

BEAUTIFUL CHORAL TONE QUALITY REHEARSAL TECHNIQUES OF A  
SUCCESSFUL HIGH SCHOOL CHORAL DIRECTOR

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Doctor of Philosophy

by

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**APPROVAL PAGE**

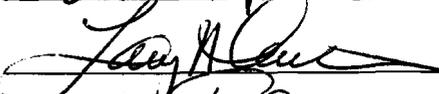
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**BEAUTIFUL CHORAL TONE QUALITY:  
REHEARSAL TECHNIQUES OF A SUCCESSFUL  
HIGH SCHOOL CHORAL DIRECTOR**

Presented by Bonnie L. Jenkins

A candidate for the degree of Doctor of Philosophy

And hereby certify that in their opinion it is worthy of acceptance.

  
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## Dedication

*This project is dedicated to my loving mother, Charlotte L. Mitchell*

She passed away one year ago and had so wanted to see me reach this goal. My mother not only supported and encouraged me but she inspired me to work hard to see my goals fulfilled.

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Dr. Wendy Sims, Dissertation Supervisor

Abstract

What is *beautiful choral tone quality*? What effective rehearsal techniques might be found if a successful high school choral director could be observed and interviewed? The primary goal of this study was to discover the strategy and technique used by a successful high school choral director to achieve a beautiful choral tone quality in his ensembles.

This case study revealed that the participant, Matt (pseudonym), had outlined five basic areas of technique that affect beautiful choral tone quality. These areas are posture, breath control, tone quality or resonance factors, vowels, and vocal freedom. This study also found that Matt developed a strategic plan and process in teaching these skills.

The data further revealed that his philosophy and method of teaching were contributors to his success. The participant had defined his “ideal” choral tone quality and his philosophy involved not only developing vocal excellence but developing the whole person. Matt stated that tone quality is affected by both.

The results of this study should help to enlighten choral directors, vocal instructors, and the music education field in general on how one can conduct successful choral rehearsals that will bring about a beautiful choral sound.

## CHAPTER 1

### Introduction, Purpose, and Definition

#### *Introduction and Purpose*

As a teacher of singing, choral director, and vocal performer I have been asked on numerous occasions to describe the best way to communicate good tone production. Having taught at the college level for a number of years I have worked to develop my own approach on how to achieve a good choral sound. Individual teachers have their particular method of communicating this important facet of singing. However, not often are teachers given the opportunity, nor do we have the time to observe other successful choral directors and their rehearsal techniques. This study provides this opportunity.

#### *Statement of Purpose*

The purpose of the study was to discover the strategy and technique used by a successful high school choral director to achieve a beautiful choral tone quality in his ensembles. The results of this study will help to enlighten choral directors on how one can conduct successful choral rehearsals that will bring about optimum vocal quality in the high school choral ensemble. The college music education major has taken voice lessons and choral conducting classes. He or she has also performed in choral ensembles. With this education, the young choral music teacher is expected to understand good vocal technique and be prepared to teach this in the choral setting. However, as an adjudicator, I have observed that many choral directors do not appear to have a system or technique and perhaps do not understand the basics of good vocal technique and its application to choral sound. If a “tried and true” technique could be discovered, defined, and articulated, it would inform, enhance, and advance the choral education field. The

question of the study was: what choral rehearsal techniques of the participant have been found effective in establishing a beautiful choral tone? It should be noted that in this study the term *beautiful choral tone quality* refers to the Western classical-based choral tradition of tone quality.

The participant, Matt, was chosen because of his success in achieving beautiful choral tone quality with young high school singers. His choirs have an unusually mature tone quality and yet the sound is healthy. The trained vocal ear would not classify the timbre as too *old* for the age of the students but rather as mature. The sound is rich and warm yet energetic and vibrant. Not only have his ensembles been selected to perform at national conferences, but they almost always receive the highest ratings at competitions. Matt is recognized as a leader in the choral music education field, and because of his great success with high school choral ensembles I chose him for this case study.

### *Definition and Historical Overview*

#### *Tone Quality*

Of the four basic properties of musical sound: pitch, amplitude, timbre, and duration, this study dealt solely with choral timbre or tone quality. Note that the term *tone quality* has several synonyms within the vocal profession. “Tone quality,” “timbre,” “color,” and “resonance” are often used interchangeably and will be used that way in this study.

According to *The New Harvard Dictionary of Music* (Randall, 1986) the definition of tone quality is:

**Tone color** [Fr. *timbre*, also Eng.; Ger. *Klangfarbe*; It. *timbro, colore*; Sp. *timbre, color*]. The character of a sound, as distinct from its pitch; hence, the quality of

sound that distinguishes one instrument from another. It is largely, though not exclusively, a function of the relative strengths of the harmonics (and sometimes non-harmonic frequencies) present in the sound. (p. 863)

What is beautiful tone quality? What is beautiful tone quality in the choral setting? Is the definition the same for both the solo and choral voice? Should choral tone quality and vocal technique be approached in a soloistic manner or by choral blend? These often asked questions will be addressed and discussed in Chapters 1, 2 and 4.

### *Beautiful Tone Quality*

To better understand today's tonal concepts, techniques, and subjective preferences, a brief historical overview of “beautiful tone quality” follows to help define the term. *Bel canto*, the early Italian term for “beautiful singing,” is generally applied to the style of singing from the middle of the 17<sup>th</sup> century to the beginning of the 19<sup>th</sup> century. This was the time of the vocal writings of Rossini, Bellini, Donizetti, and their contemporaries (Miller, 1986). The style emphasized a light lyrical quality rather than a heavy more declamatory style where the voice was projected with dramatic force. The term *bel canto* referred not only to beautiful tone quality, but the singer also had to be able to show flexibility for vocal ornamentation (Randel, 1986). However, “beautiful singing” or “*bel canto*” is not only a style and technique of the nineteenth century, it is the desire of singers and choral directors today. According to Hoffman (1997),

The term *bel canto* has been around for a very long time. It was originally applied to the vocal technique of the *castrati*, the great stars of Italian opera in the 1600s and 1700s. It’s interesting, though, that for the last three hundred years, virtually every generation has lamented that the previous generation had the secret of the

“true” bel canto style and that the current style was now corrupted, the secret lost. It does take work to maintain the tradition--singers must learn to sing and composers must learn to write for the voice--but although times, tastes and styles change, the truth is that bel canto has survived every generation in one way or another and is still perfectly alive and well today. Singers like Joan Sutherland, Marilyn Horne, Cecilia Bartoli, and Thomas Hampson, for example, would be standouts in any era. (p. 27)

Much discussion surrounds the technique of the early *bel canto* style of singing and its implication and influence on today’s approach of beautiful singing. Many contemporary voice teachers claim that they adhere to the early principles of the *bel canto* style. Why would contemporary teachers desire to carry on this vocal tradition?

There were four basic pedagogical skills that *bel canto* teachers required of their students: a) an insistence on pure vowels, b) phrasing that required long, smooth, unbroken lines, c) a free, agile voice that allowed for fioritura or ornamental passages that were improvised or written out, and d) the mastery of recitative (Whitlock, 1967). Of these four areas the first three are still part of today's pedagogical requirements. The fourth area of recitative is not of great importance today since recitative is not a contemporary stylistic treatment. Rather, the fourth point, in my opinion, could be replaced with good breath management because of contemporary stylistic demands. Much of today’s music requires good use of pianissimo and forte within the same work and even within a single phrase. In order to have a good command of dynamic changes the singer must be able to support the voice well through these changes so that the vocal instrument is free of tension. Breath support is the foundation for these dynamic changes.

However, what should we adhere to from the early “Golden Age of *bel canto*”? Has vocal technique and desired tone quality changed over the years? What is today’s definition of beautiful tone quality? Is this subjective term definable? Can the objective aspects be found and defined?

In general, most contemporary vocal teachers/pedagogues agree that the singing voice must be free, have clarity, and must have a balanced resonance with both ringing and velvety qualities as is discussed in the literature review in Chapter 2. Breath management and tone production are believed to be interrelated, as one cannot exist without the other. This is also discussed in the literature review in Chapter 2. It is generally understood by vocal pedagogues that in order for the singing voice to function well and achieve its optimum potential with regard to vocal beauty the singer must: a) have good posture which facilitates good breath support, b) have good breath support connected to tonal resonance, c) demonstrate clarity of words/text achieved with pure vowels and clean articulation, d) sing with clarity of tone through balanced resonance, e) be free from muscular tension, f) unify the registers so that the vocal line is unbroken between the first register transition or “*primo passaggio*” and the second register transition or “*secondo passaggio*,” and g) be able to communicate the text or demonstrate artistry through the use of varied tonal colors and dynamics.

This list of vocal pedagogical goals is the objective side of good vocal technique which allows the singer to establish a beautiful tone quality. However, the subjective side of “what is beautiful” always has been and always will be subjective. Some listeners prefer a warmer quality in the voice while others want to hear a clear, ringing, bright color. Listeners and teachers might prefer the dramatic over the lyrical quality or vice

versa. Most agree, however, that within the blurred periphery of “what is beautiful” remains a core understanding of good breath support, balanced resonance, clean articulation, pure vowels, and freedom in the vocal musculature. All singers must strive for a tone that is produced well. A well-produced tone will not only help the solo singer reach his or her potential but will allow the singer to be vocally healthy for a lifetime. Both of the above lists, the *bel canto* and the contemporary, are similar with the exclusion of stylistic requirements. Therefore, it can be deduced that beautiful singing has been, and is currently defined simply as, free, resonant, and communicative.

#### *Beautiful “Choral” Tone Quality*

The human ear generally desires to hear a solo voice that is both warm and ringing. If a voice is too bright, it is strident to the listener. If it is too dark and heavy in tone quality, the listener will often say that it is too weighted and cumbersome. These kinds of comments and critiques are often heard in the hallways of concert halls at the conclusion of recitals. The term used by contemporary voice teachers for a tone quality that is both warm and ringing is “balanced resonance” as is discussed in Chapter 2. The listener also desires to understand the text and expects the singer to be able to freely communicate the message. However, are these characteristics desired in the choral setting? What is the definition of “beautiful *choral* tone quality”?

This definition is as subjective in the choral area as it is in solo singing. Again, the listener has a preference. It might be for a more dramatic, rich quality, or it might be for a more lyrical, bright quality. Whatever the preference, the choral ensemble is the result of combining many solo timbres into one choral sound. How the director approaches this amalgamation to create one beautiful choral tone quality is the focus of this study.

One further element must be added to the argument, that of a singer's natural acoustical properties. Not only does technique affect the overall quality of a singer's voice but one's natural physiological and acoustical properties are inherent. A teacher does not create a lyric soprano or a dramatic soprano. Instead, a teacher takes the singer's natural tendencies of resonance and allows those natural tendencies to be developed and enhanced through proper vocal technique. This proper technique enhances one's natural gifting. With this understanding of the need for good vocal technique combined with natural tone quality, we recognize that a good singer is an individual singer unlike anyone else. No two voices are alike. How then can we come to a definition of *beautiful choral tone quality* when the ensemble consists of singers with many and varied tone qualities? Can these varied tone qualities come together to form one sound, one quality to be defined? Is there an *ideal* choral sound? As will be discussed in Chapter 2 each choral director must define his or her preferred choral tone quality. Without a personal *ideal* the director is unable to develop his or her technique. Whatever one's *ideal* definition is, whether warm and dark, bright and ringing, or the combination of the two, *beautiful "choral" tone quality* has the same vocal technique requirements as *beautiful "solo" tone quality*. It must be free, resonant, and communicative. The next question follows: how do we achieve voices that are free, resonant, and communicative? To state the main question of this study another way: what choral vocal technique will bring about the desired goal?

#### *Participant's Definition of Beautiful "Choral" Tone Quality*

Matt's definition of *ideal* choral tone quality has evolved through a process of numerous teaching experiences and the influence of other choral directors. He said,

In my undergraduate program the idea or concept of knowing what your ideal

choral tone quality was introduced to me. I was taught that to be an effective choral director you had to have an idea of what it is and I thought that was a great idea. But, I didn't know what mine was. As a result, I think that is one of the reasons that I had choirs with different success rates, choirs with different sounds as a beginning choral director. I didn't have an idea and I didn't know how to land on an ideal choral sound. I knew a lot of things like what makes a healthy sound and what's a productive sound. I knew if I liked a choir or not but I never really got all of those things together for what really is an ideal choral sound. I received a CD in the mail, *The Luboff Legacy*, performed by the University of Mississippi Concert Singers, directed by Jerry Jordan. For the first time in my life, I thought, that is for me, the *ideal* choral sound. That's what really started the ball rolling with me to know exactly what I wanted. What I heard in the sound was that singers were allowed to sing. It wasn't that they were out of control but it was just a freedom of expression and there was something extra in the sound beyond a good, healthy vocal production. It was sort of emotional. It was an inspired sound. There was a lot of energy in it. There was a lot of conviction in it. There was a lot of expression. You could just reach out and grab their sound. It was really thrilling. Everyone was just free to sing. You could hear that and they were released. They had a common idea about what the piece was about. They had a common idea about articulation and ensemble yet they weren't carbon copy voices. There was something extra in the sound. So, I listened to it. I tried to figure out what they were doing. I tried to figure out how Jerry Jordan made that happen. I played examples from the CD for my ensembles. We started doing

some music off the CD. That can bring up a scary area in that you don't want to imitate, 'Here's the sound, let's sing like this.' Rather, let's try to figure out what they're doing vocally and make that happen. There's something about synergy but there's also something about not being an exact cookie-cutter, carbon copy. I like to think that I send my singers out with their own voice still. Not, 'Oh Mr. M. said this was how I had to sound' I don't think I teach that direction but I hear choirs that are like that. I don't think that it's very healthy psychologically or good for the ensemble with regard to vocal production.

Matt now realized that the sound he heard on the recording was simply *free*, unencumbered, a freedom of production. He taught that the throat should be open, the larynx relaxed in what he calls a "droopy" position, and the soft palate raised so that the sound is lofted into the head area for head resonance. He stated that there must be a good mix of head and chest resonance. One further important technical aspect is that of the breath flow. He said, "What really makes it incredible, after you have the basic free production, is to have an airflow that really keeps the breath moving, keeps the pitch right on, and keeps the sound alive. I tell my singers, 'move the breath,' 'move the breath.'"

Matt's definition and approach was clear and deliberate. He strove for a vocal sound, both solo and choral, that was free, open, and supported. His technique had been developed through a process of time, observation, experimentation, and basic knowledge of good vocal production.

### *Limitations*

The main limitation of this study dealt with time. It was imperative that I observe the final product, and thus I made the decision to use the last month of school as the main

data gathering time with regard to observing the choral ensembles in person and by video tape. Ideally, I should have observed the choral ensembles from the first day of school in the fall to the last day of school in the spring. Unfortunately, this was impossible.

Therefore, much of the data which connected the beginning to the end, were gathered in the interviews with Matt. Because he began teaching vocal technique on the first day of school with the 9<sup>th</sup> Grade Choir and because this is foundational, I asked Matt to provide a time line of the first two weeks of school. This time line for the 9<sup>th</sup> Grade Choir is provided in Chapter 4. For this choir Matt had laid the foundation of vocal technique in those first two weeks. During this time the students did not sing any vocal literature. Rather, it was a vocal skill building time, what I call a *vocal boot camp*, with much repetition. With regard to the Chamber Choir the majority of the singers had been through these first two weeks of intense study in previous years and they began singing literature immediately.

A second limitation of the study is the fact that the study dealt with a subjective issue. Listeners develop appreciation and preferences for certain tone qualities. This can be seen in one's preference for a particular instrument. Some find the tone quality of the clarinet to be rich and resonant while others dislike the sound and classify it as harsh and "honky" in quality. These could be two listeners listening to the same performance but with totally different analyses and preferences. With this realization that tone quality preference is subjective the decision to use Matt and his choirs as a defining factor for the term *beautiful choral tone quality* remains subjective.

I would like to point out that I believe there is, however, a third preference to which I personally ascribe. The third preference is that of a balance in which the tones are

warm and rich and at the same time are ringing and bright. This is the definition of the Italian term *chiaroscuro* tone: “the dark-light” tone which characterizes well-balanced resonance in the singing voice (Miller, 1986, p. 311). However, there is no way to convince the listener and reader that he or she should like one better than the other. Therefore, although the objective side of good vocal technique which provides for good tonal quality is provided and discussed in this study, the subjective side of “what is beautiful” will remain subjective.

### *Conclusion*

This research project has attempted to capture a plan and process by which all vocal and choral teachers can find answers to help them achieve the best tone quality for their singers and ensembles. Other case studies can and should be done to provide a larger spectrum of techniques and methods of teaching. However, Matt has provided one example that may be utilized to bring vocal growth for both the teacher and student.

## CHAPTER 2

### Literature Review

#### *Vocal Technique: Views and Findings of Contemporary Vocal Pedagogues*

To facilitate beautiful singing vocal pedagogues teach that there is a required vocal technique for singers. The following discussion deals with the vocal technique areas of posture, breathing, tone quality, pure/natural vowels, and vocal freedom. Good vocal technique requires time, study, and practice. Without all of the components in place optimum vocal beauty cannot be achieved.

Today, the objective side of *what is beautiful tone quality* is reinforced and reaffirmed scientifically. The “artistic” is supported by the “scientific.” Technology helps us understand the voice in terms of physiological and acoustical properties. Scientific research is able to clarify misconceptions that may have caused confusion in the voice studio and choral rehearsal room. Appelman (1967), a recognized vocal pedagogue of the twentieth century, stated that “vocal pedagogy by necessity is both aesthetic and scientific; its scientific entity is distilled from the pure sciences of mathematics, acoustics, linguistics, and anatomy, so that it may offer immediate utility to an uninformed laity” (p. 3). When the teacher is able to unite personal taste (subjective), with accurate pedagogical information (objective), the student should not be misguided. However, the contemporary choral director may not have had adequate training in the objective side of vocal technique before entering the teaching profession. The undergraduate music student takes private voice lessons where basic vocal technique has been presented. They also have choral experience singing in various vocal ensembles. The choral director has given instruction and direction with regard to desired vocal tone

quality, but the solo and choral ideas may not have been formulated into a cohesive understanding for the student of what is desired and beautiful. The expectation is for the college graduate to assimilate all areas of vocal production and step out into the world of choral directing ready to produce healthy, vibrant singers. If the college student has not yet synthesized the curricula, experience, and ideas into a philosophy and teaching style, perhaps a model would help launch the young choral director into the choral conducting field. However, where is the model for these young choral directors? Can the technique of achieving beautiful choral singing be put in an outline or defined so that the young graduate can take their knowledge and effectively teach in the beginning years of their profession? Is there a technique that can be defined? This study will, hopefully, provide some answers.

The following sections deal with the areas of vocal technique that are generally accepted as necessary in establishing good tone quality. Prominent contemporary vocal pedagogues are cited regarding the technique factors. All prospective and practicing choral directors must understand the basics of good vocal technique. This is the objective side of *beautiful tone quality*. It should be noted that the research in this study was primarily authority based because empirical research studies related to choral tone quality are not prevalent. Much of today's scientific vocal research deals with vocal abuse and misuse rather than the positive aspects of tone production.

#### *Posture and Breath Control*

A highly recognized contemporary researcher in vocal pedagogy, a vocal performer, and teacher, Miller (1986), has systematically addressed the issues of good vocal technique and beautiful tone. He combined current research with historical

pedagogy in his book, *The Structure of Singing*. Miller adhered to the international Italianate school's breathing technique, *appoggio*, or the "system for combining and balancing muscles and organs of the trunk and neck, controlling their relationships to the supraglottal resonators, so that no exaggerated function of any one of them upset the whole" (Miller, 1986, p. 23). This concept requires that the singing instrument function as a whole, as one entity. When one area of the singing instrument is either out of balance with regard to resonance or exaggerated muscular action in a particular area then the whole will not function in a balanced fashion. There will generally be tension in the muscles to compensate for the imbalance. Thus, the *appoggio* technique, according to Miller (1986), provides the balance. First, it requires good posture to enhance deep, diaphragmatic-intercostal breathing.

The sternum must initially find a moderately high position; this position is then retained throughout the inspiration-expiration cycle. Shoulders are relaxed, but the sternum never slumps. Because the ribs are attached to the sternum, sternal posture in part determines diaphragmatic position. If the sternum lowers, the ribs cannot maintain an expanded position, and the diaphragm must ascend more rapidly. (p. 24)

Miller (1986, p. 25) further stated that the expansion of the breathing area is felt not only in the frontal diaphragmatic area (thoracic, epigastric, and umbilical) but also in the lateral-posterior areas. As well, he cautioned against imbalance or tension in this area and stated that,

No initial sensation of grabbing or holding the breath should be associated with singing. When a singer feels extreme muscle resistance to inhalation, in either

pectoral or abdominal regions, a “full” or “deep” breath is not the cause; unnecessary muscle antagonism is taking place. In primitive valvular function, glottal closure is the normal response to tension in the costal and abdominal regions. (p. 26)

In Miller’s analysis of unnecessary tension upon inhalation, he stated that glottal closure can be the result. Glottal closure is another term for glottal attack when the vocal cords close before a tone is produced and the resultant sound is a hard attack or glottal attack. A coordinated attack of the vocal cords beginning to vibrate at the moment that the breath is released is the desired attack or onset that singers should use.

Miller (1986) also stated that the early Italian term, *appoggio*, not only refers to posture for good breath support but it also includes resonance factors. It is “the establishment of dynamic balance between the inspiratory, phonatory, and resonatory systems in singing” (p. 311).

The concept of low diaphragmatic breathing is accepted by most vocal teachers and coaches but has often been misunderstood and incorrectly taught to students. McCoy (2004) cautioned teachers about the misuse of the phrase *breathe from your diaphragm*. This is heard in choral rehearsal rooms on a daily basis. It is physically impossible to breathe from the diaphragm as a person cannot control the diaphragm directly. Rather, it is indirectly controlled with the lower abdominal muscles. This misconception is due, in part, to the misunderstanding of the location and size of the diaphragm. It is a dome-shaped muscle separating the heart and lungs from the lower abdominal area. Teachers will ask their students to place their hands on their stomachs. Upon inhalation the

abdominal area moves outward. The teacher and student then assume that this is the diaphragm. McCoy (2004) clarified the diaphragm's position and size,

The most important muscle of inhalation is the *diaphragm*. This is the second largest muscle in the human body in most people, only the *gluteus maximus* muscles are larger (these are the muscles on which you probably are sitting as you read this passage). Shaped like a dome with two small humps, the diaphragm bisects the body, separating the contents of the thorax from the abdomen. In this location, it serves as the floor to the thorax. Once again with the help of the pleurae, motion of the diaphragm is transferred directly to the lungs. On contraction, the diaphragm lowers and becomes somewhat flatter. It therefore increases the volume capacity of the thorax (and therefore, lungs) much like withdrawing the plunger of a syringe. (p. 87)

Johnson (1997) described the breathing mechanism for singing in terms that simplify its definition and function. He also discussed the misconception of *breathing from the diaphragm*.

Most singers have been instructed frequently to “breathe from the diaphragm.” Many amateur choir members, however, have some difficulty deciding how one breathes from an elusive, non-feeling part of the body called a diaphragm. Since the diaphragm technically is not an active working muscle, its contraction and expansion must be controlled by abdominal muscles. Basically, while singing, the chest is held high, the shoulders are relaxed, and the abdominal muscles pull the dome of the diaphragm down and outward to allow air to enter the lungs. Contraction of these muscles in a controlled manner pushes the air out of the

lungs. These same muscles control energy for starting and stopping the tone, for accents, and for breath management. One should begin, therefore, the training of the breathing apparatus by developing control of the abdominal muscles. (p. 31)

With the correct understanding of the physiology of the breathing area the vocal teacher and choral director must help the singer to develop the correct coordination for inhalation and exhalation during the process of singing. Proper breathing and breath support are foundational.

The main components for proper breath control are good posture with the sternum held moderately high and shoulders relaxed, diaphragmatic-intercostal breathing, and the *appoggio* technique of a balance of breathing, phonation, and resonance. Every aspect of singing is built upon balance, balance of muscle activity and connection of breath support to resonance.

#### *Tone Quality: Placement, Resonance, and Color*

Once a singer understands the importance of good breath support and muscle coordination he or she is ready to apply this coordination to resonance factors. As stated earlier, resonance, tone quality, tone color, and timbre are often used interchangeably or synonymously. However, in this study tone quality will be used predominantly. Tone quality is the character of the sound that distinguishes one voice from another. It is determined by physical, acoustical, and resonance factors. The quality of one's speaking and singing voice is individual and unique. We have all had the experience of hearing a person speak from a location where they cannot be seen, and yet we are able to identify that person by simply recognizing his or her voice. No two voices are alike. This individuality is a positive factor in singing; no voice teacher wants to produce "cookie-

cutter” voices. Everyone’s voice should retain its own unique characteristics, its individuality of tone quality. For the singer, however, within this individuality lies a commonality. This commonality is that all singers must find a balance between a bright and dark quality. Without this balance of bright and dark (warm) tone quality the tone will either be too strident or too weighted. Either exaggeration is not only difficult on the singer because of muscle imbalance, it is also difficult on the listener. Even the untrained listener can hear the imbalance and will be affected by the exaggerated sound. This idea is also supported by Miller’s (1986) explanation of the early Italian term *appoggio*, which has already been discussed, where muscular balance creates the right sensation for acoustic balance or resonance balance. Vennard (1967) stated that, “It should be the objective of every singer to get as much brilliance as possible and as much depth as possible in the tone at the same time. They are the hemispheres of production” (pp. 119-120). Vennard’s statement supports the idea that both bright and dark must be present in all tones. The Italian term is *chiaroscuro* tone, characterizing dark-light tone quality. The importance of balanced resonance has been recognized for centuries and was substantiated by Miller’s explanations.

Does the untrained voice naturally have this balanced resonance? Robison (2001) attempted to answer this question and introduced a new interactivity paradigm of physics to that of beautiful singing. Robison used spectrography to show the variances in the acoustical properties of timbre between a trained and an untrained baritone singer who sang the same musical excerpt. The spectrograph displayed the various overtones that resulted from different pitches, different vowels, and the impact of the difference in the vibrato of the two singers. Assuming that the trained singer possessed a more beautiful

tone quality Robison (2001, pp. 8-9) compared the two singers and the difference in resonance factors. He concluded that the acoustics of beautiful singing involve: a) a smooth signal, particularly that of even, continuous vibrato, b) a balanced signal, a balance of both bright and dark qualities (*chiaroscuro*), c) a clean signal, pitches (frequencies) that are mathematically tuned with the natural harmonic overtones, d) a projected signal, a high percentage of overtone frequencies that lie in the higher pitch range that are easily amplified and exciting to hear, e) a consistent signal, of the four qualities already mentioned, as vowels, pitches, range, and dynamics change, and f) a comprehensible signal, that allows for the consonants to come through naturally and understandably. The desire of all singers is to produce the most beautiful tone acoustically possible for their instrument. This study by Robison reaffirms the concept that all components of sound must be balanced and finely tuned to produce optimum tone quality.

Titze (cited in Robison, 2001), a voice scientist, with colleagues at the University of Iowa and the Voice Center in Denver, used computer technology to try and decode Pavarotti's voice and what was happening in his technique and body as he sings. They logged into a computer all of the known mathematical variables representing the full range of oscillating factors regarding the beautiful sound that Pavarotti and other known beautiful singers produce. Titze called the computerized acoustical results "Pavarobotti". The "Pavarobotti" rendition of selected vocal works sounds much like Pavarotti. Titze's hypothesis was explained by Robison as "interactivity between tracheal resonances and the bottom flesh of the vibrating vocal folds..." (2001, p.10). According to Robison and his explanation of "Pavarobotti," in the past the physics of singing has been viewed

linearly and not interactively. An analogy he used in describing the linear view was that of a “honking” horn. As one squeezes the bulb (actuator) at the bottom of the horn, sound travels through the tube and out the bell of the horn. In the interactive paradigm it is like that of “shaking a bush.” The hand shakes the bush (actuator or breath). In turn, the hand becomes part of the bush that is shaken and everything is interrelated in an interactive system. This interactivity is a law of physics. Interactivity in beautiful singing means that: a) the vocal onset (attack) is critical to set in motion all oscillating factors; b) the legato line is critical with the interactivity of the onset to the vocal line of singing from note to note through the pitch and vowel. Articulation changes must be connected and smooth; c) initial interaction of the “extremities” is critical, from the floor of the diaphragm to the articulators or lips and tongue; d) there must be continuous interactivity of the major resonance cavities from tracheal resonance to pharyngeal resonance (Robison, 2001, pp. 10-11). This final point of tracheal resonance is emphasized by Robison as a key component in beautiful singing. He stated that the upper register can be enhanced by more use of tracheal resonance. In my experience as a student and performer, I have observed that many voice teachers and choral directors have focused on pharyngeal resonance, resonance in the pharynx above the vocal folds. With an emphasis on resonance from below the vocal cords in the trachea and up through the pharynx and head cavities, one achieves the most open, balanced, and beautiful resonance, according to Robison.

As already mentioned, Miller (1986), a proponent of balanced resonance, taught that, “By skillfully combining the resonating cavities, vocal timbre can be controlled for the physiology of the vocal tract resonator system” ( pp. 48-49). Miller considered the

pharynx, the mouth, and at times the nose as the vocal tract resonator. He dealt with balanced resonance through understanding not only “gola aperta” or open throat, but also well-balanced vowels and resonance balancing through nasal and non-nasal consonants. Miller also explained that by unifying the registers the voice is able to move freely up and down the scale allowing for resonance balancing.

Further clarification of the term *balanced resonance*, which is used frequently in the contemporary voice studio, includes the resonance areas of the nasopharynx, oropharynx, and laryngopharynx. This is the full spectrum of the vocal tract. Higher pitches are felt more in the nasopharynx area while lower pitches are felt predominantly in the laryngopharynx area. With balanced resonance, however, head resonance or resonance in the nasopharynx is always present. There are many varied ways that a teacher communicates the importance of head resonance and how it is accomplished. However, vocal pedagogues often help students find the correct sensation through that of the raised soft palate. Haasemann and Jordan (1991) stated,

The soft palate, the portion of the rear of the roof of the mouth that rises when one yawns, sighs, snores, etc., is a major determinant of vocal resonance and general tone quality. It is helpful to provide an image to the choir that the soft palate is able to send the sound produced by the vocal cords into facial bone structure or mask. That “placement” of the sound through the lifting or lowering of the soft palate is a major controlling factor in the resonance and color or vocal tone. (p. 58)

Because one cannot directly lift the soft palate the idea of the raised soft palate has been questioned by some voice teachers, thus many never address it. Others have

found ways to communicate the open throat idea with the use of a raised soft palate through imagery. As well, the term “placement” has been considered a negative term by some vocal teachers. I have heard vocal pedagogues express concern that the term implies “putting”—even “forcing”—the tone into a resonance area, stating that this usually causes muscular tension. However, as suggested by Haasemann and Jordan (1991), some feel that the student can be taught to think of and feel the sensation of the beginning of a yawn as they begin to sing. This promotes an open throat without direct control of laryngeal muscles. Again, the goal is for each singer to discover a sensation for singing that promotes a timbre that is free and beautiful. Nesheim and Noble (1995, p. 17) described the proper sensation as having resonance in both the pharynx and mouth. They stated that the *open throat* concept refers to the pharynx area which they consider to be the most influential area of resonance on tone quality. However, they warned that singers should not try to consciously open the throat but rather allow the tongue to be forward and relaxed with the tip of the tongue lightly touching the back of the lower front teeth. They also stated that the larynx must remain low while the soft palate is arched.

McCoy (2004) also scientifically investigated resonance factors using today’s latest technology. He addressed the desired *chiaroscuro* tone and stated that it is “accomplished by balancing the amplitudes of the fundamental frequency and the singer’s formant” (p. 58). As a contemporary vocal pedagogue, he spoke of the benefit of today's technology for singers and teachers:

Much of what is known about the acoustics and resonance of the voice has come through analysis of sound. The devices required to perform the analysis, such as oscilloscopes and spectrum analyzers, were once found only in scientific

laboratories. Voice analysis might have remained exclusively within the scientific community were it not for pioneers like William Vennard and Ralph Appleman, who were among the first to see the value of acoustic analysis in the training of singers. Personal computers have changed everything...computers permit ordinary singers and teachers to see the voice through acoustic analysis. (p. 51)

According to the vocal experts cited above, the resonance factors which affect the desired beautiful tone quality are balanced resonance, full resonance, *chiaroscuro* tone, unified registers, high percentage of overtone frequencies, and smooth legato singing. All of these factors are part of the natural laws of acoustics. It is possible that the young choral director might shy away from the objective issues of vocal technique as it seems too scientific, perhaps even intimidating. However, with proper training these technical aspects are easily understood and are necessary to place the young singer on the correct path to healthy, beautiful singing.

#### *Tone Quality: The Ideal*

Should the choral director have an established preference for a choral tone quality or color? Is there an “ideal” tone quality that should be sought? Different choral directors have a different preference, often determined by the style of literature chosen. However, every choral director must know what sound they want or need to achieve the determined outcome of style and interpretation. It then could be said that each director must have an “ideal” sound that they are after. Even though, as already discussed, the individual singer should possess balanced resonance, within that balance remains an individual color. Does the choral director prefer a darker timbre, a brighter timbre, or the ability to achieve both

through vocal flexibility? With regard to a predetermined “ideal” tone quality, Crabb (2002) asked Ehly this question:

Crabb: Some people in this audition process, it appears, form their group based on a specific sound the conductor has in mind prior to auditioning singers; they essentially know the sound the ensemble will have prior to the first rehearsal. Then some conductors select their singers and then form the sound. Which category would you say you would fit into?

Ehly: I think if I had a community choir or a professional choir, I would have my voice preference. I would select the voices that I felt would blend. In an educational setting it changes every single year. After four years everybody is gone and you’re starting all over again. I would say I probably belong in the category where I’d have to take the people and then shape the sound. (p. 51)

Ehly, in referring to the educational setting, stated that he would need to work with singers to shape the sound. Of course, shaping the sound would entail teaching and training. It then follows that in order to teach a sound a choral director must have established a tone preference and system for conveying his or her “ideal.”

Crabb (2002) also interviewed Webb regarding tonal preference in the audition process, and Webb stated that he looked for singers who were able to use three different voices: a) a full solo voice, b) an ensemble tone where the vibrato is controlled but it is still a warm, full sound, and c) a cathedral tone with much upper-partial to the sound (p. 38). Webb described his tonal preference regarding both solo and choral singing. He said,

What I want is much upper-partial to the voice, with a relaxed and free larynx position. We want to develop this “overness” to the tone...When I listen to good

singers, I hear this “lift” and upper-partial, so important to singing. As a choir, we must develop this “overness” which I dearly believe is crucial to blending and beautiful tone. (p. 38)

With Webb’s description it can be concluded that he preferred a tone quality that possessed a great amount of head resonance or as he called it “overness.” This kind of tone is warm and open, not bright or strident.

Whatever a choral conductor’s preference the important thing is that each director understands what good vocal technique entails and is able to communicate effectively these concepts. Caution is given here to the teacher who has such a strong preference for the dramatic voice that they instruct all of their students to seek this timbre, or vice versa, a teacher who prefers a lyrical quality and only allows this timbre. As stated earlier there are inherent tone qualities in a voice due to the size and structure of each individual’s anatomy. Naturally, some voices are more dramatic in quality, while others are more lyrical. These natural tendencies will always be a part of one’s voice. However, within these natural tendencies it is important that each singer find equilibrium in muscular function and tonal resonance. To one singer using balanced resonance, his or her voice will have a richer quality, to another the voice will be lighter and more lyrical. These inherent qualities must not be disturbed but rather enhanced.

### *Vowels*

As will be discussed, vowels are the carrying element of tone. For this reason vowels play a major role in tone quality. In this study vowel sounds will be characterized by the IPA symbols of the International Phonetics Alphabet (see Appendix 1).

As did the early Italian teachers of singing, many contemporary vocal teachers

teach the importance of *pure* vowels. What is a pure vowel? Each vowel has a definable phonetic position made by adjustments of the tongue, lips, mandible, velum, and resonators. In order for the vowel to be pure the physical adjustments or position of the tongue, lips, and tongue against the teeth must be in their natural and precise position for that particular vowel. A pure vowel then is a vowel that is clearly understood to be a particular vowel. As an example, the [i] vowel in the word ‘me’ must sound like ‘ee.’ As well, if a vowel is not natural and pure then the resonator tract is affected. If it is affected not only will the vowel be distorted or misunderstood by the listener but the muscular formation of the vowel is imbalanced. This imbalance, in turn, affects the entire singing mechanism and translates into unnecessary muscular tension.

Vowel changes must happen quickly. In order for this to transpire the articulators must be free. Miller (1986) described it this way:

*Cantare come si parla* (to sing as one speaks) attests to a commitment to vowel formation in singing based on rapid adjustments of the vocal tract. The ideal is acoustic mobility rather than acoustic stabilization. Balancing resonance factors is best accomplished through timbre uniformity, not through uniformity of buccopharyngeal positioning. Unification of vowel timbre results when each vowel is permitted, in freedom, to assume its own distinctive acoustic shape while “tracking” the frequencies that provide the voice with its carrying power. (p. 74)

The freedom Miller referred to is the result of allowing the tongue to assume a *natural* position, a position used in speech. Singers have the tendency to pull the tongue back into the throat for the back vowels of [o], and [u]. Often the base of the tongue is depressed unnaturally. From my observation, the frontal vowels of [i], [I], and [ε] are

sometimes strident, or harsh in quality due to tongue tension. The tongue is often stiffened and pressed against the upper teeth when producing the frontal vowels. The [ɑ] vowel is considered by some to be a frontal vowel while others refer to it as the neutral vowel. Although some teachers think that the [ɑ] vowel is the most relaxed and natural it can also be affected by tongue tension. No matter what vowel is being produced the tongue must be loose and free to move through the various vowel positions required for the text, neither pressed forward nor pulled back unnaturally.

Johnson (1997) wrote that vowel placement was the key to beautiful singing. It was previously stated that vowels are the carrying element of tone. This is understood as one recognizes that vowels are the sustained portion of the text. They are voiced and carry the tone. That is why teachers of singing require the student to “sing from vowel to vowel.” By “singing from vowel to vowel” resonance is uninterrupted. Each vowel has its natural formation and placement but the connection of the various vowels brings about a solid tonal production. Johnson (1997) stated, “Effective vowel placement is the basis for a beautiful tone-carrying quality. Most amateur vocalists must experience new sensations relative to the physical placement of the vowel” (p. 14). If the vowel is correctly placed and produced than the tone will be produced well.

Johnson (1997) also supported Miller’s premise that tongue position is critical when producing pure vowels. Johnson stated:

The tongue seems to be the forgotten part of our anatomy when it comes to pure vowel coloration. It is more than a physical entity to be positioned at the bottom of the mouth where it remains inactive. (p. 15)

The [I], [ε], and [ə] vowels are frequently mispronounced and interchanged. Their difference lies in the position of the tongue, making the tongue of practical importance in producing pure vowel coloring. Vowels need to be individualistic in nature if diction in any language is to be understandable. The back of the tongue controls the flow of each vowel sound. The conductor must guide the singer's choice of tongue position by indicating when the correct sound is being produced.

When vowels are correctly formed and aligned the result will be balance of all muscles involved allowing for freedom of tone. Nesheim and Noble (1995) described what is necessary to bring about a sonorous vowel production. They developed exercises that bring resonance and vowel elements together to promote the brilliant and dark tone qualities in singers. To develop the "ring" in the voice they advocated using the nasal consonants, [m], [n], and [ŋ]. They stated that using these consonants in front of vowel sounds when vocalizing:

encourages resonator adjustment that is conducive to desirable acoustic function, actively engages the muscles involved in breath support, and helps to eliminate tension in the tongue and soft palate, all promoting a clarity of tone which can serve as a foundation for sonorous vowel production." (p. 14)

They also wrote that the more forward vowels of [i] and [e] bring about the most clarity and ring in the voice. Placing the nasal consonants in front of these two vowels for exercises helps the singer give the proper focus to the voice. (p. 15)

In addressing the darker or deeper quality that all voices should possess as well, they advocated the use of the [u] vowel. Neisheim and Noble (1995) stated:

The [u] vowel can be of particular value when used in vocalizes to encourage

depth and freedom in the [i] and [e] vowels. The [o] and [u] vowels are also frequently recommended for use in work toward the development of the upper range. (p. 16)

The [u] vowel is thought to help with intonation as well. In an interview with Ehly (Crabb, 2002, p. 50), Ehly stated that the [u] vowel is more accurately tuned in singers than the [ɑ] vowel. He often used an electronic tuning device to experiment with pure tone with his choral singers. He had them sing a particular pitch on [u] and then had them change to [ɑ]. He stated that ninety percent of the time the pitch would drop or go flat even with people with “good ears.”

Pure vowels seem to have always been the goal of teachers of singing as can be seen in the emphasis on pure vowels from the *bel canto* period to the present day. If vowels carry tone then it can be concluded that vowel work should be paramount for the choral director. The factors which influence pure vowels are vowel placement, natural tongue positions, relaxed tongue and jaw, and unification of vowel timbre for balanced resonance.

### *Vocal Freedom*

Vocal freedom, simply stated, means that the voice is free of unnecessary tension which allows for an easy vocal production. In most instances, when listening to one's favorite singer with regard to beautiful tone, the singer can be described as having a freely produced tone. You most likely liked your favorite singer because the voice was pleasant to listen to and even when observing the singer their singing seemed effortless.

Vocal freedom is the result of a perfectly balanced instrument. The balance is the result of each facet of the vocal musculature working in perfect coordination as

previously discussed in the section on posture and breath control. Miller (1986) clearly articulated the importance of muscular balance for optimum vocal production.

Additionally, he stated that:

Dynamic muscle balance is determined by synergism of muscles of the torso, consisting of alternating movements of engagement and disengagement at a rapidly occurring rate, and the responding supple adjustments of the muscles and tissues of the larynx. Strength and flexibility are brought into balance. (p. 40)

Here Miller pointed to the importance of not only balance and relationship of muscle activity but to the importance of muscular strength and flexibility. Without proper muscular strength and balance, flexibility or vocal freedom will not exist.

Miller (1986) further stated that vocal freedom is initiated with a “non-static” onset of tone. Non-static refers to elasticity and balance in the laryngeal muscles at the beginning of each tone. He wrote, “Only if the onset of each phrase demonstrates the principle of non-static (that is, dynamic) laryngeal muscle balance and elasticity is the singer assured of freedom” (p. 1). Miller (1986) described how this non-static balanced onset occurs. The onset must not be a hard attack (glottal), nor should it be a soft onset as in a whisper. Rather,

Glottal closure is modified in the balanced onset by a narrow slit before phonations. This “even onset” is physiologically midway between the hard attack and the soft onset. Without this narrow slit in the glottis just before phonation, the buildup of subglottic pressure results in the glottal plosive, a sound similar to a light cough. (p. 4)

A glottal attack was also discussed in the section on posture and breath control. The singer must avoid this type of vocal onset so that each phrase begins with a well-coordinated attack setting the voice in motion with freedom and release. Miller's term for this type of attack is *even onset*.

Vocal freedom is, for most vocal pedagogues, the primary goal for all singers. It is recognized that vocal tension not only inhibits the singer from enjoying the act of singing but it also inhibits the production of the most beautiful resonance possible. To combat tension the singer must have built a firm understanding and coordination of all of the muscles involved in singing. As has been described in previous sections, using proper breath technique is paramount to vocal freedom. If the singer is able to allow deep diaphragmatic-intercostal expansion during inhalation and is able to keep this area from collapsing during the singing process, then this area becomes the real control point. The vocal tract is then freed from pressure and all of the muscles involved in producing the tone, in opening for resonance, in articulation, and so forth, are able to move naturally. Fleming (2004), a famous soprano of our time, wrote:

How I support my breath is relatively simple to explain, but in practice a difficult process to really coordinate. Once I have taken in that optimal breath, and my abdominal wall is open, out, and expanded, along with as much of the rest of my torso as possible, I resist allowing these muscles to collapse again. "Resist" is the key word: if I continue to push out, I'll lose the connection of the breath and create tension in my throat; if I allow it all to collapse quickly, I'll have a breathy tone and not enough air to sing even a short phrase...When I'm singing comfortably, I can actually imagine that my torso and my breath are doing all the

work, while my throat is completely relaxed. (p. 41)

Fleming's explanation of coordinated breath to create a relaxed throat and vocal instrument is stated well. The goal of a singer should be to feel a completely relaxed throat.

The vocal instructor and choral conductor constantly watch for signs of tension in the singer. Energetic singers often overwork, thus tension is found in the articulators, in facial muscles and in body alignment or posture. Nesheim and Noble (1995) listed ten signs that a conductor should watch for to detect undesirable tension. They are: jaw jutting forward or pulled back, lips pursed or otherwise tense, raised or lowered head, inappropriate head movement (especially in conjunction with inhalation), shoulders that are raised or are too far forward or too far back, raised eyebrows or wrinkled forehead, tight arms, clenched fists, fingers over-extended or fidgety, and generally poor posture. (p. 12)

The signs of tension listed above are overt and fairly easy to note. However, the singer can also have tension in the skeletal and vocal musculature that is not visible to the eye. Rather, these signs of tension can only be detected through a finely tuned and trained ear. The vocal instructor and choral director must know when tone production is affected by tension. Titze (1996) wrote that a *premier* singing voice tends "to have a non-encumbrance of skeletal structures in and around the larynx" (p. 152). The area that he referred to is the shoulders, neck, and jaw area. These areas must be free to expand and contract as necessary. However, these areas do not necessarily move a lot. Rather, there is stability and a firm equilibrium between the movements. The entire vocal instrument,

that of the larynx, ribcage, abdomen diaphragm, and the airways must also be free to expand and contract as needed. He stated:

This applies particularly to the use of opposing muscles (agonist-antagonist pairs).

They must not fight each other, but rather be able to turn on and off gradually (like a dimmer switch) to move structures and change tensions precisely and differentially. Jerky on-off movements are seldom seen in a premier singer.

Rather, there is a death-like calmness on the surface, underneath which huge muscular efforts are expended. (p. 153)

Vocal freedom is not easy to attain. Much effort goes into developing habits that bring about the equilibrium in the vocal instrument. Singers are often impatient and want instant success. It is the responsibility of the teacher and choral director to skillfully and purposefully guide young singers to the point of vocal freedom.

Miller (1986) brought up one further aspect of vocal freedom, artistry and communication and devoted an entire chapter to this subject (pp. 197-204). The singer cannot demonstrate his or her musical interpretative ability when the instrument is laboring with muscle tension. The voice must be free to show subtle changes in dynamics and color. Miller stated that the singer must operate on two levels of consciousness, that of the technical, or awareness of what the voice must do to perform well, and that of communication. He stated, "Communication in singing is dependent on those very aspects of technique that at times seem most remote from artistry. For example, vocal coloration and dynamic variation can become integrated into an expressive whole only if technical facility permits" (p. 201).

Vocal freedom is imperative for good singing. The uninformed listener and singer may assume that vocal freedom means singing without being concerned with technique, with structure. However, as has been described, vocal freedom entails a solid vocal technique that allows for a fine coordination of all muscles involved. This fine coordination takes time and effort to acquire. When a singing voice is finely aligned and coordinated the voice will be free, resonant, and beautiful.

*The Great Debate: A Soloistic or Blended Approach to Choral Tone Quality?*

If a solo singer has all of the components of good vocal technique in place, the singer is prepared to sing well with a tone quality that should be pleasing to the ear. However, in the choral setting the solo singer is no longer the only tone quality heard and is no longer in control of the performance with regard to interpretation, dynamics, diction, and tone quality. Rather, the solo singer must give way to the vocal concept of a choral tone quality. The choral ensemble is a sound all its own made up of many and varied tone qualities.

Herein lies the question or debate: Vocal technique can be established by the solo singer to work well in solo performance, but is that the same technique that should be used in the choral setting? Philosophically there has been great contention in the choral world regarding this point. Choral directors have struggled with the best way to technically treat the voice in the choral setting. Should the solo singer alter his or her vocal technique to provide a unified or blended tone quality or should the solo singer be allowed to sing with their personal preference of resonance, coloring, vowel production, among others? Every choral director must find the answer to this question and must establish a philosophy. Without a philosophy and plan the singer may be misguided. The

question is: should the choral director use a *soloistic or blended* approach to choral tone quality?

First, if it is established that there is a specific technique for correct singing that enhances the voice, then it can be deduced that this technique applies to singing in general and thus the solo singer and the choral singer should use the same basic vocal technique. The singer, whether solo or choral, strives for a freely produced, resonant, and communicative voice. Daugherty (2001) explained it this way:

In a very broad sense, singing is singing. Human beings, after all, share a similar physiology for respiration, phonation, resonance, and articulation. Many vocal pedagogy and choral methods materials tend to reason and speak exclusively from this sort of global perspective. To the degree that there are traits and processes common to all human vocal production, this “one size fits all” approach is valuable, particularly in conjunction with scientific research on the individual human voice in the past thirty years. (p. 69)

If “singing is singing” as Daugherty stated then why do studio teachers and choral directors often disagree? Ekholm (2000) found that the goal of the voice teacher and choral director is different:

Voice teachers tend to promote a vocal technique, developed by solo singers, which aims to achieve maximum resonance with minimum vocal effort in order to be audible above an orchestral accompaniment. Choral conductors, on the other hand, tend to strive for an ideal ensemble sound in which individual voices are imperceptible. (p. 123)

The goals of these two opposing views appear to be different ends of the spectrum. The solo singer works for a vocal production that allows for full resonance when so desired, use of varying dynamics, among others. The choral director, on the other hand, is looking for vocalists who are capable of confining their voices so that all voices are equally blended or mixed with regard to resonance and dynamics. These are two very different approaches. According to Rossing, Sundberg, and Ternstrom (1985),

Choir singing and solo singing are two distinctly different modes of musical performance, making different demands on the singers. Many singing teachers are reluctant to let their students practice choir singing, because they believe that choir singing requires a voice usage quite different from that used in solo singing, and some teachers even feel that these two types of voice usage cannot be effectively combined. Other singing teachers and most choir conductors disagree. They feel that good vocal technique, learned in the one mode of singing, can readily be applied to the other. (p. 1)

With the above analysis of Rossing et al. (1985), the two opposing views draw a clear line between those who feel solo singers should not participate in choral ensembles as it could possibly affect the soloists' technique versus those that feel all singers should be able to sing well in both settings.

Rossing et al. (1985) felt that in order to better understand this controversy and the demands necessary for both modes mentioned above, a study was necessary to find a "precise description of voice use in solo and choir singing" (p. 1). They studied the acoustical differences of solo and choir singing using eight male subjects in both the choral and solo singing modes. Three were professional singers and the other five were

amateur singers with varying degrees of vocal training. They found that the “spectral characteristics (acoustical) of the male solo and choir singing differ slightly in two respects; the singer’s formant is more prominent and the amplitude of the lowest spectrum partials tend to be less dominant in solo singing than in choir singing.” (pp. 6-7). They concluded that in order for singers to adjust to the two different modes of performance, they often make changes in articulation by vocal tract adjustment and sometimes in their voice source through glottal adjustments.

It is helpful at this point in the study to define the resonance terms used above regarding the complex components of tone. According to Miller (1986):

Complex tones, such as those generated by the larynx, are composed of frequencies that are integral multiples of the lowest frequency. The first component is the fundamental frequency (the first harmonic), and the others are overtones. A partial is a harmonic component of this complex tone, and the sound spectrum is made up of the resonance frequencies, which produce peaks, called formants. (p. 50)

McCoy (2004) defined formant as “resonance of the vocal tract. The key word in this definition is resonance. Formants are neither actual sound nor a function of the vibrating vocal folds. Perhaps it is best to think of a formant as sound potential” (p. 40). The most important thing to understand is that the fundamental tone exists as the foundation of the tone and the partials (upper and lower) and formants embellish the fundamental tone. The embellishment of the tone is often described as the “ring” of the tone.

Regarding these resonance factors, Goodwin (1980) described several vocal blend techniques that are used in choral teaching. The first is vowel modification where the singer alters the vowel quality in order to blend. Second, a singer will seek “to reduce the number of upper partials in a tone or the strength of those upper partials” (p. 126).

Goodwin (1980) further stated that the reason a singer would want to reduce the number of upper partials might be three-fold:

- 1) to provide a minimum of aural cues for a listener to use in identifying the tone as a separate sound,
- 2) to reduce the subjective loudness of the individual tone, and
- 3) to emphasize the portion of the spectrum that is most significant for the quality of the perceived vowel. (p. 126)

In summary of Goodwin’s study, the singer may make adjustments in his or her individual voice to affect blend with vowel modification, timbre adjustments by reducing the number of upper partials, singing softer, and use of less vibrato.

This brings us to the next point. The solo singer has developed his or her singing voice so that the full spectrum of resonance has been found. However, as has been stated in the above studies, the choral singer often makes vocal adjustments to bring about a unified sound. How does a choral director unify the varied individual tone qualities into a beautiful choral tone quality? Most directors agree that the unifying agent is “blend.” Simply stated this means that all voices come together to produce a common sound. The sound is homogenous. Goodwin (1980) defined choral blend as “sound in which individual voices are not separately discernible to a listener” (p. 119). It could be said

then that blend requires the individual singer to match his or her timbre to the voices around them.

However, choral directors have varying opinions and preferences. One choral director may prefer a choral tone quality that is bright and ringing. Another director prefers a timbre that is dark, rich, and warm. Others find their preference somewhere in between. Since subjectivity will always be a part of the equation, the argument is not so much that of preference of tone quality (subjective) but more with methodology (objective) to find a unified sound.

As stated, methodologies for choral blend are numerous as was observed in a study done by Knutson (1987). He investigated the treatment of choral blend in American choral singing from the early 1900s through 1987. Knutson chose thirteen representative conductors. He conducted in-depth interviews with the eight conductors who were still living and researched the writings of the others. With regard to the practices and trends in achieving choral blend, he found that choral blend was, indeed, a matter of personal preference. The study found, however, that there have been two basic trends from the early 1900s to the present day concerning how to achieve choral blend. First, a trend was seen in the approaches of F. Melius Christiansen, director of the St. Olaf College Choir, and John Finley Williamson, director of the Westminster College Choir. Although “Christiansen emphasized the subordination of individual vocal qualities for the sake of blended choral sound, the choral sound produced by Williamson stressed that vocal development of any individual singer was more important than the blended sound of a choir” (p.118). However both showed that, “the primary concern of each view was to create a single type of choral sound for reasons other than the music literature and style

being sung” (p. 118). The second trend emphasized the development of choral sound that would be able to handle a variety of musical styles. Knutson wrote, “Advocates of this approach stress that this does not limit the choir to singing with only one type of sound, but enables the choir to meet the interpretative, dramatic and stylistic considerations of many types of literature. The flexibility of this trend seems contingent upon both good vocal technique and good musicianship” (p. 119). This second trend appears to be prevalent today. The public school choral director often chooses literature that represents numerous genres from early Latin pieces to contemporary rock music. With such a variation in musical style the young singer is required to make vocal adjustments to handle these demands. A clear and firm understanding of good vocal technique is imperative. Not only are students required to make stylistic adjustments they are also required to make these adjustments in the confines of choral blend.

What methodologies are used today to bring about blend with good vocal technique? Fulford and Miller (2003) wrote about this and listed five things a singer must do to blend in a vocal ensemble.

- 1) Listen. Then listen some more. Listening is critical for all musicians, but particularly so when you’re singing (or playing) in an ensemble. Pay close attention to the tonal subtleties of the other voices and try to fit your tone to theirs--not theirs to you.
- 2) Always sing on pure vowels. Everyone in an ensemble has to pronounce the words--particularly vowel sounds--exactly the same. We call this “vowel unification” and it’s one of the primary means of achieving vocal blend.

- 3) Back off the volume level. Remember, you don't want to be louder than everyone else in the choir--no matter how beautiful your voice is. You are not in the ensemble to show others how well you sing. (And if you think you are, you may not be for long!)
- 4) Surrender your personal singing style--which is sometimes a sticky point. Many singers have gone to great lengths to develop their own singing style. Many singing styles are heavily influenced by today's popular music, and while this kind of style might get you rave reviews at the local karaoke bar, it won't cut it in a choral ensemble. This doesn't mean you have to sing like a voice synthesizer; just leave those vocal "flips" and "scoops" at home when you go to choir rehearsal.
- 5) Be very sensitive and judicious with your vibrato. Yes, vibrato gives your voice color and life, but it can also be one of the biggest stumbling blocks to achieving vocal blend. So when you're singing in a vocal ensemble, use a little less vibrato than you would as a soloist. (p. 138)

These five points of Fulford and Miller (2003) appear to encapsulate one of the most common approaches used today to accomplish choral blend. The singer is asked to be sensitive to the sounds around them and to work to be a part of this general sound. They have summarized the key elements of vocal technique that need slight adjustments when transferring solo vocal technique to choral vocal technique. To further clarify, point 1 asks for the singer to listen for tonal subtleties and mix or fit the solo voice into the mix. This can be done with minor color adjustments. Minor color adjustments, brighter or darker, are placement and balance issues of resonance. A tone can be felt more in the

head, mouth, and so forth, but with all resonance cavities being represented particularly head resonance in all tones the voice will not suffer from vocal imbalance or tension. Point 2 dealt with pure vowels. This is important for both the soloist and choral singer. As a choir director works for well-placed pure vowels the voice is not only clear in resonance but vocally free. Point 3, volume, is another facet of good singing for both the soloist and choral singer. All well-trained singers must know how to sing with varying dynamic levels whether soloist or choral. Good breath control and balance of resonance, *appoggio*, must be utilized for pianissimo singing as well as for forte singing. For a soloist to sing in a choral setting at a softer level than in the solo setting should not create a problem as soloists must sing at varying dynamic levels with their solo literature as well. Point 4, regarding singing style, is another aspect of good training. The soloist should have the flexibility to sing various styles with good technique. Point 5 dealt with vibrato. This particular subject is perhaps the most controversial. Some soloists have never used straight tone. If the voice does not remain free and floating while singing a straight tone, then tension is created in the musculature of the larynx. It is possible, however, to allow the breath flow to free the voice. My observation has been that if a choral ensemble is asked to sing with straight tones exclusively, then the voice does tire and vocal fatigue sets in. A good solution, as pointed out by Fulford and Miller, is to ask for less vibrato. Again, a well-trained singer should have developed this capability through the use of good breath control.

To reiterate the real basis for the *great debate*, some voice teachers do not feel that the voice should be altered to reduce the beautiful qualities that can be produced by the soloist. Many choral directors, however, feel that all singers should be able to alter

their voices without causing harm. To further elaborate on this argument, Skelton (2004) stated:

One of the few things choral conductors and voice teachers agree on is that there is a difference between singing as a soloist and singing in a choir. Voice teachers would generally agree that choral singing requires technical demands that conflict with those needed to sing as a soloist. Choral conductors would complain that singers need to learn to work as part of an ensemble, and, while hopefully not advocating poor vocal technique, would like more variety in vocal color. One requirement of most choral repertoire is a basic level of balance and blend. (p. 50)

Since it appears that the one point that can be agreed upon by both the solo voice teacher and the choral director is that there is a difference in how the voice is used in the choral setting, the next question is, is it necessarily bad for the aspiring soloist to sing in a choral ensemble and what kinds of problems can occur, if it is bad? According to Sundberg (1987), most vocal research has focused on operatic singing and not choral singing and therefore, “there are not many facts to report about choral singing” (p.134). However, Sundberg (1987) devoted a short chapter in his book about the choral voice and asked the question, “Do singers develop the same type of voice timbre in both situations (solo and choral)?” (p. 141). He cited Goodwin’s study (1980) and Rossing et. al. (1985 and 1986) and concluded that it seems that voice use in choral and solo singing differs in certain respects that are probably important for the success of a solo singer. It seems fair to assume that students of solo singing who have no problems with their voice timbres could gladly join a choir and, in this way, enrich their musical experience. If, on the other

hand, the student has problems in developing an acceptable voice timbre and if he or she also has a hard time learning two slightly differing types of voice use at the same time, it seems wiser to concentrate on one thing at a time. In any event it would be advantageous to know that the same type of voice timbre is not sought in choral and in solo singing (p. 143).

Sundberg's point that some singers are still developing their solo voices and may have problems adjusting to differing types of voices is a valid argument. It may be that solo singers who will pursue a solo career may not benefit from a choral experience at a particular point in their vocal development. However, in my opinion, all singers should work for a vocal technique that will allow them the versatility to use the voice both in solo and choral work. All singers are capable of making the minor adjustments needed to function in both settings. Once again, do these adjustments harm the voice? Obviously, these changes or adjustments have caused the singer to realign his or her technique. As a vocal pedagogue and choral director, having taught in the private studio for a number of years as well as directed vocal ensembles, I believe that these adjustments can be made in a healthy manner. As was pointed out by Fulford and Miller (2003), adjustments can be minor.

In the end, the voice teacher and the choral director must work together to build voices. Skelton (2004) presented some possible solutions for the conflict between the voice teacher and the choral director. First, he acknowledged that the voice teacher and choral conductor must understand healthy singing and its application to solo and choral singing.

Vocal teachers must accept that healthy vocalism is possible in a choir, while choral conductors must understand what healthy vocalism constitutes. A conductor can achieve this goal best, not just through an understanding of vocal function (though this should not be ignored), but rather through a firm grasp of vocal pedagogy (p. 51).

Perhaps the most important thing to realize is that healthy singing is the goal no matter the venue.

Additionally, Skelton (2004) stated that there was an institutional problem. In his opinion:

Degree programs in choral conducting vary considerably, and courses in vocal proficiency, or, at the very least, vocal pedagogy, are not requisite at most universities...I must blame institutions for not including vocal pedagogy as a core component in a choral conducting program, and for the number of choral conductors that do not adequately understand the voice. (pp. 51-52)

Skelton's observations are valid, in my opinion. The choral conductor is not always adequately prepared to teach good vocal technique. On the other hand, the voice teacher does not always understand that good choral singing requires good vocal technique and when good vocal technique is being used in the choral setting the solo singer will not be harmed.

Singing is a complex physical and cognitive act that must be cultivated and developed. The choral director has a great responsibility to protect and guide the singer. With this responsibility he or she must not only understand the complexity of the voice but must also possess a technique and philosophy for achieving a healthy, beautiful

choral tone quality. The choral director must have the knowledge and expertise needed for his or her profession so that the choral experience is valid, rewarding, and brings about the best vocal outcome for the individual singer/student. Jordan (1984) stressed the need for individual attention to a student's vocal problems to bring about choral blend. He stated, "The conductor must know each voice as if each singer were his student. Instead of handing out ineffective prescriptions that create the illusion of blend, he can assist individual students to remedy vocal problems that are buried in a sectional sound." (p. 26). A fine choral director must be knowledgeable in both solo and choral singing and must know the voices of the ensemble. The basics of good vocal technique are foundational and imperative.

### *Philosophy*

With the necessary knowledge of good vocal technique the choral director must also have a philosophy and rehearsal practice/technique that will propagate his or her knowledge. This philosophy will not only provide an understanding of what is important to that individual with regard to learning goals and objectives, it will guide the teacher in the process of delivery of these goals and objectives. Without a philosophy a teacher will lack the focus necessary to provide a systematic learning experience for the student.

Custer (2005) said it this way:

We need to develop a clear and well-constructed philosophy, what scholar and educator John Henry Newman characterized as an "explanation for our lives." Grounding our work on a solid philosophy can offer significant help as we move into new situations or encounter new challenges. Dealers in precious metals strike gold objects against a touchstone to confirm the purity of their contents. A

philosophy of teaching provides us with a similar point of reference. Like the lighthouses of old, it can serve as a reliable beacon by which to navigate the course of our careers. (p. 43)

For the high school choral director, his or her philosophy will include the understanding of what beautiful choral tone quality entails and a method and procedure to train the young singer. The definition of *philosophy*, according to Webster's Dictionary (1999) is "the general principles or laws of a field of knowledge, activity, etc" (p. 1082). The choral teacher has developed his or her philosophy through not only knowledge but experience. A successful teacher is confident and firmly holds to the principles that he or she has defined and adopted. This confidence is *tried and true*, and the student benefits from this confidence.

Why is philosophy important to tone building? Because tone building is a concise and determined process, it is a compilation of a singer's vocal abilities brought to a point of optimum control. Without a philosophy one's knowledge is often haphazardly delivered. Thus, a choral director's philosophy includes knowledge of vocal technique and a plan to deliver this knowledge. Gordan (1989) stated that, "The success of your choral program will be largely determined by your ability to set goals and then organize purposeful activities. The captain of a ship spends considerable time charting his course" (p. 21). Gordan (1989) clearly outlined how to set goals and defined three basic achievement levels that should be a part of one's planning. They are: a) Achievement level I: Orientation, individuals "learn the ropes" of the organization. In this stage the students will learn vocal skills, musical knowledge, musicianship, ensemble (balance and blend), and social skills. b) Achievement level II: Growth, members learn to contribute

more effectively through improved music-learning skills and qualitative singing.

Teamwork is emphasized. The final stage is c) Achievement level III: Culmination, skills become more refined with emphasis on interpretation and expressivity (pp. 22-23). This is just one plan or structure that can be found. Each individual teacher must adopt some type of plan that matches his or her philosophy, personality, and musical strengths.

Noble (Shrock, 1991) has a philosophy that stresses the importance of psychology in the choral teaching arena. Because teamwork is a must in ensemble work he spends much time building confidence in the singers. According to Noble (Shrock, 1991):

Every time I fail to observe psychological ramifications of rehearsal procedure, I reduce the optimum effectiveness of the time spent. Psychology is also important in working with singers—in making them feel involved. Involvement is crucial; it builds a sense of affirmation, and one can achieve one's best when an affirmative feeling is present. (p. 10)

Noble's philosophy of teaching included the belief that the more we learn about ourselves the more we can relate to others. He spoke of a person's inner child and how to free the negative hold it might have on an individual. Noble (Shrock, 1991) stated:

I can allow it (the inner child) to grow and become a part of my total positive personality. This has changed my effectiveness as a conductor... Transparency is vulnerability. It is the capacity to be open within ourselves in order that the music can flow through us—that we can be an open conduit, a free vessel...

Vulnerability can be threatening. It is not easy to be open—to share our deepest feelings. And we have a shadow side to our lives that tries to block our transparency/vulnerability. We, therefore, must make friends with our shadow

side. The accomplishment of this is one of the great adventures of life! A strong shadow results in negative thinking while a friendly shadow results in positive thinking. How can the wonderful beauty of music come forward if our thinking is predominantly negative!...As choral directors, we are given one of the greatest challenges and opportunities in life: to discover and free our inner beings, our inner persons—to be transparent vessels for the recreation of one of the most powerful vehicles in our civilization—MUSIC. (pp. 12-13)

Developing a philosophy is often difficult in the beginning years of teaching. At the start of a teaching career, ideas, goals, and musical skills may not have been fully formed. It is important that young choral directors listen to others, read about successful choral programs and directors, be willing to analyze personal strengths and weaknesses, and have a firm understanding of vocal technique. It is imperative that choral directors define their philosophy as early as possible.

#### *Teaching Method*

A successful choral director not only has a defined philosophy but also has a defined teaching style or method. According to Gumm (2003), “Music teaching style is the *focus, intention, orientation, or priority underlying the entire pattern of interaction between the teacher, students, and subject matter*. As a result, it is also the *stable, consistent, and pervasive approach to music teaching*” (p. 14). Within this interaction is a procedure and strategy, a style of teaching, a method that makes for a successful rehearsal. The teacher seeks to not only accomplish the educational goals but also seeks to instill such elements as self-discipline, musical awareness, and unity, among others.

These are goals outside the confines of actual tone building and yet play a major role in accomplishing the desired end.

How does a teacher arrive at his or her method? We must first recognize that before a method can be found the teacher must know what is to be taught. A thorough understanding of content precedes professional pedagogy and methodology. Grossman (1990, pp. 6-9) outlined four areas of teacher knowledge that are critical for teacher success. They are: a) general pedagogical knowledge, including: knowledge and beliefs concerning learning and learners; knowledge of general principles of instruction; knowledge and skills related to classroom management; and knowledge and beliefs about the aims and purposes of education, b) subject matter knowledge, which includes knowledge of the content of a subject area as well as knowledge of the substantive and syntactic structures of the discipline, c) pedagogical content knowledge, composed of four central components: knowledge and beliefs about the purposes for teaching a subject at different grade levels; knowledge of students' understanding, conceptions, and misconceptions of particular topics in a subject matter; curricular knowledge includes knowledge of curriculum materials available for teaching particular subject matter; knowledge of instructional strategies and representations for teaching particular subjects, and, d) knowledge of context, in which teachers draw upon their understanding of the particular contexts in which they teach to adapt their more general knowledge to specific school settings and individual students.

As explained by Grossman, teaching style or method involves the understanding of various areas of content knowledge. Part of that understanding deals not only with one's basic delivery and understanding of the subject matter, it also involves creating a

positive atmosphere for learning, one's personality and leadership skills, and a system of effective communication.

### *Positive Learning Environment*

Creating a positive learning environment should be a main goal. Learning will not take place when the atmosphere is threatening, negative, unchallenging, or even boring. The teacher must have the desire and ability to create this positive atmosphere for learning. Durrant (2003) addressed this issue well.

The responsibility of the conductor is then to provide an environment in which these experiences can occur. Such an environment will need to be free of threat. Part of the communication skill of the conductor, particularly when dealing with the amateur and perhaps tentative singer, is to provide an encouraging, positive, and constructive atmosphere rather than a critical, negative, and destructive one. (p. 20)

Custer (2005) referred to this positive element as *rehearsing humanely*. He stated,

Because choirs are composed of human beings, choral singing demands an exceptional degree of trust, transparency and vulnerability. We are not what we do; our worth is not dependent on our performance. There is no room for rehearsal techniques rooted in fear, intimidation, ridicule, or manipulation. I am committed to creating a climate that respects each singer's best efforts, where correction can be given and accepted as a normal part of the process of continuous improvement. (p. 47)

From the above statements a positive atmosphere must be accepting, comfortable, and conducive to learning. A sense of community must also exist. Positive attitudes are a

must. Attitudes from both sides, teacher and student, must be that of a cooperative spirit. As this connection or cooperative spirit is achieved the students will readily accept instruction. According to Gordan (1977),

Establishing and maintaining a cooperative spirit is especially important in choral performance, because the director and his singers must achieve an unusually sensitive working relationship for performing vocal music. There are three important steps that you can personally take to achieve this rapport: Develop an environment conducive to making music, establish necessary guidelines and rules, and observe the basic principles of leadership. (pp. 42-43)

### *Leadership Skills*

With the awareness of the need for a positive learning environment comes the awareness of the need for the director to show strength in leadership skills, as stated by Gordan. As the director shows good leadership skills, the student feels secure and confident in the learning process and trust and respect are built. Johnson (1997, p. 8) stated, “The conductor/disciplinarian, of course, should be a person who possesses solid self-discipline (an idea which may be a frightening notion for some directors).” The choral director who is in charge, is recognized by the students as a confident leader. The confident teacher is respected by students. In turn, students feel safe. Now the learning environment is not only positive, it is a secure and safe environment conducive to learning.

Custer (2005) addressed leadership from the perspective of modeling. He stated: I believe in *leadership by example*. While artful leadership is crucial to effecting change, practical leadership training is frequently overlooked in teacher education

programs...During rehearsals, I employ active listening, validation and feedback strategies. I believe in modeling best leadership practices in my work, and in discussing them with my singers, colleagues, and conducting students. (p. 47)

With Custer's philosophy not only are the singers secure and confident because of good leadership, the leader is intentionally demonstrating and teaching successful leadership qualities.

### *Personality*

Another aspect of leadership and positive attitudes is that of one's personality. A study done by Slack (1977) dealt with leadership qualities and personality traits of high school choral music educators. The study suggested that teaching performing groups is emotionally demanding and requires intense effort and resilience. For the choral director to be successful and handle the emotional demands of teaching performing groups, he/she must be idealistic, sensitive, and secure in oneself. As has already been alluded to, the strong leader exudes strength and security. For the director this means not only having the ability to lead with regard to well-planned lessons and goals, it means having the physical and emotional stamina to handle the demands placed on the high school choral director. It is often an exhausting task and requires great energy. Yarbrough (1975) defined two types of energy levels found in teachers of performing groups. The first is that of a high-magnitude teacher. This teacher maintains eye contact with individuals and the group, approaches and steps back from the group during rehearsals, uses expressive conducting gestures, and maintains a high energy and exciting rehearsal with speech patterns that vary in speed, pitch, and volume. The second type is that of a low-magnitude teacher. This is the opposite energy level, with no eye contact, strict conducting gestures,

a slow and unexciting rehearsal pace, and speech that has no variation in speed, pitch and volume. Yarbrough's conclusion to the study involving these characteristics was that the high school choir member preferred the high-magnitude teacher.

With a preference for high energy or high-magnitude qualities comes the realization that teacher enthusiasm affects the learning environment. A high-magnitude teacher automatically exudes enthusiasm. Enthusiasm by the teacher directly effects student attitude and achievement. Cox (1989), in a study dealing with rehearsal organizational structures, found that enthusiasm in teaching is readily perceivable by the ensemble members. An enthusiastic, positive attitude is contagious. This in turn creates a general positive atmosphere for learning that will inspire the ensemble. Personality generally influences whether a teacher is high or low magnitude. An extroverted personality naturally will tend to be high in energy and enthusiasm. A low-magnitude teacher may have to work harder at showing enthusiasm and energy. If one's leadership ability, energy level, and enthusiasm are all personality traits perhaps it could be concluded that personality not only plays a role in teaching method, but may even be a dictator of one's method.

#### *Communicating: Teaching Strategies*

Learning styles has been the topic of much discussion and research in recent years. We have come to recognize that students learn differently. Armstrong (2000, pp. 1-2) wrote about Gardner's theory of multiple intelligences, which included eight different types. Gardner stated that everyone possesses all eight, but in varying degrees. The eight intelligences are: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist. Whether you hold to this theory or not

Armstrong (2000) suggested that teachers should use a wide variety of teaching strategies. He said,

Because of these individual differences among students, teachers are best advised to use a broad range of teaching strategies with their students. As long as instructors shift their intelligence emphasis from presentation to presentation, there will always be a time during the period or day when a student has his or her own most highly developed intelligence(s) actively involved. (p. 51)

Armstrong's theory provides numerous ways to address various learning styles. Some of the strategies that I have observed in my own personal teaching as well as in my colleagues that Armstrong (2000, pp. 52-63) addressed are:

**Storytelling:** Storytelling should be viewed as a visual teaching tool.

**Picture Metaphor:** A metaphor is using one idea to refer to another, and a picture metaphor expresses an idea in a visual image.

**Kinesthetic Concepts:** The kinesthetic concepts strategy involves either introducing students to concepts through physical illustrations or asking students to pantomime specific concepts or terms from the lesson.

**Hands-on Thinking:** Students who show signs of bodily-kinesthetic intelligence should have opportunities to learn by manipulating objects or by making things with their hands.

**Board Games:** On one level, students are chatting, discussing rules, throwing dice, and laughing. On another level, however, they are engaged in learning whatever skill or subject happens to be the focus of the game.

Personal Connections: The big question that accompanies strongly intrapersonal students through their school career is: “What does all this have to do with *my* life?”...It’s up to teachers to help answer this question by continually making connections between what is taught and the lives of the students.

Feeling-Toned Moments: To feed the emotional brain, educators need to teach with feeling. This strategy, then, suggests that educators are responsible for creating moments in teaching where students laugh, feel angry, express strong opinions, get excited about a topic, or feel a wide range of other emotions.

Goal-Setting Sessions: One of the characteristics of highly developed intrapersonal learners is their capacity to set realistic goals for themselves.

The teaching strategies listed above are only some of the ways that teachers can communicate concepts. Each teacher must be able to assess their student’s abilities and learning styles and then establish the strategy to best accommodate the needs.

*Communicating: Modeling--Nonverbal and Verbal*

Because most choral directors are either singers or have had choral experience, modeling tone quality is considered one of the most effective ways to communicate the desired tone quality. Most successful choral directors are able to demonstrate the sound that they want. Haasemann and Jordan (1991, p. 30) stated that the choral director should always teach through modeling by singing first and explaining later. Young singers often learn more quickly through imitation. They can imitate their favorite pop singers, various musical styles, and various timbres. Having young singers sense tonal resonance first, followed by the verbal explanation of the physiology behind these sensations, is a very effective way to communicate tonal concepts.

Another way to communicate desired tone quality is through nonverbal cues. These cues can be intentional or unintentional. Either way they are a part of a conductor's method. Nonverbal cues are often used to achieve particular tonal responses. Eichenberger (1994) produced a video entitled, *What They See is What You Get*. The purpose of his video was not to promote a method of conducting but rather to provide "stimulation for self-evaluation and experimentation." He demonstrated that various nonverbal signals given as a conductor directs affect the overall sound of the choir, and that choir members link the visual with the aural. He showed that nonverbal communication is connected in three ways: visually, aurally, and kinetically, and he demonstrated that nonverbal cues can affect pitch, timbre, rhythm, and dynamics. Eichenberger noted that posture and facial expressions affect the overall sound of a choir, and that the size and shape of the conducting pattern affect not only dynamics but also timbre. He espoused the belief that the conductor's entire body is involved in communicating to the singers. A tall posture brings about better pitch and a taller tone production. On the video, Eichenberger (1994) stated that, "The fewer mixed messages we send as conductors the more we can trust that our singer's response will match our intention. I am convinced that there is not a correct way to conduct but there is a strong relationship between a conductor's nonverbal messages and a choir's spontaneous reaction to them."

Nonverbal behaviors of conductors were also discussed by McClung (2005). The conducting gesture not only provides the ensemble with information about attack, phrasing, dynamics, tempo, rhythm, among others, it also provides cues for timbre. McClung referred to a conducting class that he had taken with Professor Eichenberger (p.

27). In one example of nonverbal effect McClung noted that his larynx relaxed when Eichenberger asked a conductor to freeze his gesture. He noticed that the entire class froze as the conductor stopped. When Eichenberger took the conductor's wrist and asked him to relax his wrist McClung felt his larynx relax and lower. The symbol or cue was translated from the conductor's wrist to the singer's larynx. He also stated that the position of the wrists, hands, arms and shoulders should remain relaxed and free, as it all affects tone.

McClung (2005) explained that the palms of the hands, including the fingers, when turned toward the floor and cupped, reinforce the feeling and position of the lifted soft palate for a freer, more head resonant tone. He stated, "In this position the palms typically encourage the production of taller vowels and a rounder, freer, floating tone" (p. 29). He also discussed the importance of the conductor's posture and its bearing on the singer as he or she consciously and unconsciously follow the model. Posture affects the singer's breathing area and entire vocal structure. Regarding deep, diaphragmatic breathing, if the forearms are parallel to the floor and at the diaphragmatic area it will encourage "a deeper breath and produce a warmer, rounder tone." (p.29)

Although McClung discouraged the habit of mouthing words to the singers, he did write that the mouth and eyebrows can be used to model vowel shape and height. Nonverbal cues are often not only signals of instruction but are also a technique or aspect of modeling.

In summary, every conductor has his or her own method and style. To say that there is one right way to teach is to ignore individuality in a conductor's personality, taste in music, tonal preference, and teaching style. It also ignores individuality in a student's

learning style, innate musical ability, and natural tone quality, among others. A successful choral director must have an established philosophy and effective teaching style. These components help to organize and facilitate the technical aspects of vocal choral technique that will bring about beautiful choral timbre.

## CHAPTER 3

### Method and Procedure

#### *Purpose of the Study*

As a college professor, I have heard undergraduate students who are entering the teaching profession state that they don't know where to begin when they step into the choral rehearsal room. They wonder if their students should immediately begin to sing literature or if they should be taught basic music theory. Maybe they should start with basic vocal technique, and so forth. These young teachers have not yet formed a plan or process. Is their uncertainty simply the result of lack of experience, or does it perhaps have to do with curriculum issues, individual inadequacies, or simply the lack of a model or plan to follow? Perhaps all of the above play into the dilemma. I have, however, observed that little study has been done to provide a model for choral conductors at all levels of experience with regard to developing a beautiful choral tone in high school ensembles.

There are two main problems facing the young choral director. First, young voices need to be properly trained from the outset. Without proper training vocal damage can occur. Second, young music educators are expected to prove themselves immediately as successful choral directors. In the field of education, teachers are under the careful scrutiny of administrators from day one. The expectation is for all teachers to perform consistently at high levels, and in the music field, competitions and performance opportunities showcase not only the students but the choral conductor as well. The choral ensemble must not only perform music that is accurate with regard to pitch, note values, varying dynamics, and so forth, but the choir must also sound good. The college graduate

with a degree in music education has had course work in choral conducting, choral materials, ensemble participation, private voice lessons, and music core classes. With a fairly well-rounded music education these students are thrust into a public school position and are expected to immediately produce choral ensembles that receive excellent ratings at competitions. Course work is the foundation for understanding music concepts, theory, style, and so forth. However, in most instances, the young music graduate has not yet had the experience needed to put all that they have learned into a solid technique for the application of this knowledge. Ideally, course work with opportunities for applied knowledge might help prepare students more effectively. However, this is not always possible due to curriculum requirements. What often happens is the young choral director will spend much time, perhaps years, trying to establish his philosophy, teaching method, and rehearsal techniques necessary to have a successful choral ensemble.

This research project was born out of the awareness that young choral directors and experienced directors as well could benefit from a model of a successful choral director and how that choral director achieves a beautiful choral tone. This case study would provide a rehearsal technique, a plan and a process that could be adopted and developed to fit an individual's method and philosophy of teaching. It could also inform the more experienced teacher with new ideas of presenting vocal technique or could provide a basis for comparison with their own approach. It might be said that there are no new "tricks of the trade," however, there are new and differing ways to communicate concepts regarding beautiful singing. It is my hope that this study will not only set the young choral director on the right path to developing healthy young voices but that it will aid the more mature director as well.

### *Method and Procedure*

This is a case study of a music teacher in a rural high school setting in a Midwestern state. This study was narrow in scope, focusing solely on the director's rehearsal techniques for communicating and achieving beautiful choral tone quality at the high school level.

This study's participant, Matt, was a successful high school choral teacher/director in his early forties who had won many competitions with his choral ensembles and had been selected to perform at local, regional, and national conferences. He had a bachelors degree in music education and a masters degree in choral conducting. His applied area of performance was piano; however, he studied voice four years in his undergraduate program and two semesters in his graduate studies. He was very active in state and national music organizations. Besides his teaching duties at the high school, Matt was the Artistic Director of a community choral ensemble of approximately sixty voices. The average age of the singers in this ensemble was forty-five years old. Matt also directed a youth choir at a local church and was the graded choirs coordinator at that same church. He also was an adjunct professor teaching applied piano at a local college.

The population of the small community in which this study was done was around 3,500 and growing. There were approximately 900 students who attended the only high school in this rural setting. The choral program was not only highly visible in the community due to its excellent reputation, but the choral program had been strong for many years. It was supported and strongly promoted by the administration, parents, and grandparents. Many of the parents and grandparents had been members of the high school

choral ensembles and recognized not only the musical value but the importance of the music program socially and academically.

To begin this case study, I observed the two choral ensembles on site during four separate choral rehearsals in the last month of school. Each observation period was approximately fifty minutes in length and was videotaped. The total time spent in this observation process was approximately six and one half hours. I also took field notes of these rehearsals. Additionally, during the last month of school, Matt videotaped other rehearsals of both ensembles for approximately twenty hours. All videotapes were transcribed. Matt also provided written data of ratings and adjudicator comments from three different competitions in which the ensembles had participated in that school year. The final stage in the data collection process involved four taped interviews with Matt. Each interview lasted approximately one and one half hours for a total of six hours. These interviews were taped and transcribed for analysis. Although it might appear that the observation process in this project was limited to only one month's study at the end of a school year, the entire process of vocal development from the first day of school to the end of the school year was addressed during the four interviews with Matt.

The two choirs chosen for the study, the 9<sup>th</sup> Grade Choir and the Chamber Choir included a range from the youngest singers in the high school choral program to the most mature singers. The 9<sup>th</sup> Grade Choir was an auditioned ensemble composed of sixty singers. There were twenty sopranos, twenty altos, ten tenors, and ten basses. The Chamber Choir had a total of forty singers. There were ten singers in each section, with a total of five freshmen, fifteen sophomores, ten juniors, and ten seniors.

The data were initially classified into four main categories using a hierarchical approach. The four main categories were: vocal technique, solo vs. choral timbre, philosophy, and teaching method. Sub-categories were then defined under each main category. The data were then analyzed to see if overlapping and emerging themes, concepts, and patterns existed. The four main categories with the twenty sub-categories are listed below. Some sub-categories fall under more than one category.

- Vocal Technique

- Balanced Resonance

- Blend

- Breath Support

- Healthy Singing

- Posture

- Time Line

- Tonal Placement

- Tone Quality-Beautiful

- Tone Quality-Choral

- Tone Quality-Solo

- Vocal Freedom

- Vocalization

- Vowels

- Solo versus Choral Timbre

- Blend

- Intonation

Tonal Placement

Tone Quality-Beautiful

Tone Quality-Choral

Tone Quality-Solo

- Philosophy

Healthy Singing

Life Lessons

Philosophy--Matt's

- Teaching Method

Experimentation

Festival Ratings & Comments

Humor

Life Lessons

Pedagogy

Time Line

Games and Competitions

Analogy

The four interviews spanned a period of two months. The first three interviews occurred every two weeks. The final interview followed after data had been observed and analyzed from the previous interviews, videotapes, field notes, and competition data. The first interview dealt with the basic questions addressing Matt's concept of "beautiful choral tone." He provided a definition, his plan, and a process to achieve beautiful tonal quality, and a basic outline of how he taught vocal technique in the first two weeks of

school. The second interview began with a recap of Matt's basic understanding of good vocal technique and his special tricks or techniques to accomplish this. Vocal technique was discussed further with special attention given to vowel work and placement of the voice. He also provided a detailed time line of the first two weeks of school for his 9<sup>th</sup> Grade Choir. The third interview dealt with Matt's definition of the *ideal* tone quality. He explained how he came to his understanding of the definition. He also addressed his philosophy of not only teaching proper vocal technique, but the importance of helping each student discover his or her value to the ensemble and to life. This interview was mostly philosophical in nature and shed great light on not only Matt's philosophy of teaching and communicating, but also on his teaching style and method. The fourth interview came at the conclusion of the data gathering process and after much of the analysis of the data. This interview was basically a restating or review of the previous three interviews. It was a time to collect details that might not have been answered in the first three interviews, for example, questions such as 'why do you use the siren exercise?' and 'what does this exercise do for tonal development?' The area of soloistic or blended singing was also addressed. All four interviews provided in-depth answers and were used to elaborate on and compare with the observed data of rehearsal techniques in the choir room.

The process of analysis of the data gathered from the observations of actual rehearsals spanned several months. Each video was transcribed, and I took notes of Matt's body language and hand signals (nonverbal cues), his instructions and comments, his teaching method, and his general demeanor and relationship with the students. Field notes from the on site observations were added to the analysis process.

Matt provided copies of adjudicator comments and ratings from three competitions that the two ensembles had attended. The comments and ratings were analyzed and categorized.

Data gathered in this study, which included observations of rehearsals, interviews, adjudicator comments and ratings, and field notes, were all placed in the various categories that were emerging. From that process followed the process of analysis, correlation, synthesis, and finally discussion and conclusion.

### *Type of Study*

This was a qualitative research study examining what rehearsal techniques are used by a successful high school choral director in establishing beautiful choral tone quality. Qualitative research uses the natural setting as the direct source of data (Bogdan & Biklin 1998, p. 73). In this study, the director, Matt, and choral ensembles performed in their natural setting of a daily high school choral rehearsal. Because qualitative researchers are concerned with context, it was critical that data be gathered on site. The in-depth interviews also provided the groundwork for me to understand the director's philosophy and approach.

This study could be categorized as a descriptive case study according to Merriam's (1998) definition. Merriam stated, "A descriptive case study in education is one that presents a detailed account of the phenomenon under study—a historical case study that chronicles a sequence of events. Innovative programs and practices are often the focus of descriptive case studies in education. Such studies form a database for future comparison and theory building" (p. 38). The participant of this study had demonstrated to his high school choral peers and colleagues that he had a plan and process that was

effective with regard to developing beautiful choral tone quality. This was evident in his success in competitions and through numerous invitations by choral authorities to have his ensembles perform at local and national conventions. This search took the route of asking numerous “why” questions, such as “Why does the choral director put such an emphasis on vocal technique?” and “Why is vowel work so important to his tone-building philosophy?” Every detail counted. “How” questions were also asked, so that one could understand how you get from point A to point B, or how we take an untrained high school singer/ choral ensemble and help them reach a level of excellence. Open-ended questions were asked dealing with the director’s style of communicating timbre, tone production, vowel production, and the vocal technique he used to establish a beautiful choral tone quality. In-depth questions were also asked regarding the director’s philosophy of teaching, his approach to teaching vocal technique, and his process of communicating. Yin (1994) stated that “Data collection follows a formal plan, but the specific information that may become relevant to a case study is not readily predictable” (p. 56). This process requires the researcher to be engaged at all times in wondering and asking why events are happening.

Yarbrough (2000) stated that qualitative research is holistic in nature in that the participants are well studied and it is case oriented. It is non-comparative because the main goal is to understand this particular case and not to be concerned with how it compares to another. It is also empirical because it relies on observation rather than theory. Qualitative research is descriptive with words rather than numbers. As well, intuition plays a major role in analysis and interpretation. The researcher not only observes, gathers data, and collects field notes but he or she must have a sense of what

makes the phenomena occur and must validate them through triangulation, that of checking the data against multiple sources and methods.

This particular study was non-comparative. The purpose was to analyze and define one particular high school choral director's approach and technique for establishing a beautiful choral sound at the high school level. Although two choral groups were observed, comparisons were not made between the two ensembles. Instead the two groups showed the development and progression of skill from the youngest high school singer to the most advanced.

Chapter 4 deals with the areas of vocal technique that Matt addressed and used in his teaching. Those areas are posture and breath control, tone quality, vowels, vocal freedom, and "The Great Debate": a soloistic or blended approach to tone quality. Chapter 5 addresses Matt's philosophy of "beautiful choral tone quality" and how to achieve it, as well as his teaching methods. The last chapter, Chapter 6, is the summary chapter.

The goal of the study was to define what technique the participant, Matt, used to teach high school singers to sing beautifully. This was accomplished through analysis and interpretation of the data. Because I have spent the entirety of my teaching career, twenty four years, in vocal training both for the solo singer and choral singer and have studied voice personally as a performer for approximately eight years, I undertook this project to provide an outline and procedure for teaching the basics of good choral tone production that might be used by both the inexperienced and experienced choral director.

## CHAPTER 4

### Developing Vocal Technique

#### Results and Discussion

The primary goal of this study was to discover the strategy and technique used by a successful high school choral director to achieve a beautiful choral tone quality. The participant, Matt, was chosen because of his success in developing young voices in high school choral ensembles. Through observations of choral rehearsals, interviews with Matt, and analysis of adjudicator comments, this study found that the Matt had developed and established a defined strategy and method for teaching “how to sing with a beautiful tone quality.” His method included a time line of the 9<sup>th</sup> Grade Choir in the first two weeks of the school year in which vocal technique is introduced and developed. Once the technique was understood and the students were applying the technique to their singing Matt worked on the other facets of musical performance. This study dealt only with developing beautiful choral tone and not these other aspects.

Chapter 4 deals with the aspects of vocal technique that Matt taught to bring about a beautiful choral tone quality. Following an introduction of good vocal technique that he taught in the first two weeks of school to the 9<sup>th</sup> Grade Choir, the areas of posture, breathing, resonance, vowels, vocal freedom, and the *Great Debate*, which deals with a soloistic or choral blend approach to choral tone, are discussed. Each category or subject is presented with a ‘results’ section followed by a ‘discussion’ section.

#### *Introduction of Vocal Technique: The First Two Weeks of School*

Matt taught that good vocal technique is imperative and worked to help his students acquire these skills so that a beautiful tone could be produced. Therefore the first

two weeks of school were designated for the teaching of vocal technique alone. Vocal literature was not sung during this time. The only singing was that of vocal exercises to teach good vocal technique. Each day the students were given instruction and they actively participated in the vocal exercises that reinforced and solidified the technical concepts. Each area of technique that was addressed in the previous class period was rearticulated the next day. Repetition was imperative, according to Matt. Since the first two weeks of school dealt only with vocal technique, Matt stated that both he and the students had to have patience as it required concentration, diligence, and much repetition. Building good vocal technique is a step-by-step process. Matt said, “Everything in the first two weeks gets repeated. I try to end the class period talking about what we talked about today.”

From my observations and from hearing Matt’s choral ensembles before I began this study it was obvious that Matt had a unique ability to convey concepts and ideas regarding a beautiful choral sound. When I asked him to give his definition of *beautiful choral tone quality* he responded with,

The first thing, the very basic thing is just a free production, just completely unencumbered by anything. The throat is open, the larynx is relaxed in what I call a “droopy” position and the soft palate is raised. The sound is lofted and there’s a good mix of head and chest resonance. That’s basically it.

Because Matt held that good vocal technique was the foundation for beautiful tone quality and because the first two weeks are foundational weeks in Matt’s approach to teaching vocal technique, a Time Line is provided below. The Time Line outlines the technique that was taught each day for the 9<sup>th</sup> Grade Choir. The data of the Time Line

and vocal technique taught were gathered during the interview process with Matt. The specifics of the technique are not discussed in the Time Line but are explained in detail in each category of technique in this chapter. Matt introduced the basics of vocal technique in this order: philosophy of why we want to learn to sing well, posture, breath control, vowels, placement of tone, range, and vocal relaxation.

The Chamber Choir, being the most advanced ensemble, did not follow the step-by-step technique process of the 9<sup>th</sup> Grade Choir. Rather, in the first two weeks of school Matt began immediately having them sing vocal literature. Because the majority of the ensemble had already been in Matt's 9<sup>th</sup> Grade Choir and the introductory two-week session, the students already understood the vocal concepts. In the Chamber Choir Matt addressed the issues of poor vocal production or vocal technique as they occurred.

Following is the Time Line that Matt used to teach the 9<sup>th</sup> Grade Choir. Each day was filled with teaching vocal concepts and technique through lecture, discussion, exercises, modeling, and listening.

*Time Line– 9<sup>th</sup> Grade Choir: First Two Weeks of School*

*Day one:* Matt began with the explanation of why good vocal technique was important. He explained that singing was not only enjoyable and fun but also something people can do for a lifetime. In the personal interview with Matt he said that he tells the students, "I'm going to teach you how to sing for a life time, where you'll have a healthy voice, and you can sing forever." He further stated, "I relate it to sports and tell them how much I love sports, that my son plays sports, and that I live my life in the gym and on the fields. However, you can't play sports forever and you can't be a cheerleader forever but you can always be a musician. You can always sing well." He then informed

them that they will not like some of the sounds that he will ask them to make, that he will be teaching them in what he calls a *classical choral tradition*. Matt told the students that it was important to understand from the outset that singing requires discipline and hard work. He encouraged them by telling them that their hard work will soon pay off when they are able to sing beautifully. He informed them that he was setting a high standard. He played a recording for them of an advanced group from their high school and also other high schools. He said, “We’re handing the mantle on to you, you have to carry it on. This tradition is up to you and what you can do with it. It’s going to be great.”

After his introductory remarks on his philosophy of why singing is important in life he placed the students in alphabetical order. They remained in this arrangement for the entire first two weeks of school. They were placed in classified vocal sections at the beginning of the third week.

Matt then gave the first lesson in posture and breathing. This took up most of the class period. He also introduced the concept of tone placement which was explained and developed in the next class period. Before the class was dismissed he summarized what was discussed and taught that day.

*Day two:* Matt began by giving further instruction on the importance of good vocal technique. He followed it by repeating the concepts of posture and breathing taught on day one. He spent time instructing the students on tone quality and experimenting with tonal placement or resonance. The instruction of vowel formation followed beginning with the vowel [u]. The International Phonetics Alphabet is used in this study and can be found in Appendix 1. Day two concluded with a summary of what the students had learned that day.

*Day three:* Again, Matt began the rehearsal with inspirational and philosophical thoughts on ‘why we should sing well.’ This was a time of not only teaching technique but of instilling in the students a positive attitude towards music and singing. Posture and breathing were readdressed. The [u] vowel was again taught and sung by the students through various vocal exercises consisting mostly of scale-wise passages. Matt began to inform the students of resonance factors such as vowel placement. The term placement of the tone was introduced. Next, the [i] vowel was introduced. The class ended with a review of what was taught that day.

*Day four:* A review of the technique taught thus far began the day. The [ɛ] and [o] vowels were introduced. The day culminated in a review of all technique taught thus far. Students asked when they would be singing an actual song. He explained that they must be patient, that when they are using good technique and beginning to make beautiful sounds then they will sing a song.

*Day five:* The day began with an inspirational thought and again encouragement to sing well. He played an audiotape of last year’s ensemble to show an example of what they can look forward to. All previous vocal technique was reviewed. All vowels studied thus far were reviewed. Matt introduced the [ɑ] vowel. Day five ended with a review of the first week’s technique and progress.

*Day six (second week):* Matt shared about the joy of singing, making music, and doing it to the best of one’s ability. They reviewed posture, breathing, and proper singing of vowels from the first week. The five basic vowels have been taught; [i], [ɛ], [ɑ], [o], and [u]. The students have been introduced to the importance of a well-placed tone in relation to pure vowels. He further developed their understanding of placement of the

tone and began work with range extension. This was accomplished through vocal exercises. He concluded the day with a review.

*Day seven:* Matt continued the work of forward tonal placement and range extension. The day ended with a review of all technique taught thus far including posture, breathing, vowels, placement, and range extension.

*Day eight:* He continued to work on the student's understanding of vowels and their relationship to placement and resonance. A summary of that day's work was given.

*Day nine:* Matt introduced the concept of freedom of tone. A review ended the day.

*Day ten:* Matt covered the entire spectrum of good vocal technique during the first nine days. This was a day to review all areas of vocal technique. The students were beginning to have a firm grasp on the concepts and were singing well in the vocal exercises. Matt informed them that they would sing actual songs on Monday and would be singing with a beautiful tone quality.

This Time Line provides a basic outline of Matt's lesson plans for the first two weeks as well as insight into his philosophy and method for teaching vocal technique. The details of his approach to vocal technique are discussed in each respective section that follows.

### *Vocal Technique*

Matt methodically taught the basics of good vocal technique. The 9<sup>th</sup> Grade Choir was introduced to these concepts in the first two weeks of school. The Chamber Choir was made up of students who had already worked with him in the past and therefore they did not receive the same intense training. Rather, Matt immediately had them sing from

the repertoire that Matt had chosen for that semester. Matt addressed the areas of vocal technique that needed correction as they surfaced in each rehearsal.

Matt stated that all areas of vocal technique are interrelated. The process that he used to teach this idea of everything being interrelated was systematic. Each concept built upon the next. He began with posture and breath control. The categories in this section are discussed in the order in which they were taught.

### *Posture and Breath Control*

*Results.* As shown in the Time Line of the 9<sup>th</sup> Grade Choir, posture and proper breath control were taught on the first day of class. He spent approximately 20 minutes on this subject on the first day. Each following day the concepts and exercises were repeated for approximately 10 to 15 minutes.

He began with a basic explanation of correct body alignment. Matt explained that the spine must be in a naturally straight alignment, not swayed. The chest must be held high through inspiration and expiration and it should not fall when the breath is used up. A singer should stand with feet approximately shoulders width apart. One foot should be slightly in front of the other. This stance provides good balance for the singer.

With regard to the rib cage he asked the students to explain the purpose of the rib cage. A student said that the rib cage protects the lungs. Matt further explained that the rib cage must remain high during the singing process. He said that if the rib cage is not expanded then it is pressing down on the lungs. The lungs must have room to expand for inhalation. To help the students understand the shape and form of the rib cage he had each student place their fingers on the bottom of their ribcage and then he asked them to feel the bones of the rib cage.

In the beginning two weeks of school he reinforced good posture by having the students stand correctly, then he had them move to a good sitting position where the back remains straight and feet are planted on the floor with one slightly in front of the other. He then had them return to the standing position. He repeated this exercise many times to reinforce the concept.

In Matt's teaching experience not only has he recognized that repetition is extremely important, he has designed "quick fix" ideas to remind the students of a particular concept. With regard to posture he used what he called the "shoulder roll." Matt explained the shoulder roll exercise this way, "First I have them raise the shoulders up, then back, and finally down. I have them roll both shoulders back which usually raises the rib cage immediately and they have everything set to go." I observed during one of my observation periods that he continued to use the shoulder roll exercise even in the last month of school. It appeared to be a quick reminder to the students of the importance of good posture. Another idea that Matt used to help the students align the body to the correct posture involved having the students raise their arms high above their heads and then he had them bring their arms down slowly to their sides. This caused the rib cage to find a high position rather than being slumped.

The next area of technique that Matt taught was breathing. He discussed the anatomy of the breathing area. He talked about the diaphragm area and how it must expand during inhalation and will gradually move inward as the breath is used.

Matt explained why a singer must have good breath support. He stated that the most important thing in good breath support is to "get a good supply of breath and then

control the exhalation.” He also said, “If the support isn’t there, the breathing isn’t there to energize the tone.”

Matt used several different ideas to communicate the process of breathing for singing. First, he had them locate the diaphragm area. He did this by having the students place their fingers on the bottom of the lowest ribs. He then had the students walk their fingers in to the center where they would find the diaphragm area just below the lowest ribs. He had the students place their fists on this area and inhale. As they inhaled they felt the diaphragm area expand against their fists with a slight resistance. He explained that this area should not cave in during the singing process. To understand and feel the diaphragm area and its expansion, he had the students imagine that they were filling up an inner tube as they inhaled. He then had the students lie down on the floor on their backs. As they relaxed the lower abdominal area and inhaled, they felt and saw the lower abdominal area rise and fall. The diaphragm area rose upon inhalation and fell during exhalation. To feel the sensation and movement in the abdominal area he had the singers say ‘sh, sh, sh.’ They felt the diaphragm area bounce. He explained that the breathing area must stay buoyant, not still or stiff, and he had them imagine that it is like a trampoline, as if the air bounces off of the trampoline. This gives the singer energy and supports the tone. Matt explained that the vocal area from the throat area on up must remain free from muscular tension. This is only possible if the breathing area is energized.

He also used a counting exercise to not only help the students understand breath expansion but to help them gain control over exhalation. He had the students inhale slowly as he counted to 10. Then they exhaled as he counted to ten. He increased the

counting the next time to 15, then 20. He also turned this exercise into a game by asking them to slowly inhale as he recited the alphabet. He also turned the counting exercise into a game. He had everyone stand, take a deep breath, and he began to count as the students slowly exhaled. The students sat down when they ran out of breath. The last person standing won the game and everyone applauded. The importance of these two exercises (games) was to help the students gain better control of inhalation and slow, controlled exhalation. On day two of the first week of school he reminded the students of the importance of good posture. He then had a student demonstrate good posture for the entire choir. Posture and good breath support were stressed throughout the entire school year. Matt stated that he firmly adheres to the idea that posture contributes to tone. He stated that it feels strange for a teenager to stand correctly because Americans, as a society, have bad posture. I observed Matt instructing the students to stand like little soldiers to keep their sternums high.

To gain better control of the breath and its connection to tone Matt assigned each section to a pitch on an F chord. (The U.S.A. Standards Association system of octave identification is used in this study.) He had the basses sing  $F^3$ , the tenors  $C^4$  (middle C), the altos  $F^4$ , and the sopranos sing on  $A^4$ . As they sang the chord he asked one section to crescendo using the breathing area and not the throat. The other sections maintained a pianissimo dynamic level. He then asked each section at different times to do the same.

In my teaching experience, the application of breath support to singing and tone is not always easy to explain. During an observation of a rehearsal I noted that Matt asked the singers to spin the airflow through a particular word. He said, "If you don't move the air through it, it's going to be boring. Matt demonstrated how they were to connect or

move the air through the words to achieve good phrasing. He told the choir that they could stagger their breaths, if necessary, but that the phrase must be connected. He talked to the 9<sup>th</sup> Grade Choir about being committed to a phrase. He said, “It’s impressive to stay committed to the phrase all the way to the end. Stay committed. What do you do when you run out of breath?” A student replied, “Stagger your breath.” Matt informed the students that phrasing is determined by breath control.

He also told the students, “You aren’t putting steam in your engines and so the engine isn’t going anywhere, you haven’t fueled your sound.” He informed the Chamber Choir during a rehearsal that they didn’t have enough energy in the sound. He said, “Some of you get out of steam and you’ve got nothing to give me. So if you need to sneak a breath, then do so.” Matt was informing the students that not only must you stand with good posture and inhale from the diaphragm area, but a singer must keep the sound energized with the sensation of the breath doing the work. On another day when Matt wanted more energy and tone from the soprano section of the 9<sup>th</sup> Grade Choir he asked them to, “Give us some oxygen.” Matt often used humor to make a point.

*Discussion.* Based on the above results it is apparent that Matt had a deliberate plan and process in place with regard to teaching posture and breath management. He held to the idea that everything is interrelated and he built one concept of technique upon another. If posture is not properly aligned than breath support will not be there. If breath support is not there than resonance factors will not line up properly. If resonance factors do not line up than vocal tension ensues. Finally, when there is tension in the vocal muscular the tone will not be free and resonant. It will not be beautiful.

Matt began the school year with what I would call a “vocal boot camp” approach to teaching vocal technique. Posture and breath control began the workout. The strict attention to good posture and breath control continued throughout the school year. It was obvious that Matt worked hard to help students understand the concepts and technique of deep diaphragmatic breathing and its application to tone production. He demonstrated through his approach that these principles should be explained clearly, repetitively, and succinctly.

Beginning with the first day of school he gave very specific detailed instruction regarding the importance of posture and its connection to breath control. He explained the anatomy and mechanics of posture and breath control. Matt then explained how the breath is to support a free, beautiful tone. Matt’s approach is consistent with the posture and breath management techniques of Miller and the early Italianate technique of *appoggio* (Miller, 1986, p. 23). As Miller stated, in the *appoggio* technique muscles and organs of the trunk and neck must be in balance. This balance allows for perfect coordination of not only the muscles of inspiration and expiration but the connection of these muscles to the muscles of the larynx used for tonal production. In the *appoggio* approach this fine muscular balance is the foundation for a supported, well-produced tone. This kind of muscular balance and breath support is necessary for vocal freedom.

Regarding the actual position of the breathing area, both Matt and Miller (1986, p. 24) stressed that the sternum must be held in a moderately high position. This position is maintained throughout the inspiration and expiration cycle which involves the full spectrum of an entire sung phrase. Miller (1986) explained that the reason why one should never allow the sternum to slump is because the ribs will not remain expanded

during a phrase if this happens. In turn, if the ribs collapse the diaphragm will ascend quickly and breath will be forced out too quickly. Matt's shoulder roll exercise was his "quick fix" to help students realign their posture so that the sternum is held moderately high. The shoulders must also remain in the position where they are not slumping forward nor are held too far back. Rather, the shoulders sit perfectly balanced on top of the spine and rib cage. The spine must be as straight as possible without a curve that would cause a sway back. Rather, when the spine is in good alignment the tailbone is tucked under not permitting a sway back. Matt reinforced this concept throughout the entire school year. Again, the shoulder roll exercise became Matt's signal to the ensemble members that their posture was out of alignment. This exercise was simple and quick and further explanation during the school year was not necessary. Because Matt wanted to communicate concepts in a quick and easy manner he had brought the concept of good posture down to one movement, the shoulder roll. Students do not intentionally stand or sit with poor posture but they simply forget. In my opinion, the reason why this particular point must be clearly taught is that young people in our society today do not naturally have good posture. It is not often taught at home and it is not a cultural 'must'. The idea of good posture is often foreign to the students and they must be reminded often of its importance to beautiful singing.

Flexibility in the breathing area is critical for the inhalation and exhalation process which allows for the larynx to remain free. The inhalation and exhalation process is another key component of breath management. As a singer inhales silently the throat area does not feel muscular tension. Rather the throat feels open and free. The breath is ready to be used without a sensation of pressure or holding. Miller (1986) stated that, "No

initial sensation of grabbing or holding the breath should be associated with singing. When a singer feels extreme muscle resistance to inhalation, in either pectoral or abdominal regions, a ‘full’ or ‘deep’ breath is not the cause; unnecessary muscle antagonism is taking place. In primitive valvular function, glottal closure is the normal response to tension in the costal and abdominal regions” (p. 26). Simply stated, if the breathing area is tight, tension in the throat will result. Premature glottal closure, that of adduction of the vocal cords too early, will result in a build up of breath pressure. As a singer begins to sing, the vocal cords will pop open resulting in a glottal or hard attack. Again, the “*appoggio*” technique teaches a fine balance of the muscles of the trunk and neck areas so that there is no excess sensation of rigidity or weakness.

From my studies and work with contemporary vocal pedagogues the concept of diaphragmatic-intercostal breathing is accepted by the majority of teachers. Again, this is the technique of the early Italianate school of the *bel canto* period and is still considered the correct way to breathe for singing today. Matt clearly articulated this concept. However, Johnson (1997) and McCoy (2004) pointed to a common misconception found in the choral rehearsal rooms of today. Many directors misinform their students by using this phrase, “breathe from the diaphragm.” They clarified this misconception by explaining that the diaphragm is not a muscle that can be directly controlled but is rather controlled by the lower abdominal muscles. The diaphragm moves out upon inhalation in response to the lower abdominal muscles relaxing outward. Singers think of expansion in this area but cannot directly feel or manipulate the movement of the diaphragm. Some singers even have the misconception that as this lower abdominal area moves outward that air actually enters the stomach area. This misconception must be clarified by giving

students a clear picture and explanation that air enters the lungs only, not the stomach area. Without a correct of understanding of the muscular mechanics for breathing a student may not understand and feel the proper sensations for good breath support. Matt taught the proper expansion of the diaphragm area to his students as is seen in the exercises he used. He explained that the area of the diaphragm is located just below the center of the lowest ribs and had the students locate this area with their fingers. It is also taught by most vocal instructors that the expansion of the breathing area during inhalation is not only felt in the diaphragm area but expansion is felt on the sides of the rib cage and into the back. This is full expansion of the rib cage area during inhalation. Miller (1986, p. 25) stated the expansion is in the frontal thoracic, epigastric, and umbilical area as well as into the lateral-posterior areas. Matt also taught this full expansion.

From my observations, Matt's insistence on the students having a solid understanding of breath management is critical to his approach and is somewhat unusual at the high school level. Again, from my experience as a high school choral member and my years as a college professor, I have observed that usually such in-depth work is reserved for the private studio or for the undergraduate student in music. Often times the only instruction given at the high school level is the infamous phrase *breathe from your diaphragm*. Clear explanations regarding posture and its importance to breath control as well as breath control itself are lacking in the choral rehearsal room. Matt deliberately repeated the concepts over and over again. Note that he started teaching the concepts of posture and breath control on day one. He repeated and reinforced these same concepts each day for the first ten days. From that point on he reminded the students to have good posture and listened for the use of good breath control through the remainder of the

school year. He was still bringing it to their attention when I observed his rehearsals in the last month of school. His insistence and persistence might be viewed by some students and colleagues as “overkill.” However, the results speak for themselves. This is a testament to the fact that young voices can and should develop good breath management.

#### *Tone Quality--Placement, Resonance, and Color*

While tone quality is the subject of this study, in Matt’s philosophy of vocal technique tone quality is the result of overall good vocal technique including posture, breath control, placement of the tone, pure vowels, and free vocal production. Matt spent much time and energy giving instruction in this particular area. This involved verbal instruction, playing recordings for the students, modeling the desired tone quality, and experimentation with various resonance possibilities, among others.

With the 9<sup>th</sup> Grade Choir Matt began immediately teaching how to sing with balanced resonance. As observed from the Time Line, on day two he devoted most of the class period to teaching tone quality concepts. Each following day he continued the process of developing these concepts. After the two week introductory phase, Matt reiterated and reinforced these ideas on a daily basis.

With the Chamber Choir, Matt did not start with instruction regarding the basics of good tone quality; rather, he immediately began to assess the strengths and weaknesses of the ensemble regarding tonal issues as they sang vocal literature. Because the choir was comprised mainly of students that he had taught previously, Matt was able to work with tone placement and resonance as was needed. When he detected that students were not placing their voices well or if he heard tension in the singers, he would stop and work

through the problem. He did not have a specific lesson plan for this group with regard to vocal technique.

*Results.* Because this study dealt with beautiful choral tone quality, the first thing that I asked Matt was for him to give his definition of beautiful tone quality. His response was:

It's everything! It's everything in vocal production. It's everything about the basics of producing a sound. They are all interrelated. You can have a concept of a wonderful sound but if the support isn't there, the breathing isn't there to energize the tone. It doesn't matter what concept you have, it's not going to happen... So, having said that, the technique of producing the sound has to be very healthy, the tone has to be free. It can't be encumbered in any way by any part of the body, or the jaw, or the tongue, or posture.

In the second interview I asked Matt to elaborate on his definition. He said,

The throat is open, the larynx is relaxed in what I call a 'droopy' position. The soft palate is raised and the sound is lofted. There's a good mix of head and chest resonance. That's basically it. What really makes it incredible after you have the basic free production is to have the airflow. When the breath is moving it keeps the pitch accurate and keeps the sound alive. I tell my singers to "move the breath," "move the breath."

One of the main goals for Matt was to have all singers singing with balanced resonance. He often used the term "placement" of tone when speaking of balanced resonance. Because "placement" is a term that some contemporary vocal pedagogues consider a negative term I asked him why he used it. Many teachers have stated that the

term implies a “putting” or even “forcing” of the tone into a particular resonance area. They argue that it causes a singer to have unnecessary tension. Matt explained that he was aware of its possible negative effect. However, he felt it helped the students understand the importance of sensing resonance in particular areas. He did explain that he used it in conjunction with other terms and explanations so that the students clearly understood that the entire vocal instrument must be free of tension. He used a scaffolding method beginning with the term “placement of resonance” followed by explaining the various areas in which a singer should sense vibration or resonance. Matt taught that the tone should resonate through the full spectrum of resonance cavities. Head resonance must be in all tones both high and low. There should be less chest and mouth resonance in the upper registers.

He stated that his 9<sup>th</sup> Grade singers had never heard the term “placement” and didn’t have any idea of what it meant to feel where the voice should resonate. He began teaching this principle on day two of school and spent approximately 20 minutes on this subject. He said, “Resonating the voice is a whole new concept to them. So we do some experimenting with where you can place the sound. If the singer is not aware that there is even such a thing as placement, how are they going to know where to place the voice and how that affects tone and the color of tone?” In the experimentation process he had the students feel different areas of resonance. Matt said, “I have them hold their hands up to different areas and we try placing the sound in different places. I tell them to totally put it in the throat and then we work on moving it, letting them know that they really can control where they’re exactly placing the sound.”

Another technique that Matt used was to have the singers feel placement with a hum sensation or buzzing sensation. He used the consonant [n], an alveolar-nasal continuant. The term, “alveolar-nasal continuant” means that a tone can be sustained (continuant) as the apex of the tongue touches the upper alveolar ridge just behind the upper front teeth. The consonant [n] creates a buzzing or humming sensation in the mask and nasal area of the face. With this exercise, which Matt called the ‘pressed “n”, the students were asked to touch their tongues on the top of the mouth and sustain the pitch on [n]. Matt said, “We start with the ‘pressed “n” and vocalize. I try to vocalize mid-range up just because the resonators for me and for most singers work better in the mid-range...The [n] placement of tone is the easiest, the best, the healthiest and intonation-wise, it’s great.” Matt taught that the [n] consonant brings the tone more forward than any other sound. He had the singers hold the intoned [n] for a quarter note count, sometimes longer. Then he asked the students to describe what they are feeling and where. “Do you feel the buzzing, where do you feel that resonating, where do you feel that vibrating?” Matt said that with this exercise he is trying to help the student land on a concept that they will feel. When a student says that he does not feel or understand these concepts he looks for a new concept to explain it. Matt said,

I’ve done everything from playing a key on the piano while pushing the sustain pedal down and then asking the student to hear how it keeps ringing, to having students place their hand on the piano to feel the sensation of vibration of sound. I have also had students put their hand on their chest and hum in a very chesty voice to feel the sensation of resonance. They definitely feel the vibration of the chest.

From the [n] sensation or placement he added different vowels and had the students align them to this focus of tone. He instructed the students to lead the tone with the [n] sensation followed by the designated vowel. During one rehearsal I observed Matt having the students sing 'nah' on the descending scale degrees of 5,4,3,2,1. He sang with them to demonstrate the desired tonal quality. He also used the consonant [m] with this exercise. He said that the [m] consonant is not as forward as the [n] consonant placement but it does help the student feel head resonance.

Matt also taught the sensation of an open throat and told the ensemble to "sing like you have a whole egg inside your mouth." He wanted the students to sing with an open throat and at the same time allow the tone to ring forward into the [n] sensation. The open throat concept with the forward focus brings about the desired tone quality of bright and ringing but warm and resonant or the *chiaroscuro* tone.

He also helped the students feel the sensation of the raised soft palate as part of the idea of an open throat. He stated that he is amazed at how the concept of the raised soft palate changes the sound of the young voice. "It's just the most thrilling thing," Matt said. When teaching the proper sensation for the elevated soft palate, he explained how the resonance is allowed to enter the head cavities. First, he had the students locate the area of the soft palate by having them walk their tongue back on the roof of the mouth. They started with the tongue touching the back of the upper teeth and walked it back on the hard palate until they reached the soft palate. He then informed them that if they could touch their soft palate with their tongue they would "probably throw up." He used much humor and drama in his teaching and said that, "They love anything graphic." He then had them begin a yawn sensation to feel the elevated soft palate. Next, he explained

what a “phonated yawn” is, simply a yawn with sound. He said that one year, as they did this exercise, a freshman boy said that he thought it sounded like the voice of Julia Child. From that point on he had the entire choir speaking like Julia Child and they quickly understood the sensation of a raised soft palate and head resonance. He often used the word ‘hooty’ to describe the Julia Child sound. He said that when he will calls out the word ‘hooty’ the students immediately know what he is asking for, simply more head resonance. He told the ensemble during one rehearsal that I observed that they did not have the soft palate raised in general. He explained, “What the raised soft palate does is it allows the sound to go up into the head where it rings around and resonates.” He then had everyone feel the beginning yawn sensation and had the students make the siren sound from a high pitch to a low pitch with the sensation of the yawn.

He also used the sensation of imitating a “siren” sound to feel open head resonance. He had the singers ascend and descend through approximately 3 octaves with the [u] vowel in a siren fashion. He had the male singers vocalize up to high E<sup>4</sup> and the females singers up to high E<sup>6</sup>. Matt explained that he chooses to use the siren exercise because it is non-threatening and something that everyone can do.

When they were little kids and played with cars, they all made siren sounds. So it’s something familiar and we can all do it and be sort of silly. Sometimes when we do it we’ll hear the band next door do it after us...the siren really lofts the sound up into a place where there can be greater resonance, freedom, and a bigger sound up into the head and mask of the face.

The siren exercise not only helped the students understand head resonance with a raised soft palate but Matt also used it to show where their natural break was with regard to

vocal register. This is called the passaggio area by vocal pedagogues (Miller, 1986, p. 115). Matt demonstrated his break area and explained how breath control and knowing how to feel a “lofting” of the tone in this area will help eliminate one’s break.

When I observed a 9<sup>th</sup> Grade Choir rehearsal, Matt instructed the singers to think of keeping the tone placed. When the tone was not open enough into head resonance he asked them to keep the tone tall. The students appeared to understand the instruction and terminology. Tall resonance meant head resonance or resonance in the mask and head areas.

He worked tone placement differently with the Chamber Choir. The Chamber Choir was auditioned and selected in the spring term of the previous year. In the selection process he stated that the main component he looked for was tone. He wanted singers with a free, rich, warm quality. When auditioning, if he noticed that a student had potential but the tonal placement was not what he was looking for, he gave them a quick lesson and asked them to try various placement ideas. If they picked the concept up quickly, this student was considered for the Chamber Choir. Because most of the singers in the Chamber Choir had been through the rigors of Matt’s training on placement and resonance the previous year, Matt had the Chamber Choir sing vocal selections on the first day of school. When observing his rehearsals with this group, I heard him make general statements or comments about tone to remind the singers of an open, forward placement. As the choir was singing he simply called out such words as: “warm, hum, smoky, ring.” He also called out short phrases: “Everybody ‘ring’, it has to go somewhere--either forward or up, we’ve got to keep it placed.”

Another aspect of tone quality, according to Matt, is coloring. Color is the brightness or darkness of the voice. Balance of resonance, as already discussed, means that resonance takes place in various areas of the instrument. A warmer tone will have a full resonance with an open throat. A brighter quality will resonate more in the mask of the face.

Matt stated that different facial expressions also influence different colors of tone. For example, raising the eyebrows helps with the inward lift of the soft palate which brings about more head resonance. He taught that the eyebrows can be lifted in a positive manner, as if in a smile, versus a negative, tense lifting of the eyebrows, as when frowning. He said that he talks with his students about this and asks them to demonstrate this point to his singers by having the students sing the [a] vowel with an angry expression, then with a real, bright, intelligent, “36 on the ACT” face, then with a real dizzy, ditzy blonde sort-of-look. Finally, the students sing with a sad face and then a happy face. In one rehearsal that I observed Matt told the ensemble that he and the accompanist had done some experimenting with facial expressions. He said,

Now some of you are looking at me and there’s a smile in your eye, that’s really great! We have found that people smiling the tone had more energy in it, it was brighter, and a more vibrant sound. Then we had people singing with dead faces and it was a “blah,” uninteresting, empty, flat sound. So everybody look at me with a smile. When you smile you are not going to look like a “goober” unless you take it over the edge. I’ve only seen one choir in my life that took it so far over the edge. They smiled on everything, even things that were sad. We’re not going let you look like goobers. Put on a smile.

Technically, a smile will lift the facial muscles which in turn lifts the soft palate area. Indirectly the singer is achieving the raised soft palate and allowing for more head resonance.

Coloring the tone is an important element in interpretation as well. The color of the voice must match the mood and the message. “Tone color is influenced by the text”, he said.

If you’re singing something from the Renaissance it will have a brighter, lighter quality. If you’re singing something from the Romantic period or if you’re having your choir do something from an opera chorus, it’s going to have a heaviness and likely a darker quality.

The easiest way to make this clear to a high school ensemble is to have them be fully aware of what the text is talking about. Matt said,

This is one of those areas where I tell them that I don’t believe them. They’re singing about love or dedication, or commitment, or sincerity, or something, and the color doesn’t reflect that. Then we have to pause. If you’re familiar with your ensemble, they’re familiar with you. Sometimes all that is needed is for you to point it out to them. Sometimes it’s just saying, ‘I don’t believe you and so I need it to change, so, let’s change it.’ Other times I have said to them, ‘I don’t know how to tell you to make that sound. This is an abstract thought but let’s make it happen.

One example of how he communicated the importance of coloring and expression was when Matt asked the students to tell him what a particular note would sound like if they “loved” it. He then asked them to sing and make it sound like they really cared. He

said that high school students think that it's great if you're weird. "You know, you might think that's bizarre but some high school students think that's the best. They're glad you're weird. You can't be weird for the sake of being weird but you have to have a purpose." The point that Matt made is that color and interpretation work together to create music that speaks to the heart. In order to make his point he often got the students attention by having them think about a concept in an unusual way, as he termed it, "weird."

One other aspect that affects the color of tone, according to Matt, is "who they are as a person. Who they bring to the ensemble is critical. You can't convince me otherwise that it doesn't affect the color of the tone. It does." This element will be discussed in Chapter 5. He again stated that he does not try to make "carbon copy" singers but rather he tries to free the voice for its own natural color. Although he works for unified vowels and blend he does not try to make everyone sound alike. Rather, he tells the students to sing freely with a healthy production.

*Discussion.* Tone Quality, the character of sound that distinguishes one voice from another, is not only the topic of this study but is and has been the main topic of many discussions heard at the conclusion of choral concerts. This character of sound is often the distinguishing factor in whether or not a concert is hailed by the listener as "magnificent" or is given a "thumbs down." It is this aural component in music that is most subjective and yet when the listener is struck by its beauty, music becomes more than music, it becomes magical. We can all recall those moments when we felt as if we had been lifted into ethereal places, when the voices didn't sound earthly but rather heavenly. Whatever this might mean we recognize the power of a beautiful voice. The

defining factors of the term “beautiful” may vary some from person to person and yet there appear to be points of agreement. These points of agreement are: free production of the voice, resonant, colorful, and communicative. It can be further deduced that an important aspect in determining the “ideal” tone quality is balance, balance of resonance and balance in production.

Matt’s definition of what makes for a beautiful tone quality referred to everything being interrelated. By this he meant that in order for the tone to be energized, healthy and free, there must be a connection or relationship of the tone to the breath and vice versa. This interrelated concept has already been addressed as the *appoggio* technique (Miller, 1986, p. 23).

In a study using spectrography, Robison (2001, pp. 8-9) found variances in timbre of trained and untrained voices. The variances in acoustical properties showed that the trained voice was more balanced or coordinated with regard to breath management and resonance. As a result the trained voice had a continuous vibrato, had a balance of bright and dark qualities (*chiaroscuro*), pitches were mathematically tuned with harmonic overtones, it projected better due to a high percentage of overtone frequencies, was consistent with regard to vowels, pitches, range, and dynamic changes and lastly, was understandable due to good use of consonants. This supports Matt’s belief that a well-produced voice must not only be properly aligned and balanced but that the qualities of good tone include bright and dark qualities with a high percentage of overtone frequencies. The term that is used by Miller (1986, pp. 48-49) to describe bright and warm timbre existing side by side is “balanced resonance.” Matt further described these tone qualities as a voice that exhibits warmth through a relaxed open throat while

brightness is the result of a forward ring or placement. To establish these two main characteristics (*chiaroscuro*) he used the [u] vowel which will be discussed further in the section on vowels, in conjunction with the [n] consonant. The [u] vowel, according to Matt, allows the throat to be open with the elevated soft palate while the consonant [n] directs the resonance forward for a ringing quality in the mask. Matt also used the [m] consonant before vowel sounds, as it also helps a singer feel head resonance. However, he stated that the [n] consonant causes the tone to be felt further forward than the [m].

Although most vocal pedagogues teach that the resonator tube or resonating cavities in the vocal tract consist of the nasopharynx (nose and head), oropharynx (mouth), and laryngopharynx (throat) (Miller, 1986), Robison (2001, p. 10) stated that tracheal resonance is also a key component. This means that resonance takes place below the vocal folds as well.

Matt had the students experiment with tonal placement to help them feel these various areas of resonance. He had them sing a tone that was predominantly in the head, then mouth, and chest. He used his hand at those various levels to show where the tone was ringing or being placed. Later in a rehearsal when the choir was singing and he wanted more resonance in a particular area he placed his cupped hand at the level desired and the singers made the resonance adjustment.

According to Matt, a relaxed, open throat (*gola aperta*) and raised velum are important aspects in achieving a beautiful tone. These two areas are not separated but rather function as a whole. The idea of the raised soft palate is also held by Hassemann and Jordan. They stated that the raised soft palate is a “major determinant of vocal resonance and general tone quality” (p. 58). Matt informed the students that as the soft

palate is arched it allows for resonance to be lofted into the head area. In explaining the open throat concept, Matt helped his students understand that an open throat concept can develop into too dark a timbre and explained that it must be balanced with the placement of forward ring. As well, Nesheim and Noble (1995, p. 17) stated that singers must sense resonance in both the pharynx and mouth and they stated that the open throat concept refers to the pharynx area. They cautioned that a singer should not try to consciously open the throat but should relax the tongue forward with the tip of the tongue resting against the lower front teeth. However, they also stress the importance of the larynx remaining relaxed and low while the soft palate is arched. This explanation coincides with Matt's concept. He referred to a relaxed, floppy sensation in the throat area while one senses the elevated soft palate. This balance of resonance is addressed by both Miller (1986, pp. 48-49) and McCoy (2004, p. 58).

Titze (Robison, 2001) tried to decode "beautiful tone quality" in his study called 'Pavarobotti.' He found that there was an interactivity in the whole vocal process. He stated that the physics of singing has been viewed linearly rather than interactively and described the principle as imagining the hand "shaking a bush". As the breath begins or the bush is shaken by the hand, the hand now becomes part of the process or part of the bush. This interactivity means that everything is interrelated. This is exactly the description or idea that Matt expressed when he stated that "everything is interrelated." Breath is related to resonance and once again the term *appoggio* can be applied.

As was seen in the results section, Matt had numerous ways to communicate the concepts of resonance. He used lecture, discussion, nonverbal cues, modeling, imagery,

analogy, visual, experimentation, imitation, and repetition to teach. His method of presenting ideas through various approaches appeared to be very effective.

To summarize Matt's approach with both ensembles, students in the 9<sup>th</sup> Grade Choir were repeatedly taught the basic concepts of resonance. By the end of the 9<sup>th</sup> grade year these singers not only understood terms and concepts, they were able to demonstrate the desired tone. They appeared to be well-prepared to participate in the more advanced choirs the following year. The 9<sup>th</sup> grade year had been a "vocal boot camp" and Matt saw great success with his approach.

Singers in the Chamber Choir were auditioned in the spring semester of the previous year. Matt selected the ensemble with tone quality as a top priority. Matt looked for voices that were not only using good vocal technique but also voices that were free, rich, and warm in tone quality. The Chamber Choir was given similar instruction during the school year regarding tone quality, but less time was spent since they had already been taught the basics. Tone quality issues were generally addressed within the context of the literature rather than in the instructional format of lecture and vocal exercises.

For both choirs, Matt repeated concepts of tone production over and over again. Because he presented the concepts in various ways the students did not appear to be bored with the presentation. When observing both choirs at the end of the school year they sang with a mature, beautiful tone quality. The tone was full and warm, yet clear and ringing. Both groups demonstrated the *chiaroscuro* tone.

#### *Tone Quality--The Ideal*

Without an idea of what a choral ensemble should sound like, a director is without a plan and process. Because it is a subjective issue, directors can and do disagree about

what is the “ideal” choral tone quality. However, several important things must be considered when establishing one’s desired or “ideal” quality. First, the choral director must know how the voice is produced. Second, he or she must communicate good vocal production effectively so that the singer sings in a healthy manner.

*Results.* Matt expressed that in his undergraduate program the idea or concept of having an ideal tone quality was introduced. To be an effective choral director you have to have an idea of the ideal, he recalls hearing. He remembers thinking that it was a good idea. However, he did not know what his ideal concept was. Matt stated that in the early years of teaching one of the reasons that he had choirs with different success rates or different choral sounds was because he didn’t have an idea of what his ideal was and didn’t know how to find it. It took a number of years before he was able to formulate and define it.

As was discussed in Chapter 1, Matt was searching for his ideal in tone quality when a C.D. arrived in the mail. It was a recording of The University of Mississippi Concert Singers entitled “The Luboff Legacy” directed by Jerry Jordan. From that moment on he began to define and establish his ideal tone quality.

Today he can clearly articulate that beautiful choral tone quality is tone that is comprised of a number of factors. The tone must be free, supported, full, resonant with both warmth and brightness, and communicative.

When Matt auditioned the Chamber Choir in the spring semester for the following year he already had the tone quality in mind that he was looking for. As has been stated, Matt prefers a mature, warm, rich quality. Once the choir was formed and rehearsals began he listened, analyzed, and instructed the singers as to what he wanted. Matt said,

“I might go down the rows of the whole soprano section and have them each sing a two bar, four bar, or eight bar phrase to hear who’s got it. Then we’ll model after that person. If no one has it, then I’ll describe it or I’ll sing it and say, ‘you can make it happen. I’ll let you know when you have it.’”

Matt was careful, however, in making sure that the singers did not develop a sound that was too mature or too dark. He did not vocalize the singers in the lower register in the beginning of the year. Matt said, “I have found through the years that if I start working them low where they’re comfortable, they develop too big of a sound, too dark a sound.” I asked Matt how he keeps his choirs from becoming too dark. He stated that it is a problem that he has had to work on. He has received some criticism from adjudicators that commented that his choirs sound too dark. The majority of judges, however, praised him for the open, free sound his choirs produce. Matt defended his tonal preference. He said that young voices do not have to be too bright or mouthy in resonance, which is often the tone quality of high school ensembles. Rather, he expressed that he helps singers find a more forward resonance if the sound is generally moving in the direction of too open or too big. One way that he said he communicated this was by holding his hand up to a particular area of resonance of the head. This was to show the choir where the tone was resonating. If they were singing too dark he placed his hand at the back of the throat, back by the ears, and then he moved his hand forward towards the nasal area to show the more forward placement.

With the 9<sup>th</sup> Grade Choir Matt had to start from the beginning as was discussed in the previous section. His preference in tone quality was the same for all of the high school ensembles. The same tonal ideas and technique were communicated to all groups.

*Discussion.* How can there be an ideal tonal quality when some listeners prefer a more ringing, lyrical quality while others prefer a warmer, richer quality? In either instance these voices must not be strident, piercing, tense, or labored. Each choral director must establish his or her personal preference which then becomes his or her ideal. This “subjective” ideal can come within the confines of good vocal technique and balanced resonance. What must happen in all instances is that neither too bright nor too dark a quality exists. As was discussed in the previous section, all tones must have the full spectrum of resonance possibilities in each tone but always with head resonance present.

Again, Matt described his ideal tone as a tone that must be free, supported, full, resonant with both warmth and brightness, and it must be communicative. According to Webb (2002), a choral director has a tonal preference in mind with regard to both solo and choral singing. Webb preferred a voice that was relaxed muscularly in the larynx with much upper-partial in the voice. He listened for a “lift” and “overness” to the tone. He stated that this “overness” is crucial not only for the tone to be a beautiful but also for blending purposes. This is another way of explaining Matt’s preference for high head resonance with a relaxed ‘droopy’ larynx. The resultant timbre is bright and warm, or ringing and rich, at the same time.

Crabb (2002) stated that choral directors often go into the audition process looking for a particular ideal tone quality while others form the sound that they desire after the group has been established. Matt appeared to do both. With the young 9<sup>th</sup> Grade Choir he built or formed their voices with good vocal technique and taught them the resonance possibilities. With the Chamber Choir they have already been through the

rigors of training and he then chose the quality or timbre that he desired for that choir during the audition process.

The most important point within this discussion, however, is that without an “ideal” tone quality in mind a director does not have direction. Matt expressed that that was the reason why his choirs had varying degrees of success in his first years of teaching. He didn’t have an ideal tone quality in mind. Without it a director cannot give direction and instruction regarding tone quality. One rehearsal he might ask for one sound and the next, in his confusion, ask for something different. In order to train the young singer well the choral director must know from day one what he wants and how this can be achieved. Whose fault might it be when a young choral director does not have an “ideal” established? Is it because of curriculum issues in undergraduate work? Is it a result of not having established good vocal technique in his or her own personal singing voice? Did his mentors not teach and share their tonal preferences? Or, is it possibly a result of all of the above? Whatever the reason, it is imperative for the choral director to know what his or her preference is before any kind of instruction is given the young singer.

### *Vowels*

The vowel sound is an extremely important part of tone building. A vowel, according to Webster (1999) is:

any voiced speech sound characterized by generalized friction of the air passing in a continuous stream through the pharynx and opened mouth but with no constriction narrow enough to produce local friction; the sound of the greatest prominence in most syllables. (p. 1604)

Since the vowel is the voiced part of speech and “carries the greatest prominence in most syllables,” it is the most important part of vocalization for the singer. Without a vowel sound there is no tone. Teachers of singing have recognized for centuries the importance of pure vowels. Vowels must be correctly produced and clearly understood by the listener. With the pure vowel comes the importance of legato singing or connecting vowels back to back to produce constant tone. Voice teachers often instruct their students to “sing from vowel to vowel.” The less interruption by consonants, the better the tone will be.

*Results.* Matt’s work with vowels was extensive. He taught that open, pure vowels were imperative for a beautifully placed tone. Because the majority of the Chamber Choir had been under Matt’s tutelage for several years, he did not spend time in the beginning weeks with specific vowel work. Rather, Matt analyzed vowel problems when they occurred in the literature and stopped to correct and reinforce the concepts as needed. I observed this in the last month of school when he asked the sopranos to give more space on the [u] vowel. He also used his hands to show the roundness he wanted in the vowel by placing his hands together in a circle formation with fingers touching. He also sang the [u] vowel to show the desired quality. On the word ‘fecit’ he stopped the choir and asked them what the beginning vowel was of that Latin word. A student replied that it was the [ɛ] vowel and he responded that the answer was correct. He then asked the choir to feel the [ɛ] vowel more in front, more forward.

With the 9<sup>th</sup> Grade Choir he spent the first two weeks working intensely through the various vowels with their formations and placement. From the Time Line for the 9<sup>th</sup>

Grade Choir it is noted that he began vowel work on day two. Vowels were then part of regular instruction through the rest of the school year.

In an interview he explained how he approached vowel formation. First, he explained the proper vowel formation for each vowel with regard to tongue placement and mouth formation. He discussed the feeling of resonance and placement of the vowels and he stressed the importance of relaxation of all muscles involved. In the very first week of school he had discussed and worked with all five basic vowels: [e], [i], [a], [o], and [u]. The first vowel addressed was [u]. He saved the [o] and [a] vowels until last. Matt said, however, “Everyday we go back to [u]. We do a lot of repetition of the same things.”

Following is the order and method that Matt used in teaching pure vowels to the 9<sup>th</sup> Grade Choir:

*The vowel [u]:* Matt taught that the [u] was easiest to produce and he began training with this vowel. Matt found that most students can produce a nice sounding [u] without muscular restriction. He stated that most everyone can have a pretty [u]. Matt said, “The [u] vowel is warm and open and students like the sound and sensation it gives. So, we start from a place that makes them feel successful, confident, and proud of the [u].” He stated that young female voices are often breathy and that he used the [u] vowel to help the young student feel the open throat.

Matt said that he sang and demonstrated the proper tone quality and placement for [u]. As he demonstrated he also informed them that the [u] vowel cannot resonate solely in the throat, that the tone must be released to resonate up into the head and mask area of the face. Exercises were used, particularly in the first two weeks of school, to teach pure

vowels. He had all of the students begin on C in F major singing [u] on a descending scale down to the tonic. He said that he starts the male singers on middle C and the female singers on the octave above. When he heard that the vowel and tone were properly aligned and focused he asked an individual singer or a section to demonstrate it. The other sections were then asked to evaluate it. This evaluation process was important as the students were learning how to fine-tune their ears with regard to pure vowels.

During one rehearsal that I observed he stopped the choir to ask them what the vowel sound was in the word ‘moon.’ They responded with [u]. He explained to them and demonstrated how they sounded. He told them that they were not singing with enough space inside on this vowel. He stated, “We must all have the same concept of the vowel. We must agree on the vowels. If not, you’ll sound like a man and a woman who are married but they hate each other. If you don’t agree on your vowels that’s what it sounds like.” He then demonstrated three different ways to sing the word “say.” He said, “When these three sounds are all happening at once, it sounds like a divorce. It sounds like you’re on your way to divorce court and you don’t want to end up there, right? You want to stay happy together.” He then sang the word “moon” and touched his cheeks with the thumb and index finger between the teeth to show the space that is needed. He asked the altos to sing “moon” by themselves. Then he asked an individual to sing it. He told the singer that he liked the space but that the tone could have more lift. He asked another alto to sing it and he said, “Now we’re talking rich, warm, and chocolaty. Now let’s hear everyone’s “chocolaty moon.” Following this he discussed the importance of having more head resonance, more top, on the [u] vowel. He used his right hand, cupped above his head, as he sang demonstrating more head resonance in the tone. He then

demonstrated a flat sounding [u] without the top or head resonance. Matt then had them sing the desired [u] sound.

Matt often taught a new song by having the students sing the entire piece on a particular vowel before words were introduced. During a rehearsal that I observed, Matt taught a new song using the [u] vowel. After the song had been sung one time in that manner he asked the students to stand and they sang through the song with the words added.

*The vowel [i]:* Next, Matt introduced the [i] vowel. Since the [i] vowel is on the opposite end of the spectrum with regard to tongue placement and resonance he asked the students to align the [i] vowel to the [u] vowel, to sense it in the same openness or resonance as [u]. The [i] vowel is the most forward vowel while the [u] vowel is farthest back with regard to resonance and tongue placement. Because he had found that most young voices sing the [i] vowel with muscular tension which causes a strident, brittle sound, he taught that the more open formation of the [u] vowel immediately warms the tone and opens it up. Matt had the students sing on one note with the consonant [n] preceding the vowels [u] and [i]. They sang “nooee.” He said, “I go from [u] to [i] because I only approach [i] with the premise of [u]. We do an elision from [u] to [i] preceded by [n].” With the 9<sup>th</sup> Grade Choir he worked the [u] and [i] vowels the first three days of school. During a rehearsal that I observed, Matt stopped the rehearsal and asked the students to tell him what happens when you are singing a nice bright [i] vowel and you are then asked to crescendo? He informed them that he had heard several students trying to crescendo but they were not opening the space as they did so. He

explained that the sound was not warm and that all vowels need more space as you crescendo.

*The vowel [ɛ]:* The vowel [ɛ] is similar to the [i] vowel in formation but requires a little more space. The tongue begins to slightly move down and away from the upper teeth yet still touching the teeth. Matt worked the placement of this vowel as he did the [i] vowel having the students elide [u] to [ɛ].

*The vowels [o] and [ɑ]:* The [o] and [ɑ] vowels are dealt with last. Matt stated that these vowels are the most difficult vowels to produce with regard to placement. From experience he found that the inexperienced singer seems to lose the placement of these vowels. I observed that Matt often stopped to ask the choir to correct a poorly produced or placed [ɑ] vowel. He asked the choir, “What is the vowel of ‘bye’?” A student responded, “[ɑ]” Matt replied, “Very good.” He then sang the word to demonstrate the sound he wanted. He asked the students, “What is it that I want you to do to the vowel?” A student replied, “Round the vowel.” Matt responded, “What else, look at the music.” The student answered, “Crescendo.” Matt then explained and demonstrated that you must open your mouth or give more space to the vowel as you crescendo. He explained that the vowel should be round but balanced in resonance. Matt referred to balanced vowel placement as a vowel that wasn’t too dark or too bright, too pulled back, or limited to frontal resonance.

*The vowel [ʌ]:* The vowel ‘uh’ [ʌ] was not used by Matt to teach good vowel production. However, he addressed this vowel during a rehearsal. He worked with this vowel in the word “somewhere.” Matt said, “Now, any syllable that has an [ʌ] vowel sound like I’m hearing you sing in the word “somewhere” can be rounded. Give a little

more height because you know [ʌ] is an ugly, ugly vowel. If you have an ugly vowel you have to help it by rounding it.” Matt demonstrated by showing how ugly it is when there isn’t enough height or head resonance. He sang it again demonstrating the sound when a taller space is provided. Matt asked the students to imitate him. They sang it again but they didn’t quite have the sound he desired. He stopped them, demonstrated again, and asked them to sing it again. This repetition happened several times before he was satisfied with the sound.

The vocal line, legato line, or sense of connection from vowel to vowel was important in Matt’s approach. During one rehearsal Matt explained what he meant by vocal line. He said, “You can have all the right notes, rhythms, etc. but it doesn’t move. The music needs to move from one word to the next, one vowel to the next vowel.” Matt then sang for the choir to demonstrate the concept.

Again, repetition was a major part of his teaching method. He began working with vowel production immediately in the first week of school and continued to instruct and correct throughout the entire school year. He stated that in the first two weeks of school of solid vocal technique work, he always goes back to the [u] vowel because he feels it is the freest vowel.

Matt worked for a common vowel sound or unification of the vowels in his ensembles. This was confirmed by adjudicator comments. One adjudicator stated, “Lots of attention is given to vowels, vowel shape, and tone quality.” His choirs are applauded by adjudicators and audiences for their fine-tuned vowels.

*Discussion.* It is truly amazing that different vowel sounds can be produced by the human voice to create a specific language. With minute changes in tongue, lip, mouth,

jaw, and throat positions, various vowel sounds are made. The human ear distinguishes between the vowel and consonant differences and these sounds then form patterns that become language. For the singer tone is the result of continuous vowel sounds placed on various pitches. Consonants also become a part of this continuous sound. There are two categories of consonants voiced and unvoiced. As an example, the voiced consonants of [b], [d], [g] carry the neutral vowel sound of [ə]. These consonants contribute to the flow of vowels and tone. Their unvoiced consonant pairs (consonants that are produced with similar tongue and lip formations but without sound or tone) of [p], [t], and [k] stop the continuous sound or tone in singing. These consonants happen quickly and it is the singer's responsibility to produce a flowing, connected vocal line with the least amount of stoppage possible. As stated earlier, a continuous vowel sound is imperative because without a vowel sound there is no tone.

Many vocal pedagogues teach that a beautiful tone is the result of vowel placement. Johnson (1997) stated, "Effective vowel placement is the basis for a beautiful tone-carrying quality. Most amateur vocalists must experience new sensations relative to the physical placement of the vowel" (p. 14). As Johnson mentioned most amateur vocalists have never thought about how vowels should feel or where they should be placed. Matt demonstrated for the students correct vowel placement with correct vowel formation of the lips and tongue. As he demonstrated the students heard the quality or sound of the vowel and then imitated. These new concepts take time to understand and learn. Matt placed great emphasis on this aspect of tone building and taught vowel placement immediately. Placement of the vowel can mean two things. First, the correct alignment and formation of the vowel gives the vowel its distinct sound. This formation

is also referred to as vowel posture (Miller, 1986, p. 70). Second, this distinct sound has a distinct placement of resonance in the mouth and throat cavity. The [i], [I], and [ε] are considered frontal vowels. This is due to the fact the major area of constriction of air is near the alveolar ridge or upper teeth. The back vowels are [u], [o], and [ɑ]. The major airway constriction with these vowels is between the dorsum (upper side behind the tip) of the tongue and the velum (muscular portion of the soft palate). Another way to think of the area of restriction is at the dorsum of the tongue and the wall of the pharynx (Miller, 1986, p. 51). The frontal vowels resonate predominately in the front mask area of the face. The back vowels are felt more in the back of the mouth. All vowels, however, must have balanced resonance. This means that the front vowels must also be open to feel head and pharyngeal resonance. The back vowels must be open as well to feel all resonance areas or be balanced in resonance.

The pure vowel is a vowel that sounds natural and is clearly recognized as the vowel that it should be. From the early time of the *bel canto* period to the present day, teachers of singing have given much time and effort to vowel purity. A correctly placed vowel should also be a pure vowel. If the tongue placement is correct and the lips are properly formed for that vowel the vowel will be clearly distinguishable. Johnson (1997, p. 15) referred to the importance of the tongue and called it the forgotten part of the anatomy. Miller (1986) taught that one should *cantare come si parla* (sing as one speaks). This is in reference to tongue placement not tonal resonance. Miller stated, “Unification of vowel timbre results when each vowel is permitted, in freedom, to assume its own distinctive acoustic shape while “tracking” the frequencies that provide the voice with its carrying power” (p. 74). The important thing to remember is that each vowel does have a

distinctive acoustic shape of its own. Matt spent a great amount of time in the first two weeks of school teaching and demonstrating each vowel posture or distinctive. He meticulously worked with his choirs to make the [i] vowel sound like [i], to make the [ɑ] vowel sound like [ɑ]. In the last month of school I observed that the students clearly understood the concepts of pure vowels and how to achieve them. In rehearsals he often stopped and asked the students to respond to a question regarding a particular vowel. The students would not only be able to clearly articulate their analysis, they could also demonstrate the correct vowel.

As has already been mentioned Matt started with the vowel [u]. His reasoning was that most singers are able to produce a pretty [u]. He also felt that this vowel allows for good relaxation of the tongue and larynx. Matt also stated that the [u] vowel is best for intonation. Ehly (2002), as well, stated that the [u] vowel is more accurately tuned in singers than is the [ɑ] vowel. Many vocal teachers use the [ɑ] vowel as the neutral vowel and teach that all other vowels should find this open vowel position and align with it. They indicated that its neutral position creates a median that helps the frontal vowels be more open and the back vowels more forward. This is a good argument. However, Matt stated that the [ɑ] vowel not only causes intonation problems, it often lacks head resonance. Head resonance, according to Matt, helps a singer feel the pitch accurately. As well, the [ɑ] vowel is not as warm in timbre as [u] for this same reason, lack of head resonance. Thus, Matt had his students align all vowels to the [u] sensation. Because the [u] vowel is a back vowel he cautioned that the singer must allow for the open, relaxed feeling of the larynx but must not allow the tone to only resonate in the throat. Rather it must also resonate in the mask. Nesheim and Noble (1995) developed exercises to

achieve both the brilliant and dark tone qualities desired in all voices by using the nasal consonants before all vowel sounds. This is a common practice used by Matt as well. Nesheim and Noble (1995) also advocated the use of the forward vowels of [i] and [e] to help singers acquire a ringing tone and used the [u] vowel to achieve depth of tone. Matt would not disagree with this idea as he also taught that the ring must be present in all tones. However, Matt's philosophy is that all vowels need the openness and relaxation of the [u] vowel first and therefore encouraged the ring of the [i] and [e] as the second step. One particular exercise he used to help the students feel the [u] sensation of relaxation is he had them sing [u] elided with the other vowels. They began on a particular pitch singing the vowel [u] and then changed to a different vowel, on the same pitch, while trying to maintain the beautiful open resonance and relaxation of [u]. This helped them keep the open throat and head resonance feeling throughout all of the vowels. I also observed another technique he used to help his singers understand the openness and relaxation of the [u] vowel throughout the entire spectrum of vowel changes. He had selected a new song for the choir to learn. As they sight read through the song the first time he had them sing the entire song first on [u]. Then they went back and sang all of the lyrics. By singing it through on [u] first, the singers had already felt the openness and warmth that Matt desired for that song.

One important thing to note: often there is confusion when addressing pure vowels and openness. It must be clearly understood that each vowel has its own particular vowel formation or as Miller (1996) put it, its own distinctive acoustic shape. At the same time slight adjustments inside the mouth, the soft palate, and the pharynx will affect the openness yet will not distract from the purity.

I attribute the good choral blend that I hear in Matt's choirs to vowel uniformity. Matt's attention to aligning all vowels to the open resonance of [u] supports this deduction. Not only did he work hard at having his singers find open resonance on all vowels he also worked on the concept of what he termed "agreement." He made an interesting comparison with his analogy of the married couple who can't agree, are unhappy, ready for divorce being like the disagreement among choral singers of a particular vowel. He told his singers that we don't want to be like that. All singers must agree on the vowel sound they are after. It is the responsibility of the director to teach the students what this agreement is. When vowels are unified, not only is there good choral blend, there is no aural discrepancy for the listener. Vowel purity is automatic and the listener hears a unified sound. Matt indicated that vowel uniformity not only helps choral blend but also is a fundamental factor in beautiful singing

Matt's attention to vowels, to the correct formation, to purity of sound, to vowel uniformity among choral singers is not new; however, from my observation as an adjudicator, it is somewhat unusual at the high school level. I made this same observation earlier with regard to posture and breath control. Usually such intensive work with regard to these details is not addressed until the undergraduate level in college, if then.

### *Vocal Freedom*

Matt stated that he instructs his students to "move the breath, move the breath." It is the breath that then allows the musculature of the larynx to be free. The larynx or vocal instrument is buoyed up by the underlying support of the breathing area thus allowing the intricate parts of the voice box to function properly. The muscles of the throat and neck are not stiffened; the vocal bands can function properly allowing for the correct

lengthening, thinning, and minute changes made by the arytenoids for pitch changes. When all of these components are properly aligned and in balance with the resonator system the vocal instrument will be beautiful. He also stated that this brings about the healthiest singing possible.

To Matt, vocal freedom is the most important ingredient in beautiful tone quality. When he heard The University of Mississippi Concert Singers on a C.D. directed by Jerry Jordan, he knew he had found the choral sound he loved and wanted, his “ideal.” He stated that there was an unusual freedom in their singing; the voices were allowed to sing. What did he mean? As this study has found, Matt taught a vocal technique that requires balance between breath management and resonance. The term *appoggio* technique was used by the early Italians to explain this connection of breath support to resonance. Muscular balance brings about freedom of delivery. This is true of the athlete. When an athlete’s muscles work in a coordinated fashion, he is able to perform at his optimum. This is also true for the singer. There must be muscular equilibrium that allows the singing voice to produce at its optimum. The resultant sound is a sound free of any restrictions or barriers. Vocal freedom then is the result of perfect balance.

*Results.* According to Matt, free singing is healthy singing. “The tone has to be free. It can’t be encumbered in any way by any part of the body, not the jaw, tongue, or posture. If everything isn’t set up to be free then the tone is going to be affected in a negative way.”

To establish free singing he began by asking the students to sing with an open throat. He explained that the larynx must be relaxed in what he calls a ‘droopy’ position. Next, he had the students sing with the sensation of the raised soft palate. This he felt

lofts the sound so that there's a good mix of head and chest resonance. This was accomplished not only by explaining how to sense the raised soft palate but also through vocal exercises that began with the consonant [n] followed by the [u] vowel. If the tone is balanced in resonance, it has been assisted by good breath management. These two components work hand in hand. The final point Matt stressed was movement of the breath. He indicated that moving the breath keeps the pitch accurate and the sound stays alive.

Matt worked regularly with sectionals at the beginning of the school year particularly with the Chamber Choir. In the sectional work he watched for voices that were struggling with tension. When this was noted he went back to the basics of breath technique as he felt that this was foundational to beautiful singing. He taught that with proper breath expansion, a feeling of a slight resistance in the diaphragm area, and not allowing the rib cage to collapse during exhalation, that the vocal instrument will remain free from muscular tension. Matt told the students that if they used their throats to manipulate the tone, it was not only a crutch but it might cause them to have a short singing life. Stylistic issues often cause a singer to manipulate the voice such as scooping into a pitch and singing with too much chest resonance for a contemporary sound. He stated, "If the voice is supported and free, you can sing in a healthy manner until you're 70 or 80 years of age. We just take all the little crutches away and convince them that using the breath rather than the throat will be the power in their voice in time."

Until singers learn to use the voice well, they often struggle with the upper range in their voice. Because Matt wanted the students to extend their range not only for the purpose of development but also for the sake of learning to sing high and low with vocal

freedom he began work on vocal range and extension on the first day of week two at the beginning of the school year with the 9<sup>th</sup> Grade Choir. He assured the students that as they reach the limits of their range, both high and low, they should not worry about the quality of the sound and told them that range extension is not about sounding good in the beginning. He found that students will “shut down” if they think that he is expecting a beautiful sound in the extreme regions of their range. Matt explained, “Like a lot of things, it’s a paradigm shift to get the quality at the first stage. You have to not be worried about the quality and here’s what I mean by that. If a freshman is worried about quality, they stop. I have to say to them, ‘I don’t care how it sounds. We’re all going to make bad sounds. I’m going to make bad sounds. I’m going to sing flat, I’m going to sing sharp, and I’m going to sing wrong notes. We just all have to be comfortable here. We’re all trying.’” He wanted them to know that if they never work the high notes they will never have them. He did reassure them that he would not give them a piece to sing that is out of their range. He further related this to sports and the athlete. “If you never try to run the mile faster you will never know if you can. And the same is true with regard to shooting 3’s in basketball.” He has found that everyone seems to relax after these statements.

He vocalized the men on middle C and the women an octave above. The exercise used was a descending scale passage starting on the 5<sup>th</sup> scale degree at an allegro tempo. The syllable that was sung was ‘vah’ on each scale degree. Matt used the ‘vah’ syllable because he felt it seemed to spring and energize the sound. The exercise continued up in half steps until they reached a high E<sup>6</sup> for the girls and a high B<sup>4</sup> for the boys. He turned this into a game by having the students stand until they could no longer sing the pitches

as the exercise ascended. The ones that were left standing received a ‘whooo’ from the rest of the class.

Matt encouraged the students to always try to extend their range. He encouraged the students by telling them that it will be so exciting at the end of the year when they are able to sound beautiful on high notes. He used this opportunity to inspire the students to not be afraid to fail. He told them that if they were able to sing high beautifully at this time that there would not be anywhere to go. “What if our singing were perfect? We wouldn’t need to show up. We wouldn’t need to be here. We’d all just be so boring. We’ve got some work to do. We’ve got something exciting to accomplish and we’ve got something we’re going to be proud of in a couple of weeks.”

Matt has found that the young tenor often struggles more with tension than the other voices. This may be due in part to the fact that the voice is still changing. To help the young tenor he had the entire choir sing an A major scale ascending above middle C to A<sup>4</sup>. Then he had them descend down to the octave below. He told them that the boys would be singing high and the girls low. Matt worked the falsetto up to A<sup>4</sup> above middle C so that they became more comfortable. He does not allow the young tenor to try and sing below F<sup>3</sup>.

“The young bass voice can be a problem as well,” said Matt. “Some basses have been singing a three note range for the last year or so because it was comfortable. They have to be encouraged to sing higher. They often struggle with pitch.” Matt had the basses stand around the piano and they sang a descending C scale starting on C<sup>3</sup>. Because the rest of the choir cannot see him point, he pointed to a singer when the pitch was not

accurate. He also placed stronger singers on either side of the weaker singers to help them solidify pitch and tone.

I asked Matt if he spends much time with falsetto in the male voice. He responded, “I really try to work them in full voice as much as possible as I want to encourage and build their full voice. However, I explain that anything louder than beautiful is ugly and pushed. When a male singer is struggling in the upper range, I might suggest falsetto so that the tone remains healthy. Some will insist that they do not have a falsetto. I demonstrate for them showing how you can crescendo and explain that it gets stronger the more you use it. Usually the bass voice doesn’t use falsetto because the music doesn’t demand it.” Matt does not want the young singer to depend solely on the falsetto and uses it only to help the student understand relaxation.

According to Matt, the soprano voice does not have much trouble with range but more with the lack of a solid tone production. The freshman soprano often has a thin and airy tone. Matt worked two areas of technique to correct this. First, he addressed breath support and asked them to sing athletically. Matt used the analogy of a steam engine that is lacking steam. He told them that if there isn’t fuel the engine will not go anywhere. He also worked intently with helping them feel head resonance and the idea of the arched or raised soft palate.

Matt stated that the alto voice was the easiest to work with as they sing in a comfortable range. He immediately asked for an open, rich, mature sound which they were able to produce. He often called this a “smoky” tone quality.

I asked Matt to discuss his philosophy on using straight tone in vocal production. He said, “I think that straight tones are hard on the voice. I think it can be done, although

I used to think it couldn't be done healthily. I think it can be done with a whole lot of heavy constant coaching from the director, if they know how to coach. If you have the soft palate raised and you're moving the breath, then it's all right. But, you don't want to go to a concert where straight tone is used on every song, regardless of the genre, or it all sounds the same." Because Matt wanted a free, floating tone he avoided literature that would require the stylistic treatment of straight tone.

Matt had a strong belief that a voice cannot be beautiful unless the voice is free of undue muscular tension. All areas of vocal technique that he addressed had the ultimate goal of freeing the vocal instrument. Matt said, "I feel my role is to free the voice. I let them have their own voice." From posture, to breath management, to placement of the voice, to pure vowels, and so forth, everything had to do with vocal efficiency, relaxation, healthy singing, and vocal freedom.

*Discussion.* Matt indicated that singing should be for a lifetime. We all have heard singers who are sixty years old and older that have maintained a beautiful tone quality. We also have heard young singers in their late teens who have lost their voices or who have vocal nodules that may impair their voices permanently due to improper use of the voice. The vocal instrument must be treated with care just as all other parts of the human body. An athlete who overuses or strains certain muscles will be placed on a regimen of special exercise and rest. When the human voice is overused or misused the same type of treatment is necessary. Therefore, for a choral director to pay special attention to teaching good use of the voice and proper vocal technique is imperative. A free production must be a goal.

The result of a well-trained voice is a voice that is healthy and free. This was a priority in Matt's philosophy. In fact, all technique building that Matt did with the students was for the purpose of establishing vocal freedom. According to Miller (1986, p. 40) strength and flexibility of the voice are brought into balance when there is dynamic muscle balance. Miller (1986, p. 1) also addressed the importance of a good attack or what he termed a non-static onset of tone with regard to vocal freedom. He stated that "only if the onset of each phrase demonstrates the principle of non-static laryngeal muscle balance and elasticity is the singer assured of freedom." Onset or attack of the tone is only one facet of muscle balance. The entire singing instrument must find this perfect balance of muscle energy and muscle freedom. This has been referred to already in this study as the early *bel canto* technique of *appoggio*.

Fleming (2004), a famous contemporary soprano, stated that she must allow the torso and breath to do all of the work so that singing is easy. She stated, "When I'm singing comfortably, I can actually imagine that my torso and my breath are doing all the work, while my throat is completely relaxed." I, personally, instruct my students to feel as if everything from the collarbone area up is loose and free while everything below that (the breathing area) is muscularly firm but flexible, that the breathing area does all of the work. This allows for a relaxed jaw, tongue, larynx, lips, and neck. When everything is balanced muscularly, the singer looks like singing is effortless. The singer feels as if the voice is projecting, ringing, and communicating without muscular weight or force. Titze (1996, p. 152) explained it this way when he wrote that a "premier" singer is free in the shoulders, neck, and jaw areas. He also stated that the entire vocal instrument, that of the larynx, ribcage, abdomen, diaphragm, and the airways must be free to contract and

expand as needed. He said, “There is a death-like calmness on the surface, underneath which huge muscular efforts are expended (Titze, 1996, p. 153). This includes singing in all areas of one’s range. When perfectly balanced, high notes are easily sung. Matt particularly worked with range issues so that these young voices would not strain for high notes. He mentioned that tenors struggle with range more than the other voices. The obvious reason is that tenors are required to sing a higher tessitura in most songs than other voices. Matt does use the falsetto voice to show how that the larynx and neck muscles can produce a tone without straining. However, he stated that he encouraged the use of the full voice if at all possible. He did work range extension with the other sections as well so that they could learn to support and find the proper muscle balance at extreme ranges in their instrument.

When I asked Matt about his philosophy and thoughts on singing with a straight tone, he clearly articulated that he thought it was hard on the voice. This is supported by Miller (1986, pp. 187-188) as he stated that straight-tone should be used as infrequently as possible. The reason is that straight-tone does not allow for free, efficient muscle synergism.

According to Nesheim and Noble (1995, p. 152) conductors should pay attention and watch for undesirable tension in their choral singers. They listed ten signs to watch for: a jutting jaw either too far forward or pulled back, tense lips, a raised or lowered head, unnecessary head movement, tense shoulders that are raised or too far back, raised eyebrows or a tense wrinkled forehead, tight arms, clenched fists, tense or fidgety fingers and poor posture. Contrary to Nesheim and Noble, Matt taught that the eyebrows can be raised in a positive manner as in a smile rather than in a tensed angry or sad manner. He

stated that when the eyebrows are lifted this way tension does not exist. Rather, the raised eyebrows are connected to the lift that is felt with inward raise of the soft palate.

In the rehearsals that I observed Matt constantly analyzed the voices. He listened for tones that sounded labored or weighted. Matt gave very clear instruction to these young singers as to how a perfect balance can and should occur in the vocal musculature.

In conclusion, I stated earlier that some choral directors shy away from teaching “how to sing” at this age because they feel it may do damage to the young voice. I have heard them say that they simply want to help the young singer learn to love singing. My high school choral director did not want me to study privately as she felt that my voice should develop naturally. She stated that she was concerned that they would try and make me sound older. What she really was concerned with was poor instruction that would cause me to develop unnecessary tension. She had a valid point. However, if voice teachers and choral directors understand good vocal technique they will teach vocal freedom and will carefully guide the young high school singer to reach his or her vocal potential. The real issue then is not ‘if’ vocal technique should be taught to young singers but ‘how’ it should be taught. I firmly believe that Matt’s attention to good vocal technique preserves and builds the young voice. The only time that vocal instruction is detrimental to a young singer is when the vocal instruction is technically incorrect.

*The Great Debate: A Soloistic or Blended Approach To Choral Tone Quality?*

The great debate has existed for centuries or for as long as there has been choral music. The question arises out of the conflict over the vocal technique of a solo singer versus the choral singer. Should the debate exist? Is there really a difference? The question may never be answered. However, an attempt at clarifying some differences

may shed light on the problem and assist the choral director in developing a beautiful choral tone quality.

Many studio teachers argue that the vocal soloist, who is aspiring to a professional career in singing, should not use his or her voice in the choral setting. The reason for this is that the human voice should be allowed to function with technical expertise with full resonance, pure vowels, and the full spectrum of dynamic levels. They also argue that the professional solo singer should not have to alter his or her technique for the sake of blend in a choral ensemble. Some studio teachers have even felt that any alteration is unhealthy and does not allow the solo singer to sing with optimum beauty. The choral director on the other hand argues that all singers should be able to adjust their technique, in a healthy manner, for the sake of beauty. They indicate that good singing involves the ability to use the voice in a versatile and agile manner and that minute changes in vowel color, dynamic level, and resonance will not harm the voice and will allow for the most beautiful choral tone quality possible. They also state that a “true” vocal solo artist is one who possesses the ability for this flexibility.

The argument from both sides is founded on the precept that healthy singing is imperative. To state it another way, the studio teacher argues that the choral experience places unhealthy demands on the solo singer while the choral director argues that all singers, soloists or choral singers, are healthy singers when they are able to demonstrate good vocal technique with flexibility. Who is correct and how does this argument apply to this study?

Rossing, Sundberg, and Ternstrom (1985) found that there were timbre or tonal differences in the solo voice and the choral voice. In the solo voice the singer’s formant

or upper partials were more prominent and less in the lowest spectrum of partials than in the voice of the choral singer who is not a soloist. Simply stated, the solo singer is using optimum resonance possibilities. The voice has more overtones and ring, is fuller in resonance, and sings with less effort. Ekholm (2000, p. 123) stated that voice teachers promote this solo technique of full resonance with little effort while the choral director strives for an ensemble sound where solo voices are imperceptible. Goodwin (1980, p. 126) also stated that solo singers and choral singers are different in three respects: vowel modification, dynamic level, and timbre adjustments.

First, choral tone quality is the result of many voices coming together to produce a unified sound. The desire of all choral directors is for this unified sound to be not only musically correct but beautiful. Who are these individual voices that make up the whole or this unified sound? Are they mostly blending choral voices (ensemble voices), are they mostly solo singers, are they equally mixed, and so forth? At the high school level there would generally be more ensemble voices and fewer solo voices. In a college choir there may be a greater percentage of solo voices in an auditioned choral ensemble. In either instance, the choral timbre will be determined by these voices and the manner in which these voices are trained or instructed by the choral director. Therefore, this argument is directly related to this study with regard to how one should handle the two different types of voices to not only achieve tonal beauty but to insure good vocal habits.

Because Matt worked with his students not only in the choral setting but he also prepared them for solo contests, I asked him about his philosophy with regard to this debate. My questions and his responses follow:

*Results.*

Bonnie: Can a beautiful blend and tone quality occur in a choral ensemble with a soloistic approach or must there be a blended approach where the soloist's technique is altered for the sake of blend and good choral sound?

Matt: For the soloist, he or she must be a little more subtle (when singing solo repertoire). I ran across a statement this past summer that says that for a change in sound to be audible to the ear it has to be at a 25% increase for someone to hear it. I think that in a choir of 100 that's magnified. That means that not only dynamics increase but also the articulation must be stronger and the vowel bigger for the choral singer. When I take my solo singers out of the choir when they're preparing for solos at festival I'll think 'why are you singing that vowel so exaggerated?' One student I had, that had studied seriously as a soloist, adapted easily to the choral setting. She was in such great shape vocally. I asked her to produce a darker sound to match the choral tone quality. She willingly did it although she wasn't sold on it at first. It was a little bit of a struggle in the beginning. Her solo singing was a little too bright for what we were doing.

Bonnie: Was she able to make the adjustment back to her solo technique and personal tonal preference for her solo singing?

Matt: Yes, I think it is mostly attitude. I did have a girl audition for Chamber Choir that was a great singer. She had sung with children's choirs and had never really sung with a high school choir. Even though she was a great singer I didn't put her in the choir as I just didn't think her sound was going to match up and I didn't think she wanted it to.

Bonnie: So you think a singer has to have an attitude or willingness to be versatile?

Matt: Yes, it's the attitude in general.

*Discussion.* From Matt's discussion of the solo voice in the choral setting he indicated that the solo singer should have a willing attitude and be vocally flexible to adapt to the director's preference in tonal quality. Because Matt taught healthy singing, the adjustment a soloist makes are in degrees of openness of tone, vowel changes, dynamic levels, among others. I believe that these small degrees do not affect the solo singer in a negative vocal way vocally as long as the general technique of good vocal production is in place.

As has already been discussed there are differences in the types of tone quality between solo timbre and choral timbre. Daugherty (2001, p. 69) argued that the phrase "the whole is the sum of its parts," that choral sound is simply the product of individual sound sources that contribute to it, is a false premise. Rather, he indicated that choral sound is its own sound. As well, Ekholm (2000, p. 123) said that choral conductors work for an "ideal" choral sound. This "ideal" choral sound or quality may not necessarily be the quality that a solo singer considers "ideal". Matt's statement that there are degrees of openness, degrees of vowel and dynamic changes, supports Ekholm and Daugherty. Choral timbre and solo timbre are different. As Matt stated a choral singer may need to adjust a vowel to be a little more open, or may need to over articulate, or may even need to exaggerate dynamic levels compared to solo singing. These may only be minute changes. The soloist is free to sing as brightly or warmly as they choose. The teacher and the student define that individual's tone quality. Dynamic levels are also relative. A forte

level for one soprano soloist might be another soprano soloist's mezzo forte. With solo dynamics the singer chooses what works best for him or her. However, choral timbre becomes a joint effort. All voices come together to produce a particular tone quality chosen by the director. Dynamic levels are also determined by the choral director and all sections must be in balance. Not only must each section be in balance dynamically but each individual section must be balanced. No one voice should be heard above another's. Therefore, choral timbre requires that each individual give in to the overall judgment and tonal preference of the choral director. Here is where Matt's analysis regarding a singer's attitude comes into play. If a solo singer demands that they rightfully can sing as loudly as they like so that their voice is properly supported, then the choral tone quality no longer is unified or blended. If this soloist also determines that his or her bright quality does not have to be modified for a different quality, once again, the choral tone quality may not be unified or blended. A director would find it difficult to achieve his or her goal with singers who do not have a willing attitude to adjust to the needs of the choral tone quality that he or she desires.

Here the issue of subjectivity once again is brought into play. Because some solo singers and choral directors prefer a darker, warmer timbre, and others prefer a more lyrical, brighter quality, each person/director makes choices to alter an ensemble's general tone quality. Matt admitted that he prefers a richer, fuller sound. As has been seen by his vocal technique, he uses the [u] vowel to help the singers understand the open, resonant quality he desires. He also stated that he makes choices in the audition process with the Chamber Choir to choose voices that already have this timbre or voices that he is sure will be able to make the necessary changes for this choral tone quality.

Knutson (1987, pp. 118-119) studied the American choral trends from the early 1900's through 1987. He found two basic trends. The first trend held to the tenet that solo singing was foremost and should not be altered for the sake of choral blend. The second trend emphasized flexibility of the singing voice to handle the various stylistic, interpretative, and dramatic demands of a variety of musical styles. The second trend is perhaps more prevalent today and was observed in Matt's selection of repertoire as well as in his general philosophy of choral tone. Because Matt's philosophy of vocal technique is founded on good vocal technique that promotes healthy singing, he does not allow his singers to use their voices in a way that would cause vocal harm. Matt's approach is an example of a choral director who guards the singing voice at the same time he expects versatility and flexibility.

Matt stated that only small changes of tonal placement, vowel coloration, and dynamic changes are necessary to achieve the desired choral tone quality. The basics of good vocal technique are never altered when Matt works with his singers. It is Matt's belief that these small changes do not harm the voice. The basics of vocal technique which are good posture, good breath support and control, balanced resonance, pure vowels, and a freely produced voice can all be used while making these changes for vocal blend in the choral setting. Skelton (2004, p. 51) points out that both the solo teacher and the choral director must understand healthy singing.

A good argument from the opposite side, that of being in favor of the solo singer not singing in a choral ensemble, comes from Sundberg (1987, p. 143). He stated that not all solo singers are free of vocal problems. Therefore, trying to have a solo singer adjust to the choral demands when their technique is not solidified may not be timely. This

would apply primarily to solo singers seeking a professional solo career. Just as in the field of sports, the athlete (singer) must make professional judgments for their professional needs and goals. Generally, all singers should have the ability to adapt to both settings while using the voice well. Timing may be the issue here.

Fulford and Miller (2003, p. 138) highlighted five areas that singers must be aware of when in the choral setting. These five points: a) be critical listeners for the sake of tonal subtleties, b) sing pure vowels, c) be sensitive with dynamics, d) be willing to give up your personal singing style, and e) be careful with vibrato. These are key components to accomplishing a good choral blend. Good choral blend, in turn, results in a good choral sound or choral timbre.

Not only must the singer be aware of the five points that Fulford and Miller have outlined, the choral director is constantly watching for these things as well. One of Matt's strengths is his keen ear for beautiful tone quality and what hinders and promotes this production. He constantly drilled the ensembles working to establish a unified sound within each section. Matt carefully chose singers for the Chamber Choir with this point in mind. In this instance he wanted to know that a student who is more solo oriented in their experience can also work within the framework of the larger ensemble. Before they are placed in the ensemble he must feel confident through the interview process and general observation at the audition that the student has a willing attitude and ability to make tonal changes for the good of the ensemble. It might be said that the singer's awareness of these five points and the director's guidance and attention to the same are critical for musical excellence and beauty of choral tone.

In conclusion, the key to beautiful singing, whether as a soloist or choral singer, is good vocal technique. Matt not only thoroughly understands good vocal technique but he has made good vocal technique the primary goal and emphasis in his teaching career.

## CHAPTER 5

### Philosophy and Teaching Method

#### Results and Discussion

##### *Philosophy*

I believe that in the teaching field you cannot separate philosophy from method. One's philosophy of teaching dictates one's method. Since philosophy involves knowledge and understanding of the general principles of a field (Agnes, 1999), tone production for the singer, teacher, and conductor involves a thorough knowledge of the vocal instrument in conjunction with vocal pedagogy, or the manner in which it can be effectively taught.

Matt was an experienced teacher, vocal performer, pianist, and choral director. He had a solid music education background at both the bachelors and masters levels. Matt has had time to formulate his philosophy and method and this was evident in the level of musical expertise that his high school choirs demonstrated. As will be discussed in this chapter, his philosophy included not only the importance of teaching good vocal technique but building lives that had a purpose.

Matt is fortunate in that the philosophy of the community in this rural setting is that of recognizing the value of music. Not all choral programs can boast of the fact that their program is supported by parents, family, community, administrators, and colleagues. In fact, it is probably a small percentage of choral programs in the public school arena that would have this kind of support. This was a tremendous boost for Matt and he, as well, recognized that this was not the norm. This kind of support gave him the ability to continually promote and build his program. The support also promoted student

pride as students recognized the program's value to the school, community, and to them personally. They received recognition for their accomplishments and in turn they wanted to produce a product that was superior.

With this support Matt was able to take his love of choral music and continue the legacy in this community of "musical excellence." Matt's own musical accomplishments with his ensembles also fueled his own personal expectation and standard for excellence. He had a self-imposed high standard to maintain. As the ensembles continued to succeed in competitions and contests, he was energized and encouraged. Matt was fortunate to have such a positive environment in which to work but he can also be credited with much of the positive atmosphere because of his philosophy of teaching and philosophy of life.

#### *Positive*

Over the 15 years that Matt was a high school choral director he had developed a philosophy that was positive. He endeavored to help build lives, lives with a purpose. His emphasis on building "whole" people was not only to help students realize who they are, their value to society, but also Matt found that it affected musical outcome. Matt said, "I think sound is really affected by who you are, the kind of person you are, and what your contribution is to the ensemble. The ensemble is a model for life, society, and community." He melded academic excellence with purposeful living or a positive outlook on life.

*Results.* Matt strongly adhered to the idea that philosophy influences tone in singers. When asked what his philosophy was regarding "beautiful tone quality" he restated a previous quote. He said, "It (philosophical ideas) does influence quality of the tone. It does. It's hard to nail down, in a way, but if you get the philosophy...The idea is,

‘how does sound happen?’ ‘What makes a sound happen?’ We cover the first step, vocal production. But beyond that is the idea that everything can be perfect (musically), but there’s something missing. What is missing? Well, it is this, it is the development of the person. It is the understanding of what it takes to make beautiful music. It is the desire to make beautiful music. It is the understanding what the text is about. It is the understanding what it means to be a part of the ensemble. What does it mean to be a part of the world?” For Matt, “what it means to be a part of the world” meant developing the whole person. He wanted students to know how valuable they were to the ensemble and in turn he felt it created singers who wanted to give their best. In giving their best they were anxious to learn, willing to work hard, and they looked forward to performing at their best.

Matt’s positive philosophy was seen in his teaching style, method, and personal attitude. It was obvious to me that Matt loved his career in music education. He was enthusiastic and energetic. He appeared to be a “born educator.” This was observed in his manner of classroom management and his general delivery of subject matter. He entered the rehearsal room talking with the students. In all instances that I observed he was happy and started each class on an upbeat note. His mood and demeanor were always positive. I interpreted his positive attitude to mean that he had a general love of teaching and music. This seemed to directly affect and influence the students’ attitudes toward learning and singing. I noted that the students entered the classroom very upbeat and ready to sing. They chatted happily and immediately began listening when he called the class to order.

He appeared to be confident and comfortable in the classroom. During rehearsals

I noticed that he did not have to correct negative behavior. While one section was being addressed with regard to a technical issue the other sections waited patiently and quietly.

The students also appeared to be confident and comfortable with Matt's approach. He purposely created an atmosphere for learning where he encouraged and affirmed each student and the ensemble as a whole. This was observed in his rehearsals. He gave complimentary comments while the students sang and then again at the completion of a song. During just one observation period I heard the following comments as the students sang: "Yeah, awesome, great sound, good presence, good spirit, good connection, good fervor, good control, well done, excellent." He seemed to affirm the students often. This encouragement and affirmation was deliberate and began on the first day of school. Matt said that he informed the students at the beginning of the school year that they were going to make sounds that they would be proud of. He said that he wanted the students to enjoy rehearsals, to want to come to rehearsals. Matt stated, "I don't want them thinking negatively or feeling negative because it is going to influence the sound. I want them to come to rehearsals because we are going to create art. We are going to create something very profound. How then can the conductor create that environment? What goes into that? Well, being fully comfortable in themselves with expression of emotions and knowing how they feel about the piece, not having any relational hang-ups, or insecurities." To create an atmosphere that was positive for the students where they were excited to sing and where they felt comfortable was obviously a priority for Matt.

One of the most interesting techniques he used to create a positive learning environment was in the way he organized the 9<sup>th</sup> Grade Choir at the beginning of the school year. He said that he wanted all students to know that they were as valuable as the

next. He did not want the students to automatically categorize themselves as “good,” “better,” or “best” singers. To negate or ward off any possibility of this, he placed the 9<sup>th</sup> Grade Choir in alphabetical order on the first day of school. They remained in this configuration for the first two weeks of school during what I have called “vocal boot camp.” Matt stated that this does away with the thinking that, “all the boys stand together and ‘we can’t sing’ and all the girls stand together and ‘we’re giggly and immature.’” He found that if the students were placed immediately in a classified vocal section they automatically set a hierarchical order of who was the best and who was the worst. The alphabetical configuration not only did not permit a self-imposed ranking order with regard to talent and ability, but it encouraged students to work and learn independently. The singer next to him or her might be of the opposite or same sex, might be a stronger or weaker voice, or might be of the same or a different vocal classification. That student could not musically depend on the person next to him. Rather, they had to depend on their own development to accomplish what Matt was asking them to do. Matt said that he wanted to cultivate the attitude that “we’re all the same, we’re all equal.”

Not only did he create a positive learning environment, he worked to create a positive attitude in students. One means he used to do this was by discussing the negative in what he called “embracing failure.” He said that he informed the students at the beginning of the year that it’s not about sounding good. He told them, “If you never sound bad on the notes, then you can’t sound good on them.” He said that he acted really excited when they sounded bad and told them, “It’s so exciting, it’s so bad, just think about the end of the year or even in a couple of weeks. What is really terrible right now is going to be really good. Let’s not be discouraged about where we are but let’s be excited

because we've got somewhere to go. What if it was all perfect? We wouldn't need to show up. We wouldn't need to be here. We'd all just be so boring. But, we've got some work to do. We've got something exciting to accomplish and we've got something that we're going to be proud of in a couple of weeks." He prepared the students to think positively rather than negatively. Another example of turning the negative into positive was during a rehearsal period when he informed the students that he expected them to be on time the next morning for an early rehearsal. This early rehearsal was in preparation for an upcoming competition. He reinforced the point that even though it meant an early morning and hard work and that he himself did not look forward to the early morning time, that they would be proud of the fact that they had accomplished something.

He also affirmed students by directly telling them how important and valuable they were. As previously stated, he stated that a "whole" person brings much to the ensemble, that the development of the person is critical to a choral ensemble and its sound. He told the students, "I want you to be good, to be the greatest person you can be. Do you realize how valuable you are in life, how valuable you are to the ensemble? There is something for you to do whether you know it or not. There is something for you to do and I don't think it is an accident that you are in this ensemble. When she (Ashley) isn't present, something is missing in our sound, and that something is what only she can contribute. Each person has something critical to offer the entire ensemble in terms of sound. Every person has a purpose that only they can fulfill." He said that he wanted every student to know that they were needed and had a purpose for being.

He stated that this approach was necessary to create a positive atmosphere for learning and participation. Each student must feel important and valuable before they will contribute their best to the ensemble. Matt quoted Jordan to the students (1999),

Their faces must be alive, conductor must be alive, and there must be care and love in the room. And it can never wane for a moment from anyone. The commitment to soulfulness and the rehearsal born out of solitude must occupy every minute. If that commitment is there, magnificent music that reaches people's souls will be spontaneously created. (p. 49)

The care and love in the room translated into an environment where each individual singer felt a part of the "big picture" and their value to that picture.

Matt wanted the students to have a commitment to the ensemble and each other. He not only demonstrated a personal commitment, he articulated its importance to the students. During a rehearsal that I observed, the Chamber Choir was preparing for competition. Matt said,

Why do we usually get 1+ ratings? It is not because we have the greatest choir director or accompanist or choir, because talent will only take you so far. It is the agreement on one philosophical approach to interpretation, tone color, phrase shaping, etc. that will take the performance from good to great, from uninspired to inspired, from "divorce" to "marital bliss," from confusion to great harmony, from WAR to PEACE (in a musical sense). Why the whole world doesn't want to be a choir director I'll never understand. Well, I guess I'm glad they don't because I want to keep my job! In other words, what you have is a teacher who has an idea of how to make the sound, not because I have the right idea. That's

not the whole story. It's only about 5% of it. What we have is a choir that is committed to making that sound happen. We all have the same idea about how to make the sound, how to enunciate, how to produce the sound, what kind of sound we're going for. Right or wrong we're in agreement, we're in harmony. We have the same concept of where we're going. That makes us sit up a little taller and that's why we're getting the 1+ ratings. We have an energized, committed, full of vitality sound. It is awesome! We might be totally wrong. I think we could totally have the wrong stylistic idea about a song and still might be able to pull a 1+ rating because there's such commitment in the sound. And in your life, when you think about what you're going to do, this is where you have to be more careful, that you're right in living out your life. If you have taken the counsel of wise people and have an idea of how to live your life, you know where you're going, how to get there, how to make it happen, you're going to be living a 1+. But, if you just get up every morning and life just sort of takes you by the collar and jerks you around you're going to end up in the ditch."

This was one of Matt's inspirational moments, a "life lesson" moment. In the above quote Matt showed his insistence on developing commitment in the students' lives for their own personal good and the good of all.

*Discussion.* "Philosophy does affect tone quality," was a statement that Matt made. His philosophy had two basic premises. First, good vocal technique is imperative and second, tone quality is affected by who a person is. He worked hard at building good vocal technique in all of his singers. He also worked hard at building "whole" people who recognized that they had a purpose in life, a purpose in the musical ensemble. I believe

that Matt's idea that it is about personal development as well as vocal development is a major component in his success as a choral director.

It began by Matt's own personal attitude and enthusiasm. His spirit appeared to be contagious. The students were energetic and excited to learn. They were proud of their progress and accomplishments. There was sense of value in what they were doing. They were anxious for competition and performance and did not appear to complain about extra rehearsals or intense technical rehearsals. Somehow, Matt had instilled an attitude and understanding that hard work pays off. He had created an environment "ripe" for learning.

Matt approached the aspect of being positive from several angles. He was an encourager. One example was when he informed them on day one that they would soon be producing beautiful sounds. He gave positive reinforcement during rehearsals. One of the most interesting angles was his reverse psychology. He told them that they should learn to embrace failure and how that in doing so a person develops and becomes better at what they're doing. Noble (Shrock, 1991) also stressed the importance and the psychological benefit of having a positive attitude by freeing the negative from our lives. Noble indicated that confidence was crucial and came about as a result of affirmation. He mentioned that his effectiveness as a conductor had changed when he realized that the inner child must grow and be a part of a positive personality. He stated, "How can the wonderful beauty of music come forward if our thinking is predominantly negative?...As choral directors, we are given one of the greatest challenges and opportunities in life: to discover and free our inner beings, our inner persons--to be transparent vessels for the recreation of one of the most powerful vehicles in our civilization--MUSIC." Noble had

recognized, as had Matt, that a positive spirit and environment promote not only personal growth but musical growth as well.

Matt intentionally attempted to rid students of any negative feelings about their own ability, which was seen in his organization or grouping of the 9<sup>th</sup> Grade Choir on the first day of school. By placing them in alphabetical order rather than in sections they did not assume that Matt had them categorized as “good,” “better,” or “best.” They also were not able to categorize themselves but rather had to work independently to respond to Matt’s vocal instruction. From the first day of rehearsal everyone was starting on the same “playing field.” Each student knew that they had an equal opportunity to progress. I believe that this was a brilliant and sensitive idea on Matt’s part. He was creating two effects at once. First, each student could feel good about themselves personally as they did not feel the pressure of being cast as inferior. Second, the group as a whole was placed in an environment where there was no automatic hierarchical order thus a positive learning environment.

Durrant (2003, p. 20) as well stressed the importance of a positive learning environment. He stated that the learning environment must be free of threat. This means that the conductor’s approach must be encouraging and constructive and cannot be an atmosphere that is negative, critical, and destructive. In my observations of Matt’s rehearsals I never noted any time when he was negative or critical. He clearly expected musical excellence but it was all done in a positive manner by simply explaining a concept and then having the students demonstrate the concept.

It was clear to me that Matt had developed a good rapport with all of the students. Gordan (1977, pp. 42-43) referred to this as cooperation. He stated that there must be a

cooperative spirit between the conductor and singers. He articulated three steps in developing this rapport: a) one must develop an environment conducive to making music, b) you must have established guidelines and rules, and c) one must observe the basic principles of leadership. These three principles were operating in Matt's classrooms. As has been discussed, the environment was conducive to learning. Matt was able to control the classroom with a firm but caring hand. Third, his leadership skills were developed and working. This point will be discussed later in this chapter.

Matt was deliberate with regard to his philosophy of being positive. He gave individual attention, he was caring and considerate, and he personally showed a positive attitude about learning and singing.

*“Life Lessons”: Inspiration of James Jordan and Others*

As has been stated, Matt held to the importance of students becoming “whole” people. One aspect of this principle, according to Matt, was helping students feel successful. Matt had a specific strategy for accomplishing this. He encouraged his students and gave them insight into how to be successful in life through what he called “Life Lessons.” He often took the first five to ten minutes of a class period to talk to them about life issues. He did this through sharing personal stories of success and failure, by reading excerpts from inspirational books, by playing recordings with specific messages, and by simply talking about life in general

*Results.* Matt stated that he had been deeply inspired by the writings and philosophy of James Jordan, a recognized choral conductor and associate professor at Westminster Choir College of Rider University. In one interview, Matt said that Jordan's book, *The Musician's Soul*, “totally revolutionized my teaching.” Matt quoted from the

book where Jordan deals with “musicians as community.” In this excerpt Jordan (1999) was referring to the writings of Martin Buber,

Buber implores us to believe that the conductor, performer, or teacher is connected to each member of the community in a direct, one-on-one, eyeball-to-eyeball, soul-to-soul union. Both are equal. Both are always equal. Both have equal voices. Both have powerful voices. Each listens to the other in a dynamic that is constant. It is almost like there is a spiritual tether or umbilical cord between the conductor and each person in the ensemble. Nothing can stand in the way of the flow of life and music between the two. It is out of those intimate human connections that the community gains a compelling and human voice.”  
(p. 76)

Not only did Matt often begin a rehearsal with a “life lesson,” he would stop a rehearsal to teach a principle. One such lesson he used was from the above quote. Matt said that he shared this analogy of the umbilical cord, of the singer being connected to the conductor. He said that “we really work on building community and a sense of purpose, contribution, and inspiration, not leaving one note uninspired.” The purpose of this analogy was to prepare them to listen, to connect to the director, to connect to each other, and to connect to the music. Matt told the students, “So we have to be connected. You have to look at me, not only for the purpose of staying in ensemble, but we have to be communicating. It’s really a duet. It’s you and I and we have a duet.” He also asked the students to look eyeball-to-eyeball with him when he directed. He further told them, “You want to be in this group and you want to be a part of something good. We all want to do the very best we can.” When I observed the rehearsals a sense of community was

very apparent. The students appeared to have confidence and trust in Matt. He was respected and, in turn, he showed respect towards them. The “community” was strong not only musically but in spirit.

Matt also read “life lessons” from various books to the students. Some of his favorite books were: *Tuesdays with Morrie, An Old Man, A Young Man, and Life’s Greatest Lesson*, Albom (1997), *Stone Soup For the World, Life Changing Stories of Everyday Heroes*, Larned (2002), *The Musician’s Spirit, Connecting to Other’s Through Story*, Jordan (2002), and *The Musician’s Soul*, also by Jordan (1999). He stated that he engaged the students in discussion to help them understand the lessons being taught. Matt said, “These readings and discussions might happen every day for a week for 5 minutes, 10 minutes, or they might happen once a week or once a month. It’s sporadic. I would share with the choir and that would directly influence what we were singing. I would share with them the process I was going through and how this affects musicians.”

He would also play a song for the choir to listen to that had an encouraging message. One line of a song that he played said, “I want to live my life in a way that matters.” He wanted to inspire the students to reach for lofty goals, to strive for excellence, and to live a life that would make a difference. Matt said that he also picked the performance pieces for his ensembles that either have an obvious, direct “life lesson,” or could be interpreted or directed to some sort of moral quality, some good thing about life.

Matt said that one of the most powerful moments of the “life lessons” that he has experienced was one year when he read a story to the seniors on the last day of school

from the book, *Tuesdays with Morrie*, Alбом (1997). He said that the seniors were bawling as he read this,

“There’s big confusion in this country over what we want versus what we need,” Morrie said. “You need food, you *want* chocolate. You have to be honest with yourself. You don’t *need* the latest sports car, you don’t *need* the biggest house. The truth is, you don’t get satisfaction from those things. You know what really gives you satisfaction?...Offering others what you have to give...I mean your time. Your concern. Your storytelling. It’s not so hard. There’s a senior center that opened near here. Dozens of elderly people come there every day. If you’re a young man or young woman and you have a skill, you are asked to come and teach it. Say you know computers. You come there and teach them computers. You are very welcome there. And they are very grateful. This is how you start to get respect, by offering something that you have...If you’re trying to show off for people at the top, forget it. They will look down at you anyhow. And if you’re trying to show off for people at the bottom, forget it. They will only envy you. Status will get you nowhere. Only an open heart will allow you to float equally between everyone...Giving to other people is what makes me feel alive. Not my car or my house. Not what I look like in the mirror. When I give my time, when I can make someone smile after they were feeling sad, it’s as close to healthy as I ever feel. Do the kinds of things that come from the heart. When you do, you won’t be dissatisfied, you won’t be envious, you won’t be longing for somebody else’s things. On the contrary, you’ll be overwhelmed with what comes back.

( pp. 126-128)

Matt went on to say,

Maury (in the story above) is dying. High school students have such inward eyeballs. They think only about themselves and I remind them of this all the time. I share stories about myself. I tell them that the greatest joy came when I started thinking about somebody else or when I started thinking about them, what I could bring to them and what we could share with each other. I tell them to do the kinds of things that come from the heart. When you do you won't be dissatisfied, you won't be envious, you won't be longing for somebody else's things. On the contrary, you'll be overwhelmed with what comes back. I don't present it to them as a sermon by putting them down or talking down to them but rather what can happen if you just give. And, chorally, if we all didn't want to just come in here and give, give, give, we'd have a terrible product.

In this example Matt was attempting to prepare his senior choir students for the “real” world.

*Discussion.* One of the most powerful things I observed in Matt's teaching beside his thorough attention to vocal technique was his philosophy of teaching what he called “life lessons.” It was obvious that Matt was connected to the singers not just musically but personally. His mission was to not only help them become great singers but to help them become great people. He invested much time and effort, as has been discussed, with his lessons on life, playing of music that had a particular message, and readings from various books. He mentioned that these lessons were somewhat sporadic at the same time planned. He was sensitive to the general environment and needs of the ensemble and the “life lessons” came when he felt they were needed.

I believe that Matt's approach to teaching "life lessons" came across in a positive way to the students. His manner of presentation appeared to be inspirational rather than condescending. If the students had perceived it negatively there would not have been a strong rapport between Matt and the students. Rather, I observed a "sense of community." This was observed in the way that they respectfully interacted, student to student, teacher to student, and student to teacher. This "sense of community" was established in the beginning of the school year according to the data and had been maintained through the entire school year. I believe that the students recognized that Matt cared about them personally and wanted them to be successful in all areas of their lives. The "spiritual umbilical cord" analogy (Jordan, 1999) was not only presented to the students as the way it should be done in the rehearsal room but it was modeled and lived out in their rehearsals. Jordan also made the point that both teacher and member of the community are equal. It appeared that this equality existed in Matt's rehearsal room. Again, mutual respect was obvious in the way that the entire community interacted.

The story of Maury (Albom, 1997) and how we gain much by giving was another example of Matt's attention to showing how much he cared for the students personally. Musically these seniors had done great things together and now Matt wanted to leave them with one final lesson, a lesson of the value of giving, the value of investing in others just as he had invested in them. Matt had led, and again was leading by example.

Noble (Shrock, 1991) stated that choral directors are given a great challenge and opportunity, that of freeing our inner beings so that we can be transparent vessels to communicate music. The "life lessons" that Matt taught were for this very purpose. He

was conscious of and sensitive to the inner self in his students. He wanted each student to become the best that they could be. He wanted them to create great music. He wanted each student to discover musical and personal greatness that would last a lifetime.

### *Purposeful*

A purposeful philosophy means that one's teaching style and method is intentional, goals have been established, and there is a reason for all that is done. Matt had formulated a philosophy over the period of approximately 15 years that was well defined. His philosophy covered musical and personal aspects. Musically, he paid great attention to healthy singing and all that that entails. Personally, he spent a great amount of time helping students to not only develop their individual musical gifts, he worked diligently on helping them building a strong, healthy character.

*Results.* Matt was methodical in his teaching. This was seen in his approach to teaching vocal technique. The 9<sup>th</sup> Grade Choir began with a "vocal boot camp" that lasted two weeks at the beginning of the school year. In that "vocal boot camp" he took the young 9<sup>th</sup> grade singers through a step-by-step process. At the end of the two weeks they had learned the basics of posture, breath control, tone production, vowel placement, and vocal freedom. He attempted to teach these basics in what most teachers and choral directors would consider a short amount of time. However, Matt found this system, his "crash course," to work and he felt his students had a firm understanding of the basics that would then be further developed through the rest of the year. This approach lines up with Gordan's (1989) three achievement levels.

The Chamber Choir had already received this "vocal boot camp" training and reinforcement of good vocal technique in the previous years of study with Matt.

Therefore, he did not follow the same plan for this ensemble. He immediately began working with the selected repertoire for the year. He did, however, systematically assess the vocal needs of this group. When necessary, he stopped rehearsals to correct or enhance good vocal technique for the purpose of establishing healthy, beautiful singing.

One way that Matt showed his philosophy of having purpose in all that was done was how he framed his overall goal for the year. From the first day of school Matt articulated that he had high expectations for them, that it would take time and effort, that good singing creates good self-esteem, and that they would accomplish the goal of beautiful singing. With the 9<sup>th</sup> Grade Choir, he explained how the middle school vocal teacher had done an excellent job and how they supported each other. He said he tells them, “I’m going to do things differently, that it may not be fun at first but that we’re going to learn some very good things. I have some very high goals and we’re going to sing here. We want you to get the most out of your money.” Matt wanted the students to know that it would take hard work but that they would be proud of what they did in the end. He said that he played recordings of his choir performances given in previous years so that the students would look forward to sounding that good. He wanted to build excitement, anticipation, and the desire for excellence. He clearly communicated his expectations. This in turn helped the students know the direction for the school year. Having direction from the start brought about not only an atmosphere of confidence but an atmosphere of expectation.

In his approach and philosophy he stated that the foundation of teaching is teaching “how to think.” He indicated that students must be in the right frame of mind to learn. Matt said, “I think that the foundation of teaching is teaching “how to think” and

not being afraid to do that. I don't think very many music teachers do teach this because it's choir. I think you have to teach this principle everyday." His "how to think" approach involved not only the musical aspects of good vocal technique but an attitude of being positive in all areas of life as has already been discussed. In Chapter 4 his systemized approach to teaching "how to sing" was discussed. His "how to think" approach for vocal technique involved teaching and developing a solid understanding of how the voice works and what the student must do to develop a fine-tuned vocal instrument. The student had to think about good vocal coordination between breath and tone. The student had to understand resonance and how and where to feel the tone. The student had to be able to remain focused for rather lengthy periods of time.

Matt not only constantly assessed if the students were learning good vocal technique but he also observed whether or not all students were paying attention and applying the technique. An example of this and how he instructed the students on "how to think" was when he recognized that some students were not always applying a particular technique. He analyzed the situation as students thinking that they were applying it and that Matt must be speaking to other students rather than themselves. He informed the students that they should always assume that the instruction is for everyone. He told the students, "Now I know that this is a room full of brilliant musicians and I know you're not rebellious. I know that you're not doing these things incorrectly on purpose. You think you are doing them but I know you're not. Always assume that it's you that I'm talking to and then we'll all be working on the same thing at the same time. But if we're all standing here thinking, 'Well, I wonder who he's talking to,' then nobody's doing it." He said that his goal in these comments was to make sure that everyone was working on

the concept so that everyone was understanding and applying the principles and technique. This is a good example of Matt's attention to teaching not only basic or fundamental information but teaching them the right way to think. By addressing the idea of everyone working to understand a concept he kept the singers focused and on track.

Another area, that of "purposeful activities" to promote one's goals, was evident in Matt's teaching. Every moment appeared to be structured. Time was spent in instruction, rehearsing, and discussion. He did appear to be aware of the student's attention span. Although there was very little down time, I observed that he broke each rehearsal into time sections of approximately 20 minutes, often with a few minutes of down time in between. During the actual rehearsal time, the students did not seem bored or disinterested. Rather, I sensed that the students were eager to learn and perform. I attributed this to Matt's ability to "rally the troops" which I believe was the result of purposeful activities.

*Discussion.* As already stated, Matt's philosophy was well-defined. I observed this in the discussions we had in the interviews and during his rehearsals. What he articulated during the interviews was practiced and confirmed in rehearsals. He had a plan that had been in place for some time. His success rate with regard to student involvement, festival ratings, and parent, administrative, and community support was proof that his plan worked.

Matt's approach was deliberate and involved a steady building of principles. With the nature of good vocal technique requiring a building block process, Matt had a system for effectively communicating this process. Gordan (1989), as well, acknowledged the need for goal setting and the organization of purposeful activities to carry out the goals.

He proposed a plan of three achievement levels: a) *orientation* where students learn vocal skills, musical knowledge, musicianship, ensemble and social skills, b) *growth* when students have improved music skills, and c) *culmination* when the student's skills are refined. This plan is progressive, built on levels of acquired skill. It is the responsibility of each teacher to assess the musical and academic needs of his or her ensemble. From that point of reference a progressive plan can be developed and instituted.

Purposeful activities are also a key to fulfilling one's philosophy as stated above by Gordan (1989). These activities must promote one's established goals. Purposeful activities do not waste time. Purposeful activities provide solid teaching and learning. Purposeful activities demonstrate to the students that their director is knowledgeable and competent. When students know that their teacher is knowledgeable in their field they are more confident in the learning experience. When students know that the teacher has a plan and process in place they are also more confident and willing to participate. This was the case with Matt's teaching. The students knew that Matt was a successful choral director. They also were aware that the ensembles were recognized for "musical excellence." I believe that these points contributed to Matt's ability to "rally the troops."

Custer (2005) also made the point that one's philosophy must be clear and well-constructed. He referred to it as "grounding," or as a beacon that helps us navigate our teaching careers. Not only did Matt appear to be "grounded" in his approach, Matt stated that he was constantly self-evaluating. Matt said, "I really have to analyze what it is that I'm doing and how I can do it better." This is perhaps one of Matt's greatest strengths. An educator who recognizes that there is always more to learn and better ways to communicate will, in my opinion, be a successful educator.

## *Teaching Method*

*Personality: Relational, A Leader, Enthusiastic, Energetic, Focused, Humorous,*

*Outgoing, Dramatic, Caring, Honest, and Vulnerable*

Teaching method, simply stated, is the manner in which one delivers or executes the subject matter or message. Many times the manner in which something is communicated is more important than anything else. A student could read the subject matter and learn but what if a teacher is able to deliver that same subject matter in such a way that it comes alive to the student, then the learning process has now been elevated to something more than just knowledge, it is now living.

*Results.* I believe that a teacher's personality is one facet that affects delivery or style. We can all think of teachers who had great impact on our lives. We ask ourselves what it was in that teacher's personality that played a part in the influence. Was the teacher outgoing, introverted, pleasant, demanding, intense, and so forth? In the final analysis, no matter what type of personality a teacher possesses, the most important characteristic, I believe, would once again be that of a personality that promotes the positive.

I observed that Matt was a *relational* teacher. The students entered the rehearsal room very talkative and generally up-beat in attitude. Matt took time to talk to students as they entered. On several occasions, during rehearsals, he stopped to ask a student if they were feeling O.K., if everything was O.K with them. Matt stated, "The relationship, understanding the relationship between the conductor and the singer, is huge."

I have heard it said that some people are "born leaders." Whether this is factual or not, I believe that some personalities lend themselves more easily to fulfill leadership

roles. Matt demonstrated strong *leadership* skills in his rehearsals. The simple question that one asks when determining this is, “Did the students ‘follow’ his instruction?” A leader will have followers. The answer for Matt was a very strong ‘yes.’ This was seen in the final product. The students were singing beautifully at the end of the year. They had competed in competitions and had received superior ratings. The “sense of community” existed through the entire year. From my observation in the last month of the school year, the students were still engaged and anxious to learn. The overall effect of Matt’s performance as a leader was successful.

Matt was not only relational and a strong leader, he was very *enthusiastic*. His enthusiasm poured into everything he did. If he were discussing the next day’s schedule or an upcoming event, he was always energetic and positive. As already mentioned, Matt appeared to love his profession. He loved teaching, loved the students, and loved music. The rehearsal room appeared to be filled with anticipation of good things to come. Even the negative aspects of hard work, early morning rehearsals, extra rehearsals, discipline, concentration, among others, were presented in a positive way with enthusiasm.

He was also very *energetic* and the classroom hours were fast-paced. I observed that the students were attentive and focused for approximately 20 minutes at a time. He usually began the day with a few minutes of instruction about upcoming events or some type of short reading or philosophical idea. Then a segment of actual singing took place for approximately 15 to 20 minutes. He usually worked each rehearsal in blocks of time. The blocks of time were approximately 20 minutes in length. One block of time might be with the entire ensemble. Then he would perhaps work with one particular section while

the other sections were free to talk quietly. This gave the students time to relax in between the times that required solid concentration.

Matt was extremely *focused* on each task. He drilled vocal technique with regard to breathing, vowels, placement of tone, and coloring. Again, the students remained attentive during the entire process. I observed that there were times, when working with a particular section, that the students stood around the piano as he directed and played the piano. The other vocal sections were free to talk softly, do homework, or just relax. While the one group stood around the piano as Matt worked with them, the others sat on chairs placed on built in risers on one side of the choir room. During my time of observing rehearsals I noticed that not only was Matt focused, but the students were engaged and focused the entire time.

*Humor* was interjected into his comments of analysis or correction on a regular basis. The students appeared to appreciate these moments of comic relief and he allowed time for the students to laugh or respond with their own humorous comments or comebacks. He said that he used humor to catch and hold their attention and to help the students remember concepts. His humor was at their level and he spoke their language. One example was when he tried to teach the students about the importance of deep expansion in the lower ribs upon inhalation. He told the students, "If your rib cage is not expanded then it's pressing down on the lungs. Then your lungs can't fully expand and you can't sustain the note as long as you might need to. Your phrasing will be bad and you'll sound like a smoker and we don't smell." The students laughed. He said that he tries to make it crazy but at the same time communicate good technique. Another time he told the singers to look at his nose holes instead of asking them to watch him at all times.

When asking for more support and a greater dynamic level he called out, “Where’s the beef?” At one point he asked the students to smile as they sang. He said, “Everybody look at me. When you smile you are not going to look like a ‘goober’ unless you take it over the edge. I’ve only seen one choir in my life that took it so far over the edge that they smiled on everything, even things that were sad. We are not going to let you look like ‘goobers.’ We’re not going to let you go over the edge. Put on a smile.” Matt laughed often with the students and kept a very happy classroom atmosphere.

Matt’s personality was very *outgoing* and *dramatic*. He was friendly with all of the students. He talked comfortably with them individually and as a whole. In the rehearsal setting he was confident and spoke with varying levels of volume and inflection. He was not afraid to be dramatic when presenting a concept. He used hand gestures, varied and humorous facial expressions, and often acted somewhat overdramatic to get a point across. Again, his presentation and outgoing personality seemed to be accepted and appreciated by the students.

His *caring* attitude was seen in many and varied ways. Matt’s attention to the individual student was impressive. It appeared that he knew each student well with regard to musical and personal strengths and weaknesses. He gave one example of an instance when he had been hurt by a student’s behavior and felt that he should address his concerns and feelings with the student. Matt had spent many hours transposing a song for him to sing at a competition. The student took the music but did not practice. Matt wanted this singer to know that he had invested much time and energy in him and was hurt that the student wasn’t showing his appreciation for the extra hours he had spent on his behalf by practicing. Matt asked the student to meet with him to discuss it. After a

very positive meeting Matt said that he and the student understood each other better which created an even better relationship. His caring attitude was also seen in his classroom presentation in general. As was mentioned earlier, he remained positive the majority of the time. When any type of discipline or correction was made he did it in a very firm but kind way. I never observed anger or condescension from him. He was respectful towards the students yet in control. The “life lessons” that he gave on a regular basis also demonstrated to the students that Matt was concerned about them personally. He told the students that if they truly cared for each other then they deserved to give their full effort for each other. He further explained that they will want to share the “expression” of music, “We want to honor our fellow musicians through commitment, dedication, and interpretation.”

Another attribute of his personality was his *honesty* and *vulnerability*. He had a willingness to be vulnerable and honest with the students. He wanted them to know that he was just like them in succeeding and failing and he often told of his own experiences of success and failure. He said that he shared with them that he was terribly intimidated when he began his master’s program. He had not studied voice since 1985 and was scared to sing for the voice teacher. Matt wanted the students to know that he related to their fears about singing. However, he indicated that in order for students to grow musically and vocally they must try and be willing to learn from failure. He said that he explained why it is so frightening to sing in front of the people. He said,

The vocal instrument is directly “you,” unlike playing an instrument. If you make a bad sound it can be embarrassing because “it’s all about you.” It’s your instrument. You can’t take it out of a case. You can’t take the mouthpiece out. It’s

not the reed. It's your baby. It's embarrassing! It's like standing in front of them naked!

The students laughed, he said, but the concept was understood that we must be willing to try, willing perhaps to fail, and willing to learn from our failure so that we can develop.

During one rehearsal he said to the students,

Sometimes it's hard to take criticism. At contest it is the adjudicator's job to criticize. We should take the opportunity to improve from their criticism. It is an opportunity to get better, an opportunity to learn. You know, in your life, you're going to fail. You're not going to get the break you've always wanted. But if you're always winning, if you're always getting everything you want, you aren't really learning anything except the fact that hard work pays off. You're learning that but what else are you learning? You aren't learning very much. You get an 'A' on everything, you always get everything you try out for, you always win the sweepstakes, what did you learn? You didn't learn anything but you probably have an inflated ego saying to yourself, 'I must be really good at everything.' I think there's a lot of value in failing and I think we shouldn't be afraid of failing. Because, when you fail, when you take back the judges sheet with a '2' on it, and you look at all the criticism, and you take it to heart and work on it, you get better. So, I don't think you should be afraid of failing. Your goal shouldn't be to fail. Your goal should be to win but you shouldn't be afraid of failing.

With Matt's willingness to be vulnerable and honest he was also very open and direct about what needs improvement and development in the choir. He expressed how he wanted each student to grow musically and vocally, and expected each student to pay

attention to his instruction. Matt said that he also feels it is important to be open and honest when he makes a mistake. He reported that he has apologized to individuals and the ensemble when he knew that he was in the wrong. He has also asked students to apologize if they have done something wrong. Matt said, “Relationship built out of honesty, even if you don’t agree, creates something.”

His personality, in general, was outgoing and engaging. The students appeared to love, appreciate, and respect him. His personality traits appeared well-suited for a choral conductor.

*Discussion.* There is much debate as to how parents and teachers are to relate to young people today. Are we figures of authority, are we friends, both, or somewhere in between? With Matt’s approach and his personality traits he appeared to be balanced and somewhere in between. He was a *relational* teacher but also a strong *leader*. He was in command of the classroom and a teacher figure but also reached out to the students as a friend. With regard to leadership, the terms “authority” and “disciplinarian” can carry negative connotations. They often infer a “lording over” or “ruling” in the educational setting. However, these terms can be translated in a positive way. A leader must possess the ability to show authority and be able to discipline. However, it is the manner in which these tasks are carried out that determines whether they are “negative” or “positive.” I believe that in all situations a teacher must exhibit the “positive.” A teacher builds relationships with the students. These relationships must be founded on understanding and trust. A teacher never “lords” over the students but rather guides them by example.

“Leading by example” is a phrase that is often heard. Custer (2005) addressed several key components. He said that he employs active listening, validation, and

feedback strategies. I observed and discussed with Matt the importance of active listening. He often asked the students to listen and analyze tone production issues. While he was working with a particular section the other sections were listening and then were asked to give their assessment or feedback of what had transpired. Matt then responded to their answers with his own analysis. This was an example of teaching the students to be good musicians by developing critical ears based on the guidance of the teacher/leader. Another way that a teacher “leads by example” is through the teacher’s own self-discipline. Johnson (1997, p. 8) stated, “The conductor/disciplinarian, of course, should be a person who possesses solid self-discipline (an idea which may be a frightening notion for some directors).” Matt was an accomplished pianist and an excellent vocalist. He was able to demonstrate his musical skills for the students which affirmed his attention and insistence on good vocal technique. He also demonstrated self-discipline in his delivery in the classroom. He maintained a steady, fast pace of instruction. He broke the rehearsal into time segments of approximately 15 to 20 minute periods. He was well-organized and methodical in delivery of instruction. All of these areas showed the students that he was well-prepared for a task which took much self-discipline.

*Enthusiasm* abounded in Matt’s rehearsal room as well. The atmosphere was upbeat as a result. The reason for this atmosphere was Matt’s great positive spirit. Cox (1989) found that students readily perceive enthusiasm and are influenced in a positive way by it.

Matt would also be classified as a very *energetic* teacher. He maintained high energy throughout all of the rehearsals that I observed. Slack (1977) stated that teaching performing groups is emotionally demanding and requires intense effort and resilience.

From my personal experience I would agree with Slack. To direct a one-hour rehearsal requires great energy, good organizational skills, command of the rehearsal, good analytical skills with regard to music, a sense of the singers' attention spans, among others. In other words, performance rehearsals demand much from the director. Within the time frame of a rehearsal period a director wants to achieve the musical goals and at the same time make it an enjoyable experience. Choral ensembles usually consist of thirty to sixty young voices and to instruct and direct this many performers at one time requires a special energy and endurance level. In a study done by Yarbrough (1975) it was found that there are two types of energy levels in teachers. The first is what he termed "high-magnitude." The teacher possessing this level of energy is fully engaged at all times. The teacher maintains eye contact, approaches and departs the group during rehearsals, uses expressive gestures, and maintains a high energy and exciting rehearsal with varied speech patterns of speed, pitch, and volume. The second energy level is just the opposite, "low-magnitude." Here the teacher does not maintain eye contact with the students, has strict gestures, leads a slow and unexciting rehearsal pace, and does not vary speech patterns. Matt definitely was in the high-magnitude category in all respects. His rehearsals were fast-paced. He was dramatic in his presentation of instruction with varied facial expressions, varying dynamic levels of speech, much body movement, and wide use of hand gestures. Because of his outgoing and dramatic personality he created an overall exciting and positive learning environment. Yarbrough's (1975) study determined that students preferred the "high-magnitude" teacher. The obvious reason is that students are engaged during an exciting, energetic rehearsal.

Another aspect of the “high-magnitude” teacher would be their ability to personally stay *focused* and in turn help the students remain focused. This would have to do with the pace of the class as well as the sensitivity of the teacher regarding student behavior, ability, and need. Matt was extremely focused on the task at all times. He appeared determined to accomplish the goals he set for the rehearsal. The students also seemed focused. One of Matt’s gifts, in my estimation, was his ability to inspire. He did this through his sense of what was working and what was not working. He often interjected *humor* into statements. This not only created a happy atmosphere but he stated that he intentionally added humor to help the students grasp a concept.

In Slack’s (1977) study he also found that teachers must be secure, idealistic, and sensitive. In being idealistic one shows the spirit of excellence and of being positive. Matt did just that. However, I would say that he was “realistically” idealistic. What I mean is that he expected musical excellence but was realistic about the singers’ abilities. He was not critical but rather analytical with regard to improvement. Matt demonstrated a sensitive and caring attitude toward the singers as was seen in his philosophy of helping students find their place and value in life. In general, the students knew that his attention to musical detail, his positive attitude and influence, his willingness to give extra time in extra rehearsals and contests, among others, was a demonstration of his devoted and caring attitude.

As mentioned above, Slack (1977) addressed the importance of a choral director being secure. Matt demonstrated personal security in his willingness to show *honesty* and *vulnerability*. I believe that this helped to build trust in the singers. Noble (Shrock, 1991) stated that “Transparency is vulnerability” and spoke of its impact on creating music. He

said, “It is the capacity to be open within ourselves in order that the music can flow through us--that we can be an open conduit, a free vessel.” Custer (2005) also addressed these attributes and stated that choral singing demands an exceptional degree of trust, transparency, and vulnerability. Matt modeled these attributes and I believe this was a strong contributor not only to the “sense of community” that existed in Matt’s rehearsals but to the successful learning environment.

*Style/Method: Repetition, Simplification of Technique, Analogy and Storytelling, and Modeling (Verbal & Nonverbal)*

The definition of “style” or “method” according to Gumm (2003) is “the *focus, intention, orientation, or priority underlying the entire pattern of interaction between the teacher, students, and subject matter.* As a result, it is also the *stable, consistent, and pervasive approach to music teaching.*” (p. 14). Matt had a well-defined “method for his madness.” In this instance the word “madness” means Matt’s very creative and efficient method. Through his years of teaching he had established a “priority” and “order” that brought about the desired goal, that of “beautiful choral tone quality.”

*Results.* Matt had found that *repetition* was a key element in the learning process. The old adage “practice makes perfect” is often lost in the contemporary culture of “I want it now.” Repetition and practice take time. It is often a difficult task to convince young people that hard work, practice, and time are necessary elements in the road to success. However, Matt demonstrated that it is possible to convince young musicians of this benefit. During each rehearsal that I observed I noted that there was much starting and stopping of phrases. Matt often repeated a phrase many times over. Either the entire choir was involved in the repetition or he worked with a section or several sections

together. He said that he constantly reviews posture, placement, and the philosophy of “why” we’re doing this. Matt said,

High school students don’t like to repeat things. It’s a societal thing, we want things fast and we want to be done. We want to go on to the next thing. This whole idea of repetition is another concept that I got out of this James Jordan’s (1999) book.

Matt said that he took this even one step further. “We have to really get in the mode where we can enjoy practicing as much as performing.” He said that he communicated this concept to his ensembles. He wanted them to appreciate and enjoy rehearsing.

Matt’s method of teaching demanded constant repetition. Even when the students might show tiredness he continued to drill, refine, and reinforce. He said,

In the first two weeks everything gets repeated. I try to end each day, before they leave, talking about what we talked about today. I really set it up and I tell them, “I’m going to teach you how to sing for a lifetime, where you’ll have a healthy voice, and you can sing forever.” I relate it to sports and I tell them how much I love sports, my sons play sports, I live my life in the gyms, the fields, however, you can’t play sports forever, you can’t be a cheerleader forever. But...you can always be a musician, you can always sing well, forever, and ever, and ever, amen.

He was so insistent on students learning good vocal technique that he was not afraid of what some might call “overkill,” even in the first two weeks of school when he took the 9<sup>th</sup> Grade Choir through “vocal boot camp.” This was discussed thoroughly in

Chapter 4. Matt said, “If the technique is not there then you have to go back and do a little bit of review.”

As previously stated, we live in a society of instant gratification and success and yet here is an example of young people tolerating and benefiting from a strong teacher who wanted vocal excellence and insisted on it. The students, in turn, strove for excellence and realized that it only comes through practice.

Another approach in Matt’s method was that of *simplifying vocal technique*. He felt that it was very important to technique to put the concepts “in a nut shell.” He wanted to make it easy and quick for the students to learn. Pace was important. When there is so much to accomplish in each rehearsal, “time is of the essence.” Therefore, after a concept was taught Matt looked for a “shortcut,” a “quick fix.” A “shortcut” helped Matt have a more productive rehearsal, as he would simply give the signal and the choir responded. He did not want to waste time reiterating a concept if it was already understood. One example was the “shoulder roll.” He simply had to mention the term when students had bad posture and immediately the students’ postures were realigned. With regard to a “quick fix” for poor tonal placement, Matt used the consonant [n]. He taught this tonal idea to the students in the first week of school. Matt reminded them of the placement of tones aligning to the resonance sensation of the consonant [n]. He stated, “I have used [m] and [ŋ] before different vowels, however, the brilliance, or the great thing about [n] is that it is really fast and really easy. The [n] consonant brings the tone to the most forward position. Because it is really fast and easy, it is so much easier to hear.” He also has found the [u] vowel to, most generally, align and open the tone for the best tone quality. He used the [u] vowel as the sensation to which to align all the other vowels.

He looked for practical and simple ways to communicate technique. One example is that of teaching breath control. He had the students inhale while he counted from 1 to 10, then 1 to 15, then 1 to 20, and so forth. Matt said, “This seems to make more sense to them. This works better than long explanations or more difficult exercises.” Matt was constantly looking for ways to simplify explanations for easier understanding and ways to communicate a concept with a quick reminder with such things as a hand gesture or comment.

*Analogy* and *storytelling* were a major part of Matt’s method. As stated in the above paragraph he looked for ways to communicate effectively. He wanted to present difficult concepts in a manner that could easily be understood. He did this by providing an analogy or story that the students would understand and remember. Chapters 4 and 5 have provided examples of these. However, one analogy that will not be forgotten and was stated in Chapter 4 in the section on vowels dealt with vowel placement and blend. Matt compared the ensemble that sang with differing vowel placements to a married couple that couldn’t agree and were headed for divorce. He told his singers that they didn’t want to be like that, that all singers must agree on the vowel sound they are after. Storytelling came often as well. He either told stories about himself or he read to them from some of his favorite books. Matt stated that the analogies and stories helped the students have a better understanding.

I believe that one of the key ingredients in Matt’s success was his ability to communicate. He was articulate and concise. I did not notice time being wasted. Rather, his method of communication involved short instructional lectures that often incorporated

*modeling*. His modeling involved both *verbal and nonverbal* cues. Categorized below are some examples of his modeling.

### Verbal

- 1) Matt sang a phrase to demonstrate good articulation and how to crescendo.

The choir then sang and imitated.

- 2) Matt sang along with the choir as they sang to show a particular color and style. He did this often.

- 3) Matt sang the proper way to sing the [ə] vowel in the word “somewhere”.

First he demonstrated it with an ugly timbre. Then he sang it again with a little more height or head resonance. He sang it one more time with balanced resonance.

- 4) In explaining what it means to sing with vocal line or connection he sang it first without connection and then in a legato manner. He said, “The music needs to move, to have direction with intensity from one word to the next.”

- 5) He sang the word “me” and then asked the ensemble how he could improve it.

A student answered, “Open your mouth more.” He responded, “That’s right.”

He then instructed them that as you sing louder you must allow for more space for the vowel.

- 6) On the word “moon” he stopped the rehearsal and demonstrated how they were singing the [u] vowel and explained that there wasn’t enough top (head resonance) in it.

- 7) He demonstrated what he calls a “phonated yawn” and sighed through descending pitches. He was using this exercise to demonstrate how a tone

should sound and how it should feel when the soft palate is raised allowing for head resonance.

- 8) Matt stopped a rehearsal to ask the singers to over-articulate. He demonstrated how it should be done.

### Nonverbal

- 1) He used his right hand cupped above his head as he sang to ask for more head resonance.
- 2) As the choir sang he demonstrated the mouth position for the vowel [e] in the word “name” signaling for them to keep the tone open and long.
- 3) Matt rounded his lips and hollowed his cheeks as the choir sang to ask for a rounder tone.
- 4) He mouthed words as they sang to show vowel formations.
- 5) Matt used the thumb and index finger on his left hand, positioning them at the corners of his mouth, to ask for a more forward and rounded tone.
- 6) He made a circular motion with the index finger of his right hand in a lasso type motion to ask for more ring in the tone.
- 7) Matt opened and cupped his right hand with the palm down signaling a more open vowel sound.
- 8) With his right palm up but cupped he was signaling for a bigger, more open sound.
- 9) He made a fist with his right hand to ask for more power or volume.
- 10) Matt used a flat right hand with palm down, striking in an outward motion to show staccato and no vibrato.

- 11) As the ladies sang he wanted a rounder tone quality and rounded his arms out in front of him with fingers touching as if placing them around someone.
- 12) He used both hands in a rounded fashion as if holding a ball to show roundness of tone and raised the ball higher as the phrase was to crescendo.
- 13) Matt flexed his bicep muscles of both arms at the end of a phrase to signal that the phrase ends strong and forte.
- 14) He used his left arm and hand to circle at head level to signal for more head resonance.
- 15) Matt asked for a taller tone by separating his right hand from his left in a vertical motion.
- 16) He often directed with one hand above his head to help the singers feel the high, head resonance.
- 17) As they sang the word “you” he directed with his thumb and index finger forming a circle. He was asking for a rounded [u].
- 18) To demonstrate a taller sound as they sang, he placed both hands together with fingertips touching. He pulled his hands a part in a vertical direction to ask for a taller tone.
- 19) When asking for more lift in the soft palate area to attain more head resonance he cupped his right hand at the eye level or soft palate level.

His hands appeared to suggest intensity, pitch, and timbre. The entire time these nonverbal signals were given, the choir was attentive and followed closely. They seemed to understand and enjoy the variety of communication tools. Matt’s method of modeling seemed very effective. With verbal modeling the students were able to hear exactly what

type of tone he wanted and they were then able to imitate. With nonverbal modeling Matt provided a visual tool for the tonal concepts.

*Discussion.* Because method, according to Gumm (2003), is the “stable, consistent, and pervasive approach to music teaching” (p. 14) a teacher must establish a solid approach that allows for consistency. Matt found that repetition was an important element in his method allowing for consistency. He attributed his attention to repetition to James Jordan (1999) and quoted him:

The irony in all this, however, is that great artists are great artists because they enjoy practice as much as performance. That is because their practices are always performances. Repetition in rehearsal is both repetition and deepening... The profound dilemma for artists is that the world despises any repetition that adds time to any process. Speed is important. Fast food, e-mail, and computers are contributing to this faster-than-thou attitude... How do fine craftsmen learn their trade? Through incessant repetition. If one uses repetition to refine, discover, and deepen the musical material, repetition is the way things become beautiful. Most importantly, one must live for beauty. A singer must want to make a beautiful sound every time he or she sings. (pp. 58-59)

As Jordan pointed out craftsmen learn their trade through repetition. Perhaps teachers are afraid that too much repetition will bore the student. Others might think that students understand and practice the technique after a few lectures or exercises. It was Matt’s belief that students must be reminded on a regular basis. This might be due to the fact that we all get lazy mentally and physically from time to time. We also forget concepts and sensations of coordination for singing. It could be that some students will not grasp the

concept until it has been explained numerous times and in varied ways. Or, it could be that some students just need lots of time and practice for good vocal technique to become habit. All of the possible reasons above are valid and support Matt's reason and attention to incessant repetition.

Another theme that surfaced in this study with regard to Matt's method was his desire to *simplify technique* for easier understanding and application of technique. Some teachers skip over technique while others belabor the details of anatomy and the science of the voice. Matt worked hard at communicating vocal technique so that students could easily understand. He established some "quick fixes" that the students understood such as the "shoulder roll" for posture and the [u] vowel for open resonance. He made sure that everyone understood and if they didn't he found a new way to communicate the same idea. Repetition and simplification of technique were two very strong components in his approach.

Armstrong (2000) stated that teachers should use a wide variety of teaching strategies because of individual learning styles. It appeared that Matt intentionally worked in various modes to help the different types of learners. I found that Matt frequently used *analogy* and *storytelling*. These strategies were observed earlier in this chapter in the section on "life lessons." Matt seemed to find a way to connect vocal concepts with concepts that the students already understood. Armstrong listed numerous strategies that could be used and he mentioned that storytelling and picture metaphor were visual teaching tools.

Matt was also a proponent of *modeling*, but he did not consider himself an outstanding singer. In fact, he said that he had to work hard at learning to sing well. He

studied voice in his undergraduate and graduate programs but did not feel that it came easily to him. However, he stated that he felt that having to work for it may have been a good thing. The reasoning behind this is that he felt that he had to work through his technique which has made him a better singer and teacher. Even though he did not consider himself a great soloist Matt had developed a lovely singing voice that was used well. This should be the goal of all vocal ensemble directors. If a music teacher is not an accomplished singer he or she can study and develop a singing voice that is produced well so that young singers have a good model to follow.

Haasemann and Jordan (1991) stated that the choral director should demonstrate first and then explain. Matt approached teaching both ways. He often stopped the rehearsal to ask for a different tonal quality. Not only would he explain the vocal quality he was looking for but he would sing the word or phrase for the choir and then they would imitate. He was able to demonstrate all areas of vocal technique.

Matt did use a lot of nonverbal communication with hand gestures, arm movements, and facial expressions. The most common hand formation was the cupped hand placed at his eye level with the palm down. This was a signal to the singers that he wanted more lift in the soft palate area and more head resonance in the sound. His hands became the voice, to ask for a more open, rounded sound. Sometimes his hands gave two signals at the same time as when he formed his hands in a ball shape and gradually lifted them to indicate a rounder sound and a crescendo.

According to research that has been done regarding modeling and nonverbal cues both have a profound impact on singers. Eichenberger (1994) experimented and produced a video showing the relationship between a conductor's cues and the singer's response.

He found that nonverbal cues directly affect the overall sound. He said that we link the visual with the aural. He taught that a rounded pattern affects the roundness of tone quality and pitch. A floppy wrist and rounded hand can cause tonal problems where the firm wrist helps students produce a more solid tone. He also has observed the conductor's posture and its influence. He stated that a tall posture brings about a taller tone and better pitch.

McClung (2005) also discussed nonverbal behaviors. He had taken a class with Eichenberger and made reference to noticing that when Eichenberger had a conductor relax his wrist McClung felt his larynx relax. McClung also indicated that the palms of one's hands and one's fingers can communicate tonal differences. He also mentioned the cupped hand turned downward caused singers to feel and position the lifted soft palate. McClung discouraged the habit of mouthing words to the singers but did admit that the mouth and eyebrows can encourage the proper shape and height of vowel sounds.

Although Matt has not studied nonverbal cues and modeling he naturally has found signals that work best to coordinate the visual with the aural. As a conductor myself, I found Matt extremely interesting to watch. His movements were deliberate and often dramatic. He seemed to perform with the choir, not in a negative way to distract from the choral performance, but in a positive way. He and the choir were connected. Each movement and signal had meaning.

The contributing factors discussed above, with regard to successful style and method, are intertwined, and related to the four points addressed by Grossman, described in detail above (1990, pp. 6-9). He mentioned four areas of teacher knowledge that he believed were critical for teacher success. They were a) general pedagogical knowledge,

b) subject matter knowledge, c) pedagogical content knowledge, and d) knowledge of context.

Subject matter knowledge, point b, was discussed in Chapter 4. Matt had a thorough understanding of good vocal technique. This was derived from his studies at the undergraduate and graduate levels as well as his experience as a teacher and performer. However, I believe that his years of teaching experience may have been the major contributing factor regarding the other three areas that Grossman discussed. General pedagogical knowledge relates to knowing and understanding how instruction affects learning and the learner. Matt had a sense for knowing what the students could understand and assimilate. I observed this in his pacing of class time. He did not allow much down time. Rather, the students were engaged for most of the class period. When he sensed that they were becoming bored or tired he interjected comic relief. This was also seen in the attention he gave to vocal sections and even individuals. He knew when small groups or individuals should be instructed. He appeared to have a sense of timing as to how long he should dwell on a particular point and how to keep the entire ensemble engaged in learning. Matt not only understood good time management of the classroom he seemed to understand classroom management in general. He established the boundaries and expectations for learning in the very beginning of the school year. Matt informed his students of what he expected and how they would achieve the goals. He also was in control of the classroom as the authority figure but he was not overbearing. There was a sense of rapport between Matt and the students, and of trust. The students followed his leadership and respected his knowledge and expertise. In turn, Matt made a conscious effort to let them know that he had faith in them and their abilities.

With regard to pedagogical content knowledge, students were taught the value of good vocal technique and how it could affect them presently and in the future. Matt seemed to have a sense for communicating concepts thoroughly and succinctly. This was observed in the way he used simplified explanations of technique or found “quick fix” phrases and terms for better understanding. His “vocal boot camp” approach perhaps best demonstrates his understanding of pedagogy. Through his experiences, I believe, rather than his educational background, he had discovered that laying the foundation early on in the learning process brought about the best result. Explaining the whole picture from the outset and working on the individual components early on was most affective.

Grossman’s point about knowledge of context could be seen in Matt’s understanding of how to explain vocal concepts to the 9<sup>th</sup> Grade Choir versus the Chamber Choir. He did not review or bore the Chamber Choir with unnecessary redundancy. He chose to teach the Chamber Choir certain concepts when inadequacies were seen in their performance. He had a sense of timing and appropriateness. He seemed to understand each group’s needs in its own context.

In conclusion, I believe Matt’s success is a result of his philosophy and method of teaching. Everything he did had purpose. His enthusiastic and positive attitude, coupled with his teaching skill, brought the students to a level of musical excellence not often seen at the high school level.

## CHAPTER 6

### Summary

#### *Vocal Technique*

*“Vocal timbre that results from the well-formed, well-coordinated instrument, without maladjustment of any of its physical parts or functions, stands the best chance of qualifying under the artistic criteria for tonal beauty, as found in Western culture.”*

*(Miller, 1986, p. 205)*

The above quote summarizes Miller’s philosophy as to the necessary criteria needed for beautiful tone quality. The vocal instrument must be “well-formed, well-coordinated without maladjustment of any of its physical parts or function.” His statement defined tonal beauty as resulting from the technical aspect, that of the voice functioning acoustically, physically, and scientifically according to laws affecting coordination and resonance. His basic premise was that a voice that is well-coordinated will be well-produced. In turn, a well-produced voice will be beautiful. Within those parameters, however, lies the “subjective.” “Beautiful tone quality” to one listener may not be beautiful to another listener. This study did not attempt to promote one tonal preference over another. Rather, even though Matt, the participant, had a preference for a warm, open, rich quality, his philosophy dealt with the technical aspect of a well-coordinated voice. It is my belief that within the confines of good vocal technique there are tone placement variances that affect the quality but still adhere to good tonal production. These placement variances involve slight percentage changes within balanced resonance. That is, one singer may mix a little more head resonance into the balance than another. A warm, open tone quality will have more mix of head resonance while a

brighter timbre will have a little less head resonance with a little more forward mouth and mask resonance. The important factor is that all resonance areas are open and resonating.

This study was chosen to help provide a possible exemplar for others on how beautiful choral tone can be taught and developed. It dealt solely with Matt's philosophy and method of achieving a beautiful choral tone quality in high school singers. It was found that he had designed a plan that taught a well-coordinated tone production.

The first question to be answered with regard to the findings of this project, is what is at the core of this study? What did we learn about teaching and learning? It may be observed clearly that a high school choral conductor has a great task before him or her. This task involves not only knowing the subject matter well but knowing the best way to impart it to the high school student. These two key areas have been discussed and identified as subject matter knowledge and pedagogical content knowledge. These two areas must work hand-in-hand. Teaching vocal concepts without a sense of knowing how to most effectively impart the concepts will result in less than desired results. The reverse is also true. Knowing how students learn without a solid understanding of how the singing voice works in the choral setting will not bring about vocal choral success. This study found that Matt had studied good vocal technique at the undergraduate and graduate levels. He had developed his own singing voice. At the same time he had established a philosophy of teaching and a method of delivery that resulted in recognition of his high school choral ensembles in the choral field as superior and successful. Because there is no objective test used to evaluate success of musical ensembles outside the parameters of contest ratings by adjudicators and reviews by those considered authorities in the field, such ratings were used to select Matt for this study. As has been

discussed, Matt's pedagogical approach was supported by contemporary vocal authorities. He knew the concepts but perhaps more importantly, articulated them clearly. He worked diligently, in a timely fashion, to communicate. His communication style involved the understanding of what I would call the "high school student psyche." He seemed to know what would catch and maintain their attention. His humor, his purposeful intention to build confidence and self-worth in each student, his sensitivity to the overall learning environment of timing, positivism, creative tactics of learning, as well as setting and maintaining high expectations, bred an environment of successful learning.

I would like to point out some of the technical areas that I believe made Matt an excellent communicator of good vocal technique. Matt's intense attention to good vocal technique was impressive. In my experience as a college professor, choral director, and adjudicator of high school competitions, I have observed that few high school choral directors give as much attention to vocal technique as Matt did. Many choral directors do not work with vocal technique at all. Some say that they only have enough time to teach vocal literature. Other choral directors choose not to spend the time. They possibly do not have the knowledge or they may have a different philosophy regarding choral singing. Some feel that musical interpretation takes care of many vocal flaws. I have also heard teachers state that at this young age students shouldn't be taught technique but rather just allowed to sing, to make music. There are even some who feel that teaching vocal technique at this age level will do vocal harm to the young singer. I believe that singers will not form good vocal habits and will not develop their voices properly without good training.

Within Matt's philosophy he had established an "ideal" tone quality. Although some argue that there is no such thing as an "ideal" tone quality, I would argue that there are simply varying tonal preferences within the "ideal." Everyone must know what type of sound he or she desires to produce. Without a personal "ideal" one cannot formulate a technique. Matt had found his "ideal" when listening to a recording of an ensemble directed by Jerry Jordan. His "ideal" choral tone quality not only required teaching good vocal technique it involved helping students find their value to the ensemble and to life in general. He credited James Jordan with this inspiration. Matt stated that tone quality is affected by both good vocal technique and who you are as a person.

Matt began immediately with his intense approach to technique. His "vocal boot camp" began on the first day of school for the 9<sup>th</sup> Grade Choir. Each rehearsal in the first two weeks was filled with explanation, drill, and repetition. It was a skill building time where one concept built upon another. It was a progressive plan in which each area was repeated many times to help solidify the technique for the singers. The Chamber Choir did not receive the same training, since the majority had already gone through his "vocal boot camp" in previous years. Rather, they already had an understanding of the technique and Matt stopped rehearsals to correct or reiterate vocal principles of good technique. Matt's attention to detail was not only seen in the first two weeks of school but continued through the entire year. It might be said by some that Matt was a "drill master." Some might even say that his intense approach was "overkill." However, the students appeared to have accepted Matt's method and were continuing to participate in his drill work even at the end of the school year. I also observed that the students were not bored with the

repetition of vocal technique. I believe that Matt had convinced them that hard work pays off. They knew that his plan and technique were valid and necessary for success.

His method of communicating vocal technique was not only intense it was varied. The “grunt work” took place immediately. He introduced vocal technique concepts in lecture form describing how they should feel and sound. He then put students through the paces of “drill work.” The drill work included exercises and repetition. These exercises dealt with the physical aspects involving the anatomy and function of posture and breathing as well as vocal exercises. These exercises were followed up with repetition of the same concepts through old and new exercises. Matt constantly reiterated concepts until he knew that the students had a firm grasp on good vocal technique. He also used discussion. The students were actively involved during these discussions and were evaluating their own performance as well as their peers.

It was obvious that Matt genuinely cared about the students’ vocal health and progress. He wanted to help all singers sing well no matter their level of development or their natural ability. He knew that good vocal health was not only important for the present but that if choir members continued to sing well it would give them vocal longevity. He was preparing them to sing for a lifetime.

Vocal health to Matt meant a voice that was free of tension. One of the most difficult challenges a choral director has today is convincing singers that all vocal styles must be done with relaxation, that vocal freedom is paramount. Matt told the students that they must have a “droopy” sensation in the larynx, that the breath must do the work. Today’s stylistic demands of contemporary, country, gospel, rock, among others encourage a pushing or pressing of the tone from the larynx rather than a floating of the

tone on the breath. Matt taught that the voice must be relaxed and supported for good vocal production and healthy singing. To convince the students of this fact is a monumental task and Matt seemed to have done just that. It is my conclusion that vocal health was the foundation to Matt's philosophy and method.

A key emphasis in his approach was that of pure, open vowels. He had recognized that the foundation of tone is the vowel sound. He particularly gave emphasis to the vowel [u]. He had discovered that his tonal preference for a warm, open quality could best be developed by having the students relax and open the throat in the manner of the [u] sensation. Not only did he spend time on having them sing the [u] vowel well he had the students align the others vowels to the more open sensation of the [u]. This is often referred to as vowel uniformity or in Matt's terms, vowel agreement. The main conclusion here is that his idea of "beautiful choral tone quality" was particularly influenced by the vowel [u].

All other areas of technique were approached in a similar manner. Through explanation, exercises, discussion, and repetition the concepts were developed. When I observed and listened to the ensembles in the last month of school I was impressed with their level of performance. Both choirs sang with a beautiful sound. The 9<sup>th</sup> Grade Choir had a warm, open, and vibrant quality. Visually they formed their vowels in an open unified manner, the musculature of the face, lips, and jaw generally appeared relaxed. They had excellent posture and stage presence. If I had not known their grade level I would have assumed that they were an advanced choir. The Chamber Choir was "par excellent." Their sound was definitely mature, open, and resonant. They also showed vocal excellence with controlled phrasing, great musicality, and an outstanding blend.

Their stage presence and performance was polished. If I had been adjudicating I would have given them both the highest rating. The most impressive aspect of their singing, however, was the sound, the tone. Not only was it open, warm, and rich for their age level, it was energized and communicative.

With regard to the “great debate: a soloistic or blended approach,” I found his analysis very interesting. The underlying factor for him was student attitude. He held to the idea that singers that sing well as a soloist will sing well in the choral setting. Because he insists on good technique in his choral ensembles all of his singers should sing well. His point then was that a soloist who does not have a cooperative attitude will not do well in the ensemble. There are soloists and teachers who insist on a particular tone quality, vocal style, and vocal delivery for the solo performance. In the ensemble performance they insist on the same. This insistence often does not agree or blend with the choral ensemble’s direction. The soloist argues that for the voice to be produced well the soloist must be able to deliver the voice in the soloist fashion in all instances. The choral director, on the other hand, argues that a well-produced voice should be a free and versatile voice, able to handle varying tonal preferences, dynamic levels, and stylistic demands. Matt stated that unless the soloist’s attitude is such that he or she is willing to make small changes in dynamic level, balance of resonance and so forth, neither the soloist nor the ensemble will benefit. Herein lies the real argument: if a choral director is not developing healthy choral singers, the solo singer and teacher have a valid argument.

Matt’s attention to vocal technique was methodical and skillfully delivered. Students under his tutelage not only received excellent vocal training, they observed dedication to the art of singing.

However, the question arises as to how a choral director, who may not have the same background as Matt with regard to education, experience, and ability, can use his approach? It was obvious that Matt had much going for him. He had an excellent education. He developed his performance skills vocally, as a pianist, and accompanist. Matt had a number of years' experience in the choral teaching field at the high school level. Finally, he had a personality that exuded enthusiasm and positivism. It would appear that Matt "had it all." However, Matt admitted that it had been a long journey for him of success and failure. He personally struggled in learning good vocal technique. He did not always have successful choral ensembles in the early years of his teaching. It took him several years to define what he considered to be his "ideal" choral tone. In other words, his technique and philosophy took time to develop. My hope is that this study will be of value to all choral conductors for this very reason. Not many choral directors have been able to cover the territory that Matt has covered. Perhaps his approach will provide answers or guidance. As we read the results of this study we are able to associate with various parts of his story, of his experience. One reader may find that they did not have the opportunity to study and develop his or her own singing voice as Matt did. Maybe another does not have good piano skills. Others may feel that they do not naturally possess a good vocal instrument. Still others may not have had enough experience in the rehearsal setting to have formulated a technique and philosophy. Perhaps reading this study will inspire them to seek further education and professional development in these areas. In all instances I trust that Matt's exercises and approach can help the choral director understand his or her own voice. The choral conductor should be able to demonstrate the desired tones. Through experimentation with the concepts presented and

reading of the materials given in this study, a choral director can find further explanation and in turn will better understand the choral voice.

With regard to personality, it is obvious that we cannot be someone who we are not. However, there is much that can be gleaned from Matt's positive attitude and spirit. I have heard it said that "enthusiasm breeds enthusiasm." Whether we are extroverted or introverted it is our job to convey a love of teaching. Our love of music, of beautiful singing, of sharing music with others can be the impetus for creating a positive learning environment filled with enthusiasm. We may not be as dramatic as Matt, or as humorous, as outgoing, or as open in the ways we communicate, but we can all be positive. His examples may help us find our own methods of creating the positive.

This study was not intended to be an absolute for all teachers but rather a tool to guide and inspire. Hopefully, we will be encouraged in the areas in which we find we do well and, and we will be inspired to aspire to learn and improve in areas in which we may feel inadequate. Ideally, this study may encourage each reader to pursue further training in areas that may be less developed, no matter his or her age or years of experience. As Matt pointed out, singing can be for a lifetime.

Another question arises with regard to training teachers. How can we adequately train and educate the aspiring choral teacher? It has been noted that Matt received a bachelor's degree in music education and a master's degree in choral conducting. What should the undergraduate degree in music education look like? Currently, such degrees require applied voice lessons along with varied choral ensemble experience. Within the context of these two areas one receives individual training and corporate training. Depending on the method of the college teacher and choral conductor some students

receive a thorough background in good vocal technique. However, there are not specific standards or curriculum requirements for vocal technique within these two mediums. The applied vocal teacher will likely explain the basic areas of technique and the student will develop a good singing voice. On the other hand, one college choral director may assume that good vocal technique is being taught in the private studio and not address it in the choral setting. Another choral director will spend much time working with good vowel placement, resonance, and proper breathing. The result, however, is left to happenstance rather than deliberate curriculum requirements. One answer to the problem could be a curriculum standard established for this very purpose, perhaps as a collaboration between the National Association of Teachers of Singing and the American Choral Directors Association. Another answer for the problem may be the requirement of a class in vocal pedagogy for all choral music education majors or perhaps vocal technique could be taught in choral conducting and literature classes which already exist in most colleges and universities.

#### *Philosophy and Method*

The “art of teaching” is truly an art. It requires knowledge, philosophy, method, administrative skills, and personal skills. It is a calling that requires a love, commitment, and dedication to the betterment of young lives. Music education, in my opinion, is one of the highest and most fulfilling callings. Music has been, is, and will always be a special part of our lives. It is a gift that speaks as no other language. It fills our daily lives with comfort, healing, encouragement, and hope. To teach music is to elevate the art to levels that bring not only greater skill but, I believe, a betterment of mankind.

Matt's knowledge and method provided him with the tools to teach the fundamentals of good vocal production. His philosophy and love of music and humanity provided him with the basis to effectively teach the beauty of music and tone quality. As previously mentioned, Matt stated that "beautiful choral tone quality" is the result of good vocal technique and who you are as a person. As was seen in the previous section, he worked diligently to accomplish good vocal technique. He also worked diligently to help students recognize their potential and worth musically and personally. Matt stated several times during the interviews that "who a person is affects tone quality." He said, "...who they are bringing to the choir, it's critical. You can't convince me otherwise that it doesn't affect the tone. It does." I believe that this can best be understood when we realize that singing is different from any other type of performance. An instrumentalist picks up an instrument, he tunes it, he blows into it to warm it up, he has specific positions or fingerings for various pitches, and he produces sound. The sound is the result of a physical force of breath or action of the hands, fingers, etc., that activates a source for vibration. From there sound is reinforced in the instrument. The singer, on the other hand, is the instrument. The activator is the breath, the vocal cords are the vibrator, and the larynx, mouth, and pharynx reinforce the sound. Thus, tone is particularly personal for the singer. His or her physical and emotional make-up are directly connected. I have observed the direct correlation in my studio when giving voice lessons. A confident, happy student generally produces a tone that is vibrant and resonant. There is a release and freedom of production. On the other hand, a student who might be dealing with difficult issues in life, who might be struggling with self-esteem or depression often struggles with vocal production. As well, the color of one's voice is directly related to

emotion. This is also heard in the speaking voice. When someone is excited and happy the tone of the voice is bright in timbre, energized, and perhaps raised in pitch and volume. If someone is sad the tone of the voice is usually dull in timbre perhaps lowered in pitch and volume. The emotional side of a person is directly linked to the voice. For these reasons the singer's instrument is very personal. Not only is the vocal instrument one's actual body, there is no way to separate the emotional from the physical. I believe this explains Matt's premise that, "who a person is affects tone quality."

Because of Matt's awareness of the connection of voice and emotion his philosophy and method involved helping students learn to have positive attitudes in a positive learning environment. He worked to build lives that had a purpose not only for the sake of music but for the sake of life in general. He stated that the ensemble is a model of life, society, and community. The data show that Matt purposely created a positive atmosphere with a positive outlook in all that he did. Even the negative was turned around to be a positive. He spoke of "embracing failure," to look at it as a learning experience to better oneself. His own personal positive attitude and personality might have been the driving force. I never detected "down" moments in Matt either in or out of the classroom. His personality was outgoing and upbeat. His overall attitude set the tone for the classroom. I noticed that the students appeared to be in the same general mood as Matt. On the whole they appeared happy, excited, and ready to learn. I tend to think that Matt is naturally a positive person which is a "plus" for him. However, I know that he intentionally worked to build a positive learning environment for his students. What does this say for a person who is not naturally positive? My belief is that a teacher sets the

tone, the teacher must lead the way. Therefore, if a teacher struggles with negativity on a regular basis it could be a detriment in the learning environment.

To help the students find the positive in themselves and to look at the future with hope he used a very interesting method that he called “life lessons.” These were intentional moments in the rehearsal when he read to the students, shared a personal story, or played an inspirational song. These moments not only gave guidance and insight into living a successful life, they created a special bond between the teacher and student, and the student with student. This built “community” which was one of Matt’s goals. I also believe that this “community” went beyond the relational to the musical. Here is more support for Matt’s premise that “who they are affects tone.”

Along with Matt’s attention to the positive came his attention to discipline and focus. The foundation of teaching, according to Matt, was teaching the students “how to think.” This applied to how vocal technique works as well as how to view life issues. With regard to discipline, it was obvious to the students that Matt lived a disciplined life. He would not have achieved his personal level of performance as a vocalist and pianist without much study. Second, Matt had set very high standards for them that he articulated at the beginning of the year. They were very aware of Matt’s expectation for vocal excellence. They also watched him on a daily basis steadily work toward those goals. Matt was a wonderful example for the students. The old adage to “lead by example” was in play.

Regarding the above adage, not only did he lead the students in inspiring them to be disciplined, he also demonstrated good leadership qualities in general. It was obvious

that he was in charge of the classroom, that he had earned the students' respect. He was well-organized with regard to class structure and performance details.

Of particular interest is his approach in communicating concepts. He was thorough in delivery with his belief in incessant repetition. He used a simplification of technique with his "quick fixes" or "short cuts" to keep the singers on track. Once a concept was understood he found a phrase or exercise that stood for the concept. All he had to do was mention it and the students were immediately able to correct the problem.

Analogy, imagery, and storytelling were also a part of his method. The visual aspect of technique was communicated with these. He used competitive games, hands-on activities and exercises that benefited those who were more kinesthetically oriented. Modeling was a very important teaching strategy. His modeling was both verbal and nonverbal and was very effective in communicating tonal concepts.

It has been observed thus far that Matt had a plan and process for his philosophy. This plan and process, also called method, appeared to work. It was deliberate and calculated. There are some other factors as well that I believe contributed to his success somewhat outside the parameters of the structured. These factors have to do with Matt's special touches in the classroom, the human element.

First, Matt had a great sense of humor and he used it often. The classroom was filled with laughter. He would intentionally make a funny remark or a funny facial expression. All of it, however, was directly tuned to the learning process. He wasn't afraid to laugh at himself. He wanted the learning experience to be fun and it was just that.

Second, along with the humor came ‘great’ drama. Once again, he wasn’t afraid to be overly dramatic for the cause. The students appeared to really enjoy this side of him. He stated, “Students love anything graphic.” The one example that comes to mind is when he asked the students to locate the soft palate by walking their tongues back on the roof of their mouths until they reached the soft palate. He told them not to go too far or they might “throw up.” Matt seemed to have a sense for what was funny and appropriate at this age level. His outgoing, dramatic personality kept students’ attention.

Third, and perhaps most important, was his open and caring attitude. Matt’s attention to “community” and being connected to each student is one of the greatest contributions he made. Remembering my high school years and the influence of my high school choral teacher on my selection of a career in music education has helped me realize what critical years these are for these young lives. These are not only formative years but years when they are making decisions for life with regard to career, relationships, and their future in general. I am a college professor of music today because of the direct influence of Miss E., my high school choral director. She invested not only time in me with regard to my voice and solo singing, but she personally helped me audition for scholarships, took me to competitions, and let me know that she had faith in me, that I would succeed if I applied myself. Matt was doing just that, building lives musically and personally. Everyone, young and old, has the need to be valued. Because Matt was willing to take the time to tell these young singers that they were worth something, that they were worth something to the ensemble, built not only good self-esteem for the present but, I believe, would leave a lifelong imprint. To encourage them to be disciplined, and to aim for a high goal was a tremendous gift.

All of the above traits, I believe, are positive attributes that have helped to make Matt very successful. Not all people may be as gifted as Matt in the relational, academic, and performance areas. Each individual teacher has strengths and weaknesses. The example that Matt has given will hopefully encourage all of us to develop those areas which, when improved, will make us better. Some will need to work on organizational skills. Others may need to work personally on creating the positive in our lives. Some may need to further develop performance skills and their understanding of good vocal technique while others may need to pay more attention to the human side of learning, that of caring for our students presently and for the future. Hopefully this study has enlightened us all and given us an example of how it can be done successfully.

This study has also brought to light ideas of other possible studies that would benefit the music educator with regard to beautiful singing. Some possible studies are:

- a) *Vocal curriculum requirements at the undergraduate level in the United States versus vocal curriculum requirements in Europe.* A comparative study between the two would give insight into possible curriculum development in the United States.
- b) *What do high school choral directors feel are critical curriculum needs at the undergraduate level to adequately prepare one for high school choral music?* The current high school choral conductor has an up-to-date perspective on his or her abilities and inadequacies. Their perspective would give insight into basic curriculum needs.
- c) *The influence of personality type on vocal timbre.* A study to determine if there is a correlation between personality type and vocal timbre could influence vocal

pedagogy with regard to dealing with individual differences.

- d) *The connection of temperament and emotion to tone quality.* It has been discussed in this study that the singing instrument is directly connected to the physical body and that one's mood may affect tone quality. Do such factors as depression, sorrow, anger, joy, among others, directly affect a singer and his or her vocal production? If so, how can the high school choral or vocal teacher better service and teach students who are dealing with emotional difficulties?
- e) *How can higher education better service the student with regard to developing young voices?* As pointed out in this chapter, there may be curriculum issues with regard to giving the undergraduate choral education major a solid understanding of good vocal technique.
- f) *What influences before high school affect choral music at the high school level?* Because it was observed in this study that the middle school choral director, community, family, colleagues, and administration strongly supported the high school choral program, is there a correlation between success and interest in the high school choral music student because of these influences?
- g) *Would the results and vocal techniques found in this study work with any age group?* Matt understood the needs of the high school student. However, would younger and/or older age groups respond in the same manner?
- h) *The impact of nonverbal cues in conducting.* Although there are some contemporary educators and choral directors developing and teaching the benefits and correlation of nonverbal cues with regard to tonal concepts, scientific studies are not prevalent.

i) *Further case studies of successful high school choral directors.* The more examples that can be provided for the high school choral director, the more we understand vocal pedagogy. This could also influence undergraduate curriculum.

In conclusion, although this study was undertaken at the high school level, the basic vocal principles and techniques can be applied to all ages. I believe this study has disclosed one example of a teacher's rehearsal techniques that bring about optimum vocal beauty in the choral ensemble. This can be looked upon as a step-by-step technique where one vocal principle can and must be built upon another principle. In the end, when the singer has fully understood good vocal coordination and technique, when everything is in balance, the voice will be beautiful.

Appendix 1

INTERNATIONAL PHONETICS ALPHABET (IPA)

SYMBOLS USED IN THIS STUDY

<i>IPA SYMBOLS</i>	<i>ENGLISH SOUND</i>
<u>VOWELS</u>	
[i]	Ke <u>en</u>
[ɪ]	Th <u>i</u> n
[e]	Ob <u>e</u> y
[ɛ]	Be <u>t</u>
[ɑ]	Fa <u>t</u> her
[o]	Not <u>e</u>
[u]	Fo <u>o</u> l
[ə]	The <u>e</u>
[ʌ]	U <u>p</u>
<u>CONSONANTS</u>	
[b]	Be <u>b</u>
[d]	De <u>d</u>
[g]	Go <u>o</u> d
[p]	Put <u>t</u>
[t]	To <u>o</u> k
[k]	Co <u>o</u> ld
[m]	Mo <u>o</u> ney
[n]	No <u>o</u>
[ŋ]	S <u>ing</u>

## Appendix 2

### INTERVIEW QUESTIONS

#### **Interview One**

1. What is your definition of beautiful tone quality and the components that belong to it?
2. Define your term of a pressed [n].
3. What do you do to help the students who do not understand your vocal technique or concepts regarding resonance?
4. What nasal vowels do you use?
5. Outline your timeline with regard to teaching vocal technique.
6. What exercises do you use for posture?
7. Do you discuss feet position and head posture?
8. What do you teach after posture?
9. How do you describe proper breathing for singing?
10. Do the 9<sup>th</sup> grade students sing songs in the first two weeks of school during this intense vocal training?
11. How much time do you spend on posture and breathing in the first two weeks of school with the 9<sup>th</sup> Grade Choir?
12. You stated that you work on tonal placement next. How much time do you spend teaching placement each day and on what day do you begin discussing this area?
13. What do you teach on days four and five?
14. Have you covered all vowels by the end of the first week?

15. You mentioned working with range extension. How much time do you put into this in the first two weeks?
16. Why do you use the syllable 'vah' for range extension exercises?
17. What transpires in week two with regard to vocal technique?
18. You mentioned that "who they are as a person affects tone quality." We'll discuss this in the next interview.

## **Interview Two**

1. In the first interview you defined beautiful choral tone quality. Would you rearticulate it?
2. Again, when you don't have the 9<sup>th</sup> Grade Choir students sing in the first two weeks of school, what do they sing? What kind of exercises?
3. You mentioned placing the students in alphabetical order on day one. Was that your own idea?
4. Why do you do this?
5. When working vowels you begin with the [u] vowel and then work on [i]. You are going from the most open, back vowel to the furthest forward vowel. Why?
6. Can you demonstrate for me the breath extension exercise?
7. Explain again how you describe the process of proper inhalation for singing.
8. When I observed your rehearsal the other day I noticed that vowels are very important to you. Why?

9. You mentioned that vocal freedom is very important. What do you do to help your singers sing with vocal freedom?
10. So you do a lot of sectional work for this area. Is there anything else you do?
11. Do you ever work privately or individually with your singers?
12. Do you find that there is a general voice type that struggles more than another?
13. How do you work through the problems?
14. You mentioned that building self confidence is very important. Maybe we can discuss how that relates to tone when we meet again.

### **Interview Three**

1. What would you like to discuss today?
2. What is the name of the book by James Jordan?
3. You seem so inspired. One day when I was observing your rehearsal you made a comment like, "I'm not sure I believe you." What were you trying to convey?
4. (Matt reads numerous passages from Jordan's book.) What pages are these quotes on?
5. You shared this with the choir?
6. You're speaking of emotion or soulfulness. How does translate into tone?
7. I think you are heading toward tone color. Would you tie soulfulness into color?
8. What is your preference or taste for tonal color?

9. Your “ideal” choral tone quality came from Jerry Jordan’s recording, do you still have that recording?
10. What about your undergraduate studies, do we really prepare our teachers as we should?
11. Do you have your students listen to recordings to help them understand the tone quality you want?
12. You’ve mentioned relationship between teacher and student. Can you explain?
13. Honesty and vulnerability are important to you. Tell me more.

#### **Interview Four**

1. How is the Chamber Choir taught differently from the 9<sup>th</sup> Grade Choir in the first two weeks of school?
2. So you don’t take them through the same drill? Is it not necessary?
3. Can you give me some examples of what you might do in the first day of school with the Chamber Choir to get them back in shape?
4. When teaching open resonance how do you keep your choir from falling too far back with placement so that the tone is not too dark? Do you have to correct that very often?
5. Do you ever have them overcompensate in a different direction?
6. With the Chamber Choir in the first week of school then, you don’t structure anything close to the 9<sup>th</sup> Grade Choir? Do you just jump right in and push, push, push?
7. How many choral ensembles do you direct in this high school?

8. How many are in your 9<sup>th</sup> Grade Choir?
9. How many are in your Chamber Choir?
10. You mentioned that you often place singers in Chamber Choir before they are ready. Why?
11. What other things do you consider when selecting your choirs?
12. Do you care about tone quality when selecting the 9<sup>th</sup> Grade Choir?
13. How long have you been teaching?
14. Have you always been at the high school level?
15. Did you go directly from elementary to high school?
16. How long have you been at this high school?
17. What other choral directing experiences have you had?
18. How many outside rehearsals would you have with the 9<sup>th</sup> Grade Choir and the Chamber Choir?
19. When you have the students do the “siren” exercise how many octaves do they cover?
20. What are the technical components that you are achieving with the “siren” exercise?
21. What does the “siren” exercise do for the tone?
22. When you do the breathing exercise of inhaling and exhaling to a certain number of counts, how far do you count?
23. When you use the “vah” exercise for range extension, how high do you take the men?
24. When and why do you introduce falsetto to the men?

25. Do you allow the men to use falsetto in an actual performance?
26. How long do you keep the 9<sup>th</sup> Grade Choir in alphabetical order?
27. In the bass section you mentioned a “phantom” voice. What did you mean?
28. Who do you consider to be the most prominent contemporary choral director?
29. Tell me again what it is in the tone of Jerry Jordan’s choirs that strikes you.
30. What is the most common choral sound or quality you hear out there in other ensembles that you shy away from?
31. Technically, what do you think about straight tones and how it affects the voice?
32. Outside your personal preference or taste who would be the two most recognized choral experts?
33. With these people in mind, where do you fit in the picture with regard to philosophy?
34. Even though you have developed your own philosophy, who do you think might be in your camp?
35. There is a big debate between solo technique and choral vocal technique. Where are you in this debate? Is there a difference in vocal technique?
36. What do you do with a singer in your choir who has perhaps studied and established a solid vocal technique that doesn’t match what the others do?
37. How was her technique different from what you think she did as a soloist?
38. And when she went back to her solo singing was she able to make the adjustment back to what she preferred for her solo voice?
39. So it has a lot to do with attitude and their willingness to be versatile?

40. You mentioned that you had written an article on embracing failure. Can I get a copy of it?

## References

- Albom, M. (1997). *Tuesdays with Morrie, an old man, a young man, and life's greatest lesson*. New York, NY: Doubleday.
- Agnes, M. (Ed.). (1999). *Webster's new world college dictionary* (4<sup>th</sup> ed.). New York, NY: Macmillan.
- Appelman, D. R. (1967). *The science of vocal pedagogy*. Bloomington, IN: Indiana University Press.
- Armstrong, T. (2000). *Multiple intelligences in the classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Bogdan, R. C. & Bilkin, S. K. (1998). *Qualitative research for education: an introduction to theory and methods*. Needham Heights, MA: Allyn & Bacon.
- Cox, J. (1989). Rehearsal organizational structures used by successful high school choral directors. *Journal of Research in Music Education*, 37, 201-218.
- Crabb, P. R. (2002). Choral audition procedures of six well known conductors; Webb, Noble, Bruffy, Carrington, Ehly, and Warland. *Choral Journal*, 42 (9), 38, 50-51.
- Custer, G. (2005). Philosophy-who needs it? *Choral Journal*, 47 (8), 43, 47.
- Daugherty, J. F. (2001). Rethinking how voices work in a choral ensemble. *Choral Journal*, 42 (5), 69-70.
- Durrant, C. (2003). *Choral conducting philosophy and practice*. New York, NY: Routledge.
- Eichenberger, R. (Producer) & Dunn, M. (Director). (1994). *What They See Is What You Get, Rodney Eichenberger with Andre Thomas* [Video]. Chapel Hill, NC: Hinshaw Music, Inc

- Ekholm, E. (2000). The effect of singing mode and seating arrangement on choral blend and overall choral sound. *Journal of Research in Music Education*, 48, 123-124.
- Fleming, R. (2004). *The inner voice, the making of a singer*. New York, NY: Penguin Group.
- Fulford, P. & Miller, M. (2003). *The complete idiot's guide to singing*. Indianapolis, IN: Alpha Books.
- Goodwin, A. W. (1980). An acoustical study of individual voices in choral blend. *Journal of Research in Music Education*, 28, 119-128.
- Gordan, L. (1977). *Choral director's complete handbook*. West Nyack, NY: Parker Publishing Company, Inc.
- Gordon, L. (1989). *Choral director's rehearsal and performance guide*. West Nyack, NY: Parker Publishing Company.
- Grossman, P. L. (1990). *The making of a teacher, teacher knowledge and teacher education*. New York, NY: Teachers College Press.
- Gumm, A. (2003). *Music teaching style, moving beyond tradition*. Galesville, MD: Meredith Music Publications.
- Haasemann, F. & Jordan, J. M. (1991). *Group vocal technique*. Chapel Hill, NC: Hinshaw Music, Inc.
- Hoffman, M. (1997). *The NPR classical music companion*. Boston, MA: Houghton Mifflin Co.
- Johnson, D. J. (1997). *Choral techniques: Beyond the basics*. San Diego, CA: Neil A. Kjos Music Company. .

- Jordan, J. (1984). False blend: A vocal pedagogy problem for the choral conductor.  
*Choral Journal*. XXIV, (1), 26.
- Jordan, J. (1999). *The musician's soul*. Chicago, IL: GIA Publications, Inc.
- Jordan, J. (2002). *The musician's spirit, connecting to others through story*. Chicago, IL:  
GIA Publications, Inc.
- Knutson, B.J. (1987). Interviews with selected choral conductors concerning rationale  
and practices regarding choral blend (Doctoral dissertation, Florida State  
University, 1987). *Dissertation Information Service*, 48 (12), 3067A. 118-119.
- Larned, M. (2002). *Stone soup for the world, life changing stories of everyday heroes*.  
New York, NY: Three Rivers Press.
- McClung, A. C. (2005). Using video self-assessment to enhance nonverbal conducting  
gesture. *Choral Journal*. 45 (9), 27-29, 31.
- McCoy, S. (2004). *Your voice: An inside view*. Princeton, NJ: Inside View Press.
- Merriam, S (1998). *Qualitative research and case study applications in education*. San  
Francisco, CA: Jossey-Bass Inc.
- Miller, R. (1986). *The structure of singing, system and art in vocal technique*. New  
York: Schirmer Books.
- Nesheim, P. & Noble, W. (1995). *Building beautiful voices, a concise, yet comprehensive  
study of vocal technique for the choral rehearsal or private instruction*. Dayton,  
OH: Roger Dean Publishing Company.
- Randel, D. M. (Ed.). ( 1986). *The new Harvard dictionary of music* (Rev. ed. of 2<sup>nd</sup> ed.)  
Cambridge, MA; The Belknap Press of Harvard University Press.

- Robison, C. (2001). Beautiful singing: What it is and how to do it. *Journal of Singing*, 58, 7-11.
- Rossing, T. D.; Sundberg, J. & Ternstrom, S. (1985). Voice timbre in solo and choir singing: Is there a difference? *Journal of Research in Singing*, 8, 1-7.
- Shrock, D. (1991). An interview with Weston Noble. *Choral Journal*, 10, 12-13.
- Skelton, K. D. (2004). Vibrato and voice timbre in choral singing. *Choral Journal*, 44 (7), 47-54.
- Slack, J. (1977). Values and personalities of selected high school choral music educators. *Journal of Research in Music Education*, 25, 243-255.
- Sundberg, J. (1987). *The science of the singing voice*. Dekalb, IL: Northern Illinois University Press.
- Titze, I. (1981). Is there a scientific explanation for tone focus and tone placement? *The NATS Bulletin* 37, (5), 26.
- Titze, I. (1996). The singing voice. *National center for voice and speech status report*, 10, 152-153.
- Vennard, W. (1967). *The mechanism and the technic*. New York, NY: Fischer.
- Whitlock, W. (1967). *Facets of the singer's art*. Champaign, IL: Pro musica press.
- Wine, T. (2004). Check your intonation. *Choral Journal*, 44, 23-27
- Yarbrough, C. (1975). Effect of magnitude of conductor behavior on performance, attentiveness, and attitude of students in selected mixed choruses. *Journal of Research in Music Education*, 23, 134-146.
- Yarbrough, C. (2000). *An introduction to scholarship in music: To theory and methods*. Boston, MA: Allyn & Bacon.

Yin, R. K. (1994). *Case study research, design and methods*. Thousand Oaks, CA: Sage Publications, Inc.

## VITA

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