty-five surveys, eleven were returned (44% return rate), with four teachers fitting the study criteria including a willingness to participate fully in this study. The four directors agreed to be interviewed and observed during their teaching day as it pertained to CCM techniques and practices. The questions for these interviews were developed from the survey responses, as well as my own research questions that guided the overall study. Full transcripts of each interview can be found in Appendix B.

Interviews and Observations with Choral Directors

Each of the four participating directors received electronically a set of structured interview questions to complete on their own time, with the possibility of follow up questions for clarification. The interview asked questions specifically pertaining to their teaching approach and pedagogical ideas of CCM techniques. Along with the interviews, each director was observed in a rehearsal setting for one class period (approximately 45-50 minutes), on their practical application of CCM pedagogy. All vocal ensembles

observed were non-classical in nature, and ranged in size from twelve to twenty-five singers.

Richard

Richard has over ten years teaching experience in his current position. Even though he does not have any formal training in CCM, Richard has experience in jazz voice from both his high school and undergraduate education. His current high school choral program utilizes CCM through a vocal jazz ensemble and a school musical.

Richard stated in his interview that he does not teach ‘belt’ technique because he does not believe it to be a “healthy vocal production”. He believes ‘belt’ to be the chest voice taken above the “natural break in the female”, and taken “all the way through the passaggio without any ‘mix’” for males. Richard strives to “ensure that all sound is ‘on the breath’ and ‘free from tension’ regardless of the style of music being sung”.

The beliefs that Richard stated in his interview were also observed in his rehearsal practice. Most of what was observed involved mouth/vowel shape techniques only intended to address the unification of sound, but nothing about ‘belt’ or CCM technique specifically. This group included twelve singers (male female split), and all the students seemed well versed in the stylistic sound of vocal jazz as demonstrated through their vocal production. The use of vibrato was limited, however it was present throughout on longer, sustained notes, which can be a stylistic element to jazz.

The vocal color was not bright in nature, but rather had a softer vocal quality in all parts of the SATB ensemble, which in the females sounded to my ears to be more cricothyroid dominant in vocal fold production. Occasionally the production sounded somewhat breathy, which could be due to the use of stiff vocal folds – a technique often

used in jazz. The influence of current popular trends, such as the use of a heavier “chest” (or thyroarytenoid dominant) voice in the lower range and a light, breathy “head” (cricothyroid dominant) voice in the upper range, was heard throughout the rehearsal, with many singers having a similar sound to popular performers like Nora Jones and Beyoncé.

The overall sound production by this ensemble demonstrated that students understood vocal health in singing. This was apparent by the lack of tension in the throat and sound that was heard from the ensemble as a whole. The vocal production was very natural sounding and not pushed toward any specific sound, except with simple stylistic changes such as vowel and vibrato use.

Being at a later stage of rehearsal preparation, it is difficult to say what techniques were addressed by Richard during the development of the pieces, except what was specifically heard. During this specific rehearsal, the students worked on smaller ensemble pieces at the end of the rehearsal time that were more classical in nature. Richard was able to address certain differences between the two styles, referencing the mouth shape differences between CCM and classical, asking the students to bring the “corners in” for a classical sound. No other specific technical differences were observed in Richard’s teaching between classical and CCM production, however. The demographic makeup of this urban school, which is predominantly African-American, may contribute to the success with jazz singing if students are grounded in Gospel traditions or other jazz forms in their personal listening or music making outside of school. Richard does not teach technique for belting or CCM singing, instead choosing to concentrate on teaching singing with a released tone that is free from tension. It is his opinion that singing without

tension, “regardless of the style of music being sung”, is the best way to ensure a healthy vocal production.

James

James has been teaching in his current position for more than ten years. He was part of very strong vocal jazz programs in both high school, and five years of college singing. While in college, James worked for a local theme park and was able to “work with vocal coaches who specialized in sounding like a pop singer”. This background and specialized coaching helped James to feel more confident in his teaching of CCM techniques. He has an SATB, auditioned choir as part of his high school choral program that performs a lot of vocal jazz and contemporary pop music throughout the school year. He also helps to direct the school musical.

James defines the ‘belt’ voice as “using a solo tone that cuts over the crowd with a mix of classical technique and pop sounds mixed together”. He also states that he doesn’t necessarily think it is an unhealthy production, “but it definitely takes some practice to hone the sound you want for that style”. Although James does not specifically teach CCM or ‘belt’ techniques in his choir setting, he does experiment with vocal sounds and colors with students for the school musical. When beginning to develop the ‘belt’ voice, James suggests to not “let your voice change over at your break...keep using your chestier tone even into the higher registers”. During this process, James stressed the importance of listening to the students because “at the high school level, they can tell when something works or not”. He also mentioned that learning a new technique can be a lot of “trial and error”, which is why it is important to always be conferring with the students on what they think and feel in their singing.

In observation of James's choir, I was able to hear a gospel song as well as a traditional song to compare the techniques used between the two. This group contained approximately twenty singers in a mixed choir setting. During the warm-up exercises, James asked his students to concentrate on more of the classical style with tall vowels and open resonance space. Most students addressed this need and were able to change from a wider vowel to a tall vowel shape. However, a few students struggled with this, keeping wide vowel and mouth shapes throughout, which affected the blend and tuning of the group.

In the first song, which was gospel in style, there was much unison throughout the piece, which helped the students hear their blend. The sound was unified with little vibrato use and some occasional breathiness throughout, which could be due to stiff vocal fold production, or the developmental issues of young voices which occurs very often in adolescent female voices. The students used a wider vowel and mouth shape, which seemed more natural to the majority of them for this piece.

Comparing the production of the first song to the second, which calls for more of a traditional choral sound (more classical in nature), the students seemed unsure how to address the differences without specific guidance from the director. The sound was very bright, similar to the first song, with inconsistent vowel shapes used throughout the ensemble. The soprano section was able to make the biggest stylistic difference, heard mainly in their higher register. The tenors and baritones still used wide vowels, which caused some tuning issues because of the lack of vowel unification. It seemed apparent that the majority of the students were unaware of the specific differences between a

classical sound, and a gospel, or CCM sound and what is required or desired in vocal production.

Overall, knowing what techniques have been addressed is difficult to observe at this stage of their rehearsal process, because it is only one rehearsal toward the end of a concert cycle. The students seemed to have a concept of stylistically correct vocal choices within CCM singing, but were inconsistent with their technique in traditional choral singing. Singing with wider vowel and mouth shapes tends to be more natural for young singers because that is how speech is shaped, and that is the sound people are exposed to with current popular music. James did address vowel differences between a CCM and classical sound, as well as a brighter tone for CCM. However, not all students seemed to be to the point of understanding those differences yet, as was observed through their singing.

Gail

Gail team teaches a musical theater group comprised of mainly upper class students, many of whom study voice privately. There are approximately twenty singers in her mixed ensemble. Gail does not have any formal training in the area of CCM, but has learned “through the experience of the performance of various styles of music”. She also directs mixed traditional choirs, and her groups perform many styles of music ranging from madrigal to Broadway musical styles.

In defining the ‘belt’ voice, Gail said it is a “crystal clear [sound] with little vibrato. It is a common sound in musical theater repertoire”. Since many of Gail’s students study privately, she does not personally teach ‘belt’ techniques to her students. Gail considers herself “more of a vocal coach [since] they learn vocal technique from

private voice teachers”. Even though she does not feel she knows enough about the ‘belt’ voice to teach it to her students, Gail also does not “think it is right to teach a belt technique for a beginning student until they know how to access their head voice and chest voice”. In the matter of vocal health, Gail asks her students “how their voice and body feel when they are singing and encourage[s] them to develop a vocal technique that encourages healthy singing” which includes “accessing both chest and head voice for the female singer and learning to mix [as well as] teaching men to get comfortable and confident with their falsetto”.

The ensemble that I observed was working on many different musical theater styles, including jazz and ‘legit’ styles – the musical theater term for a classical pedagogical approach. However, the approach was similar in all styles – wide vowels and mouth shapes, little or no vibrato, and a bright sound. It was difficult to notice if the laryngeal position was elevated or not without working one-on-one with a student, but the vocal production sounded healthy with no visible tension.

Occasionally other techniques addressed by the directors were incorporated within the singing. During sections that were more “jazzy” in nature, the background vocals on an [u] vowel were less thyroarytenoid (TA) dominant and heavy sounding, instead using a lighter cricothyroid (CT) dominant production. When the musical line ascended into a higher range, more nasality was brought into the sound to help brighten up the high range to keep it consistent with the lower, brighter register. During one particular song, a ‘legit’ production was needed. Since this was different from what the students had been producing throughout the rehearsal, they needed a reminder about using taller vowels and not a “musical theater sound” in this particular song.

This ensemble was capable of using many techniques to match the correct musical style to each piece, which usually only involved a small change of vowel or vocal fold production to achieve. However, because many of the students study privately, the directors rarely worked with individual CCM techniques, instead agreeing to concentrate on the ensemble sound for a unified blend. Even though Gail was specifically part of this study, her co-teacher seemed to hold many of the same beliefs as Gail, and used them in her teaching as well.

Tina

Tina has been teaching in her current position for less than five years. Along with her mixed traditional choirs, Tina directs a mixed vocal jazz ensemble of approximately twenty-one singers and assists with the school musical. She has not had formal training in the area of CCM or vocal jazz, but she has attended various jazz and *a cappella* workshops. The jazz workshops mainly “focused more on repertoire, warm-ups, etc. rather than actual vocal technique”. She found the *a cappella* workshops more beneficial because they used students to demonstrate different techniques, such as “sing softer/listen more when using microphones, [and the] importance of blend”.

Tina defines the ‘belt’ voice as “a tone created by projecting pitches found in the passaggio or head voice range with the volume and support of the chest voice”. Because she was not formally trained in CCM techniques, Tina stated:

I don’t teach belting to my students, mostly because I myself do not feel comfortable ‘belting’. For students who attempt this technique, I focus more on breath support, vocal placement, and vocal health to ensure that they are using proper support and not harming their vocal cords, than teaching them the specificities related to belting.

Tina believes that both male and females have a ‘belt’ voice, but does not have a “solid understanding of what constitutes good ‘belt’ singing”, therefore is unable to give specific examples of what constituted good ‘belt’ technique. However, she does address the following issues with her students, whether it is for classical or CCM singing: “Watch for physical signs of strain (especially in neck and head placement); Listen for vocal signs of strain; Emphasize good breathing techniques and placement; Teach proper classical tone – helping students alter sound after that has been developed”.

The vocal jazz ensemble that I observed was singing a specific concert set in the school auditorium for the first time. They were working on getting used to the sound in the space, as well as using microphones for the first time with the music. Overall, the ensemble had a very classical jazz sound, with a lot of vibrato throughout. The repertoire chosen was based on a theme (“Love”), but seemed to be more classical, or ‘legit’ production. The students used wider vowels generally, but there was no ‘belt’ sound, or other CCM technique audible in their vocal production.

Soloists were used during many of the songs. Each soloist had a very different, and unique sound that was more “popular” in nature, as compared to the ensemble sound. The uniqueness of the voices did not affect the overall ensemble blend, but gave a contrast during the solo sections. The addition of the microphones to the rehearsal did not seem to adversely affect the student’s vocal production, with the exception of making a few of them more shy and unwilling to sing into the mic.

Overall, this ensemble had a very nice blend in their production, but no CCM techniques were utilized. Because Tina does not feel confident in her own ability to ‘belt’, she does not address it within her ensembles. The ensemble sound was very

traditional, and may not always be stylistically accurate, but represented healthy vocal production throughout the rehearsal.

Director Comparison

The four directors observed and interviewed each had different experiences and background in the area of CCM techniques. James felt confident in teaching CCM and ‘belt’ because of his background, whereas Tina did not, therefore it was not specifically addressed. Gail did not feel she needed to address individual techniques because many of her students study privately, whereas Richard does not feel ‘belt’ to be a healthy production so does not teach it.

The pedagogical ideas of CCM and ‘belt’ singing differ between each of the directors. Tina does not feel like she has a “solid understanding of what constitutes good ‘belt’ singing”, therefore was unable to give any ideas of what techniques to use when ‘belting’. James approached ‘belt’ and CCM technique from the idea that it is similar to a classical pedagogy, saying:

To me they are using a lot of the same techniques that we discuss with what is required to make a healthy tone on a Mozart piece vs. a Phil Mattson song.

The main technical difference Richard would use in his teaching was the idea of the mouth shapes between the two styles. For classical, Richard reminded his students that they needed “corners in” for their mouth and vowel shapes. Similarly, Gail did not need to address any technique with the exception of vowels on occasion, possibly due to the fact that the majority of her students studied privately.

The idea of breath seems to be the only misunderstanding that is shared across all directors. All four believe that a classical breathing foundation is appropriate for a CCM approach. Kruse Ruck, as well as Nate and Rebecca, speak of the importance of less

breath pressure with CCM and ‘belt’, with Kruse Ruck explaining “if they [students] try to utilize a classical approach to breathing and breath management while singing in belt, they will over blow and hurt themselves”. As will be discussed in more detail in Chapter Five, the use of breath for CCM should be less due to the longer closed phase of the vocal folds, as compared to classical technique, which has a shorter closed phase.

All four directors seemed to agree that the mouth and vowel shapes help to produce the color needed for a brighter sound, which is stylistically appropriate for most CCM pieces. The use of vibrato was not addressed during the rehearsals that I observed. This could be due to the fact that it was already discussed in previous rehearsals, or because many adolescent singers are still working to develop control over their vibrato, therefore making it difficult to ask students to use less or more.

These varying backgrounds were represented in their rehearsal techniques, through the use, lack of use, or even misuse of CCM pedagogy. Even though they all agree that vocal health is important, some misunderstanding of CCM techniques could be potentially damaging to the voice, especially a younger developing voice.

Summary

With the growing popularity of CCM ensembles – such as vocal jazz, show choir, and musical theater – as part of choral programs in our schools, more than ever the differences need to be addressed between classical and CCM techniques. Having an appropriate background and education in CCM is critical to proper vocal education and vocal health of all students. Since many teacher education programs are still not addressing this issue in undergraduate programs, many teachers may need to find other ways of educating themselves in this area. Attending workshops, conferences, or even

taking a graduate course should be considered. There is literature available, as I have found, but it is still very much a developing pedagogy.

CHAPTER FIVE

Discussion

Throughout my research, it was important to recognize the differences between pedagogical approaches for classical and contemporary commercial music (CCM) and how they are being applied in choral programs. Along with that, understanding what the ‘belt’ voice is and how it is used became important in being able to gather sufficient evidence for vocal exercises that can be used with beginning students in developing CCM technique. Placement of these techniques into the choral setting becomes the final challenge for teachers developing a varied repertoire in their programs.

Defining the ‘Belt’ Voice

Differences in pedagogy between classical and CCM relies heavily on first defining the ‘belt’ voice. There is still much debate on whether or not the ‘belt’ is a healthy production. Many choral directors and private voice teachers still think of the ‘belt’ as being unhealthy, therefore many do not address it in their teaching. Other teachers have misconceptions on ‘belt’ singing and could be teaching improper technique. As Corinne Ness stated in her presentation *Contemporary Vocal Pedagogy: Function, Flexibility, and Vocal Health* (October 18, 2011): Attempting to belt with a classical set up can be just as dangerous as trying to play any sport without proper equipment (p. 2).

The experts that do consider ‘belt’ to be a healthy technique, as long as it is taught correctly, mainly agree that it is a thyroarytenoid (TA) muscle dominant function of the vocal folds (Allen, 2004; Bourne, Garnier & Kenny, 2011; LoVetri, 2003). Some experts, such as Robert Edwin (1998a), believe it to still be a combination of both cricothyroid

(CT) and thyroarytenoid (TA) muscle use, but with the TA being dominant throughout the ‘belt’ register. Kruse Ruck agrees, saying “belt is a vocal color that involves a particular set of conditions within the body that allow for a TA dominant function (not exclusively TA function) that emphasizes high overtones”.

Through the interviews of area choral directors the concept of ‘belt’ singing had various levels of understanding. Tina and Richard both stated that ‘belt’ is the use of a “chest” voice quality that is brought up past the first passaggio. Richard plainly said that he believes the “belt voice is chest voice”, whereas Tina more specifically called it a “tone created by projecting pitches found in the passaggio or head voice range with the volume and support of the chest voice”. Gail and James, however, only spoke of the sound quality of ‘belt’, not the muscle function or register. Gail said the “belt voice is crystal clear with little vibrato”. In James’ opinion, ‘belt’ is “a solo tone that cuts over the crowd with a mix of classical technique and pop sounds”. Though all four directors recognized the difference in tone production from classical to CCM, or ‘belt’, the level of understanding of those specific physiological differences at the source of the vocal folds – especially for female singers – seemed to be lacking.

Male Belt

Differences between the male and female ‘belt’ voice must be considered. According to Kruse Ruck, males sing only with TA muscle function throughout their full range, only flipping into CT dominance for falsetto voice. Even though there was limited information dealing with the male voice, Edwin (1998b) alluded to this use when he said “the male classical singer only needs to brighten and tighten his chest/head mixture to create a belt-like sound” (p. 61). In working with Kruse Ruck and her male student, they

both explained the difference in ‘belt’ for the male voice to be simply wider vowel and mouth shapes. This helps to create a narrower vocal tract space, using less vibrato and air pressure, while allowing for no “cover”/vowel modification through the upper passaggio which emphasizes the bright overtones. Therefore it becomes apparent that males do in fact ‘belt’. Since the difference between ‘belt’ and classical technique for males is minimal, and because some (Allen, 2004; Bourne, Garnier & Kenny, 2011; Edwin, 1998b) define ‘belt’ as only a TA dominant function at a higher than normal pitch level (and men only use TA), there is limited literature on the subject to help teachers more clearly define what needs to be taught.

On the subject of male ‘belt’, three of the four area choral directors agreed that males can ‘belt’, with Gail saying that she did not know enough “about the belting voice to give an honest opinion”. James and Tina both stated that they believe male and females can ‘belt’, but do not specify why they believe this to be true. Richard described his opinion, saying “if males take their chest voice all the way through the passaggio without any ‘mix’, I consider that belt”. This statement would suggest that there are still some who do not understand the differences between male and female voices, given that males do not sing with a ‘mix’ vocal production as females can. With the lack of literature on the subject of male voices, especially in the area of CCM, or ‘belt’, it seems apparent that the differences between male and female voices needs to be addressed more thoroughly in teacher education programs.

Female Belt

The female ‘belt’ voice is much more involved, however making it a critical issue for vocal development within choral programs using CCM. LoVetri (2003) says that

“belting is just a label given to a certain aspect of chest register function” (p. 162). In my research on CCM techniques, the idea of bringing the “chest” voice up into a higher range is somewhat controversial. The “chest” voice is a TA vocal fold function with little, to no CT muscle involvement until above the first passaggio point, which usually occurs around E/F4 (LoVetri, 2003). Once the singer goes above the first passaggio point, a TA/CT balance is used which slowly “stretches”, or lengthens the vocal folds to create higher pitch (Edwin, 1998). Eventually, the thyroarytenoid (TA) muscles release and the cricothyroid (CT) muscles are the only muscles contracting to move into full “head” voice, or CT dominant function (McCoy, 2012).

Because of the differing vocal fold functions in the female anatomy compared to the male, the ‘belt’ is much more difficult to define in female voices. Some, such as Edwin (1998a) and Allen (2004), believe the ‘belt’ to be a TA dominant function, which consists of a mix of TA and CT muscle function. Others however, feel that the ‘belt’ is simply the “chest” register, TA vocal fold function, brought above the first passaggio point, with limited, or no CT muscle function involved (LoVetri, 2003). This concept is generally why many classical pedagogues believe the ‘belt’ to be unhealthy.

Vocal teacher Barbara Burdick (2005) stated that ‘belt’ can be taught as a separate technique to chest voice in healthy ways if specific consideration is given to physiological and perceptual differences. This concept was reinforced by Kruse Ruck who said that “chest” voice and ‘belt’ are two separate ideas.

However, as is seen in the interviews with area choral directors, some teachers still believe “chest” voice and ‘belt’ to be the same thing. Both Tina and Richard used the term “chest” voice when defining the ‘belt’ in their interviews. Richard also stated that he

does not teach ‘belt’ because he does not believe it is healthy technique, which was observed in his teaching practices as well. Tina also does not teach ‘belt’ to her students because she does not understand the technique for her own voice. Gail worked mainly with students who study privately, so therefore did not address much technique as it pertains to ‘belt’ singing specifically. James also does not teach ‘belt’ technique to his students in a choir setting, but works with students as needed when doing school musicals.

Pedagogical Differences

According to Sundburg (1987), the voice is made up of three main parts: the breathing apparatus, the vocal folds, and the vocal tract. Within those three “macro” parts of the voice I have broken down the differences between classical and CCM into five “micro” areas in order to assess specific teaching practice: vocal fold function, laryngeal height, vocal tract/pharynx space, breathing, and vibrato. The area high school directors only addressed the differences of vocal tract space (as it pertains to mouth and vowel shapes), and vibrato. The difference in breath use between classical and CCM singing is not very well covered in current literature, therefore this idea might not be known to many directors. Also, the use of the vocal folds, larynx, and vocal tract are difficult to control in adolescent singing since the voice is still developing, which might contribute to the lack of acknowledgement within the rehearsals I observed.

Experienced pedagogues, such as Edwin (2007) understand the specific differences between the two styles, indicating that tall, round vowels used in classical technique do not serve belting, as well as CT dominant vocal production and an immediate vibrato onset. That is not to say that classical techniques do not have a place in

contemporary commercial music however. Edwin also acknowledges that traditional Broadway ‘legit’ singing incorporates the same technique as classical music. The difference between the two techniques are distinct though, and important to creating a healthy production and stylistically accurate performances.

Within the choir rehearsal settings that were observed, specific differences between CCM and classical technique were not directly addressed, with the exception of vowel and mouth shapes. All four directors indicated to their students the need to have taller vowels for a classical sound, versus wider vowels for a CCM sound. The issues of laryngeal height, vocal tract space, vocal fold function, breath, and vibrato were not specifically addressed. It is possible, as the interviews give an indication, that the directors did not realize there were differences with these parts of the technique. However, there is also the possibility that they may not want to address these physiological differences with younger students, since many adolescent voices are not yet developed enough to have specific control over the larynx, vocal tract, and vibrato.

Vocal Fold Function

The function of the vocal folds between classical and CCM is different for female singers. In classical pedagogy, female singers will tend to avoid a thyroarytenoid (TA) dominant production, unless the repertoire calls for that vocal color. When using this function however, Kruse Ruck explained in her lesson with Rebecca that it will almost never be brought above E/F4, or past the first passaggio. Generally the main function of the vocal folds for classical literature is a thyroarytenoid/cricothyroid (TA/CT) balance (McCoy, 2012). In this manner the balance shifts as the range increases involving more and more CT contraction to lengthen the vocal folds as the voice moves higher. Once the

second passaggio point occurs, the TA muscles release and only the CT muscles are contracted (McCoy, 2012).

In CCM, or ‘belt’ singing, the TA dominant vocal fold function is the majority of the range, until the second passaggio point. Throughout that first passaggio, with the TA being the dominant function, the CT is generally not as contracted as it would be for classical pedagogy. Some singers may choose to use more of a TA/CT “mix” as the range increases, adjusting the vowels and vocal tract space more for the brighter overtones needed in ‘belt’, as Kruse Ruck explained. As in any type of genre, not everyone will be able to produce a true ‘belt’ sound, so modifications can, and should, be made to avoid misuse of the voice.

The idea of modifying the ‘belt’ sound should be considered with many adolescent singers since their voices are still developing. Richard shows through his rehearsal practice that a brighter sound can be achieved with simple adjustments to the vowels. According to Kruse Ruck, and McCoy (2012), the vowel and mouth shapes (as well as the tongue placement) will directly affect the vocal tract space and laryngeal height without having the students “do” something with it. Singing with a wider vowel helps to narrow the vocal tract, and a higher tongue will generally raise the larynx as well, helping to create the bright sound of ‘belt’ without having the female students need to adjust the vocal folds themselves. Since males always sing with a TA dominant production, they do not need to address the vocal fold difference.

The lengthening of the vocal folds by the contraction of the CT muscle is generally referred to as “thin fold” production due to the fact that the vocal folds are becoming thinner as they stretch. In the TA dominant function, because the contraction of

the TA muscles causes the vocal folds to thicken, this is generally called “thick fold” production. Different pedagogues have different terminology for vocal registers and the vocal fold function. For example, classical pedagogue Scott McCoy (2012) chose to use the word “mode” instead of register when explaining the function of the folds. Kruse Ruck used different explanations as well, including “thin fold” and “thick fold” production or TA and CT dominant function. In the world of vocal science there is still much debate on “right” and “wrong”, whether it be on the topic of healthy vocal production or differing ideas of register, with there being many terms for various ideas.

In the male ‘belt’, the pedagogical differences are not in the vocal fold function. Males use TA dominance throughout the majority of their range in both CCM and classical production. The other differences of laryngeal height, vocal tract space, vowel shape, breath and vibrato use will be discussed later in this chapter.

Laryngeal Height

The larynx is the area in which the vocal folds are housed. The vocal folds (also called vocal cords) are muscles covered by mucous that can grow to approximately 9 to 13 mm in women and 15 to 20 mm in men (Sundberg, 1987). The position of the larynx in CCM and ‘belt’ singing is still somewhat controversial.

In classical technique, the larynx should be in a relaxed, or lowered position. This allows for a longer vocal tract shape, which helps to create a warmer tone, as compared to the brighter tone associated with CCM or ‘belt’ singing (Malde, Allen, & Zeller, 2013). The lowered larynx helps to reduce strain and tension in the voice and vocal mechanism.

Even though CCM and ‘belt’ singing can be produced with a lowered larynx, it is not unhealthy, or uncommon, for there to be a higher laryngeal position. Experts such as

Scott McCoy (2007) and Lisa Popeil (1999) agree that the larynx should be in a lowered position for a proper ‘belt’ sound. However, Estill’s (1988) research showed that the larynx “must be high to produce a brighter sound” (p. 42) which is typical of ‘belt’. Bourne and Garnier (2010) agree with Estill, saying that ‘belt’ singing requires a higher laryngeal position.

In my work with Kruse Ruck, she mentioned that ‘belt’, or CCM singing is classified as a brighter tone color, which strives to accentuate the brighter overtones. Because of this brighter sound quality that is desired, for amplification purposes, it is natural for the larynx to be heightened when singing CCM. A higher larynx creates a shorter vocal tract – coupled with wider vowel and mouth shapes – which creates a brighter tone. A longer vocal tract, produced by a lowered laryngeal position and taller vowels with forward lips, helps to create a warmer tone that is typical of classical singing.

The laryngeal position is difficult to observe, except for lower male voices where you can see the Adams Apple (which is the notch at the front of the thyroid cartilage as part of the larynx [McCoy 2012]) move up and down. For females especially, it is difficult to see the position of the larynx. In observing the high school rehearsals, the idea of a higher larynx was not addressed by any of the directors, however it was observed in Rebecca and Nate’s lessons. Since Nate is a baritone it was easy to see the position of the larynx raise from classical to CCM, and to hear the corresponding tone change. Rebecca’s larynx was not visible, but she was able to feel the difference and relay that information to both myself and her teacher, Kruse Ruck. Many adolescent singers may not be able to “feel” the difference in their larynx. It may be best to avoid directly asking

students to raise the larynx because of the lack of control they have, which might cause unnecessary tension and holding, instead of a released and free production. Once a singer is able to develop awareness for the physical happenings in the vocal tract and larynx, it would be safe to address this difference. Until then, a higher larynx can be achieved by a higher tongue position, according to Kruse Ruck.

Most CCM pedagogues agree that the larynx *can* be higher for ‘belt’ singing as compared to classical, but there is still disagreement on whether or not it is possible, or healthier, to ‘belt’ with a lowered larynx. The decision to raise the laryngeal position could simply be a color choice for singers to create the brighter tone associated with CCM styles.

Vocal Tract/Pharynx Space

The vocal tract, which is a combination of the pharynx and the mouth, is where resonance and amplification occur in singing. The pharynx can refer to both the space in the throat as well as the “muscles that surround and define that space” (Malde, Allen, & Zeller, 2013, p.129). Classical pedagogue Scott McCoy (2012) separates the vocal tract into five regions:

- Nasal Cavity
- Oral Cavity
- Nasopharynx – “passageway behind the soft palate into the nose”
- Oropharynx – “tip of the epiglottis to the soft palate”
- Laryngopharynx – “vocal folds to the tip of the epiglottis” (p. 28)

The vocal tract can be manipulated to create different colors and tones in singing. The shape and length of the vocal tract helps determine the vocal colors being produced.

The vocal tract can be shortened or lengthened depending on the mouth and the laryngeal position. When the larynx is lowered and the lips are released and forward, the

vocal tract will be longer, therefore creating a darker, fuller tone used in classical singing. The soft palate will also be higher to decrease the nasal sound when singing – with the exception of certain “nasal” consonants or vowels needed in some languages (Malde, Allen, & Zeller, 2013).

In contrast, the CCM singer will typically have a wider mouth/lip placement and possibly a higher laryngeal position, which will shorten the vocal tract and create a brighter tone. Depending on the style of CCM music, the soft palate can be lowered for a nasal, “twangy” sound. According to Malde, Allen & Zeller (2013) “[i]n these styles the movements of the larynx, soft palate and jaw will be closer to those of speech” (p. 127). This contributes to the idea of why many pedagogues call CCM, or ‘belt’ singing “speech-like” in nature.

Well known pedagogue, Corinne Ness used the words “divergent” and “convergent” to explain the difference between CCM and classical vocal tract shapes in her lecture on vocal “recipes” (October 25, 2012). Bourne and Garnier (2010) explain that CCM singers usually sing with a narrower, or constricted pharynx, similar to a “megaphone-shaped configuration... compared to inverted-megaphone shapes” of classical singers (np).

Kruse Ruck addressed the vocal tract shapes with her students Nate and Rebecca, having both use a wider mouth, explaining that it helps to create a narrower vocal tract. With a narrow vocal tract and a higher larynx, a bright sound will be created, instead of a warmer sound that is typical of classical singing. Feeling the sensation of a narrow vocal tract may be slightly easier than feeling the laryngeal position. The vocal tract shape was not directly addressed within the high school rehearsals, however James and Richard both

briefly explained to their students how the vocal tract can affect the sound, but did not ask students to do anything specific. Gail and Tina did not directly mention the vocal tract, however vowel shapes were addressed – as they were by James and Richard – which can have a direct effect on the vocal tract shape.

Breath and Vibrato Use

The misconception that breathing for classical singing and CCM singing are the same can have consequences, according to pedagogue Corrine Ness in a lecture given on CCM pedagogical issues (October 11, 2012): “Over blowing” is one of the most common faults in music theater singing. More breath is not a good thing. (Excess breath through the folds will give a shorter closed phase, and thus less sound).

The “closed phase” she mentions is when the vocal folds come together during the vibration needed for singing. In CCM or ‘belt’ singing, the vocal folds are thicker (TA dominant), therefore stay closed longer as compared to classical singing (CT dominant using thin folds). Because of the closed phase being longer, less air pressure is needed for CCM singing, therefore needing less air intake. Using more breath will give you a longer open phase, which Ness states will produce less sound rather than more.

It is not healthy, then, to approach CCM singing with the same breath used for classical singing. If too much air is used the ‘belt’ will sound forced, and could potentially be damaging to the voice. Kruse Ruck was careful to address this with her students, being sure they understand the difference. However, in my research, this area seems to be the least addressed, with the only information on breathing differences being found in Ness’s lectures. The lack of information available in this area may contribute to no distinction by the directors between breathing for CCM as different from classical

singing. Tina emphasized “good breathing techniques” with her students, but did not specify the stylistic context, therefore it was difficult to tell if there was an understanding of the need for less air pressure with CCM singing. In the same manner, Richard also worked with his students to sing “on the breath”, but did not explain how breathing is different for CCM.

Vibrato use should also not be addressed the same for CCM as it is in classical singing. The idea of vibrato was only discussed on a limited basis in the high school rehearsals that were observed. Richard was working with a vocal jazz, as was Tina, therefore may not have addressed vibrato use since a stylistic element of jazz is to use more vibrato in comparison to contemporary musical theater. Gail, however, did briefly speak with her students on vibrato use. Since the majority of her students study privately, she did not talk of other technical uses in CCM, but did address vibrato for the purposes of ensemble blend. Since Nate is proficient in both classical and CCM, he concentrates on the differences, using less vibrato with CCM singing. He also spoke in his interview of using less, or no, vibrato for ensemble singing so the voices will blend more effectively.

In classical technique and style, vibrato is initiated from the onset of the tone. In CCM styles, vibrato is generally used sparingly, and for effect depending on the specific color or style desired. Jazz solo singing will tend to use more vibrato throughout, whereas contemporary musical theater may only use vibrato on longer sustained notes and the ends of phrases. Vibrato use in CCM is all based on stylistic decisions. Therefore, understanding the historical aspects of each style becomes important when deciding how to use the vibrato.

Summary

In my observations of high school ensembles, it was difficult to tell exactly if the students were able to produce the CCM sound with proper technique. What I heard in their sound was typical to 'belt' and CCM styles, but without the students themselves being able to articulate what they were doing and feeling, it becomes difficult to assess their production past outward physical signs of potential tension which were not present. What was observed was mainly the use of mouth/vowel shapes to create a specific color that was desired. The use of imitation was also prevalent throughout the observations, in which many students, whether consciously aware or not, took on the sound of current popular artists.

It has become apparent that many current choral educators do not understand fully the differences between classical and CCM technique. Through the survey responses and interviews, many of the teachers either did not know, or had misconceptions about CCM singing, specifically with the use of breath. The teachers addressed the use of vibrato and vowel shapes in their students singing, but there was no evidence that anything further had been addressed as it pertains to the function of the vocal folds, the larynx, and the breath.

In my work with Kruse Ruck I have been able to put an understanding together of the voice in classical and CCM techniques that I previously did not have. As has been mentioned various times, many pedagogues will disagree on ideas of vocal techniques. However, the ideas presented by Kruse Ruck have been in line with vocal studies I have researched by other experienced pedagogues such as Scott McCoy, Robert Edwin, and Jo Estill.

Kruse Ruck has differentiated classical and CCM techniques for her students, and the results are telling. Her two students I observed and interviewed were knowledgeable in the function of the vocal mechanism for both classical and CCM production. Even though both students are at different stages in their vocal study, their use of the technique is apparent in the sound they produce, as well as their longevity in rehearsals.

CHAPTER SIX

Development of Vocal Exercises

In developing exercises to use with beginning students in the area of contemporary commercial music (CCM), there are many things to consider. The differences between CCM and classical technique need to be understood, as well as stylistic differences within the area of CCM. These vocal exercises focus on developing the ‘belt’ voice in both male and female voices, as well as other techniques such as ‘stiff’ vocal fold production, ‘legit’ (or classical) production, and ‘mix’ production (only in the female voice).

Based on the literature from expert pedagogues and my work with Kruse Ruck, the ‘belt’ voice will be defined for the purpose of vocal exercise development as: **A vocal color of predominantly thyroarytenoid muscle function – with gradual mixing of the cricothyroid muscle in the female – which can be carried up to the second passaggio point.**

This “color” is achieved by vocal fold function, wider vowel shapes, narrowing of the vocal tract space, less vibrato and air pressure, and possibly a higher laryngeal position. The following exercises were developed by suggestions from Tanya Kruse Ruck and Robert Edwin (1998), as well as taken from the lectures of Corinne Ness (2012).

Vocal Exercises

'Belt' voice – Male and Female

Exercise 1

The purpose of this exercise is to begin developing a kinesthetic awareness of the 'belt' voice in both the males and females so the singer can recognize the difference in the technical approach for 'belt' and how it "feels" in the voice. This should be done with consideration for the breath, vibrato, and vowel shapes.

Less air should be taken in as compared to classical singing, therefore creating less air pressure on the exhale. Practice only taking in the air needed and not pushing the air through the vocal folds, but rather allowing it to naturally occur as it would in speech. Since 'belt' singing has a longer closed phase of the vocal folds (the amount of time the vocal folds are actually touching), having extra air pressure can create a weak sound and the possibility to "over blow" the vocal folds.

Using the bright vowel [æ] and a wider vowel/mouth shape, as compared to tall classical vowels, will help create a brighter sound that is necessary for 'belt' singing. The wider mouth shape will also help create a narrower shape to the vocal tract, which assists in creating the brighter overtones. Also, a higher tongue placement can facilitate a slightly higher laryngeal position, which creates a shorter vocal tract. Concentrate on using limited vibrato to facilitate the style.

This exercise (see figure 6.1) should begin around A3 and go only to a B4/C5 for beginners (males sing octave basso), being sure to keep the vocal production in thyroarytenoid (TA) dominance through its entirety.

Figure 6.1 Exercise 1



Exercise 2

This exercise (Figure 6.2) is another way to help develop kinesthetic awareness, or the physiological feeling of the ‘belt’ voice for both male and female singers. As with the first exercise, concentrate on breath intake and use of less air pressure when singing. Also continue to use the wider mouth/vowel shapes to help create a narrow vocal tract and brighter overtones, as well as little to no vibrato.

The text of this exercise helps to facilitate the wider vowel shapes as well as the angry emotional context to produce a less than “pretty” sound, which is the aim. Emphasize the bright sound keeping the exercise in TA dominance throughout. As with exercise 1, begin on A3 ascending no higher than a B4/C5 in the beginning. Once the singer has begun developing kinesthetic awareness of the structure and use of the vocal tract, and the use of air within the ‘belt’ technique, the range can be gradually expanded.

Figure 6.2 Exercise 2

$\text{♩} = 90$

Hey - that's my ap-ple that you took Hey - that's my ap-ple that you took

Hey - that's my ap-ple that you took Hey - that's my ap-ple that you took

Hey - that's my ap-ple that you took Hey - that's my ap-ple that you took

Hey - that's my ap-ple that you took Hey - that's my ap-ple that you took

Thyroarytenoid Dominance – Female Only

Exercise 3

The purpose of this exercise is to continue developing awareness for the ‘belt’ voice and staying in a thyroarytenoid (TA) dominant function, which can be difficult for female singers. Since females generally make a natural switch into a thyroarytenoid and cricothyroid balance past their first passaggio point, it is important to work on staying in the TA dominant function past that point to create the ‘belt’ sound up to the second passaggio. This exercise (Figure 6.3) can be used to develop the ‘mix’ voice as well once past a B4/C5 to bridge the gap from full ‘belt’ to CT dominance. Whether using TA dominance, or a ‘mix’ in the upper range, be sure to keep the color and strength of the sound consistent. Again, a bright sound keeping the vowel/mouth shape in mind, as well as a higher tongue for a higher laryngeal position (shorter vocal tract) is necessary.

Always be mindful of breath usage, taking in only what is needed and not “pushing” the air through the vocal folds, but releasing it without unnecessary pressure.

The use of a brighter vowel – [a], as in apple – should help to shape the mouth and vocal tract to produce the brighter sound and overtones necessary. Rearticulate the top octave with a slight rest after the lower note as is notated, but be sure to keep the sound in the same “register”, or vocal fold function. When descending through the arpeggio, be sure to connect the sound to help keep the ‘belt’ in the same register as the upper octave. The idea is to create a sound without noticeable register shifts, even when moving into a ‘mixed’ production.

Figure 6.3 Exercise 3



‘Legit’ (Cricothyroid Dominance) – Female Only

The next two exercises are for the purpose of developing a ‘legit’ sound, which uses a cricothyroid (CT) dominant function in females. In CCM techniques, ‘legit’ is more of a classical sound as compared to the full ‘belt’. CT dominant production can be used in the upper register only, or throughout the majority of the range for females, depending on the style of the song.

Exercise 4

This exercise is designed to concentrate only on cricothyroid dominant production (head voice). Being able to access the head voice is important for the development of the whole vocal range, and can give more options for healthy vocal production. This specific exercise is not notated, but should concentrate on the range above the second passaggio point – approximately Eb/E5 for females.

Begin by making a sound similar to a “puppy dog whimper”. This should be in a higher register, with the mouth closed to start, and will probably have a lighter quality. When the sound is being produced with ease and lack of tension, repeat the “whine”, but with the mouth open on an [a] vowel. There should be a slight descending slide from the upper note. Because ‘legit’ is more classical in nature, the vowels should be less wide, creating a tall, open resonant sound, allowing the vibrato to be free and present from the onset of the tone.

Once this sound is being produced with a more open tone and lack of tension, begin descending slides, or sirens, keeping the vocal fold production consistent in the descent. Each time, try to extend the range slightly higher and slightly lower, always being conscious of keeping a free and released sound. Above the staff, females should release the jaw in an [a] vowel shape to negotiate the upper passaggio for the ‘legit’ style.

Exercise 5

Now that there is a better understanding of how to access the head voice, this next exercise is for the purpose of bringing the cricothyroid (CT) dominant production below the upper passaggio point for females.

Using an [u] vowel, begin above the upper passaggio – around F5 for females. Keeping the same concept as the “puppy dog whimper” and sirens, slide between the two notes using a CT dominant production (Figure 6.4). Descend by half steps until well below the upper passaggio, always remembering to keep the vocal production consistent. Be sure to keep taller vowels and more resonance space in the vocal tract, allowing the vibrato to be free and present from the onset when singing ‘legit’ style, as compared to the wide vowels and narrow vocal tract of ‘belt’ singing.

After the singer becomes more confident in her ability to use a ‘legit’ vocal quality below the upper passaggio, begin working with wider interval slides, such as major thirds (M3) and perfect fifths (P5), always descending and returning with a slide from the top note in the same vocal quality throughout.

Figure 6.4 Exercise 5

Figure 6.4 Exercise 5 is a musical score consisting of six staves. The tempo is marked as $\text{♩} = 76$. The score is written in treble clef and includes various key signatures (one sharp, two sharps, one flat, and two flats). The notes are primarily half notes and whole notes, with rests. The vowel 'u' is written below the notes, indicating the vocal sound to be produced. The score is divided into measures by double bar lines, and some measures contain multiple notes.

‘Legit’ (remaining in thyroarytenoid dominance) – Male only

Exercise 6

The purpose of this exercise is for the male singer to understand the stylistic and technical differences between ‘legit’ (or classical sound), and ‘belt’. This exercise should be taken through the upper passaggio so the student can negotiate the “shift” using vowel modification with a ‘legit’ sound. The main difference between a male and female production of the ‘legit’ sound in the lower/middle range is that males will use TA dominance until switching into falsetto, which then shifts to a CT dominant production. Males do not change their vocal fold production in the lower/middle range between ‘belt’

and ‘legit’ as females do, only their vowel/mouth shapes, vocal tract space, and laryngeal height are altered to produce the desired color.

Beginning with a ‘legit’ production, which still uses the same vocal fold function of TA dominance as ‘belt’, use an [i] vowel, concentrating on bringing the corners of the mouth in (Figure 6.5). Allow the vibrato to be free and present from the onset of the tone. Working through the upper passaggio, be sure to maintain a consistent vocal tract shape throughout, while modifying the vowel to negotiate the passaggio shift to keep the tone consistent as it ascends.

Once the production has a ‘legit’ sound, switch between the two styles, using [i] for ‘legit’ and [e] for ‘belt’. Observe the differences in mouth and vowel shapes, vocal tract space, and vibrato use between the two styles. Also, develop an awareness of the difference in air pressure needed.

Figure 6.5 Exercise 6

$\text{♩} = 76$

ni (ne) _____ ni (ne) _____ ni (ne) _____ ni (ne) _____

ni (ne) _____ ni (ne) _____ ni (ne) _____

ni (ne) _____ ni (ne) _____ ni (ne) _____

‘Mix’ voice (bridging the gap between TA and CT dominance) – Female Only

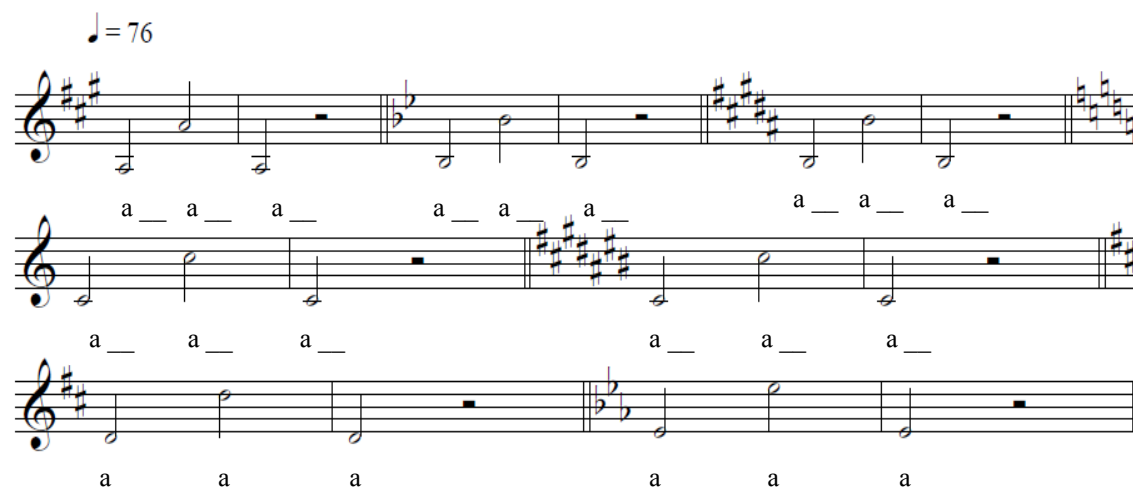
Exercise 7

The purpose of this next exercise is to develop a ‘mixed’ vocal production for the female singer. Since males sing in thyroarytenoid (TA) dominance through their entire range – until switching into falsetto – using a ‘mixed’ production is not necessary for them. Females should begin adding cricothyroid (CT) activity into their production around an A4, or slightly higher depending on the singer – the full TA dominance (or heavy ‘belt’) should be avoided higher than A4 so as to create a healthy transition into the higher range.

When beginning to use a ‘mixed’ production, the female singer should think of an increased “twangy” sound in the higher ‘belt’. The color and strength of the sound should be consistent with the lower, full TA dominant production. As with full ‘belt’, a brighter sound is necessary, always keeping in mind the use of less breath and wider vowel shapes. If the singer also uses a higher tongue position, the larynx will generally raise as well to create the shorter vocal tract.

In this exercise (Figure 6.6), the lower half note should be in full ‘belt’, or TA dominance. When singing the upper half note, the singer should switch into either a ‘mixed’ production, or depending on the range, cricothyroid (CT) dominance. Begin around A3 in TA dominance in the lower octave, moving up by half steps to a comfortable level for the lower to stay in TA dominance. As the range increases, the upper octave should go from a ‘mixed’ production to a CT dominant production. Again, be sure to use a consistent color and strength in production between the lower and upper notes.

Figure 6.6 Exercise 7



Exercise 8

This exercise for ‘mixed’ voice uses a top-down method of developing awareness of the production necessary to connect the vocal colors from one “register” to another with a smooth transition. Considering all the same conditions as previously stated – less breath, wider vowel/mouth shapes, higher tongue and larynx, narrower and shorter vocal tract, little to no vibrato – the singer should work to unify the sound from the ‘mix’ to the full ‘belt’ using a descending pattern.

Thinking of an increased “twang” in the upper sound, the singer should begin around D5/Eb5 using a TA/CT (thyroarytenoid/cricothyroid) balance, or ‘mix’ production (Figure 6.7). While descending, the amount of CT use should decrease allowing the TA function to increase as it approaches the full ‘belt’ range at, or below, A4. Keep the color and strength of the sound consistent as the line descends to facilitate a smooth transition between the two productions.

Figure 6.7 Exercise 8

The image shows two staves of musical notation for Exercise 8. The tempo is marked as 82. The first staff contains four measures of music, each starting with a different key signature (B-flat, A-flat, G-flat, F) and ending with a whole note. The second staff contains four measures of music, each starting with a different key signature (E-flat, D-flat, C, B) and ending with a whole note. The lyrics 'ne' are written below each measure on both staves.

Exercise 9

Similar to the previous exercise, this exercise is designed to facilitate the “register” shifts so they sound as seamless as possible. Concentrating on using a ‘mix’ production above A4 (and possibly above E4 for a more consistent transition), be sure to keep the bright color and strength from the full ‘belt’ into the ‘mixed’ sound.

Give consideration to specific vocal conditions – vowel/mouth shape, tongue and laryngeal height, vocal tract shape, vibrato and breath use – to be sure the sound is stylistically correct for CCM production. Using an alternating [na] and [ni] for this exercise will help with a brighter sound, and an increasing “twang” sound needed in the upper range.

This exercise (Figure 6.8) is written to begin on C4 going up to D5. As with all exercises in this collection, the range can be raised or lowered slightly depending on the singer. Always be aware of unhealthy vocal use, such as tension and strain, and stay within a comfortable range for all beginners, increasing the range only when the singer

understands and can apply all aspects of the technique (vocal fold function, breath and vibrato use, mouth/vowel shapes, tongue and laryngeal height, and vocal tract shape).

Figure 6.8 Exercise 9

Figure 6.8 Exercise 9 displays four staves of musical notation for a vocal exercise. The tempo is marked as $\text{♩} = 96$. Each staff contains two measures of music, separated by a double bar line, with the lyrics "na ni na ni na" written below the notes. The notation includes various musical symbols such as treble clefs, key signatures (one sharp, two sharps, and three sharps), and note values (quarter notes, eighth notes, and rests).

Stiff Fold Production – Male and Female

Exercise 10

The purpose of this exercise is to help students understand “stiff” vocal fold production. This technique, just as it suggests, is when the vocal folds are stiff and do not close completely, which creates a breathy sound. This should be done simply by thinking about a breathy sound, and then producing it.

In this exercise (Figure 6.9), students will sing “Happy Birthday”, trying to sound like Marilyn Monroe. Once the student feels comfortable using this vocal production, try

repeating the exercise only occasionally using a “stiff” fold production. This can be used to have students begin to switch between vocal productions (‘belt’, ‘mix’, ‘legit’, ‘stiff’ fold) and use their creativity to try new things.

Figure 6.9 Exercise 10

"Happy Birthday"

Happy birthday to you, happy birthday to you, happy birthday, happy birthday, happy birthday to you

Happy birthday to you, happy birthday to you, happy birthday, happy birthday, happy birthday to you

Happy birthday to you, happy birthday to you, happy birthday, happy birthday, happy birthday to you

Happy birthday to you, happy birthday to you, happy birthday, happy birthday, happy birthday to you

Additional Pedagogical Suggestions

Through research of available literature, as well as working with Kruse Ruck, there are other pedagogical suggestions that should be kept in mind when working with adolescent and beginning singers in the area of CCM, especially ‘belt’. According to Kruse Ruck, it is important to remember:

- To take in and use less breath than classical singing
- To use wider vowel and mouth shapes than classical singing
- To use a narrower vocal tract space than classical singing
- To use a higher tongue and higher larynx position than classical singing
- ‘Belt’ is an emotionally charged production with a lot of energy, *but not tension*
- To emphasize the brighter overtones

In lectures given by Corinne Ness (2011, 2012), she suggests trying the following with beginning students:

- Moan, complain, and lament text for speech-like quality
- Use nasalized vowels for brightness
- Sing “ng” in a three note pattern (1-2-3-2-1) and focus on the buzz of nasality, feeling of a higher larynx, and feeling of a high tongue
- Use an excited revival preacher voice (“Praise the Lord, Halleluiah!”)

Voice teacher Barbara Burdick (2005) suggests a lot of sustained, voiced consonants for a frontal resonance of the voice. She explains that it might be more beneficial to concentrate on producing a bright sound with young students as compared to laryngeal position and vocal tract shape since most young singers do not yet have the muscle development to control these.

Jeanette LoVetri (2003) says that the “head” and “chest” voice should be developed separately from a ‘belt’ technique, beginning with “head” voice to give more access to the higher range. She also stresses the importance of not confusing “chest” voice (or full TA production in women) with ‘belt’.

CHAPTER SEVEN

Implications for Practice

Each teacher of CCM techniques has unique approaches in their style and method of teaching. One thing that all of the vocal educators in this study agreed upon was the importance of vocal health. There are still misconceptions about CCM and ‘belt’ singing that need to be addressed in choral music programs and individual vocal instruction within schools. *Is belt singing a healthy vocal production? Or should classical singing and CCM singing have the same technical foundation?* These are two specific issues that need to be addressed in choral programs beginning at the university level in music education curriculum.

Many directors teach ‘belt’ or CCM singing using incorrect technique, therefore creating the potential for vocal damage in young singers. Other directors choose not to teach ‘belt’ or CCM at all because they feel it is unhealthy, therefore eliminating an opportunity for students to perform different styles of music in healthy, authentic ways.

Pedagogical issues addressing CCM techniques, need to become a more significant part of undergraduate programs to help prepare future teachers for all areas of choral repertoire. It is naïve for undergraduate programs to think that choral educators will only ever direct a traditional choir throughout their career. Continuing education opportunities need to be provided at all levels, to support teachers who are unaware of proper technique. Becoming aware of deficiencies in teaching pedagogy, and remediating the issue, should be a number one concern for all educators based on the health and welfare of our students.

All vocal educators, including those in choral settings, would benefit from additional research by voice scientists in the area of CCM pedagogy. Through my research of literature, there have been many debates on what CCM pedagogy is, and how to address it with a healthy technique. There is limited information on how to address CCM techniques with a developing singer, such as would be found in a high school choral ensemble. This leaves the potential for teachers to mislead their students with incorrect information. Experimental research into approaches for the individual voice within an ensemble setting would also strengthen choral-based practice.

The selective exercises developed for this study are only a beginning. All student vocalists should have an opportunity to sing music they enjoy, with healthy technique. Application of these exercises can help young singers to begin learning that technique, but more individual practice and knowledge needs to be gained before younger voices extend their range and repertoire. Choosing appropriate repertoire for individuals and ensembles is a factor that should not be overlooked when teaching CCM styles. As always, knowing students voices – range, timbre, resonance, and volume – is an important consideration for choosing appropriate CCM repertoire for a given ensemble.

Conclusions

The knowledge I have gained from this study will serve my teaching in many areas, not only with vocal pedagogy in CCM and classical styles, but with the overall knowledge of the body as it is used for singing. The confidence I have gained in my ability to teach more styles of music to students is invaluable. Also, the awareness of misconceptions about these techniques has made me more able to use the tools I have gained to help others in choral music education learn new ideas.

Interviewing and observing other directors with various levels of experience has been rewarding. Even though I did see great technical ideas that are unrelated to this study, I was able to realize just how much the knowledge of CCM pedagogy and techniques needs to be addressed for inservice as well as preservice teachers. Even if a teacher has experience of their own singing in CCM styles, this does not automatically qualify them for teaching it with understanding. As I have learned, there are many differences in technique and physiology between classical and CCM, and these differences cannot be overlooked. It is the responsibility of the teacher to educate themselves before they can truly educate a learner, especially on something as difficult as vocal pedagogy.

If current trends in choral education continue, the use of CCM ensembles will only grow. The popularity among students, administrations, and community members of these genres of choral music is a driving force behind this growth. The days of Bach and Beethoven being the cornerstone of a choral program are fading. Even though classical genres should always be a part of choral programs, as CCM repertoire grows, being able to provide a complete musical education, utilizing many genres and styles of music, is becoming more important. As educators, it is our responsibility to be sure we have all the necessary tools to provide that education for our students.

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Appendix A

Contemporary Commercial Music (CCM) Survey

Study Description: The purpose of this research study is to show differences and similarities in vocal pedagogy for ‘belt’ singing and classical singing. If you agree to participate, you will be asked to complete this survey that will take approximately 10 minutes to complete. The questions will ask about your experience and/or training in vocal techniques outside of classical pedagogy. The survey will also ask if you are willing to participate further with an interview and class observations.

Research Subject’s Consent to Participate in Research:

By entering this survey, you are indicating that you have read the consent form, you are age 18 or older and that you voluntarily agree to participate in this research study.

1. Do you believe ‘belt’ voice is different from ‘chest’ voice? Please explain:
2. Have you heard the term “contemporary commercial music” (or CCM)?
 - Yes
 - No
 - i. CCM is a term used by some vocal pedagogues to refer to non-classical music. This term encompasses jazz, pop, musical theater, blues, soul, country, folk, and rock styles.
3. Do you believe classical techniques are different from CCM techniques? Please explain:
4. Do you teach separate technique for your CCM (non-classical) ensembles? Please give a brief description:
5. Have you received formal training in CCM techniques?
 - Yes
 - No
 - i. If yes, what kind of instruction?
6. How long have you been in your current position?
 - 1-5 years
 - 6-10 years
 - More than 10 years

7. What CCM ensembles are offered as part of your high school choral program?
(circle all that apply)
 - Vocal Jazz Ensemble
 - Music Theater (Musicals)
 - Show Choir
 - Other:
8. Which group would you say is the “strength” of your program? Why?
9. Would you be willing to participate in an interview about your CCM ensembles and techniques?
 - Yes
 - No
 - Unsure
10. Would you be willing to allow me to observe you and your groups as it pertains to CCM techniques?
 - Yes
 - No
 - Unsure
 - i. If yes, please list the name of your school below:

Appendix B.1

Semi-structured Interview Questions for selected High School Choral Teachers

In my university program, I did not get background and training on techniques for contemporary commercial music or CCM so I am exploring what other choral directors know and teach in this area. Thank you for participating in this interview.

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.
2. How is CCM represented in your choral program? What types of ensembles would fit this category?
3. In your opinion, what is the 'belt' voice? How would you define it?
4. Do you teach 'belting' to your students and if so, have you been successful?
5. In your opinion, do males 'belt', or is it just a female technique?
6. Can you give some examples of good 'belt' techniques to use for beginning students?
7. As choral educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?

Appendix B.2

Interview Responses – Richard

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.
I have received training in jazz voice, both at Booker T. Washington HS for the Performing and Visual Arts in Dallas, and at Northwestern University.
2. How is CCM represented in your choral program? What types of ensembles would fit this category?
CCM is primarily represented in my program in the Vocal Jazz Ensemble, although I am the vocal director for the musical this year.
3. In your opinion, what is the ‘belt’ voice? How would you define it?
In my opinion, the belt voice is chest voice- (whether below or above the natural break in the female voice).
4. Do you teach ‘belting’ to your students and if so, have you been successful?
I do not teach belting to my students.
5. In your opinion, do males ‘belt’, or is it just a female technique?
If males take their chest voice all the way through the passaggio without any “mix”, I consider that belt as well.
6. Can you give some examples of good ‘belt’ techniques to use for beginning students?
Since I don’t believe it is healthy vocal production, I do not teach any techniques for belting.
7. As choral educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?
I strive to ensure that all sound is “on the breath” and “free from tension” regardless of the style of music being sung.

Appendix B.3

Interview Responses – James

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.

I was fortunate enough to be in a really good vocal jazz program in high school and for 5 years in college. Also in college, I was able to work for the Six Flags theme parks around the country where I got to work with vocal coaches who specialized in sounding like a pop singer.

2. How is CCM represented in your choral program? What types of ensembles would fit this category?

I do a wide variety of vocal jazz and contemporary pop with one of my elite audition only groups at the high school level.

3. In your opinion, what is the ‘belt’ voice? How would you define it?

This is always a tough question but when I think of belt singing I think of using a solo tone that cuts over the crowd with a mix of classical technique and pop sounds mixed together. I don’t think it necessarily will hurt your voice if you do this but it definitely takes some practice to hone the sound you want for that style.

4. Do you teach ‘belting’ to your students and if so, have you been successful?

In the choir setting....no. But when we are working on musicals, I will experiment with this tone with soloists if the show calls for it.

5. In your opinion, do males ‘belt’, or is it just a female technique?

Males and Females can do this.

6. Can you give some examples of good ‘belt’ techniques to use for beginning students? ***When doing warmups, don’t let your voice change over at your break...keep using your chestier tone even into the higher registers.***

7. As choral educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?

To me they are using a lot of the same techniques that we discuss with what is required to make a healthy tone on Mozart piece vs. a Phil Mattson song. A lot of it is trial and error and giving the students a voice in the process as well. At the high school level, they can tell when something works or not.

Appendix B.4

Interview Responses – Gail

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.

I have not received formal training in the area of CCM. My learning has been through the experience of the performance of various styles of music.

2. How is CCM represented in your choral program? What types of ensembles would fit this category?

At [my] High School we teach the students a variety of repertoire from madrigals to Broadway Medleys. The class that performs the most is The Broadway Company. In addition to the standard 3 school concerts (fall, winter, spring) they also have performed at [additional sites], and they produce the fall musical and spring music theater nights.

3. In your opinion, what is the ‘belt’ voice? How would you define it?

A belt voice is crystal clear with little vibrato. It is a common sound in musical theater repertoire.

4. Do you teach ‘belting’ to your students and if so, have you been successful?

Although I have taken voice lessons I do not give private lessons to my students. I consider myself more of a vocal coach. They learn vocal technique from private voice teachers.

5. In your opinion, do males ‘belt’, or is it just a female technique?

Don’t know about the belting voice to give an honest opinion.

6. Can you give some examples of good ‘belt’ techniques to use for beginning students?

Personally I don’t think it is right to teach a belt technique for a beginning student until they know how to access their head voice and chest voice.

7. As choral educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?

As a choral educator I ask questions of my students about how their voice and body feel when they are singing and encourage them to develop a vocal technique that encourages healthy singing.

1. Breath Support with an expanded ribcage that doesn’t drop.

2. *Accessing both chest and head voice for the female singer and learning to mix.*
3. *Teaching men to get comfortable and confident with their falsetto.*

Appendix B.5

Interview Responses – Tina

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.
There was no formal CCM training incorporated into my training at [my undergraduate program]. I've attended various WMEA Jazz Workshops, but they've focused more on repertoire, warm-ups, etc. rather than actual vocal technique. I've also attended a few a cappella workshops – both of these used students to demonstrate different techniques (i.e. sing softer/listen more when using microphones, importance of blend), which was beneficial, however each session was only one to two hours.
2. How is CCM represented in your choral program? What types of ensembles would fit this category?
Jazz Choir (curricular)
Madrigal Choir
Spring Musical
3. In your opinion, what is the 'belt' voice? How would you define it?
I view the belt voice as a tone created by projecting pitches found in the passaggio or head voice range with the volume and support of the chest voice.
4. Do you teach 'belting' to your students and if so, have you been successful?
I don't teach belting to my students, mostly because I myself do not feel comfortable "belting." For students who attempt this technique I focus more on breath support, vocal placement, and vocal health to ensure that they are using proper support and not harming their vocal cords, than teaching them the specificities related to belting.
5. In your opinion, do males 'belt', or is it just a female technique?
I think males and females can belt.
6. Can you give some examples of good 'belt' techniques to use for beginning students?

Having no previous training on 'belt' techniques I don't think I have a solid understanding of what constitutes good 'belt' singing.

7. As choral educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?
 - ***Watch for physical signs of strain (especially in neck and head placement)***
 - ***Listen for vocal signs of strain***
 - ***Emphasize good breathing techniques and placement***
 - ***Teaching proper classical tone – helping students alter sound after that has been developed***

Appendix B.6

Interview Responses – Tanya Kruse Ruck

1. Can you describe any formal, or informal training you have received in the area of CCM (contemporary commercial music)? This could be through your university program or through conventions or workshops since then.
I have attended several different workshops given by experts, including a PhD musical theatre teacher. Some of these were offered through our musical theatre program, some through the National Association of Teachers of Singing, and some through the Voice Foundation. I have done my own research on the subject as my formal training in pedagogy did not include CCM.
2. How is CCM represented in your choral/voice program? What types of ensembles would fit this category?
I don't teach choir, but my voice studio is comprised of about 30% musical theatre majors.
3. In your opinion, what is the 'belt' voice? How would you define it?
Belt is a vocal color that involves a particular set of conditions within the body that allow for a TA dominant function (not exclusively TA function) that emphasizes high overtones. A narrowing of the vocal tract must be achieved by widening the mouth shape, allowing a less dome-shaped palate, narrowing the AE sphincter, and sometimes lifting the larynx. This, in combination with the right amount of breath pressure, allows for "belt" to happen.
4. Do you teach 'belting' to your students and if so, have you been successful?

Yes and yes.

5. In your opinion, do males 'belt', or is it just a female technique?
Males absolutely belt. They are using TA dominant function, as all males do in the full voice, but when belting, they do not do any vowel modification (or "cover") in the upper passaggio. They also keep the mouth formation wider, sometimes they allow a higher laryngeal posture to happen, and often employ a smaller pharynx for belt.

6. Can you give some examples of good 'belt' techniques to use for beginning students?
It is NOT true that "a solid, healthy, classical technique is the foundation for everything else". Yes, there are principles of vocal health that are true in any genre, and it is true that there are vocal truths that should be taught in all genres (such as where the anatomy is located and how it all functions for singing), but singing in various styles requires different techniques. There are huge differences in technical approaches, such as how the breath works in classical and belt that must be addressed. I think that teaching vocal truths of all styles that will be used in the choral setting is the way to teach technique, belt or no belt.

7. As choral/voice educators, the vocal health of our students is very important. Can you describe ways that you ensure your students are producing a CCM sound in a healthy way?
As I said in question 6, students need to understand the different ways of using the voice in different styles in order to do it healthily. Students can hurt themselves if they are using poor technique in ANY genre. For example, if a student understands how the body functions for breathing, that is excellent. However, if they try to utilize a classical approach to breathing and breath management while singing in belt, they will over blow and hurt themselves. Helping them to understand that belt uses less breath and less breath pressure, and therefore requires less "tanking up" with air, is teaching vocal health. Teaching students to use a "classical technique" while approaching literature that is to be belted is irresponsible.

Appendix B.7

Transcribed Interview Responses – Rebecca

Can you just explain a little bit of your background? So your training and your history, your vocal history?

I have been singing since I was eleven. In shows and classes. I never really took any formal lessons until college however. Looking back it was so stupid, I should have. I

was mainly belt dominant. I never ever sang in my head voice. I was not able to access it at all. And then college I started taking lessons with a grad student my freshman year. And then my sophomore year when I became a first year Musial theater student is when everything went wrong where I spread myself too thin. I was belting things I shouldn't have been belting. And I ended getting a vocal polyp on one of my vocal cords. I went through therapy for a couple months and it still didn't reduce. Which is common with polyps. They usually have to be removed with surgery. And when I had the polyp I noticed a change in range. There was zero access to head voice. I always was in vocal fry. Belting was painful. And then I had surgery and then I had to take 6 months off of singing. And then I started again last January.

January 2013?

Yes. That's when I started to sing again. It's just been slowly building it up and figuring stuff out since then.

Through your training that you have been doing over the last year, what styles do you feel proficient in performing?

I feel proficient in... I'm trying to think of a good name of the styles. I guess kind of more modern musical theater because it's more belt dominant. There's nothing head voice really. Usually alto repertoire. Like kind of the styles comedic. More story telling songs that are kind of the same notes.

Do you have a lot of experience in ensemble singing?

No, I do not.

How about within a musical theater chorus?

Sometimes, the musicals I'm usually in are smaller musicals. Where there's not a lot of chorus type.

Within an ensemble singing, do you use any of these belt or CCM techniques? And then in what ways would you use them compared to singing solo?

I'll just compare it to choir that I was in last semester. The first time I took choir is when I messed up my voice with just belting head voice stuff. Now I kind of figured out to find a kind of mix between belt and head voice. In choir, like singing anything above the staff was always head voice but I would mainly try to belt everything by using a more thin fold production. Stiff fold sometimes, but mostly thin fold production. But still a belt.

Let's say you were in a vocal jazz ensemble. What difference would you make between singing solo jazz and singing in an ensemble?

In an ensemble I'd focus a lot on holding in my vibrato to try to blend in. Kind of matching the tones around me. So I guess that is how it would be different. If I was singing solo it would be more stylized in terms of the color I would use.

In your opinion, what is the belt voice? And how would you define it as a female?

I think a belt voice is just having a smaller area of resonance and use of singing voice. Whenever I think of head voice I think of all this space. But belt I think of as a laser piercing through a back wall. A concentrated sound. And for female, I'm not sure just singing with more power in the chest.

I know you've had an interesting development of your technique. Can you think back to when you started developing on your own, some things you didn't do quite right, and then also how you started to develop it in the correct, healthy way. Can you think back to some of what you did?

When I first started belting it just felt really easy. I can't really think of how I did it incorrectly. I guess it would just be overextending my range. Belting G's and A's. And I guess just holding a lot of tension instead of letting it naturally flip into the head because I was so scared of it that I just contained everything. And the mechanism, the set up. And learning to do it the correct way is a lot of trusting that I don't have to do anything to make the sound come out. I still struggle a lot with tension because I feel that belt, I associate belting with tension. That I have to hold it to make it a certain way. A lot of release, focusing on releasing and relaxing and trusting that the sound will come out. I don't have to do anything for it.

Can you possibly explain how you release? Can you physically explain?

That's a lot of the stuff I'm struggling with right now. Just kind of... I don't even know because it's an issue that I'm struggling with right now. But I know that I'm tense when my onsets aren't clean. When there is like a glottal onset. I'm not sure. I can't even feel the tension there but I know it's there.

As you've been developing this and developing your re-developing your belt in a healthy way, have you been able to extend your range back to what it was, but in a healthy way? What are some things that you notice now?

I noticed that after my surgery I had a major decrease in range. I use to be able to sing a C6 and now I'm around a G, G#. The belt is definitely not as high as it used to be, which I am fine with because belt shouldn't be used above an E5 in my opinion. It shouldn't be used above that. I noticed that since having the surgery there's a richer sound. When I use to belt before there was a lot of tension, so my jaw was tense, so it

was all very nasally, not a lot of colors. But now that I've finally been able to ease tension primarily in the jaw it sounds more older, more mature. And I can do more colors now.

Because you've been through this, and you understand how delicate the voice is, can you personally think of any examples that you could use with a beginning student? A high school aged student? What are some good vocalizes or exercises that you think would be really good to start to feel those sensations?

For belt, a lot of "nay", bright vowels. Make sure that you sing it like a little girl would because that way it helps you think more not a lot of breath pressure. Because belt actually needs less breath pressure. Thinking of a little girl singing "nay, nay, nay". Lots of "ay". That's how I usually warm up the belt. Just a lot of bright things. Make sure that it's emphasized to think in the mask instead of a darker sound. Forward. Maybe even start nasally and work back from there.

Now that you are really getting serious training, have you been working in the classical style as well?

We've been doing more, not classical repertoire, but a classical mix type sound.

Are you able to recognize some difference in technique between belt and classical? And what would those be?

I recognize a difference in technique when I listen to it. Over the past two weeks I've been kind of feeling stuck in a rut because I just can't get that last push to understanding classical. I don't really feel the difference yet. I know there should be a difference. I know the mechanics of what the difference should be, but for the life of me I just don't understand, after singing belt for so long, how there can be a completely different set up for singing. It's so frustrating because I know it shouldn't be this hard, but it's so hard.

As a choral educator, vocal health is really important to me. Obviously you understand the importance of that. Can you describe ways that you ensure you produce a healthy sound?

I know when I'm producing a healthy sound in that I don't feel any grabbing. I don't feel a push... I'm trying to think how to explain how that feels. I guess at the time of singing it doesn't hurt, but the second you stop singing, if you feel any pain at all it's wrong, and it should be taken seriously. "Oh, it will just feel better tomorrow", you shouldn't be doing it if it hurts.

Is there anything that you would add? Any information that you think is really important in any way about belt or CCM technique?

It's just trusting that... it's ok if you can't hit the notes in belting. You should try to. I just think a lot in my high school, and early college singing where I felt that it was the end of the world if I couldn't belt something. Emphasize that vocal health is more important than sounding like Idina Menzel.

A lot of people talk about singing in a mix voice – equal TA/CT function. Do you have any experience with mix?

The mix seems to come more easily than mainly head voice. I think, in my head, I see it as just opening up a little bit more. Thinking a little bit more space...it's so hard to explain. I think of belt and head voice in a see-saw balance. I'm not really sure how to explain it in words. Or even the sensation that it makes because I'm dealing with this problem that maybe I'm not using the correct technique. Head voice in the back, but the mouth shape of a belt.

So the mouth and the resonator space maybe stays belt...the vowel shape and all that stays wider?

But then the larynx drops more.

So the actually vocal mechanism is doing more of a head dominant function?

That's kind of what I feel. I'm not sure how to explain it.

Appendix B.8

Transcribed Interview Responses – Nate

Can you describe your training in CCM and what styles you feel proficient in performing?

My training has been more concentrated in the last two years. So school year of 2012-2013, 2013-14 I've had scattered professional/academic training in musical theater styles in my first two years of school, but it was more concentrated in my last two years.

Styles that I feel proficient singing, pretty much contemporary styles of musical theater that sits within my range, and most pop styles. Pop is such a wide range. There are some pop songs I would sing but I don't have as much formal training in that. It's more just sort of using the techniques I've learned with musical theater and incorporating them into a healthy pop sense.

Within most genres, depending on the sound that they want would depend on if you feel comfortable?

Yeah, I suppose. I probably wouldn't feel comfortable singing a rock song. Mostly because that's not the style that my voice is. But I could probably figure out how to sing it in a healthy way. That's why contemporary musical theater and pop, they are kind of in that same arena. It's an easier switch using those techniques, or it's an easier comparison.

With those techniques that you are talking about, would you use those techniques in ensemble singing? And in what ways?

It really depends. I would use parts of the technique, but I wouldn't use all the technique. Especially if you're singing in an ensemble and you're singing in a vocal jazz or a capella group, small ensemble form like that and you're singing in contemporary and pop styles. I would use those techniques absolutely if I was singing a solo. If I was singing background, I'd use straight tone, obviously that's the best fit for most of those. And I'd use all of the same vowel formations.

The same vowel formations as other non-classical music?

Yeah, the same similar. The wider formation, the brighter tones. More access to overtones all that kind of stuff that all sort of lends itself more to the ensemble singing especially in contemporary pop forms. I would use similar techniques but I wouldn't sing the same way I would if I did a solo.

Could you describe what you mean?

There will probably be less color shifts in a line. It would be more conformed to what everyone else is singing. When you're singing a solo you have the liberty to make more color changes and do more things with the line. All that kind of stuff. I probably wouldn't do that much if I was background.

Just to make sure I'm understanding, within an ensemble you'd still use the wider mouth shape. And with that the vowels. And you would still go more toward the straight, or intermittent vibrato, compared to more. And those are kind of the two main things?

Yeah, off the top of my head those are the two main things that I would consider. Those are the things that sort of lend themselves to the pop sound. In the end it's the same sort of techniques, I just wouldn't sing them in the same way as I would if I was singing a solo. And you can use those techniques to create a more consistent sound, especially with straight tone, it helps take care of a lot of intonation issues. Especially in pop tunes you don't want all these different vibratos moving at different times especially if you're dealing with younger singers.

So now we're going to talk more specifically about the belt voice. In your opinion what is the belt voice? How would you define it in general, and then how would you define it for you as a male?

The belt voice in general, it's that. I want to call it a wail, but most people would consider it that high, intense wail that... I don't know, it's a high, intense sound that you'd get in pretty much every contemporary style that really only occurs in a higher register. I don't think you hear belt in a middle/lower register. Not register, range.

So you consider belt to be in a higher range?

Belt is in a higher range. I wouldn't really belt in my lower ranger. It would be middle/high to high range is where I sort of see myself belting. So more specifically how I see belt, in terms of notes, my belt tends to happen probably starting around between C and D, because B is the top of my range. Up to like a high B.

So what physically, vocally, is happening with the belt?

There's less air pressure, and just less air in general and more focused straight tone. I don't want to say it's muscle, because it's not. How it feels is that it doesn't feel as open as say singing a C in a classical recipe. It feels a little bit more, not narrow, but it's not those big open spaces. It's a little more closed off especially since you're using less air. I don't know...it's less... it's work in a different sense than singing classical because it's trying to make sure you're using just enough air to create the sound and not trying to push. So for me, belt is that change from really pushing a lot of air through to really concentrating the air and focusing the sound more.

Think back to when you first started singing non-classical, or belt. When you began developing your belt, or CCM techniques, what were some of the things that you were doing?

Working on not modifying the vowels so much, especially as a baritone when you get up into the passaggio range, which for me like E, F range. There is a need in a classical recipe to modify our vowels so it's a little more narrow and easier to navigate through the passaggio. When belting, it's about keeping consistent with your air, not using vibrato. Thinking about Vibrato for me sort of gets in the way. The other things that were difficult was overall vowel formations because that's what really accesses those bright tones and a lot of those colors that you hear and that you want in that style. So after doing two years of classical and sort of getting those hammered into my technique, it was sort of like going back to what was a little bit more natural because my mouth sides wider and more lateral. I naturally have those wider vowels, so that was a little bit reverse engineering and just remembering that I don't need to be modifying, I don't need to be doing all of those things. Or if I do need to be modifying it's in a different way. It's not modifying in the way that it's narrow, taller

embouchure, all those kinds of things. It's a little bit wider, while keeping everything free and easy. But focusing on less air and more concentrated air.

Do you remember doing any of this stuff in high school, or was it very strictly classical style?

Oh no, I sang choral style.

I'm going to call it traditional choral style.

Yeah, I sang mostly traditional choral style, but then in my vocal jazz, a cappella group we sang pop and vocal jazz styles. I also sang in the musicals each year, so I did access those styles more so than the traditional choir style. I knew how to do the traditional choir style, at least in the limited training that I had in high school, which was mostly about tall, open vowels. All that kind of stuff. A lot of space. The musical theater, contemporary to pop styles came a little more naturally to me and I think it does for most high school singers especially now a days because that's what you're more exposed to. So you're familiar with the colors and it's a little bit easier to imitate. I suppose that's more of what I was doing. I was imitating colors instead of understanding how I was creating them.

Having said that, do you think you could give some examples of good techniques to use for beginning students. Like maybe some examples of some exercises, or just ideas?

The best one that I can think of that really gets those colors and sort of activates those mouth forms and all that stuff is Corinne Ness, and everyone is using it now, that "hey that's my apple that you took". It's really one of the best ones because it gives you as the teacher can really exaggerate it to really get the point across to your students. They may go as far as you, but mostly it's pulling them out of that choir sound, that traditional choir sound, and getting them more to that wider form without being too wide. Especially since the exercise doesn't really call for any really wide vowels. "Hey" a little bit, but it's a really good one to give an example of what that sound should be like and what those sensations really are.

Being a choral educator, vocal health is really important to me. The vocal health of my students is really important to me. Can you describe ways that you would ensure that you yourself are producing a healthy sound?

The big thing about belt is understanding and being able to differentiate between having a really focused and concentrated breath stream, and having a strained and held and muscled breath stream. Because I think that's a thing that gets a lot of people in trouble, especially if they don't have much understanding of the difference of the classical and contemporary side. Especially from high schoolers, they'll hear that really focused sound and they'll think it's because of grabbing. They may not think it's

because of grabbing, but they'll more inherently grab to keep that nice tight sound. So I think that's a big thing that gets a lot of singers in trouble, especially high schoolers. They hear that sound and they think "Alright, I'm going to sing really hard" and especially with the volume that's inherent with belting, because it's so loud and in your face, they think they should be pushing all this air out when it's really about a focused air stream and overall less air. And I think it's understanding that difference of being able to feel the difference between using an appropriate amount of air because it's different for everyone. Overall it is less than a traditional choir sense. So being able to differentiate between the choir air necessary and belt air that's necessary for each individual singer. And knowing when you're grabbing, when you're tensing and when you're pushing.

So, if you had a student and they understood that they were grabbing and tensing, what do you think you would say to them to get them to change that?

I know for myself when I start to grab it's because I'm trying to create the sound, I'm trying to make this artificial sound that I think I want to have. Or because mostly I am in my own head. So the thing that really works for me, and might work for other singers, is just distracting yourself from that concept. So maybe just having them walk around the room while they sing. Focus on something else. Get them out of this planted, stationary form where they have more opportunity to grab, and get them moving. Keep them loosened up and all that. It might help loosen that tension that they're creating within the tract.

Are there any other things that you can think of that you've experience in your learning process that maybe would help a beginning student?

That's an interesting question. I know I've had a lot of different things, but a lot of them have been personal vocal, not issues, but just road bumps. Because when I came into this school I had no foundation of really any technique. I had no private lessons of any kind. The whole idea of just understanding the mechanism. I think that's a big thing for beginning students is just understanding how intricate the mechanism is and understanding how just a few things can cause a lot of damage. That was something that really started to resonate with me. I looked back on the things I did and thought "If I kept doing that, that would have probably caused a lot of damage, or not gotten me to the point where I am now". So I think just awareness. Learning as much as you can especially if you're serious about singing. Just be more educated on your instrument and the technique and the mechanism itself. Because everyone is going to struggle with different issues. There are obvious inconsistencies with things that you need to work on when it comes to approaching those different styles and difference between a traditional choir sound and a contemporary small ensemble sound. But for an individual singer it's more just about understanding your own voice and

understanding the voice and the mechanism in general. And not trying to create someone else's sound, but create your own sound with similar colors.

So not trying to imitate necessarily?

Yeah, don't imitate because I remember having done that in high school. We did a song, it was a current pop song. I would listen to the original singer and I would try to imitate what they were doing and I couldn't sing it as well. Instead of just emulating the colors that they would create. I think that's the big difference in imitating what they're doing, they're technique and emulating what the colors they're trying to create. Because you can create a lot of the colors they're trying to do and it won't sound exactly the same, but you can get the same ideas across without getting yourself into trouble.

APPENDIX C

IRB Approval Letter



Jessica Rice
IRB Administrator
Institutional Review Board
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Department of University Safety & Assurances

New Study - Notice of IRB Exempt Status

Date: January 13, 2014

To: Sheila Feay-Shaw, PhD

Dept: Peck School of the Arts

Cc: Brittny Kempfer

IRB#: 14.210

Title: Contemporary commercial music pedagogy: Selective exercises for developing healthy technique in adolescent singers

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been granted Exempt Status under **Category 1 & 2** as governed by 45 CFR 46.101(b).

On **January 14, 2014**, this protocol was approved as exempt for a period of three years. IRB approval will expire on **January 13, 2017**. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the expiration date, please respond to the IRB's status request that will be sent by email approximately two weeks before the expiration date. If the study is closed or completed before the IRB expiration date, you may notify the IRB by sending an email to irbinfo@uwm.edu with the study number and the status so we can keep our study records accurate.

Any proposed changes to the protocol must be reviewed by the IRB before implementation, unless the change is specifically necessary to eliminate apparent immediate hazards to the subjects. The principal investigator is responsible for adhering to the policies and guidelines set forth by the UWM IRB, maintaining proper

documentation of study records and promptly reporting to the IRB any adverse events which require reporting. The principal investigator is also responsible for ensuring that all study staff receive appropriate training in the ethical guidelines of conducting human subjects research.

As Principal Investigator, it is your responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities which are independent of IRB review/approval (e.g., [FERPA](#), [Radiation Safety](#), [UWM Data Security](#), [UW System policy on Prizes, Awards and Gifts](#), state gambling laws, etc.). When conducting research at institutions outside of UWM, be sure to obtain permission and/or approval as required by their policies.

Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project

Respectfully,

A handwritten signature in cursive script, appearing to read "Jessica P. Rice", written in dark ink.

Jessica P. Rice

IRB Administrator