INCORPORATING AURAL SKILLS IN THE TEACHING OF MIDDLE AND HIGH SCHOOL INSTRUMENTAL ENSEMBLES

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PREFACE

"Nobody can play . . . [a piece of music] well if he does not feel and know where the essence of the melody is, and if he cannot bring it to life with his voice…To teach a child an instrument without first giving him preparatory training and without developing singing… to the highest level along with playing is to build upon sand."[1]

- Zoltán Kodály

This research originally stemmed from my own experiences in teaching. Prior to my graduate studies I taught middle and high school band and choir for twelve years and included singing activities as a regular part of my instrumental ensemble teaching. As a graduate teaching assistant for aural skills classes, I encountered many undergraduate instrumental music majors with strong performance skills, but that have little to no experience singing. Many of these instrumental music students enter the first semester of aural skills classes unable to sing or identify pitch intervals. This realization led to the formulation of questions about what aural skills are being taught in middle and high schools and how the amount of time spent on such topics could be increased. It is my hope that this work inspires other teachers to include instruction on complete musicianship to the students in their instrumental ensembles.

[1] Zoltán Kodály and Ferenc Bónis, *The Selected Writings of Zoltán Kodály,* London: Boosey & Hawkes, 1974, 193, 196.

ABSTRACT

University undergraduate instrumental music students possess a variety of abilities in ear-training regardless of their ability to perform on their major instrument. Some students may have received prior aural skills instruction in their middle and high school ensembles; their teachers may have included singing activities in their rehearsals. Scholarly research indicates incorporating aural skills in the teaching of instrumental ensembles improves students' abilities in sight-reading, error detection, sense of tonality, and intonation. The purpose of this thesis is to identify the extent to which aural skills activities are being taught in U.S. middle and high school instrumental classrooms, and to advocate for their use by creating resources and example lessons for future classroom implementation.

To discover what aural skills content middle and high school teachers include in their ensemble rehearsals, a survey was created to investigate current teaching practices of secondary instrumental teachers, with an emphasis on aural skills activities. The survey, written in QuestionPro, was distributed through the "Band Directors Group" on Facebook, a professional development community with over 25,000 members. The total number of participants in this study was 281 instrumental middle and high school teachers. The results of the survey indicate that a majority of teachers do include aural skills in their ensemble teaching. However, teachers wish they could include more aural skills in their ensembles, but lack the rehearsal time or resources to successfully implement these lessons prevent its implementation. Survey participants provided a list of

published method books and resources they currently use as well as a short list of repertoire performed by their ensembles in the past year. Example exercises and sample lessons were created from these resources and repertoire to encourage teachers to discover creative ways to teach aural skills to their students.

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CHAPTER ONE:
INTRODUCTION AND GENERAL INFORMATION

How important is the role of singing in instrumental music ensembles? The National Association for Music Education (NAfME) has included the goal "to sing, alone or with others" as part of their national standards for music education since 1994.[2] NAfME's National Standards were a significant milestone for music education at the time, but the notion of encouraging instrumental musicians to sing was neither progressive, nor revolutionary. Composer Robert Schumann, in the pedagogical guidance supplementing his 1848 *Album for the Young,* stated "Cultivation of the ear is of the greatest importance."[3] Regarding singing, Schumann stated "Endeavor, even with a poor voice to sing at sight without the aid of your instrument; in that way your ear for music will constantly improve."[4]

Singing activities continue to be a large component of music education curricula in the elementary general music classroom. Instruction in elementary music rarely includes ensemble playing, but rather focuses on singing, learning basic music notation, and an introduction to instruments via Orff percussion and recorders.[5] Elementary age students sing folk songs and perform music programs for a variety of special occasions;

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[2] "1994 National Standards," *Archived*, National Association for Music Education, last modified June 2014. https://nafme.org/wp-content/files/2014/06/Archived-1994-Music-Standards.pdf

[3] Robert Schumann and Steven Isserlis, *Robert Schumann's Advice to Young Musicians*, London: Faber & Faber Ltd., 2016, 33.

[4] Robert Schumann and Steven Isserlis, *Robert Schumann's Advice to Young Musicians,* 51.

[5] "2014 National Standards," National Association for Music Education, https://nafme.org/wp-content/files/2014/11/2014-Music-Standards-PK-8-Strand.pdf

therefore, singing plays a vital role in the education of children at a young age. While the activity of singing continues in middle and high school choral ensembles, limited singing occurs in secondary instrumental ensembles (i.e. band and orchestra). Instrumental music educators did receive aural skills instruction as part of their college curriculum, and sight-singing is a skill which must be mastered during these courses. Is it not plausible then, that singing should be a regular activity during instrumental ensemble instruction? Do middle and high school teachers include singing in their ensembles? To what extent do they include singing in their teaching?

The purpose of this thesis is to answer the questions posed in the previous paragraph. In order to find this information, a survey was created and distributed to determine current aural skills teaching practices in secondary instrumental ensemble classrooms. Based on the results, teaching resources were then created to assist instructors in finding simple ways to implement ear-training in their daily routines.

Chapter Two's literature review examines past studies, method books, teaching resources, and journal and periodical publications that build an informed framework for this research. In Chapter Three, I discuss the methodology involved in creating, disseminating, collecting, and analyzing data from an online survey. In Chapter Four, I address how method books and teaching materials can be adapted for teaching aural skills. Additionally, I create some ear-training lessons making use of wind band repertoire. Finally, in Chapter Five I provide concluding thoughts from this study as well as ideas for the future implementation of such recommendations.

CHAPTER TWO:
LITERATURE REVIEW

The goal of this thesis is to discover whether middle and high school instrumental ensemble directors are including aural skills, specifically singing, in their ensembles, and to determine the extent to which singing is included. A secondary goal of this thesis is to provide example singing exercises to encourage the inclusion of consistent singing in the teaching of instrumental ensembles in secondary schools. This literature review summarizes scholarly research studies involving singing and ear-training activities in secondary instrumental classrooms. Also included is information published in instrumental pedagogy resources, choral pedagogy resources (which can be applied to instrumental teaching), and teacher advice articles found in music periodicals.

Scholarly Research

During the 1980s and 1990s, there was a heightened interest in research on the benefits of including singing in instrumental music instruction. In his dissertation, Michael Paul Dunlap organized prior research on the inclusion of singing in instrumental instruction into five categories: Singing and the Development of Aural Concepts in Instrumentalists, Singing and Instrumental Performance, Singing and Music Reading, Singing Activities in Instrumental Classes, and Singing with Solmization Syllables.[6] Dunlap found there was a consensus among music education authorities on the

[6] Michael Paul Dunlap, "The Effects of Singing and Solmization Training on the Musical Achievement of Beginning Fifth-Grade Instrumental Students" (Ph.D. diss, The University of Michigan, 1989), 2-9.

importance of vocal activities in the development of instrumentalists. Dunlap's study demonstrated the effects of singing and solmization practices on the ability to positively impact vocal accuracy, melodic ear-to-hand coordination, aural-visual discrimination, instrumental performance, and instrumental sight-reading of beginning fifth grade instrumentalists. He further compared how all five of these study areas correlated to musical aptitude. Dunlap's dissertation is certainly helpful in organizing prior research, and includes endorsements of lauded music educators, survey data of music educators, and positive findings to each of his hypothesized claims.

In his dissertation, "The Effects of Tonal Training on the Melodic Ear Playing and Sight-Reading Achievement of Beginning Wind Instrumentalists,"[7] Christian Bernhard II included singing instruction with a group of beginning band students, and compared their achievement in melodic ear playing with a control group not receiving singing instruction. Spending time on singing, and less on reading notated music, did not diminish the students' ability to sight-read; however, the students' ability to recognize tonality increased when singing was introduced. Interestingly, the study incorporated the singing of melodies derived from the beginning band method books already used in the classroom teaching,[8] which demonstrates to teachers that they already have singing resources available to them in their classrooms. Bernhard, in an earlier published article, makes the claim for including singing:

> At a time when support for comprehensive musicianship is prevalent in the profession (e.g., MENC, 1994), vocalization is an important instructional strategy

[7] H. Christian Bernhard II, "The Effects of Tonal Training on the Melodic Ear Playing and Sight-Reading Achievement of Beginning Wind Instrumentalists." (PhD diss., The University of North Carolina at Greensboro, 2003), 1-3.

> for instrumental music educators to embrace. Based on this collection of research, vocalization activities, particularly when related to tonal understanding, may promote instrumental performance achievement, as well as musical comprehension. Thus, while developing and maintaining quality instrumental performing ensembles, teachers may enhance musical learning and foster the development of complete, independent musicians."[9]

In his *Effect of Vocalization on the Sense of Pitch of Beginning Band Class Students*[10], Charles Elliott claimed piano and string musicians score lower on aural acuity tests than vocal students; however, students participating in both an instrumental and vocal ensemble score the highest. Using this information, Elliott introduced singing into beginning band classes by vocalizing melodies from the beginning band textbook. Elliott, like Bernhard and Dunlap, found students to have a heightened sense of tonality. Additionally, Elliott was able to demonstrate that both woodwind and brass players benefited equally from singing. Using Elliott's practices, beginning band teachers could benefit by having their students sing melodies from the band method books, without investing additional money or significant rehearsal time.

Patricia Grutzmacher[11], like Elliott, completed her research study in a classroom of first-year instrumental students. She taught one group of students to sing solfège patterns outlining major and minor key relationships, and a control group received instruction based heavily on technique and notation with no singing. Grutzmacher found that the experimental group could distinguish major and minor modes and sight-read

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[9] H. Christian Bernhard II, "Singing in Instrumental Music Education: Research and Implications," *Update: Applications of Research in Music Education* 22, no. 1, (May 2002): 33.

[10] Charles A. Elliott, "Effect of Vocalization on the Sense of Pitch of Beginning Band Class Students." *Journal of Research in Music Education* 22, no. 2 (1974): 120-128.

[11] Patricia Ann Grutzmacher, "The Effect of Tonal Pattern Training on the Aural Perception, Reading Recognition, and Melodic Sight-Reading Achievement of First-Year Instrumental Music Students." *Journal of Research in Music Education* 35, no. 3 (1987): 171-81.

melodies at a much higher rate of success than the control group not receiving singing instruction.[12] She also noted both groups could read music at nearly the same level, which aligns with Bernhard's observations on how additional time on singing did not diminish the reading abilities of students. Although beginning instrumental method books do not usually include lessons with tonal patterns or solfège, teachers can use resources provided to them from their ear-training curriculum in college.

Deborah Sheldon[13] included undergraduate music education majors enrolled in an instrumental methods course in her study. In addition to score study and conducting lessons, the study group also received fifty minutes of ear-training and sight-singing each week, using music from wind band literature. These students demonstrated much better error-detection abilities, arguably the most coveted skill for successful instrumental educators. Sheldon's research also suggests that the inclusion of singing in instrumental instruction produces positive results not just at the vulnerable beginning stages, but as late as collegiate instruction. Given the positive findings of these research studies, it would seem appropriate for instrumental pedagogical resources to include instructional guidelines for singing.

[13] Deborah A. Sheldon, "Effects of Contextual Sight-Singing and Aural Skills Training on Error-Detection Abilities." *Journal of Research in Music Education* 46, no. 3 (1998): 384-395.

Teacher Methods Resources

Although most research has focused on the positive influence of singing on sight-reading, melodic ear playing, and error detection, there are additional applications for singing. Shelley Jagow suggests singing be used to improve intonation and increase interval recognition.[14] She also discusses how the use of singing correlates with verbal, visual and kinesthetic learning styles.[15] Robert J. Garofalo[16] also references singing while tuning an ensemble to help physicalize the pitch. He recommends that bands and orchestras sing four-part Bach chorales to develop intonation ability and increased musical expression. Finally, he recommends singing the vocal music which inspires certain instrumental compositions. Paul Kimpton and Delwyn Harnisch[17] also offer extensive methods on how to assess students' musical aptitude. They mention creating "Independent Musicians Creating Quality Performances," yet seldom give even a mention to singing in band and orchestra.

If singing develops a better sense of intonation, then its application during early instrumental instruction should have an impact on a musician's sense of tonality. Having taught middle school band, I can remember countless times where my students would play through entire pieces ignoring the key signature. The students were unaware that the music did not sound in the major mode as it was intended to be. Often note accuracy

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[14] Shelley Jagow, *Developing the Complete Band Program. (*Galesville, MD: Meredith Music Publications, 2007), 72-73.

[15] Ibid, 92-97.

[16] Robert J. Garofalo, *Improving Intonation in Band and Orchestra Performance.* (Ft. Lauderdale, FL: Meredith Music Publications, 1996), 75-76

[17] Paul Kimpton and Delwyn Harnisch, Scale Your Way to Music Assessment: The Ultimate Guide to Creating a Quality Music Program. (Chicago: GIA Publications, 2008), 1-24.

issues are the result of young musicians not comprehending which pitches do not "fit." Stanley L. Schleuter supports teaching a sense of tonality by using moveable do solfège to teach aural patterns, which are learned and then combined into larger passages.[18] He includes a proposed method of instruction, and an extensive bibliography of additional sources for research and application[19]. Schleuter also gives insight into several learning theories, and how singing in the instrumental classroom can reinforce these.

Non-Instrumental Resources for Instrumental Teaching Application

Edwin E. Gordon is credited with coining the term "audiation." In Gordon's words, "audiation is to music what thought is to language."[20] It is essentially the ability to hear music entirely in one's head. Although Gordon's article is not a study, it does reference his important research in music learning theory, published later in his book, *Learning Sequences in Music: Skill, Content, and Patterns: A Music Learning Theory*[21] In the first chapter of this book, Gordon lays out his theory of audiation, including its eight types and six stages. Later, in the chapter titled "Tonal Content Learning Sequence," he takes the concepts of audiation and expands them into tonality and keyality[22] concepts which are arguably important in beginning instrumental instruction.

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[18] Stanley L. Schleuter, A Sound Approach to Teaching Instrumentalists: An Application of Content and Learning Sequences. 2nd ed. (New York: Schirmer Books, 1997), 48-57.

[19] Stanley L. Schleuter, 77.

[20] Edwin E. Gordon, "All About Audiation and Musical Aptitudes." *Music Educators Journal* 86, no. 2 (Sep 1999): 41-44.

[21] Edwin E. Gordon, Learning Sequences in Music: Skill, Content, and Patterns: A Music Learning Theory. (Chicago: GIA, 2003) 1-3.

[22] N.B. According to Gordon, tonality is an umbrella term including major and minor diatonic systems, as well as other tonal systems derived from the church (modes), while keyality refers to the pitch name that serves as the tonic of the music. (i.e. Bb major, the tonality is major, while the keyality is Bb). For the purposes of this thesis, my references to tonality and keyality align with Gordon's definitions.

By title alone, Steven M. Demorest's 2001 book, *Building Choral Excellence: Teaching Sight-Singing in the Choral Rehearsal*[23], seems like it would have little impact on instrumental teachers. His book includes research on methods for teaching sight-singing as well as assessment strategies which would work just as well in an instrumental classroom. Finally, Demorest's book includes a review of materials available for instruction. He bases much of his teaching on Edwin Gordon's Music Learning Theory. With a bit of creativity, both Kuehne's and Demorest's methods could be reframed for use in bands and orchestras.

Finally, George Pratt[24] argues the notion that too much of aural skills training is spent on identifying pitches and durations in music. It makes sense that much time is spent on these two activities as they are more easily graded and have more structured parameters both theoretically and cognitively. In his 1998 book, *Aural Awareness: Principles and Practice*, Pratt makes an argument for including other aspects of music in the teaching of aural skills, mainly dynamics, tempo, timbre, texture and structure. Pratt outlines six overarching mental processes involved in aural skills training: aural acuity, memory, imagery (the capacity to hear musical patterns in one's head in the absence of any physically measurable acoustic signal), musical knowledge, kinesthetic process, and aesthetic response.[25] Of these, memory and imagery would be the most significant in an instrumental classroom. Application of memory could include chunking elements in

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[23] Steven M. Demorest, Building Choral Excellence: Teaching Sight-Singing in the Choral Rehearsal. (New York: Oxford University Press, 2001), 1-12.

[24] George Pratt with Michael Henson and Simon Cargill, *Aural Awareness: Principles and Practice.* (New York: Oxford University Press, 1998), 2-3.

[25] Matthew S. Royal, "Music Cognition and Aural Skills: A Review Essay on George Pratt's *Aural Awareness." Music Perception: An Interdisciplinary Journal* 17, no. 1 (Fall 1999): 137-38.

smaller groups before placing them together. Long-term memory is also used by musicians to compare separate performances of the same piece or to compare two different pieces. The topic of imagery is used by performers who need to gain an idea of how a passage of music is supposed to sound before attempting a performance. As Pratt posits, sight-singing is used to train and assess imagery. By having instrumental students sight-sing in class, they are increasing their imagery abilities.

Teacher Advice Published in Periodicals

The following periodical articles outline specific lessons and examples of implementing singing in the instrumental classroom, including singing the literature being played in band in order to better understand concepts of melody, phrasing, history, culture, and context. These sources offer lesson ideas for improving pitch, intonation, balance, and musical syntax. The articles also include lists of vocal source material for singing in the band rehearsal. While these articles provide helpful information, most only offer anecdotal evidence that these methods are effective, and most have yet to make it into the greater canon of music teacher education curriculum.

Gregory Burton's article "Teaching Beginning Brass Players: A Singing Approach,"[26] has applications which would work for teaching students any instrument in a beginning ensemble or private lesson. Given the nature of playing a brass instrument, where one fingering combination can produce a multitude of different pitches depending

[26] Gregory Burton, "Spotlight on Brass: Teaching Beginning Brass Players: A Singing Approach." *Canadian Winds: The Journal of the Canadian Band Association* 3, no. 2 (2005): 82-83.

on a myriad of factors related to breathing and embouchure, the ability to match pitches is paramount. Therefore, it is logically sound to include singing in brass pedagogy. Burton references the Schleuter text in this article, emphasizing beginning instrumental instruction should start with the sounds in music, not the symbols. Burton explains that successful learning occurs more readily when moving from the known to the unknown. Beginning instrumentalists know how to sing, but many teachers start with teaching notation out of the method book. Burton also relates musical learning by imitation to how children learn speech, also citing the Suzuki method which educates the ear before learning notation.

Burton also posits that instrumental music teachers tend to start in the middle of the process, dwelling on physical instructions concerning embouchure, breathing, vibrating the lips, and instrument carriage. Burton quotes Keith Johnson, saying "The skill of listening should be introduced to brass players during the first lesson and improved upon every lesson thereafter. Every phrase should be sung by the student(s) before being attempted on the instrument. By learning to hear (sing), the young student becomes product-oriented (sound) rather than means-oriented (mechanics)."[27] While few instrumental teachers can play well on all of the band instruments, all teachers and students can sing. Burton mentions how singing allows students to hear how to connect notes, produce a beautifully controlled sound, establish a musical shape to each note, and control dynamics and pitch.

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[27] Keith Johnson, *Brass Performance and Pedagogy,* Upper Saddle River, NJ: Prentice-Hall, 2002.

Burton suggests instructors use echo-singing and echo-playing to teach tone quality, phrasing, intonation, and dynamics. Burton teaches students concert D, C and Bb, referring to them by solfege names (mi-re-do), without context to the staff notation. When introducing songs, he first sings them on solfege with the students while having them practice the fingerings. These three-note songs can be transposed to other keys (e.g. concert G-F-Eb), to begin increasing the range of the players. Once the students are comfortable with hearing and playing, Burton then transfers the students to the band method book, including staff notation.

James Gates published "Using Singing as a Teaching Tool in Brass Playing"[28] in 2017. While Gates' publication was an Honors Research Project and not a periodical article, it suits best to mention it at this time. Gates did not conduct a research study; instead, he conducted meta-research on three historically significant brass pedagogues whose method was firmly established on singing. These included Emory Remington[29], trombone professor at Eastman from 1922-1971, Arnold Jacobs[30], principal tubist with the Chicago Symphony 1944-1988, and Joseph Alessi[31], who has been the principal trombonist with the New York Philharmonic since 1985 and professor of trombone at Juilliard since 1986. Gates' thesis includes these pedagogues' ideas on how singing improves tone, timbre, rhythm, tempo, phrasing and style.

Remington, whose early music education began singing in an Episcopal Boys Choir, stressed the constancy of tone quality throughout the range of the trombone. He

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[28] James G. Gates, "Using Singing as a Tool in Brass Playing," *Honors Research Projects,* (2017).
[29] James G. Gates, "Using Singing as a Tool in Brass Playing," 4.
[30] Ibid, 5.
[31] Ibid, 6.

correlated this to a singer's use of chest and head voice, just as brass instruments have different ranges in which different tone colors are more easily produced.[32] Just as singers do vocal "sirens" as warm-ups to develop consistency between ranges, Remington adapted this concept in creating lip-slurs for brass players. While many teachers include lip slurs, often referred to as "Remington exercises," few teachers make the connection of the exercises' importance, and their connection to vocal music.

In considering tone and timbre, Arnold Jacobs[33] discussed using vowel sounds to alternate between bright and dark sounds, much like a singer does. In considering rhythm and tempo, Alessi[34] encouraged students to put down their instrument to conduct and sing, allowing the students to externally express time while navigating rhythms and meter changes. This method also creates a connection between visual, kinesthetic and aural learning for each beat. Remington[35] posited that chorale playing should be an integral part of an ensemble's musical development. Similar to his training singing in a boys' choir, these chorales help develop the concept of a musical line. He would have ensembles sing through the chorale, listening how each part fits into the greater phrase. Alessi[36] has students sing through a musical phrase to help identify the beginning, middle and end, as well as finding where the goal tone (apex) in the phrase is. All of these activities, initially designed for private brass lessons, could be incorporated into an instrumental classroom.

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[32] Ibid, 7.
[33] Ibid.
[34] Ibid, 8.
[35] James G. Gates, "Using Singing as a Tool in Brass Playing," 9.
[36] Ibid.

Jeffrey Huenink[37] presented a practical application of Stanley Schleuter's teachings on tonality and Grutzmacher's teachings on solmization in his exercises for use in a middle school band classroom. Huenink created charts from Grutzmacher's tonal patterns, and encourages teachers to implement echo singing, with emphasis on the teacher modeling what they desire from their students. Huenink also provides feedback on one teacher's use of singing, playing by ear, and improvising to help students develop a better sense of tonality. Ann Marie Musco[38] expands on Huenink's thoughts by encouraging teachers to make use of pre-reading activities such as singing patterns from the band literature on a neutral syllable before making the connection with solfège. She also provides ways to connect aural and visual learning, as well as ways to check for students' understanding of the concepts.

Debbie Galante Block, in her article, "A Vocal Approach to Instrumental Improvement"[39], states that "vocalization is the key to mastering a musical instrument."[40] Block claims that students need the ability to "pre-hear"[41] pitch sequences, and singing helps them develop their skills in audiation. She quotes Ann Marie Musco from her article, "Solfege for Instrumentalists," in saying "By helping our students understand general concepts before trying to execute them on their instruments, we can be certain

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[37] Jeffrey S. Huenink, "Sing it, Hear it, Play it! Ear Training for Middle School Students." *Teaching Music* (August 2002), 58.

[38] Ann Marie Musco, "Solfège for Instrumentalists: How Singing Can Help Students Play." *Teaching Music*, February 2012, 28.

[39] Debbie Galante Block, "A Vocal Approach to Instrumental Improvement," *Teaching Music,* August 2013, 58.

[40] Ibid.

[41] Ibid.

they have an accurate aural image before adding the challenge of instrumental technique involving the airstream, tongue, bow stroke, or other factors."[42]

Singing in the classroom also helps teachers swiftly evaluate the learning of a large group of students. On an individual level, a teacher can ascertain whether performance errors are due to a lack of understanding, as substantiated by poor vocalization, or problems in instrumental technique, as verified when vocalization is accurate, but the overall performance is inaccurate. Block[43] also recognizes that older students who have not been asked to sing in a rehearsal setting may be apprehensive and recommends first scatting articulations and chanting rhythms. "Students tend to be more comfortable doing this than singing at first."[44] Finally, Block advises instrumental teachers have the knowledge of comfortable vocal ranges for stages of vocal development and suggests that students first sing stepwise melodies and melodies with small leaps.

Douglas Towner published an article in *Kodály Envoy*[45] titled "Looking for Solfege Patterns." *Kodály Envoy* is a publication of the Organization of American Kodály Educators, an organization which promotes musical literacy. While many of the ideas taught through the Kodály method are applied with elementary-aged students, Towner encourages teachers to consider looking for solfege patterns when programming band music. (e.g. mi-re-do, do-re-mi-fa-sol, sol-me, do-re-mi-sol-la, etc.) Teachers can extract the solfege patterns and compile them into one resource for students to sing. By singing

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[42] Ann Marie Musco, "Solfege for Instrumentalists," February 2012. Qtd. In Debbie Galante Block, "A Vocal Approach to Instrumental Improvement," *Teaching Music,* August 2013, 58.

[43] Debbie Galante Block, "A Vocal Approach to Instrumental Improvement," 58.

[44] Ibid.

[45] Douglas Towner, "Looking for Solfege Patterns, *Kodaly Envoy 39,* no. 2, 13.

through these patterns, students have a chance to hear the other students' parts and can learn to play them by ear. Patterns can be taught to reinforce intonation, such as patterns including the leading tone (ti-do) versus those with a subtonic (te-do).

Towner suggests pulling some solfege patterns from popular and folk music to help students make a connection with music they may already have heard. Additionally, if multiple sections of an ensemble have the same patterns, but at different times during a piece, aural connections can be made which will improve balance, blend and intonation. As a final point, Towner provided the following questions for teachers to consider when analyzing a potential piece of music for students to sing: 1) Where would the instruments most likely play out of tune? 2) What would happen if students could practice part of the time singing the solfege? 3) What songs do students know that have the melodic pattern that relates to the problem area? 4) What would happen if all the students could play the solfege together?[46]

Mark Wolbers[47] mentions several benefits of singing in the band classroom. He suggests singing the source material on which the wind band literature is based (hymns, folk songs, etc.), in order to better understand concepts of melody, phrasing, history, culture and context. He also offers applications for improving pitch, intonation, balance, and musical syntax. Most importantly, the article has a list of vocal source-material for singing in the band rehearsal.

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[46] Ibid.

[47] Mark Wolbers, "Singing in the Band Rehearsal," *Music Educators Journal* 89, no. 2, (Nov. 2002), 37-41.

Like the published research studies, Frederick Speck[48] claims that singing using moveable do solfège improves ensemble intonation. He offers five arguments in favor of using movable do solfege: 1) solfege syllables provide specific names for all chromatic pitches; 2) solfege syllables encourage students to hear the exact placement of a pitch before playing, whereas the use of neutral syllables tend to be the product of matching the singing to the playing; 3) solfege syllables offer better vowels for singing than numbers; 4) solfege syllables are specific only to pitch, causing less confusion as opposed to numbers which are also used for counting systems; 5) movable do maintains the same do and sol polarities in any key, reinforcing function whether in major or minor. Speck includes directions for singing with moveable do in the instrumental classroom, including both melodic and harmonic elements, in both major and minor modes. He also offers a short list of wind band literature that lends itself to using the voice to build the musician's ear, thus improving intonation.

In writing "Beginning Band without a Stand"[49] for the *Music Educators Journal,* Matthew Clauhs states "I realized I was neglecting aural and creative skill development in favor of fixing notes and rhythms in our band music."[50] Clauhs, like many band directors, admitted to getting trapped in the habit of rehearsing only band literature in preparation for performances, without digging much deeper than surface-level musicianship. "In the end, I realized that these kinds of experiences taught my students

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[48] Frederick Speck, "Strengthening Instrumental Ensemble Tuning with Vocalization and Solfège," in *The Music Director's Cookbook: Creative Recipes for a Successful Program,* ed. Garwood Whaley (Galesville, MD: Meredith Music Publications, 2005), 103.

[49] Matthew Clauhs, "Beginning Band without a Stand," *Music Educators Journal* 140, no. 4 (June 2018), 39.

[50] Ibid.

how to play a specific role in an ensemble, but not how to be creative musicians and critical thinkers."[51] Clauhs emboldens band directors to sing every day during class, as vocalizing helps students develop aural skills, pitch discrimination, improve balance and musical syntax. Additionally, he says that students will not be able to play in tune if they cannot already sing in tune, nor will they play in tempo any better than they can move their body rhythmically in time. Clauhs adds, "music teachers should find a balance between notation skills and musicianship to develop beginning instrumentalists who understand with their ears as well as their eyes."[52]

Learning songs by ear in band class is an activity often overlooked or even discouraged in the United States, but Clauhs encourages band directors to include learning music by ear, and offers the following steps: 1) the teacher sings and the students sing back; 2) the teacher sings and the students play back; 3) the teacher plays and the students sing back; and 4) the teacher plays and the students play back.[53] Sometimes the vocal range of beginning band students does not exactly match the playing range, and Clauhs encourages teachers not to have students sing consistently below middle C. Once the students are confident and fluent singing and playing by ear, then the teacher can easily transfer the sound to the symbols in the music or the beginning band method book.

While research has demonstrated positive results for including singing in instrumental classrooms, John Bryan Burton's survey[54] noted vocalization exercises were

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[51]Matthew Clauhs, "Beginning Band without a Stand," 40.

[52]Ibid.

[53] Ibid.

[54] John Bryan Burton, "A Study to Determine the Extent to which Vocalization is used as an Instructional Technique in Selected Public School, Public Junior College, and State University Band Rehearsals," Journal of Band Research 23:2 (Spring 1988), 30-39.

used sparingly at best in instrumental teaching. First, some teachers lamented that singing was too time consuming, giving priority to concert and competition preparation. Secondly, a number of teachers believed their teaching methods were adequate, questioning the necessity for singing. Third, other teachers were hesitant or unsure of how to implement singing in their classroom. Burton's survey demonstrates teachers' reluctancy to adopt singing as a regular activity in their classroom while concurrent research proves positive results. Mitchell Robinson[55] attacks some of the common arguments instrumental directors use for not singing, including lack of time, lack of confidence in their voice to model singing, and fear of poor student reactions. Robinson argues that introducing daily singing exercises eventually saves teachers time in the long run by providing students the ability to fix their own problems independently; additionally, time spent on tuning the ensemble is reduced as students master this skill. A heightened awareness of tonality is also achieved through regular singing.

Possibly the most successfully designed set of plans are offered by Aaron Wilson, in his "Aural Skills for Making Music: Incorporating Ear-Training into Rehearsal Settings."[56] Wilson begins his article by empathizing with teachers, knowing that rehearsal time is precious, and often times the practice of basic musicianship is set aside in favor of learning repertoire. Like Robinson previously noted, Wilson argues that dedicating more time to aural skills throughout the majority of the year will help student achieve more in a shorter amount of time, while making fewer repeated mistakes. When a

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[55] Mitchell Robinson, "To Sing or Not to Sing in Instrumental Class." *Music Educators Journal* 83, no. 1 (1996): 17.

[56] Aaron Wilson, "Aural Skills for Making Music: Incorporating Ear-Training into Rehearsal Settings," *Canadian Winds,* Fall 2018, 32.

teacher spends less time fixing pitch and rhythm errors, they are afforded more time to teach style, interpretation and ensemble skills. Additionally, consistent effort in aural skills development can improve intonation, sight-reading, rhythm and fundamental performance skills on every instrument.

Wilson posits that musicians use audiation in three ways: 1) to recall previous aural experiences; 2) to translate music notation into internal aural stimuli; and 3) to imagine entirely new music. Strong audiation skills allow students to learn music quickly, observe motivic and melodic patterns with ease and perform with greater confidence.[57] Knowing the desired melodic sound of scales, arpeggios, and frequently used melodic patterns will increase accuracy and confidence, and Wilson states this is done through singing, giving students a target, rather than hoping for the best.

Out of all the published articles, Wilson is the only instrumental teacher to not only emphasize a positive singing culture, but also provide instruction on proper singing technique.[58] By reinforcing great posture, tongue placement, vowel shape and consistent vibrating of the larynx, Wilson provides an easy to implement plan for proper singing technique which teachers can additionally correlate to proper playing of wind instruments. Wilson emphasizes teachers select a system for solmization in the band rehearsal. While he believes moveable do (do in minor) promotes learning relationships of notes within a key, while promoting greater accuracy in pitch, he admits there is a steeper learning curve at the beginning of implementation. Wilson offers that Curwen hand signs can be very beneficial, especially for kinesthetic learners. These hand signs

[57] Ibid.
[58] Aaron Wilson, "Aural Skills for Making Music," 33.

can help strengthen audiation skills, aid students in hearing pitches of the scale in relation to the tonic and allow the teacher the ability to disseminate information even while students are singing.

Wilson does well to outline specific aural skills activities for use in the classroom. "Speak 'n' Say"[59] is a call and response activity in which a teacher plays or sings on a neutral syllable a melodic fragment, and the students repeat it back on their instrument. Before doing this, a teacher can sing on a neutral syllable, and students can sing back first on the neutral syllable, and then again using solfege. While singing on solfege, Wilson encourages students to do the fingerings for the notes on their instruments, allowing students to identify the melodic pattern through singing before attempting it on their instruments. This activity leads into "Singing Melodies,"[60] in which students sing and play simple melodies, improving intonation within the context of a key. Students will better anticipate how melodies are constructed, and a teacher can model proper breathing and phrasing through singing as well. In beginning ensembles, students can sing the melodies in the method books. Older students can use sight-singing b or melodies from their band literature. Additionally, Wilson offers exercises in tuning around the room, subdivision of beats, and rhythmic cells which can be chunked into longer patterns. Finally, Wilson summarizes his activities and again offers ways to implement aural skills regularly into a busy classroom.

Research has presented a multitude of positive findings for instrumentalists to sing on a regular occurrence. While teachers receive aural skills training in their first

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[59] Ibid.
[60] Aaron Wilson, "Aural Skills for Making Music," 34.

years of undergraduate study to help develop their own musical ears, very little application for singing in the classroom is presented in collegiate instrumental pedagogy coursework. Although a few successful teachers have applied this research in their own classrooms and shared their success stories, many others have remained reluctant to implement singing as a daily activity. Given the rich benefits students gain from singing, there is an overwhelming opportunity for growth in teachers including singing in their daily curriculum.

CHAPTER THREE:
METHODOLOGY: STUDY AND RESULTS

As shown in the studies and publications reviewed in Chapter Two, singing and ear-training activities are beneficial for the musical development of instrumental students. Since one purpose of this thesis was to identify what aural skills activities are currently being taught in middle and high school (collectively referred to as "secondary") instrumental ensemble classes, an online survey was created, distributed via a Facebook group and results analyzed. This chapter will discuss the survey and its results.

Participants

Participants for the survey included current and retired secondary school band and orchestra teachers, and were recruited via the private Facebook group, "Band Directors Group" (BDG), which identifies itself as "*A Professional Development Endeavor."*[61] BDG is also open to collegiate music education students who have limited access to resources and posts. While the online survey was viewed by 1,152 individuals, only 464 actually began taking the survey of which only 281 completed the survey. Of these 281 participants, 263 were from the United States and 18 were from other countries. U.S. participants came from 44 states; international participants included 5 from Canada, 3 from China, 2 each from the UK and Japan, and one participant each from Australia, Kazakhstan, Kenya, New Zealand, Switzerland, and Vietnam. A breakdown of U.S.

[61] *Band Director Group: A Professional Development Endeavor – Free from Outside Influence – 25,000 Teachers Strong.* Last accessed April 22, 2020. https://www.facebook.com/groups/banddirectors/

participants by region, as delineated by the National Association for Music Education (NAfME), can be seen in Figure 3.1.

Participants represent a myriad number of years of teaching experience, from first-year teachers through those having taught for more than thirty-five years. (See Figure 3.2) The mean years of teaching experience is 15.61, with teaching experience being fairly equally distributed with the largest number (64) in their first five years of teaching or with 16 to 25 years' experience. The smallest group, 13 participants, is teachers with more than 35 years of experience.

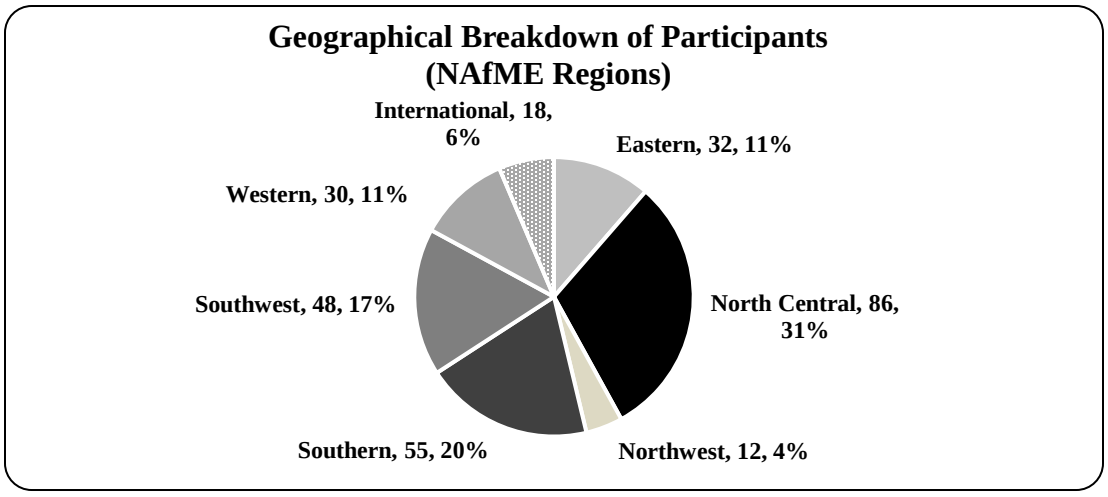

Figure 3.1 Geographical Breakdown of Participants

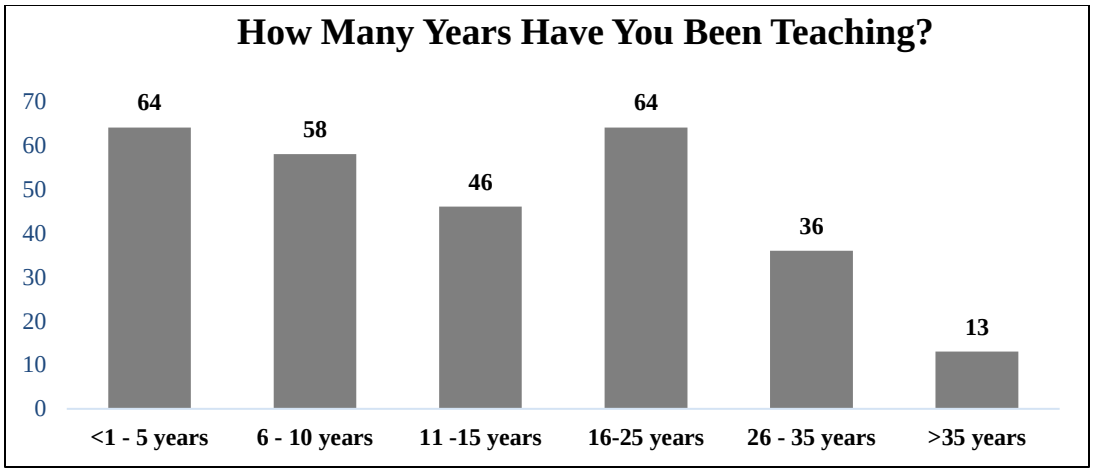

Figure 3.2 Number of Participants Per Years of Teaching Experience

Because it is common for instrumental music teachers to be responsible for instruction at more than one grade level, participants were asked to indicate all grade levels they currently teach. A breakdown of all teaching levels is shown in Table 3.1. An equal number of participants (N=199) indicated their teaching responsibilities included high school (grades 9-12) and middle school (grades 6-8). A smaller group of participants taught students in grades K-5 (N=43), while only three indicated they taught college (N=3), two were retired teachers (N=2), and one person taught adult community band (N=1).

TABLE 3.1 GRADE LEVELS TAUGHT BY PARTICIPANTS

Grade Level	# of Participants – All Teaching Responsibilities	# of Participants – Primary Teaching Responsibility
K-5	43	10
6-8	199	123
9-12	199	142
Other	6	6

In order to better correlate statistical data from the survey with grade level taught, participants were asked to note which grade level they teach the majority of the time (see Table 3.1). Participants were asked to answer the remaining questions of the survey based on which grade level was their primary teaching responsibility.

Instrument

An online survey was created specifically for the purposes of this study using QuestionPro. (See Appendix C for the full survey.) In addition to collecting the demographic information mentioned above, the survey covered five areas of questions:

Structure of classroom rehearsals and concert performances

The first section of the survey included five questions that asked the participants about the structure of their ensemble classes. Participants were asked the average number of minutes they meet with each of their ensembles weekly and the percentage of time spent on a list of prescribed activities in a typical rehearsal. Activity categories included warm-ups for technique and tone development, concert preparation, sight-reading, ear-training, singing, written music theory and fundamentals, listening and analyzing musical performances, non-musical information such as announcements, and other. Participants

were also asked the number of concerts their students prepare for each school year, if the students participate in a concert ensemble festival, and if this festival included a sight-reading component.

Inclusion/attitudes of singing activities in band and orchestra class(es)

The second section of the survey included six questions regarding the inclusion of singing in the middle and high school instrumental classroom. Participants were asked whether they included singing in their ensemble classes, and, if they did, they were asked about the general attitude of both the students and the teacher toward singing in the rehearsal and ways in which singing has had a positive impact on their students. Participants were also asked more specific questions regarding singing, such as which method(s) of solmization (if any) is used and the types of singing activities they have included in daily classroom teaching. If the participants do not include singing in their classes, they were asked to tell why singing is excluded.

Methodology of teaching rhythm and pitch intervals

In the third section of the survey, participants were asked five questions about their pedagogical practices for teaching rhythm and melodic and harmonic interval identification. They were asked which method(s) of rhythm counting they employ (e.g. Standard (Numbers) [1-e-&-a], Eastman [1-ti-te-ta], Kodaly [ti-ri-ti-ri], and Takadimi [ta-ka-di-mi]). If the participants do not teach a rhythmic counting method, they were asked how they ensure their students understand how to count rhythms.

Similarly, they were asked about their methodology for teaching pitch interval identification id. They were asked whether they taught intervals in relationship to the scale, associated popular music songs to intervals, or correlated intervals to the ensemble repertoire currently being played in class.

Presence of separate music theory curricular offerings

The fourth section posed four questions about their school's music theory offerings outside the ensemble classrooms. They were asked whether the high school offers a theory class or an AP theory class and if they were the teacher for either theory class.

A survey of method books, resources, and repertoire used in teaching

In the fifth and final section of the survey, participants were asked four questions about the method books, resources, and literature they use in their ensemble teaching. Participants were asked which particular method book(s) they use in their middle and high school programs, as well as any materials used to teach sight-reading, ear-training, and music theory during ensemble rehearsals. Teachers were invited to upload any ear-training or singing resources they wished to share. Finally, participants were asked to list the name and composer of three works they programmed within the last year.

Procedure

After receiving IRB approval (see Appendix A), an invitation to participate in this study was posted in the "Band Director Group." The online survey was created and

distributed using QuestionPro, a web-based survey design tool. The survey was open for six weeks, with a reminder sent weekly.

Results & Discussion

As stated above, there were 281 participants in the survey. The responses were analyzed to determine answers to four main questions: (1) What aural skills activities are currently being taught in instrumental ensemble classes? (2) To what extent are aural skills implemented? (3) What are teachers' and students' attitudes toward these activities? (4) What are the perceived benefits for the inclusion of the activities? The data provided by these participants was analyzed utilizing the analytics in the QuestionPro software, as well as the Statistical Package for Social Sciences (SPSS) analysis software.

Survey Section 1: Structure of classroom rehearsals and concert performances

In the first section of the survey, participants were asked how many minutes they meet each of their classes weekly (see Figure 3.3). Answers were grouped into the five ranges corresponding to typical amounts of classroom time. The largest number of the participants (48.75%) indicated they meet between 201-300 minutes of rehearsal time per week, which is an average of 40 to 60-minute classes five days each week. The next largest group of participants (19.57%) meet their ensembles 121 to 200 minutes of rehearsal time, or three to five 40-minute classes per week. Only 13.7% of participants meet between 60-120 minutes weekly, 8.9% of participants meet less than 60 minutes, while 8.54% meet for more than 300 minutes weekly.

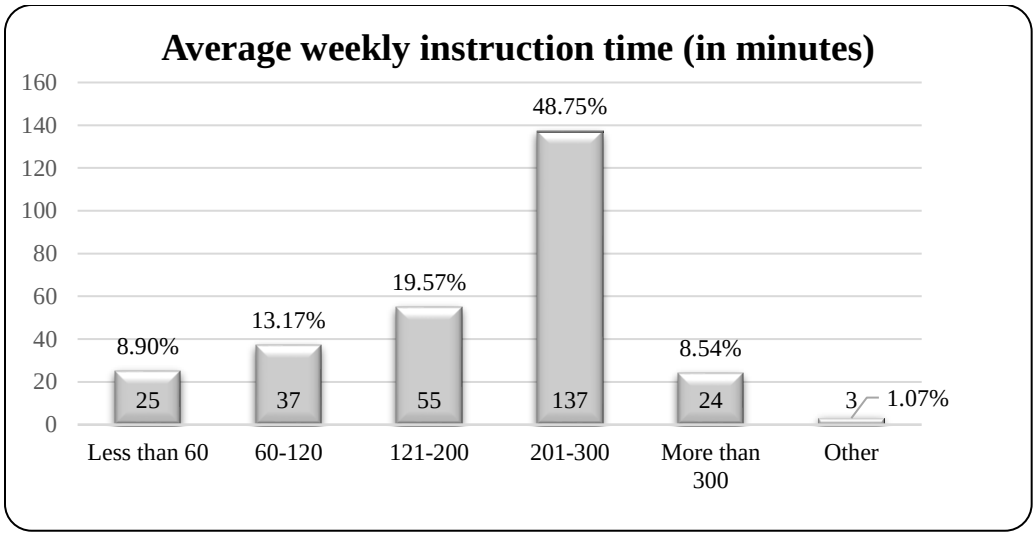

Figure 3.3 Average Weekly Instruction Time in Minutes

Next, participants were asked to estimate the percentage of time spent on a variety of activities in a typical ensemble rehearsal. Activities were grouped into the categories shown in Figure 3.4. The question was formatted so that the sum of all activities had to equal 100%. The results showed that concert preparation accounted for almost three times the percent of rehearsal time than the next most popular activity. Concert preparation took, on average, 48.17% of rehearsal time with the next largest amount of time, 18.74% dedicated to warm-ups, technique and tone development. Participants spent an average of 6.79% of rehearsal time on sight-reading, 4.26% of time on ear-training, 4.11% of time listening and analyzing music, 4.0% of time working on music theory and other written music fundamental materials, and a mere 3.57% of rehearsal time singing.

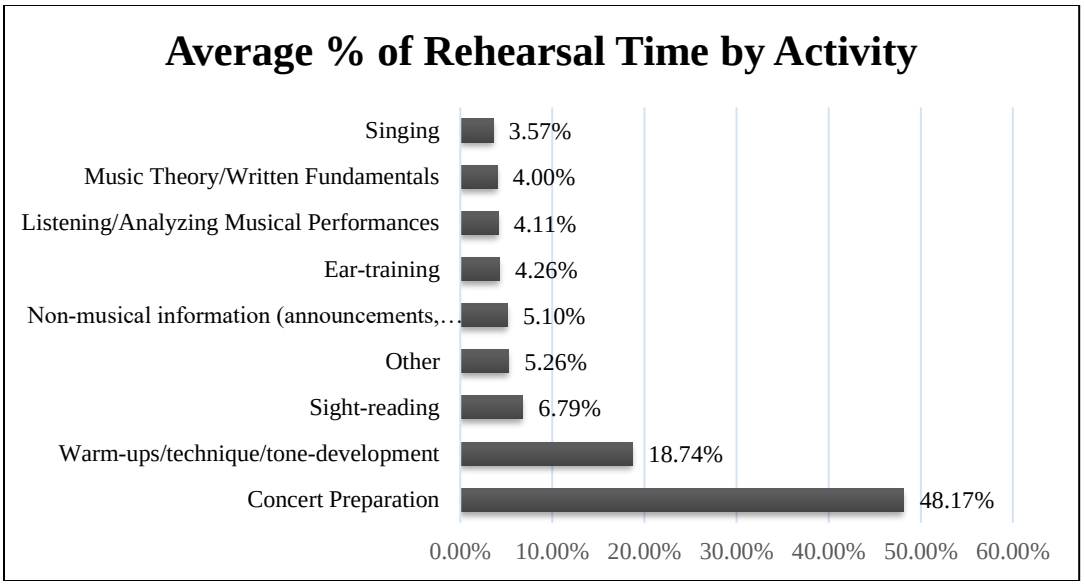

Figure 3.4 Average Percentage of Rehearsal Time by Activity

Participants were also asked the number of concerts their ensembles prepared for each year. Not surprisingly, no participants responded that they did not perform at all. The largest number of participants (69%) prepare three to five concerts annually, or a concert every seven to twelve weeks if a school year is approximately thirty-six weeks in length. The next largest number of participants (18%) prepare even more concerts (6 or more), while the smallest number of participants (13%) prepare only one or two concerts each year.

Concert festivals are organized on the local, regional, and state levels and provide middle and high school ensembles the opportunity to perform concert repertoire for adjudicators and receive feedback on their playing. These events can be competitive (e.g. contests between other schools) or non-competitive. Ensembles must perform at a certain level as outlined on a pre-established assessment rubric to earn specific ratings. These events provide a yearly benchmark for middle and high school ensembles. Often,

especially at the high-school level, these events include some sort of sight-reading activity which contributes to the overall rating. In the survey, participants were asked if they participate in a concert ensemble festival. Of the 281 participants, 222 (79%) responded they do participant in such events. Of those answering yes, 129 (58.1%) indicated the festival included a sight-reading component.

Survey Section 2: Inclusion/attitudes of singing activities in band and orchestra class(es)

A majority (196, 70%) of participants include singing in their ensemble classroom teaching. While this statistic seems impressive on the surface, it should be noted that the largest amount of participants stated they had between 201-300 rehearsal minutes per week (see Figure 3.3) and, on average, participants spent only 3.57% of time singing in rehearsal (see Figure 3.4) which means that these participants are spending only seven to eleven minutes singing per week.

Participants were asked to state more specifically to what extent they incorporate a variety of solmization activities in their rehearsals. The results (see Table 3.6) demonstrate that the largest group of participants (74.59%) utilize neutral syllables (e.g. singing pitches on loo or dah) on at least a weekly basis. While any singing can still be beneficial, using a singing system (e.g. numbers or solfege) allows students to understand a pitch in relation to its function. Numbers were the most popular system with 31.07% of participants employing this method on at least a weekly basis. The next most popular system (18.5%) was moveable do/do based minor solfege. Less participants (10.78%) used moveable do/la based minor on at least a weekly basis, while only 4.79% of participants used fixed do solfege. Participants were given the opportunity to share how

they incorporate singing in their classroom teaching. A full list of their responses can be found in Appendix D.

Participants were asked to indicate the attitude demonstrated toward singing by themselves and their students (see Table 3.3). Nearly all teachers said they agreed or strongly agreed that they presented a positive attitude toward singing – 96.8%, only 56.4% of teachers agreed or strongly agreed that their students had a positive attitude toward singing in class. Conversely, while most teachers do model a positive attitude toward singing, 10.88% of teachers disagreed or strongly disagreed that their students had a positive attitude toward singing. Participants were asked to list reasons they thought singing has had a positive impact on their students; a full list of responses can be found in Appendix E.

As mentioned previously, 70% of participants indicated that they included singing in their classroom teaching. The remaining 30% of participants were asked why they do not include singing in their classroom teaching; their responses are outlined in Table 3.4. The number one answer had to do with confidence. The majority (83.33%) of participants agreed or strongly agreed their students are not confident in their singing; no one strongly disagreed with this statement. While teachers did seem to feel confident in their own singing abilities (61.47% strongly disagreed or disagreed with the statement "I am not confident in my own singing"), they did cite teaching time and style as reasons for not including singing in classes. A majority (51.21%) of participants agreed or strongly agreed that they did not have enough class time. A large number (44.57%) of participants agreed or strongly agreed their own teaching methods, which do not include singing, were adequate. These results align with what John Bryan Burton found in his research in

1988, over thirty years ago.[62] While it might prove difficult to change the attitudes of teachers not currently embracing singing in their classrooms, it is possible for teachers and students to build confidence in their singing and reprioritize the percentage of rehearsal time allotted for singing. More discussion on these ideas will be presented in the next chapter.

[62] John Bryan Burton, "A Study to Determine the Extent to which Vocalization is used as an Instructional Technique in Selected Public School, Public Junior College, and State University Band Rehearsals," Journal of Band Research 23:2 (Spring 1988), 30-39.

TABLE 3.2 PARTICIPANTS' USAGE OF SOLMIZATION ACTIVITIES

Method	Never	< Monthly	Monthly	Weekly	Daily
Solfege – moveable do (do minor)	65.9%	6.94%	8.67%	14.45%	4.05%
Solfege – moveable do (la minor)	79.64%	5.99%	3.59%	8.98%	1.80%
Solfege – fixed do	90.42%	0.00%	4.79%	3.59%	1.20%
Numbers	42.37%	14.12%	12.43%	19.21%	11.86%
Neutral syllables	8.84%	4.42%	12.15%	34.81%	39.78%
Other	66.96%	2.68%	8.93%	9.82%	11.61%

TABLE 3.3 ATTITUDES TOWARD SINGING IN ENSEMBLE CLASSROOMS

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I model a positive attitude toward singing in rehearsal	.52%	.52%	2.07%	**27.46%**	**69.43%**
The students have a positive attitude about singing in class	2.07%	8.81%	32.64%	**45.60%**	**10.88%**

TABLE 3.4 REASONS PARTICIPANTS DO NOT INCLUDE SINGING

REASON	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I Am Not Confident in My Own Singing	**25.76%**	**35.71%**	11.90%	17.86%	4.76%
Students Are Not Confident Singing	**0.00%**	3.57%	13.10%	**52.38%**	**30.95%**
Not Enough Class Time	9.76%	15.85%	23.17%	**37.80%**	**13.41%**
I Believe My Own Methods Are Adequate	3.70%	16.05%	**45.68%**	**39.63%**	**4.94%**

Survey Section 3: Methodology of teaching rhythm and pitch intervals

The majority of participants (98.93%) responded that they teach their students how to count rhythms using a variety of counting schemata (see Table 3.5). The vast majority (93.68%) of participants incorporate the Number method of rhythm counting (i.e., 1e&a) on at least a weekly basis, with 79.55% of participants using this method on a daily basis. All the other systems (Eastman, Takadimi, Kodaly) were never used by the majority of participants (83.57%, 89.35%, and 94.34% respectively).

Participants who teach their students how to identify pitch intervals (66.19% of all participants; see Table 3.6), indicated they also include these lessons on a regular basis. On at least a weekly basis, 70.97% of participants expressed that they teach pitch interval identification in relation to pitches of the scale. Almost as many (64.52% of participants) use examples from music they are learning to teach intervals on at least a weekly basis, while a smaller group (32.8% of participants) taught intervals through examples from popular music. While nearly the same number of participants (66.19%) teach pitch interval identification as those who include singing activities (70%), the frequency of pitch identification activities is significantly higher than those of singing. (see Figure 3.2).

TABLE 3.5 WHICH METHOD OF RHYTHM COUNTING DO YOU USE?

Method	Never	Less than once a month	Monthly	Weekly	Daily
Standard / Number (1e+a)	3.72%	1.12%	1.49%	14.13%	**79.55%**
Eastman (1-ti-te-ta)	**83.57%**	4.23%	2.35%	2.35%	7.51%
Takadimi (ta-ka-di-mi)	**89.35%**	2.78%	.46%	2.78%	4.63%
Kodaly (ti-ri-ti-ri)	**94.34%**	1.89%	.47%	1.42%	1.89%
Other	**77.65%**	3.35%	3.91%	6.15%	8.94%

TABLE 3.6 HOW DO YOU TEACH MELODIC/HARMONIC INTERVAL IDENTIFICATION?

Method	Never	Less than once a month	Monthly	Weekly	Daily
Examples from popular music	**13.98%**	**25.81%**	27.42%	25.27%	7.53%
Examples from music we are learning	3.76%	9.14%	22.58%	**41.94%**	**22.58%**
In relation to pitches of the scale	2.15%	7.53%	19.35%	**46.24%**	**24.73%**
Other	**72.04%**	8.60%	6.99%	6.99%	5.38%

Survey Section 4: Presence of separate music theory curricular offerings

The number of schools that have a music theory class (49.47%) is almost the same as the number that do not have a theory class (50.53%). Of the participants whose schools do have a theory class, 57 (41.04%) participants indicated they were the instructor of the music theory class (see Table 3.7). Most schools (70.82%) do not have an AP music theory class and of those that did (29.18%), 36.99% (30 of 82) of responders were the instructor for the AP Theory class.

TABLE 3.7 SEPARATE MUSIC THEORY CURRICULAR OFFERINGS

	Yes	% of Participants	No	% of Participants	Total Participants
HS has a Music Theory class	139	49.47%	142	50.53%	281
Participant is the Music Theory class instructor	57	41.01%	82	58.99%	139
HS has an AP Music Theory class	82	29.18%	199	70.82%	281
Participant is the AP Music Theory instructor	30	36.99%	52	63.41%	82

Survey Section 5: A survey of method books, resources and repertoire used in teaching

Method books are used with beginning instrumental students as a way of teaching simple, scaffolded lessons, in a variety of classroom structures (e.g. private lessons, like-instrument groups, full ensemble). Participants were asked which method books their middle school (or middle school feeder school) uses. Because it is common for teachers to use more than one method book, a five-point Likert-scale was used to find the frequency of use for each method book (e.g. never, less than monthly, monthly, weekly, and daily). Participants were given choices of five widely published method books, as well as the option to list other books not in the choices.

Of the five books listed, only one book was used more than not. The *Essential Elements Interactive*[63] series (formerly *Essential Elements 2000*) was used on a daily basis by 41.30% of the middle schools (see Table 3.8). The next largest group of participants (23.96%) reported daily use of the *Standard of Excellence*[64] series, followed by 10.95% using *Sound Innovations*[65], the newest of the popularly used method books. The series began publication in 2010, while the other series have been in publication since the 1990s. Additional method books in the survey question included the *Accent on Achievement*[66] series (7.33% daily use) and *Yamaha Advantage*[67] (.53% daily use).

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[63] Tim Lautzenheiser, John Higgins, et. al., *Essential Elements Interactive,* Milwaukee, WI: Hal Leonard Co., 1999.

[64] Bruce Pearson, *Standard of Excellence,* San Diego, CA: Kjos Music Company, 1993.

[65] Robert Sheldon, Peter Boonshaft, et. al., *Sound Innovations,* Van Nuys, CA: Alfred Music Publishing, 2010.

[66] John O'Reilly and Mark Williams, *Accent on Achievement,* Van Nuys, CA: Alfred Music Publishing, 1997.

[67] Sandy Feldstein and Larry Clark, *The Yamaha Advantage,* Oskaloosa, IA: CL Barnhouse, 2001.

Interestingly, the number of participants indicating they never use the books was larger than the number of participants using any of the five method books on a daily basis.

Although 49.07% of participants indicated that they never use other method books, a little over a third of the participants (34.72%) did indicate that they used other methods on a daily basis. The three highest mentioned were *Habits of a Successful Middle School Musician*[68] (5.69% used daily), the *Tradition of Excellence*[69] series (4.27%) and the *Measures of Success*[70] series (3.20%).

TABLE 3.8 WHAT METHOD BOOK DOES YOUR MIDDLE SCHOOL USE?

Method	Never	< Monthly	Monthly	Weekly	Daily
Essential Elements Interactive	**44.35%**	3.48%	3.04%	7.83%	41.30%
Standard of Excellence	**61.75%**	2.30%	3.23%	8.76%	23.96%
Sound Innovations	**78.11%**	2.49%	3.48%	4.98%	10.95%
Accent on Achievement	**89.53%**	.52%	.52%	2.09%	7.33%
Yamaha Advantage	**99.47%**	0%	0%	0%	.53%
Other	49.07%	1.85%	2.78%	11.57%	34.72%
Other – Habits of a Successful Middle School Musician					5.69%
Other - Tradition of Excellence					4.27%
Other – Measures of Success					3.20%

[68] Scott Rush, Jeff Scott, et. al., *Habits of a Successful Middle School Musician,* Chicago, IL: GIA Music Publications, 2016.

[69] Bruce Pearson and Ryan Nowlin, *Tradition of Excellence,* Sand Diego, CA: Kjos Music Co., 2012.

[70] Deb Sheldon, Brian Balmages, et. al., *Measures of Success,* Ft. Lauderdale, FL: FJH Music Publishing, 2010.

Participants were asked to list any books and resources used to supplement their teaching of sight-reading, ear-training, and music theory within the ensemble rehearsal. A full list of resources, organized by number of mentions, can be found in Appendix F. Three books, *Foundations for Superior Performance* by Richard Williams and Jeff King (mentioned by 37 participants), *Habits of a Successful Musician* by Scott Rush and Rich Moon (mentioned by 16 participants), and *Bach and Before for Band* by David Newell (mentioned by 6 participants) will be used as examples for teaching aural skills lessons in the next chapter. Finally, participants were asked to list three works they programmed in a concert during the last year. A full list of pieces, organized by number of mentions, can be found in Appendix G. *English Folk Song Suite* by Ralph Vaughan Williams (mentioned by 3 participants) will be used to create sample ear-training lessons from repertoire in the next chapter.

CHAPTER FOUR:
TEACHING AURAL SKILLS FROM METHOD BOOKS, RESOURCES & REPERTOIRE

In the last chapter, I discussed the results of the aural skills teaching survey, including method books and resources participants use to supplement their teaching. In this chapter, I will review the contents of the most popularly used resources for their potential to be adapted into aural skills lessons. Additionally, I will reveal how teachers can create ear-training lessons from the method books and resources. Finally, I will provide sample lessons I created demonstrating how to teach aural skills using instrumental ensemble repertoire.

As mentioned in the last chapter, method books are popular resources in beginning and middle school band. All eight middle school method books mentioned in the survey results include a large collection of folk songs with short, sing-able melodies. As was mentioned by Matthew Clauhs (see Chapter 2)[71], it is important for students to make music by humming and singing before making music on their instrument. The melodies in a method book are a great place to begin. Because the first five notes taught in all of these books are the first five notes of the B-flat major scale, they can easily be sung by younger voices. While this limited range encourages the use of singing, it does not reinforce one of the most important notes of the major scale – the leading tone. In fact, in some band method books (e.g., *Essential Elements Interactive*), the subtonic, *te*,

[71] Matthew Clauhs, "Beginning Band without a Stand," *Music Educators Journal* 140, no. 4 (June 2018), 39.

or concert A-flat in Bb major, is introduced before the leading tone (*ti* or A4) due to a variety of instrument range and fingering issues. If students are not singing and reinforcing the leading tone, they might begin to incorrectly hear *te*-do as the correct sound in a major scale, even after a full scale is learned. Teachers can help students learn this difference by singing songs from later in the book which utilizes the leading tone. Teachers who believe they do not have enough rehearsal time to sing should only consider how often in one rehearsal they correct students playing A-flat instead of concert A. If students sing diatonic melodies, they will begin to understand the sound of a major scale and later, the ideas of tonality and tonal center.

In addition to the unison melodies, method books include several duets which can provide great opportunities for singing exercises as well as simple error detection activities. Unlike the usual structure of instrumental repertoire, in which students can only see their individual part, the duets in these books show both staves, allowing for students to learn both parts and help students find their pitch much in the same manner students in choral ensembles do by following all parts. In my experience from teaching students in band, learning to sing both parts in a duet allows students to develop early error detection abilities. When they can confidently sing and hear both parts in a duet, students can quickly decipher when something is incorrectly played in either part.

The easiest way for a teacher to check for understanding is through singing. Singing removes any potential mechanical playing issues and allows a teacher to hear how the student is interpreting the written notes on the page. By singing, students will also develop their audiation skills early in their instruction. To continue developing audiation skills, the teacher can change specific notes in a song to rests (e.g. in the

manner of the nursery song B-I-N-G-O). By doing this, a teacher can quickly assess if a student is maintaining the pitch in their head.

As indicated in the results of the survey, teachers use a variety of rhythm counting methods, with the Standard (Number) method being the most often used system (see Table 3.5). The majority of method books also use this Number system (1e&a). While middle school method books include extensive instructional material by way of simple songs, they tend to provide a limited amount of exercises for rhythm counting. There is a myriad of resources available to fill in these gaps. All of these resources can be used for singing as well as playing.

Sight Reading Factory is a cloud-based resource (also available as an app) which allows teachers and students to generate a new piece of music at the touch of a button[72]. While the music is computer-generated, the system follows conventional rules of composition to ensure the music is rhythmically, harmonically and tonally sound. The website is customizable, allowing teachers to choose exact rhythms, as well as set parameters for range, leaps, accidentals, dynamics and articulations. *Sight Reading Factory* also allows teachers to create assignments for students to complete and turn in via the cloud. Because the difficulty levels range from beginner through advanced, this resource could easily be used for middle school, high school and even college-level ear-training instruction.

[72] Sight Reading Factory, sightreadingfactory.com

Ed Sueta's *Rhythm Vocabulary Charts for Effective Rhythmic Development*[73] contains 32 sequenced charts for playing rhythms, logically increasing in difficulty. The goal of mastering a chart is for students to achieve rhythmic independence and proficiency. This book is geared toward developing musicians, so it would be applicable for use in middle schools or developing high school programs.

Teaching Rhythm Logically[74], by Darcy Vogt Williams, is a method book for teachers, not students. It models a logical, sequential way to teach rhythm that attacks concepts from multiple angles to reach students with multiple learning styles. The lessons are designed to create an understanding of rhythm, beyond just counting out loud. The self-published PDF includes a full script for teaching the method to students.

101 Rhythmic Rest Patterns[75] by Grover C. Yaus encourages the counting of rest values as well as notes. This method book places rhythm and rest patterns on unison pitches in B-flat, E-flat and F major, thus limiting the technical playing challenges, and instead focusing on counting comprehension. This approach, then, is easily adaptable for singing rhythms since the pitch material increases in difficulty proportionally to the rhythmic material. Because teachers cite that they do not sing in their ensembles because of student's timidity (see Fig 3.4), this resource could help bolster student confidence. The book instructs students to sing pitches that are short

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[73] Ed Sueta, *Rhythm Vocabulary Charts for Effective Rhythmic Development,* Peapack, NJ: Macie Publishing Company, 1985.

[74] Teaching Rhythm Logically, https://teachingrhythmlogically.com

[75] Grover C. Yaus, *101 Rhythmic Rest Patterns,* Van Nuys, CA: Alfred Music, 1985.

in duration (e.g. isolated eighth notes and quarter notes separated by rests), not requiring students to sustain long passages with a strong singing voice.

Garwood Whaley's *Basics in Rhythm*[76] is a collection of short, graduated studies for teaching or learning to read rhythms. The included exercises cover all fundamental rhythms, meters, and mixed meters. The exercises are notated on a single-line staff, designed to be sung or counted aloud using rhythmic solfege. The book includes demonstration audio recordings, allowing for practice or homework. Because this resource is absent of pitch material, it could easily be adapted for scaffolded lessons, beginning with rhythm only, and then by adding solfege abbreviations under the exercises, methodically introducing larger or more difficult leaps in pitch.

Participants in the survey were also asked to indicate a list of resources they use to supplement their teaching (in all grade levels) of sight-reading, ear-training and music theory. (See Appendix F for a complete list.) The most often cited resource (37 mentions or 13.17% of participants) was *Foundations for Superior Performance*[77] by Richard Williams and Jeff King. Having used this book with my own high school bands, I feel I am qualified to speak to how easily this resource can be adapted to teach aural skills during an instrumental ensemble lesson.

The first section of *Foundations for Superior Performance* includes a variety of long-tone exercises, similar to Emory Remington's trombone exercises, which

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[76] Garwood Whaley, *Basics in Rhythm: An Instructional Text for all Instruments*, Ft. Lauderdale, FL: Meredith Music Publications, 1984.

[77] Richard Williams and Jeff King, *Foundations for Superior Performance.* San Diego, CA: Kjos Music Company, 1998.

Remington adapted from vocal exercises during his forty-nine years at Eastman.[78] Through these long tone exercises, students can reinforce their ability to hear and identify intervals by singing these exercises on solfege, perhaps while doing the fingerings to the notes on their instrument. A series of warm-ups and variations follow the long tone exercises. These exercises are written to cater to pedagogical needs for specific instruments in the band and could easily be adapted into singing exercises. For example, brass lip slurs could be sung to reinforce hearing the intervals of the overtone series: octaves, fifths, fourths, thirds and eventually seconds. Three survey participants specifically mentioned incorporating the singing of Remington exercises in their regular classroom activities (see Appendix D).

The largest portion of the Williams and King book includes major and minor scales, a variety of scale and arpeggio patterns and interval and chord studies in all diatonic keys, introduced in order of the circle of fifths. Because the exercises are the same in all keys, this lends very well to learning every exercise using moveable do solfege, and having the students sing the exercises before attempting a new key, while fingering the notes on their instrument. In this way, students reinforce their knowledge of the sound of the exercise and the note function. Some participants in the survey cited lack of student confidence as a reason for not including singing (see Figure 3.4). Aaron Wilson encouraged the singing of scales, arpeggios and frequently used melodic patterns

[78] James G. Gates, "Using Singing as a Tool in Brass Playing," *Honors Research Projects*, 2017, 39.

to improve accuracy and confidence.[79] Twenty participants mentioned they sing scales in their weekly classroom routine (see Appendix D).

The last section of *Foundations for Superior Performance*, a collection of chorales and tuning exercises in every key, could easily be adapted for aural skills instruction. The chorales can be sung with solfege to help instrumentalists understand how their part fits functionally into the four-part texture. Using the interval tuning exercises found in the book, students would practice singing intervals of thirds, fourths, and fifths. All of these interval tuning activities culminate in the band singing chord tuning exercises, building I, IV and V (7) chords, and resolving back to I. 27 survey participants mentioned they sing chorales during class (see Appendix D).

The next most widely mentioned book, *Habits of a Successful Musician*[80] by Scott Rush and Rich Moon, is also filled with tuning and technical exercises which lend themselves to being adapted into aural skills lessons. The authors themselves even emphasize incorporating solfege, as they state in the teacher's edition:

> **Solfege: Understanding What You're Communicating:** *Musical literacy or melodic wandering?* As you teach self-expression, it is important that students not only learn to musically interpret what's on the page, but to hear it and understand it…The best way to teach this aural skill is through the use of solfege.[81]

[79] Aaron Wilson, "Aural Skills for Making Music: Incorporating Ear-Training into Rehearsal Settings," *Canadian Winds*, Fall 2018, 32.
[80] Scott Rush and Rich Moon, *Habits of a Successful Musician*, Chicago: GIA Publications, 2011.
[81] Ibid, 119.

The authors then suggest some solfege exercises to help improve pitch identification and musical literacy. One of the first exercises begins with the singing of short, three to six pitch patterns. An example of such an exercise is shown in Figure 4.1 below.[82] Using this exercise, (1) students would sing with solfege syllables and scale-degree numbers, (2) with the scale degree numbers removed, students would sing on solfege syllables only, (3) students playing back on their instrument a pattern sung with solfege by their instructor, and (4) students playback on their instrument a pattern sung or played by their instructor with no syllables. This entire progression leads up to encouraging melodic and rhythmic dictation activities in the ensemble classroom.[83]

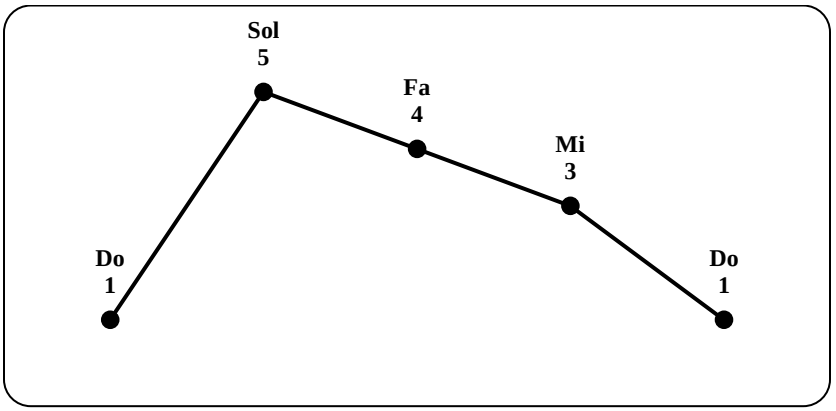

Figure 4.1 Example Solfege Pitch Exercise

[82] N.B. This exercise is not one from the book, but one created to show the type of exercise in the book.
[83] Scott Rush and Rich Moon, *Habits of a Successful Musician,* 119.

David Newell's *Bach and Before for Band*[84] is another method book that encourages aural skills instruction. In the preface, the author states:

> Each of the 19 individual chorales included in *Bach and Before for Band* is presented in the student books on two facing pages. On the left-hand page is printed a Soprano, Alto, Tenor and Bass part…within the playable range of each particular instrument. The top right right-hand page contains the solo part (soprano part from the left-hand page) along with the complete four-part piano score. This gives students the opportunity to follow the score as the individual parts are played during the band rehearsal.[85]

Giving the students the condensed piano score encourages students to analyze what is going on in the music and see how their part fits into the whole. Newell also advocates for singing in the band rehearsal; he says "instrumentalists who can sing a passage in the correct style have a deep personal internal model of the passage that they can imitate on their external instruments."[86] Newell talks about how hard it is to get students to sing: "Many teachers have tried [singing in their classroom] but have given up…(1) there is no material readily available in the band folder for teaching this difficult skill, and (2) many students seem unenthusiastic, even shy about singing in band."[87] Newell's insights regarding student's attitudes toward singing align with the responses from survey participants (see Table 3.4). To overcome these problems, Newell includes a recommended sequence for teaching the chorales, one voice part at a time, combined only when students are capable of singing each of the lines independently. Through his lessons, students gain a sense of confidence in their singing voice. With this gained confidence, teachers may be more apt to include singing in their teaching (see Table 3.4).

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[84] David Newell, *Bach and Before for Band,* San Diego: Neil A. Kjos Music Company, 2002.
[85] Ibid, 7.
[86] Ibid, 21.
[87] Ibid.

Another benefit of the book's format is that students can sing in their own appropriate vocal range. A trumpet player with a bass vocal range, who normally only reads trumpet music in the treble clef, can sing the bass part in their singing range, first using the treble clef bass part on the left-hand page, with the goal of eventually learning how to read bass clef using the piano reduction on the right-hand page. Conversely, a female trombonist can sing soprano or alto, while also reinforcing her ability to read in treble clef.

As research demonstrated in Chapter 2, it is imperative that the teacher creates a classroom environment where all students are encouraged to sing enthusiastically, without fear of being made self-conscious. The next section of this chapter offers my research-based exercise suggestions for application with the Newell book. One possible exercise to introduce singing is to have alternating students play the music while the remaining students are singing, gradually reducing the number of students playing until all students are singing. Other combinations of singing and playing activities are possible. Perhaps the brass section sings the alto part while the woodwinds section plays the soprano part. More advanced ensembles might encourage small chamber ensembles to sing the chorales (e.g. a clarinet choir could have one person on each part playing while one person on each part is singing, eventually all singing). The ultimate challenge for students would be having a quartet sing a chorale a cappella. Such singing would demonstrate each student's ability to maintain the pitch integrity of their own part, while maintaining elements of balance, blend, intonation and tuning, without the aid of pitches provided from the piano or other students singing or playing.

While these method books are just a few of the many resources referenced by participants and some of these sources stress singing, they show that it only takes some creativity to adapt instrumental method book examples to encourage aural skills instruction. In addition, aural skills exercises can be created directly out of the repertoire students are learning.

Teaching Aural Skills from Repertoire in 3 Steps

One simple yet effective way to encourage singing while learning repertoire is to learn the source material on which the piece is based, as was discussed by Douglas Towner[88] and Mark Wolbers[89] in chapter 2. For example, students can learn the folksong that is used in a composition. Ralph Vaughan Williams' *English Folk Song Suite* (1923)[90], is one such piece. *English Folk Song Suite* is one of the first works in the 20th century to be composed specifically for wind band, appears on the high school state repertoire lists in 23 states.[91] An avid collector of over 800 folksongs, Vaughan Williams based this work on nine of these collected songs (see Appendix G for the nine folksongs). One of these folksongs, "Blow Away the Morning Dew" (see Figure 4.2) can be taught to students while learning this music. A sequence of exercises might follow a Sing-Think-Play organization. For this piece and this folksong, this exercise sequence might be as follows.

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[88] Douglas Towner, "Looking for Solfege Patterns, *Kodaly Envoy 39*, no. 2, 13.

[89] Mark Wolbers, "Singing in the Band Rehearsal," *Music Educators Journal* 89, no. 2, (Nov. 2002), 37-41

[90] N.B. While no one piece was mentioned extensively by participants in the survey, this work was mentioned by three participants, receiving the most mentions

[91] J.W. Pepper & Sons, www.jwpepper.com, includes an interactive compiled list of state festival works on their website.

Step 1: Sing

1. Students sing through an F major scale (the key of the folksong) and tonic triad (ascending and descending) using solfege.
2. The teacher plays the folksong for the students and the students identify all instances of F major scale patterns in it by measure and beat, using solfege. Students sing the patterns.
3. Students sing through the F major scale in thirds (ascending and descending) using solfege (e.g. do-mi, re-fa, mi-sol, etc.)
4. Teachers have the students identify all instances of thirds in "Blow Away the Morning Dew" using solfege. Students sing the patterns.
5. Teachers have the students sing through "Blow Away the Morning Dew" using solfege.[92]

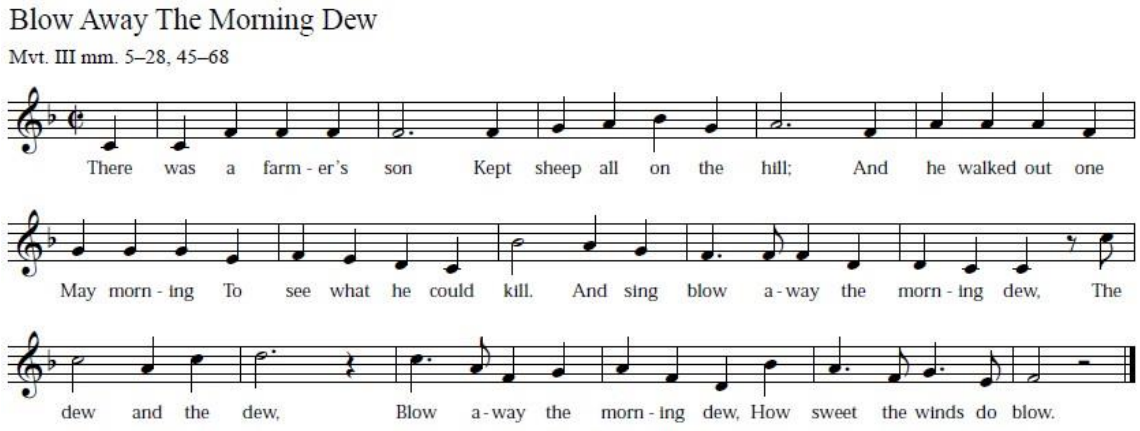

Figure 4.2 "Blow Away the Morning Dew" – English Folk Song

[92] Teachers could choose to have students sing their pitch names as well to reinforce this skill if necessary.

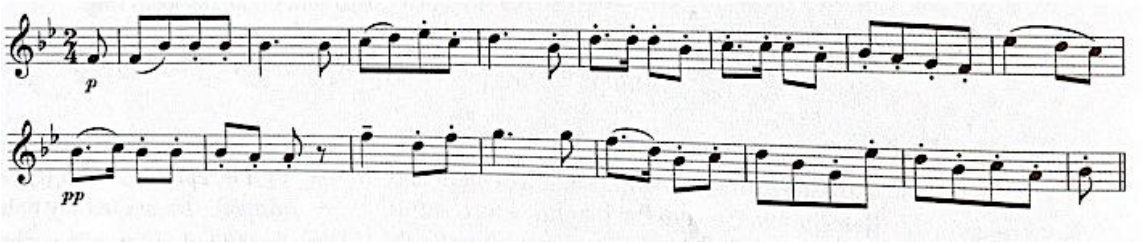

Figure 4.3 Melody Reduction - *English Folk Song Suite*, Mvmt. III mm. 5-20

In *English Folk Song Suite*, "Blow Away the Morning Dew" begins in Mvmt. III, measure five, but is written in B-flat major. Teachers can have the students sing "Blow Away the Morning Dew" (while looking at Figure 4.3) using solfege to reinforce ideas of transposition and moveable do solfege. Then the students can discuss any differences between the folksong and the version in the piece. (e.g. dotted rhythms, time signature, pitch alterations)

Step 2: Think

The students look at the transcription of the melody from *English Folk Song Suite* (Figure 4.3) in the context of the entirety of Mvmt. III. Students discuss why Vaughan Williams made the choice of the 2/4-time signature instead of 2/2, which was most likely done to aid the transitions between simple and compound time signatures later in the movement.

Step 3: Play

The students then play the transcription of the melody from *English Folk Song Suite* as found in Figure 4.3. Finally, the students play their individual part, as written in *English Folk Song Suite*, Mvmt. III, beginning at measure five. The students' awareness of the melodic material should reinforce correct style, as well as balance between the melody and accompaniment figures.

This same "Sing-Think-Play" sequence can be used for any of the nine folk songs included in *English Folk Song Suite,* with a few modifications. For example, when introducing "Seventeen Come Sunday," the students would first need to be taught about Dorian mode in the Think portion, and how it relates to their natural minor scale. (e.g. raised sixth scale degree).

English Folk Song Suite also provides great opportunities for teaching and reinforcing rhythmic counting in both simple and compound meters. The folksong mentioned above is a good example of simple time (see Figure 4.3). In the trio section of Mvmt. III, Vaughan Williams introduces compound time, -- a 6/8-time signature. Vaughan Williams also introduces polymeter in this piece in Mvmt. I, mm. 65-80, where he uses 2/4- and 6/8-time signatures simultaneously. A rhythmic reduction of these two ideas can be seen in Figure 4.4 and can be used to reinforce counting without concern of pitch material.

Using Figure 4.4, teachers could have the students count each line aloud separately. Takadimi syllables would be an excellent choice for counting this example, as they help reinforce simple versus compound time. The class could be divided into two groups. Group one, reading the top line, includes upper woodwinds and percussion (the instruments that will play this rhythm in the piece), with the remaining members of the ensemble comprising Group 2, those whose music is notated in 2/4. The two groups could then be combined, counting both lines simultaneously, emphasizing independent rhythmic integrity. Finally, the students would repeat this sequence while looking at their actual sheet music.[93]

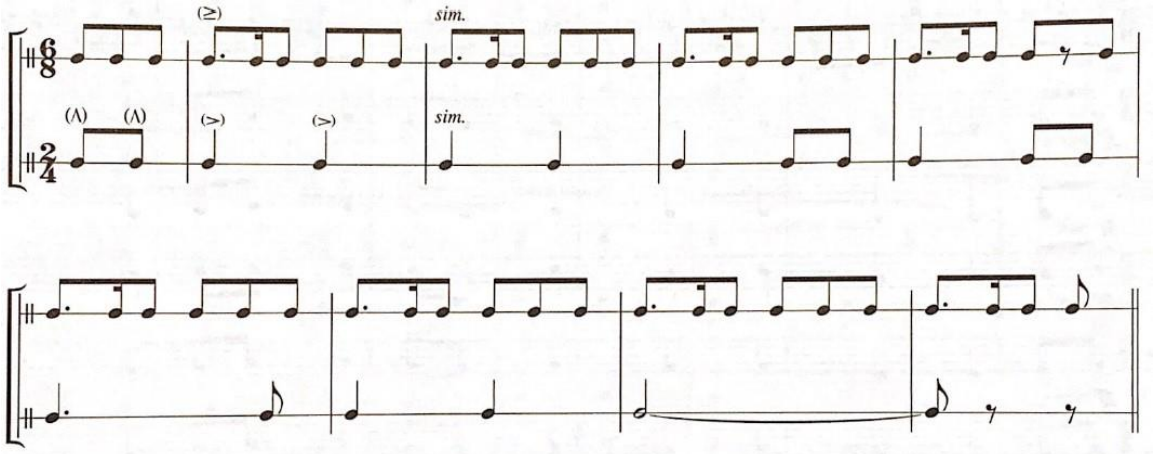

Figure 4.4 Polymeter Reduction of Mvmt. I, mm. 65-72

[93] N.B. Before accomplishing this activity, it might be necessary to have the groups reinforce the counting of the 2/4 vs. the 6/8-time signatures by clapping the subdivisions first independently, then simultaneously.

There are hundreds of pieces of wind band music which utilize folk songs as their source material, written at all difficulty levels. The Wind Repertory Project, a comprehensive database, is one resource which can be used to search for potential works.[94] Additionally, large sheet music retailers such as J.W. Pepper,[95] Stanton's Sheet Music[96], and Pender's Music Co.[97] provide searchable databases on their websites which can help teachers find more pieces using folksongs.

Other works based on folk songs include Brian Balmages "Moscow, 1941" (based on the Russian folk song, "Meadowlands"); Frank Ticheli's "Shenandoah," "Loch Lomond," "Cajun Folk Songs" and "Cajun Folk Songs 2"; Percy Aldridge Grainger's "Lincolnshire Posy,"; Michael Story's middle school arrangement of "Horkstow Grange" (from Lincolnshire Posy); and "Variations on a Korean Folk Song" by James Barnes Chance.

Instrumental pieces based on folk tunes are a helpful place to begin because they are naturally monophonic. Once students are confident in singing unison melodies, they should learn to sing in parts. Such singing can be correlated with a method book (e.g. *Foundations for Superior Performance* or *Bach and Before for Band*[98]), or wind band works based on chorales, hymn tunes, and choral music. Examples of such wind band works include "Salvation is Created" by Pavel Chesnokov (arr. Brown); "Sleep," and "Lux Arumque," both composed and arranged by Eric Whitacre; "O Magnum

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[94] Pilato, Nikk, "Category: Folk Songs," *The Wind Repertory Project*, last updated March 1, 2020, http://www.windrep.org/Category:Folksongs

[95] J.W. Pepper and Son, Inc., last updated 2020, https://www.jwpepper.com

[96] Stanton's Sheet Music, last updated 2020, https://www.stantons.com/

[97] Pender's Music Co., last updated 2020, https://www.penders.com/

[98] Richard Williams and Jeff King, *Foundations for Superior Performance.* San Diego, CA: Kjos Music Company, 1998.

Mysterium" by Morten Lauridsen (transcribed for band by H. Robert Reynolds); "An American Elegy" by Frank Ticheli; "Hymnsong on Phillip Bliss," "A Childhood Hymn," and "On An American Spiritual," by David Holsinger; "Chorale and Shaker Dance" by John Zdechlik, "The Light Eternal" by James Swearingen, and "Symphony No. 4" by David Maslanka. Students can learn to sing the source material to these wind band works in their entirety, or a teacher could create reductions of the more advanced works.

Teachers should continue to have students sing the source material for their band repertoire. Pieces programmed for holiday concerts are almost all arrangements of carols and songs. Much of the lighter selections performed for "pops" concerts include transcriptions of film scores and Broadway tunes, as well as popular music arrangements, so they have very sing-able melodies. In addition to singing the source material for repertoire, teachers can create worksheets isolating melodic and harmonic cells from their repertoire similar to scale and tuning exercises found in method books to help transfer knowledge from one activity to another. Any repertoire can be the agent for aural skills instruction; the important thing is to have the students continually develop their audiation skills.

CHAPTER FIVE:
CONCLUSION

As previously mentioned, singing and playing should not be seen as two separate activities, but instead one fluid activity encouraging students to strengthen their audiation skills. This thesis began by examining prior aural skills research, including studies conducted by teachers using the students in their classrooms, as well as collective best practices published by teachers in books, journals and periodicals. Given that the research encouraged implementing aural skills into daily classroom instruction, I then set out to determine the state of aural skills instruction in instrumental classrooms today. I created an online survey and received responses from 281 participants. The data from the survey was analyzed to determine if middle and high school instrumental teachers are already implementing aural skills in their ensembles, to determine the benefits of singing, and to better understand why some teachers choose not to include ear-training activities in their teaching.

Teachers need to include more aural skills into their teaching but cite lack of rehearsal time and timidity toward singing as reasons why they do not. The biggest question is how to overcome these obstacles. Backwards course design is needed. Teachers should first think about the most important things they wish for their students to achieve. Then, they should design their lessons with these goals in mind. It would be interesting to see if teachers who include more minutes of singing in their daily rehearsals find that they spend less time preparing music for concerts because their students, with heightened audiation skills, learn and perfect the repertoire at a faster pace. With a

restructuring of priorities, perhaps teachers would have more rehearsal time than they realize.

Furthermore, teachers are not always confident in their own singing abilities, causing them to not teach aural skills. There may still exist a disconnect between the instruction teachers receive in their college ear-training courses and the successful transfer of these skills to their future teaching. Having taught both middle and high school band as well as undergraduate ear-training courses, I truly believe there is a need to bridge this gap. Whether this means music education students take their ear-training coursework separately from other music students, or specific applications for teaching aural skills in secondary classrooms is provided as part of music education methods courses, an opportunity for course improvement exists.

Finally, I believe we live in a time where it is easier than ever to share ideas. As I finished this thesis during my time in quarantine due to COVID-19, I was reminded how connected teachers are and how the common goal of helping our students unites successful teachers. More than ever before, teachers need to find new ways of teaching, including the use of audio and video recording technology. New pedagogical ideas that result from these upsetting and distressing times need to continue to develop when we all return to our classrooms, and, in my opinion, aural skills instruction is an area where our students can benefit.

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APPENDICES

APPENDIX A: IRB Approval Letter

THE UNIVERSITY OF TENNESSEE KNOXVILLE

May 21, 2019

Adrian Austin Hartsough
UTK - College of Arts & Sciences - School of Music

Re: UTK IRB-19-05175-XM
Study Title: Survey of Aural Skills Teaching in Secondary Instrumental Classrooms

Dear Adrian Austin Hartsough:

The Human Research Protections Program (HRPP) reviewed your application for the above referenced project and determined that your application is eligible for **exempt** review under 45 CFR 46.101.

Your application has been determined to comply with proper consideration for the rights and welfare of human subjects and the regulatory requirements for the protection of human subjects. This letter constitutes full approval of your application (Version 1.1) as submitted, including:
waiver of documentation of IFC-online survey/consent statement
Thesis Facebook Post v1.1
QuestionPro Survey v1.1
The above listed documents have been dated and stamped IRB approved 5/21/2019.

In the event that volunteers are to be recruited using solicitation materials, such as brochures, posters, web-based advertisements, etc., these materials must receive prior approval of the IRB.

Any alterations (revisions) in the protocol must be promptly submitted to and approved by the UTK Institutional Review Board prior to implementation of these revisions. You have individual responsibility for reporting to the Board in the event of unanticipated or serious adverse events and subject deaths.

Sincerely,

Colleen P. Gilrane

Colleen P. Gilrane, Ph.D.
Chair

Institutional Review Board | Office of Research & Engagement
1534 White AvenueKnoxville, TN 37996-1529
865-974-7697 865-974-7400 fax irb.utk.edu

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APPENDIX B: Approved Facebook Recruitment Post

PARTICIPANTS REQUESTED

I am currently completing my MM in Music Theory at The University of Tennessee-Knoxville. Prior to my graduate studies I taught high school band for 12 years. As part of my thesis project, I am researching current aural skills teaching practices used in middle and high school instrumental music ensembles. I have created an anonymous online survey which should take you no more than 15 minutes to complete. My goal is to collect information with the intent of creating resources to aid band and orchestra directors in their future teaching endeavors. I would greatly value your help and input in my research. The link to my survey is below:

<Insert Survey Link Here>

APPENDIX C: QuestionPro Survey



Aural Skills in the Instrumental Classroom Survey

Consent for Research Participation

Research Study: Survey of Aural Skills Teaching in Secondary Instrumental Classrooms
Researcher: Adrian A. Hartsough, University of Tennessee, Knoxville; ahartsou@vols.utk.edu
Faculty Advisor: Dr. Barbara Murphy, University of Tennessee, Knoxville; bmurphy@utk.edu
Institutional Review Board (IRB), University of Tennessee, Knoxville; utkirb@utk.edu

I am asking you to be in this research study because you currently, or have been, a middle/high school band/orchestra director. You must be age 18 or older to participate in the study. The information in this consent form is to help you decide if you want to be in this research study. Please take your time reading this form and contact myself or my faculty advisor to ask questions if there is anything you do not understand.

PURPOSE
The purpose of the research study is to determine current aural skills teaching practices used in middle and high school instrumental music ensembles.

What will I do in this study?
If you agree to be in this study, you will complete an online survey. The survey includes questions about your experience and methods in teaching secondary instrumental music ensembles, specifically the incorporation of aural skills and ear-training. The survey should take you about fifteen minutes to complete. You can skip questions that you do not want to answer.

Can I say "No"?
Being in this study is up to you. You can stop up until you submit the survey. After you submit the survey, I cannot remove your responses because I will not know which responses came from you.

Are there any risks to me?

I don't know of any risks to you from being in the study.

Are there any benefits to me?
I do not expect you to receive immediate benefit from taking this survey; however, I hope the knowledge gained from this study will benefit you and other teachers in the future. Your participation may help me develop lessons and curriculum to be included in my research and teaching at The University of Tennessee, Knoxville.

What will happen with the information collected for this study?
The survey is anonymous, and no one will be able to link your responses back to you. Your responses to the survey will not be linked to your computer, email address or other electronic identifiers. Please do not include your name or other information that could be used to identify you in your survey responses. Information provided in this survey can only be kept as secure as any other online communication. Information collected for this study will be published in my thesis and potential journal articles, with the hope of presenting my research at meetings and conferences.

Statement of Consent
I have read this form. By clicking the "I Agree" button below, I am agreeing to be in this study. I can print or save a copy of this consent information for future reference. If I have any questions, I may contact the Researcher, Faculty Advisor, or the IRB. (Contacts listed above).



Please select the state where you currently teach. (If outside the US, please indicate where using the other option).
1. Alabama
2. Alaska
3. Arizona
4. Arkansas
5. California
6. Colorado
7. Connecticut
8. Delaware
9. Florida
10. Georgia
11. Hawaii
12. Idaho
13. Illinois
14. Indiana
15. Iowa

16. Kansas
17. Kentucky
18. Louisiana
19. Maine
20. Maryland
21. Massachusetts
22. Michigan
23. Minnesota
24. Mississippi
25. Missouri
26. Montana
27. Nebraska
28. Nevada
29. New Hampshire
30. New Jersey
31. New Mexico
32. New York
33. North Carolina
34. North Dakota
35. Ohio
36. Oklahoma
37. Oregon
38. Pennsylvania
39. Rhode Island
40. South Carolina
41. South Dakota
42. Tennessee
43. Texas
44. Utah
45. Vermont
46. Virginia
47. Washington
48. West Virginia
49. Wisconsin
50. Wyoming
51. Other _____

What grade level(s) do you currently teach (mark ALL which apply)
1. K-5
2. 6-8
3. 9-12
4. Other _____

Select the single grade level you spend the majority of your time teaching:
1. K-5
2. 6-8
3. 9-12

4. Other

How many years have you been teaching?

1. <1
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10
12. 11
13. 12
14. 13
15. 14
16. 15
17. 16
18. 17
19. 18
20. 19
21. 20
22. 21
23. 22
24. 23
25. 24
26. 25
27. 26
28. 27
29. 28
30. 29
31. 30
32. 31
33. 32
34. 33
35. 34
36. 35
37. > 35

How many minutes in an average week do you meet with each of your classes?

1. Less than 60
2. 60-120
3. 121-200
4. 201-300
5. More than 300

6. Other _____

During an average rehearsal, what percentage of your time is devoted to:

- Warm-ups/technique/tone-development _____
- Sight-reading _____
- Concert Preparation _____
- Ear-training _____
- Singing _____
- Music Theory/Written Fundamentals _____
- Listening/Analyzing Musical Performances _____
- Non-musical information (announcements, schedule, etc.) _____
- Other _____

How many concerts do your students prepare for each year?

1. 0
2. 1-2
3. 3-5
4. 6 or more

Do you participate in a concert ensemble contest/festival?

1. Yes
2. No

Does your contest/festival include a sight-reading component?

1. Yes
2. No
3. Other _____

Do you include singing in your classroom teaching?

1. Yes
2. No

What method(s) of singing do you incorporate in your classroom?

	Never	Less than once a month	Monthly	Weekly	Daily
Solfege - moveable do (do minor)	❑	❑	❑	❑	❑

Solfege - moveable do (la minor)	❑	❑	❑	❑	❑
Solfege - fixed do	❑	❑	❑	❑	❑
Numbers	❑	❑	❑	❑	❑
Neutral syllables	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

Why do you not include singing in your teaching?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A
Not enough class time	❑	❑	❑	❑	❑	❑
I am not confident in my own singing	❑	❑	❑	❑	❑	❑
Students are not comfortable singing	❑	❑	❑	❑	❑	❑
I believe my own methods are adequate	❑	❑	❑	❑	❑	❑
Other reason	❑	❑	❑	❑	❑	❑

Please give some examples of how you incorporate singing into your rehearsal:

What has been the general attitude toward singing in rehearsal?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I model a positive attitude toward singing as the teacher.	❑	❑	❑	❑	❑
The students have a positive attitude about singing in class.	❑	❑	❑	❑	❑

In what ways has singing had a positive impact on your students?

Do you teach students how to count rhythms?
1. Yes
2. No

Which method(s) of rhythm counting do you use in your classroom?

	Never	Less than once a month	Monthly	Weekly	Daily
Standard (1e+a)	❑	❑	❑	❑	❑
Eastman (1-ti-te-ta)	❑	❑	❑	❑	❑
Takadimi (ta-ka-di-mi)	❑	❑	❑	❑	❑
Kodaly (ti-ri-ti-ri)	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

How do you make sure your students understand how to count rhythms?

Do you teach students how to identify pitch intervals?
1. Yes
2. No

How do you teach melodic/harmonic interval identification?

	Never	Less than once a month	Monthly	Weekly	Daily
Examples from popular music	❑	❑	❑	❑	❑
Examples from music we are learning	❑	❑	❑	❑	❑
In relation to pitches of the scale	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

Does your high school offer a music theory class?
1. Yes
2. No

Are you the instructor of the music theory class?
1. Yes
2. No

Does your high school offer an AP Music Theory class?
1. Yes
2. No

Are you the instructor of the AP Music Theory class?
1. Yes
2. No

Which method book(s) does your middle school program currently use?

	Never	Less than once a month	Monthly	Weekly	Daily
Accent on Achievement	❑	❑	❑	❑	❑
Essential Elements 2000	❑	❑	❑	❑	❑
Sound Innovations	❑	❑	❑	❑	❑
Standards of Excellence	❑	❑	❑	❑	❑
Yamaha Advantage	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

Please list any and all books and resources you use to supplement your teaching of sight-reading, ear-training, and music theory within the ensemble rehearsal:

Please list 3 works (and composers) your ensemble performed in a concert in the past year:

Additional Comments, Suggestions or Concerns

APPENDIX D: Open-Ended Question #14 Full Responses

Please give some examples of how you incorporate singing into your rehearsal:

- Singing scale, chorales, music, articulation passages, chord singing
- Tuning chords at ends of phrases. Concert F exercises etc.
- Sing unison lines in daily routine. Sing intervals. Sing chords when tuning. Sing to rehearse rhythms, articulations or dynamic contrast.
- Echo game. I play, they sing 1st then play second. Also, percussion sings note names as they play.
- Sing and finger through music, echo sing rhythm patterns on neutral syllables, sing scale and then play scale
- Sing a part when brass players are not in the right partial. Solfege to reinforce keys/key signatures.
- Matching F concert, singing parts in the music (with rhythmic consistency)
- We sing melodies and chords from within our technique exercises or concert music.
- Vocalizing parts during both rehearsals and in sight-reading practice. When tuning to internalize pitch. To practice inflection of line in jazz.
- Singing chords to adjust intonation. Singing familiar chorales.
- Singing chorales. Singing chords. Tuning.
- Singing parts in the chorale. Phrasing visualization. Sight reading
- I will have students sign their part to play through a song at a faster tempo, or to work on dynamics
- We start by singing a Concert F. I use the Remington study and we different notes each time. We will play/sing chorales.
- Jazz we use singing most often to get the swing feel. During warmups or chords we struggle with we'll also use singing.
- Singing tuning note. Singing chorales as a part of the warm-up to work on developing pitch.
- Singing/humming tuning note once you have matched the pitch play it on your instrument. Chorales, we are working on getting to 4 parts. When working in a piece that is based on a folk song, we will learn the song and sing it. Sing parts for style and to match articulations. Sing rhythms.
- Singing intervals, singing the tuning pitch, singing their note in the chord
- We sing an exercise or part before playing.
- Sing your part - everyone starting with the same syllable
- Sing note names while fingering (part of our "practice strategy")
- Singing parts, working on tuning chords
- Guided hand signals, chorale singing, part singing.
- Sing parts, include at least one piece per year which includes singing as part of the composition.
- Sight-reading. Singing a pitch then playing it. Call and response.
- Sing tuning exercises and chorales

- Singing a passage with different articulations to zero in on the correct one, singing flow studies on an 'oh' vowel to open up the playing tone.
- Sing it, finger it, play it. 'Sing through' in marching rehearsals.
- Learning warm-up material as beginners. Singing scales. Drones.
- In orchestra rehearsals, chorale playing/singing, mostly. In elective classes, I use strict solfege for Honors music theory, numbers for other musicianship classes.
- Sing scales. Match pitch. Use for tuning.
- They sing their part, particularly a difficult section, in Solfege, usually writing it in first.
- use of singing for articulation: Doo, Dih, Dah, ahh. use of singing for pitch - play drone sing 5th - singing to match pitch and harmonizing - singing scales while one group holds to create unison, 2nds, 3rds, etc. Singing for rhythm in sight reading and in rehearsal. Singing to save chops and still rehearse
- Largely to emulate articulation/style it helps hear pitch
- We usually sing rhythms and melodies that students struggle with. I tell them we are not a choir, so I don't expect excellence, and that seems to help them loosen up and participate. It can be a struggle with middle schoolers, however. I use neutral pronunciations because solfege seems confuse them. Sometimes we do sing more names to help them read better.
- We hum or use ah for some pitches which students struggle to play on their string instruments (e. g. C# on an open G string)
- Singing rhythms, singing their own parts
- By rote, part-singing, tuning
- Singing Dah for pitch matching. Singing intervallic studies to learn and practice intervals. Singing chords for tuning purposes.
- Sing long tones. Sing/say rhythms
- I have students learn to sing the school song then figure out how to play it on their instruments - as well as other well-known melodies. We sing chords to work on intonation.
- Singing lines with piano accompaniment to learn pitches before playing
- We sing scales in warmups and tubing pitches for reference. We also sing passages in the music to help with intonation and rhythmic integrity.
- Mostly with beginners singing numbers of the scale before playing.
- Singing warmups. Singing tonic. Singing starting pitch
- Warmups, humming for intervals, melodic material
- Tuning chords, working on rhythms and style.
- sing through parts
- sing Remington exercises and chorales
- 'If you can say (sing) it, you can play it...'
- Sing our chorale, sing the scale, sing the tuning pitch before playing, sing your pitch when we tune or balance a chord, sing through our method book song, sing to show phrasing and dynamics.
- When there are wrong notes, we sing the parts to help our ears hear the mistakes. We use singing to work on tone and style as well.

- Echo studies. Singing rhythms. Singing parts.
- Singing scales and canons. Singing their own or another student's part. Finding what note is sticking out in the chord.
- My band sings daily. They must be able to sing, using solfege, their individual line for all concert pieces and warmups. It is for a grade.
- We sing intervals in my 9th grade band to get from scale to scale. We sing lines of music to work on phrasing (once rhythms are learned). In my advanced group we sight-sing Bach Chorales in solfege for individual parts, and neutral syllables for 4-part singing. I use singing a LOT.
- Sight reading, tuning chords, articulation
- Pitch matching for intonation. Modeling articulation
- Singing scales, using it to find the pitch center, chord tuning, articulation
- The two primary ways I incorporate singing is 1) working on rhythmic integrity, guiding students to listen to inflection/articulation/note length or 2) tuning exercises in which we work on adjusting chord tones per harmonic tuning. This often includes singing a scale, pausing on the third, and then having them match the pitch on their instruments.
- Singing scales/rounds, listen for tone production and quality sounds, easy jingles with Lah or Dah syllables and numbers, pass the pitch
- Sing unisons, chords, melodies as relates to warm-ups and literature. Refine intervals through singing using both solfege and numbers where appropriate. Theory related and taught through technique and literature.
- I will have kids sing scales and sing their parts of their ensemble music.
- Play-sing-play through a harmony chord sequence daily. Singing runs of sections from concert music
- Modeling, having students model articulation and pitch, singing warm up chorale for independence.
- Warmups-sometimes we play exercises, sometimes we sing (thirds, arpeggios, etc.). Also- I have them play, think, sing. For example, play first note of scale, think the second, then play the third. Gradually we increase the number of degrees we think before singing.
- We sing scales and Remington exercises often and occasionally the music. We spend more time sizzling or bopping.
- Vocabulary, articulation, style, and phrasing
- Beginning Band, singing melodies on la or the notes names while fingering the instrument. Concert band, attempting to sing chorales on parts, with or without instrument support on each voice. Concert band, also singing rehearsal passages while fingering, sometimes on la and sometimes on the counting of the rhythm.
- Singing rhythms, singing articulations and dynamics
- Sing scale patterns before we play them around the circle of 4ths
- Intonation, rhythm, expression
- we sing to match pitch and to match articulation
- We use singing for intonation and pitch matching, and Steve Melillo Function Chorales.

- Sing with and without a drone, intervals, sing passages of music.
- We sing chords with and without a drone to learn tuning tendencies and just intonation. We also use it to discuss tone quality and color.
- Usually singing chords when working on balancing and tuning chords. Sometimes singing intervals to help them understand the interval and center the pitch better when playing it.
- singing for the purpose of matching/ear training
- On difficult motifs or passages, I will sing the pitches and rhythms, followed by the students repeating in time to get the sound and feel before applying to instruments. Even if a section of instruments does not have the passage specifically in their part, it exposes them to rhythms and motifs they wouldn't necessarily have otherwise.
- To anticipate a piece, to sharpen rhythms and articulations
- Pitch matching on f pivot long time, singing successive notes, singing intervals, particularly brass, picking literature that incorporates singing
- Sing chords, sing warm-ups. Sing scales and patterns. Sing through passages.
- Warm up chorale during tuning-play-sing-play, singing difficult passages
- Tuning, sing it, play it. Chanting rhythms to food related words. Aligning chords by training ears.
- Intonation Exercises and chorales sing to neutral syllable or solfege.
- Singing excerpts in sight reading for style, phrasing, and pitch. Singing in warm-up for attention signal and also to help with intonation / blend in ensemble.
- Sing #5 on Dah. Sing your note names in rhythm. Sing a concert F. Sing on your articulation syllable. Sing the melody.
- Singing chorale parts before playing, singing rhythmically dense sections on neutral pitches
- We sing phrases often. Work to find goal notes. Sing rhythm etc.
- Pitch matching, audiation. Scales. Chords.
- Sight reading and to rehearse articulation or style.
- Have students sing somewhere patterns and then play back. Have students sing to lock in tuning
- Singing scales, chorales, tuning exercises, intervals.
- Singing scale patterns to internalize tuning and then putting it in the instrument. Singing tuning note and then “make your instrument play that pitch”. Sing parts before we play them. sing articulations before playing them.
- After counting and speaking rhythms, we try to song the parts. It doesn't always work, but if you incorporate from the beginning, it does.
- Sing your rhythm, tuning/balance/blend, play pieces that call for vocals.
- Students hum and Ah concert F in our tuning exercise. Also sing chords and sing their individual parts. Will tune with voices and then instruments.
- Matching pitch, sing melodic / harmonic content, play sing play
- I have the kids sing various parts on Tah to assess comprehension of rhythm and articulations. We also sing to check pitch and assess their comprehension of their parts.

- Singing music, singing scales.
- Singing a line that they're playing, singing letter names of an exercise line (6th graders), singing to match pitch as we're tuning.
- Always in warm up and tuning. Sing the exercises with numbers then play.
- Sight reading ... say rhythms using Takadimi method, sing pitches ...
- Singing root/3rd/5th of the key during warmup and while playing pieces to re-center key. Singing pieces to audiate before playing
- Students sing Root, Fifth, and Third of chords. We take those chords and build Major and Minor triads. Then we distribute the members of the chord to different parts of the ensemble to balance. Always alternating with playing/buzzing for reinforcement of pitch to build confidence. Singing is also used to sight read and work on rhythm/dynamics/style/articulation matching.
- Solfege once more familiar. Neutral syllable during all portions of sight-reading.
- I have students sing difficult passages. “If you can sing it, you can play it”.
- Singing the note names as they play and finger the notes. Sing- match this pitch- La
- Scales and sight reading. We sing our scales before we play our scales. We also sing our tuning pitch.
- Humming pitches before playing them.
- To match pitch, timbre, musicality, and style.
- During sight-reading or rehearsing, students will sing the counts OR sing their note names.
- During sight-reading or rehearsing, students will sing the counts OR sing their note names.
- Tuning- hum the pitch/sing the pitch. Sing a part.
- Singing intervals with a drone, singing parts, singing scales, audiating musical lines and singing only the ending pitch.
- Singing scales & warm-ups before playing them.
- When we have trouble singing a chord I have them sing it. We also sing the melodic phrases to make sure we're phrasing them logically.
- Singing chorales or sections of their music. Sometimes building chords.
- We use solfege to sight-read new music in the method book. Also sing then play for pitches that need work, in getting the correct partial or playing in tune.
- Mostly while working on tuning and interval recognition.
- During warm up to help train the ear in scale passages as well as passages in the music that are outside normal interval pattern.
- Fixing rhythms by singing the counts then using 'ta' for the articulation. Also, singing with 'ta' while concentrating on the style of the music.
- We sing parts for entrances, articulation, pitches (especially in brass). We also sing scale degrees/solfege before playing them in multiple keys.
- If a section has a difficult rhythm, I have the entire band sing it. I use singing to help establish an internal tonal center for tuning purposes. I model different styles and tone through singing.

- Find my pitch game where students use their instruments to identify the pitch I am singing. Beat elimination. Phrasing.
- Sing their passage, everyone sings the melody, sing each other's parts, sing major/minor scales.
- Ask students to sing a section prior to playing it to check for understanding of rhythms and pitch.
- Singing their parts, singing exercises.
- Students will first sing a scale on solfege before performing the scale as a class.
- Learning scales, simple chorales, sight-singing music.
- Sing and finger, sing the pitch then play it.
- Sing chorales, call and response, sing lines, tuning.
- Vocalizing parts, centering pitch
- Most singing comes from me, but I'll have students sing pitches of chords, melodies, starting pitches for help with learning pieces. I will sing to model phrasing and/or style, certain melodic lines, tone, etc.
- Matching pitches via Harmony Director.
- Students sing their part as a rehearsal technique.
- Singing parts
- We sing rhythms daily, I use it to demonstrate tone, students will move fingers while I provide the part that goes with it. Upper levels use it to emphasize phrasing and dynamics.
- Singing new songs in the method book. Singing scale pattern exercises. Singing a new note before playing.
- Scales, simple chords
- Play, sing, play. Match pitch. Drone/sustain - feel intervals.
- Students have to sing rhythms on pitch.
- Tuning. Intervals. Parts. Ensemble.
- Sing then play the note.
- Often when we are working through our method book/concert rep/etc., Students will sing the line using solfege, numbers, or their correct articulation while pressing down the correct keys on their instrument. We will also sing our chorales as well.
- Solfege exercises we sing us different syllables for the exercises as I play the exercise on the keyboard as a reference for tuning and staying close to pitch.
- Singing parts in a Bach chorale.
- Pitch Matching, Tuning, sing your part.
- We sing everything we sight-read using Tah or Tih whichever matches rhythmic values also allows for checking if attacks. All students are expected to be able to sing F and B-flat concert by heart. This is taught through the use of drone pitch matching and is used in the tuning process.
- Students will play scales and arpeggios, then will sing them. We do the same with chorales- students will play then sing their part.
- Singing chords, singing your part.
- Singing of parts, drones for tuning.

- We sing everything before we play. We sing chords and chorales. We do a small bit of jazz improv that starts with scat singing.

APPENDIX E: Open-Ended Question #16 Full Responses

In what ways has singing had a positive impact on your students?

- Improved tuning and articulation.
- It helps to focus in on the pitch and reinforce good intonation.
- If you can sing it, you can play it. Students that embrace singing are more successful musicians in the ensemble setting.
- Helped with partials for brass instruments. Helps Percussion with timpani tuning.
- The students are better able to match pitch, particularly on brass instruments
- Improves their intonation and builds confidence.
- They are able to sing their parts more consistently and be able to sing outside of rehearsals.
- Pitch awareness and intonation show improvement after vocalizing.
- I think it has been greatly valuable in all ways that we utilize it. I actually wish we did it more.
- Tone production and intonation is clearer.
- Singing helps give my students a better pitch center. It also is an audible way to see how much breath support they are using compared to when they play their instrument.
- Pitch and balance markedly improved.
- If you can sing it, you can play it is my motto.
- Intonation has improved. Students are more aware when they are not in tune and begin to adjust.
- Pitch improves.
- It's helped them play better in tune.
- It has improved our overall tone, intonation, and balance as well as improved listening skills.
- Really helps brass players to zero in on the pitch.
- It improves tuning and tone almost instantly and promotes a more musical mindset.
- I can tell who can internally hear the pitch better than if we were not singing.
- Those that have confidence singing their part also play it more musically and tunefully.
- They internalize the melody of a familiar song and better relate it to their playing (ex: beginning band learning to play Hatikvah).
- Makes them listen more closely.
- Better listening skills, interval playing, balance, phrasing development.
- I'm not sure other than they listen to each other more and it reinforces their part, but they love it!
- They are better listeners.
- Better intonation
- Their tone has vastly improved, students are less afraid of their voices, their articulations have gotten more consistent, intonation improves as well.

- I know instrumentalists who sing have better concepts of pitch and pitch function, regardless of how they sing, as long as they do. It tended to expedite cleaning a weak area of the music.
- Better intonation.
- More confidence on what material we rehearse in this fashion.
- It most definitely improves their aural skills.
- It helps them to develop their audiation.
- Easier time finding pitches and blending.
- It develops their ears for much better intonation.
- It improves intonation as well as confidence in the students.
- It has helped improve intonation. It helps us sight read much better. It helps unify our articulation. It helps us understand rhythm. It allows us to rehearse and not kill brass chops.
- Confidence and ear development.
- I believe my singing to them has helped tremendously in getting them to understand what they should be doing. I purposely figure out rhythms and pitches in front of them as a demonstration of how they should be doing it at home as well.
- Students play better in tune.
- It helps internalize rhythms and as time goes on, they gain confidence in it and actually try to really sing.
- Students regularly earn the highest achievement levels at both ensemble and individual adjudication events.
- They hear themselves singing in just intonation, which is easy for them to transfer to hear the same sounds as they play.
- I use it to teach intervals and focus their ears. Pays off on the instruments, but they need to be reminded that even though their tuning note is in tune, the must adjust.
- Students see the relationship that singing has to intonation. It helps them realize when they are off pitch. It also shows me that they really internalize the melody when they can sing it. It also builds confidence when I applaud them for trying it and being a risk taker!
- Brass players are more accurate with pitches.
- Their confidence has grown in their musicianship. There has been a marked improvement intonation and pitch within the ensemble.
- Kids will often sing their band music outside of class (mostly to be annoying to other students. I teach a lot of middle school boys).
- Better understanding of pitch.
- Air control and pitch are better.
- They match pitch better when we do it. Tuning sequence has improved a lot.
- Pitch understanding.
- They produce better tone quality on their instruments, and match style better.
- If you can sing it, you can play it.
- Better internal pitch.

- Better intonation, more musical expression, better awareness of other ensemble parts, better tone quality.
- Students play much more in tune since we started singing. Students also play more in balance.
- Singing has created a stronger sense of confidence in how to play their parts. Singing has improved their intonation on wind instruments.
- I can tell if students really know their parts. They hear how things fit together.
- Intonation and balance.
- Seems obvious, but singing is how they learn to adjust intonation. Singing also makes them aware of the pitches that come out of their instruments. Singing is not done in the bands feeding into my HS, so when they arrive, the students can't recognize pitches at all, can't tell when they play a wrong note, etc... Singing makes that connection happen.
- Finding pitch center, listening, conceptualizing. Gives the ability to approach the music in a different and often simpler way.
- Better intonation.
- Stronger ear training and pitch recognition.
- Huge increase in the ability to recognize tonic. Partial accuracy for brass players. Articulation clarity still needs work.
- Tuning of ensemble has increased. The voice is quicker to get in tune than an instrument and they recognize what I am asking of them.
- Harmonic pitch has improved dramatically.
- Pitch/tuning, confidence and tone production.
- They enjoy the difference in timbre and appreciate the clarity it brings regarding intonation. To aid in listening while playing, when appropriate, they are asked to sing along while other parts play. The challenge (again when appropriate) is welcomed and the engagement and effort are high.
- Tone quality has improved as well as rhythm and intonation.
- We have received compliments from adjudication on our intonation and tone quality.
- Modeling is very useful.
- It has definitely helped their pitch centers. They are able to hear mistakes and poor intonation. It has greatly helped my low brass in terms of playing the correct partials.
- Students can recognize pitch and match it in their instrument.
- Intonation and balance improve.
- Transfer of learning.
- For some, better pre-cognition of the pitch and improvement of center of pitch as they learn to listen to each other. For middle school, this is hard. Everyone feels insecure and boys (changing voices), even more so.
- If they can hear it and sing it, they can definitely play it.
- Articulations have been more consistent across the whole group.
- Intonation, musicality.

- Helps students be more rhythmically accurate without being hindered by the technique of their instruments. Helps brass players be more accurate with pitch.
- Better intonation and blend.
- It makes them listen better and match pitch.
- They are more accurate to identify pitch, match pitch, and correct poor intonation in performance.
- Matching pitch with voices helps students match pitch with their instruments.
- Internalized the pitch, helped with intonation, helped tune our ears and become better musicians.
- They begin to audiate new pieces and increase the percentage of correct notes the first time through a piece.
- Mostly just helping to match and center pitch better when playing.
- Listening skills.
- It helps them to better hear how the music goes and how it fits together with other parts when we sing polyphony, even if they haven't mastered the part on their instrument they can take away the good feeling of being able to sing their part in time. It gives them something to work towards.
- They are more comfortable reading and vocalizing.
- They have a better sense of pitch and when they are accurate or not.
- Pitch, interval recognition.
- It helps them learn their parts faster.
- Singing has helped intonation and phrasing.
- Intonation
- Better Intonation
- They can sing passages from orchestral works. They seem happiest when they sing.
- Intonation. Accuracy on instruments or in choral ensembles. Confidence in music performance.
- Music doesn't come from the instrument; it comes from what we put into the instrument. Singing has increased confidence in many and has led to a stronger relationship between band and choir.
- Intonation is better, balance improves, clarity in denser passages is easier to achieve.
- It forces them to develop their inner musicianship without the hindrance of an instrument.
- Improved intonation. Reminder of correct oral shape.
- More accurate sight reading and more efficiency in teaching articulation uniformly within the ensemble.
- Students hearing skills have greatly improved.
- It has helped to improve their overall intonation.
- They play better in tune and articulate better. It has especially helped with tuning harmonies.
- I have found a positive influence.
- They are better listeners.

- They have much improved listening skills and can FEEL what being in tune is better.
- Better pitch accuracy. Better ways to practice parts.
- Intonation has improved significantly. I have also found that if you have them sing from the very beginning, they don't fight it once they get older.
- I always tell my students 'if you can look at a line and sing it, then playing it will be MUCH easier.
- Our pitch center has improved exponentially.
- They are getting used to it, I hear a difference in sight reading.
- Intonation improvements. When singing they naturally adjust to match pitch but not when playing ... the more we sing the more they adjust when playing.
- They connect with the music on a deeper level. All students can sing. When students can vocalize the pitch, they will be more accurate in terms of intonation. Students who can “play as they would sing” will place the note in tune, instead of just being button-pushers.
- Helped with tuning and sight reading.
- The general attitude has improved drastically in regard to singing as I have incorporated it into our daily routine. Tonal center and overall tone quality have improved as a result.
- It has improved their ear- they hear differences between half steps and whole steps better.
- It helps them match pitch with brass instruments. It helps them get a musical sense of the notes when they name and finger them as they sing the notes.
- They are able to anticipate cadences, their role in a four-part chorale, and glean some understanding of their parts before playing a new piece. I use singing as a strategy for learning. We either sing or analyze/critique our recordings, but rarely in the same class period.
- It helps them play more in tune!
- Pitch tendency has improved among the group as a whole.
- Matching pitch, matching tone quality, matching style.
- Improves tone quality and listening skills.
- Intonation improves.
- Their intonation has improved dramatically, as has their confidence with singing. The more they do it, the more comfortable they become.
- Producing sounds off the instruments, matching pitches before playing; intonation
- My students who take it seriously have seen massive improvements in tuning
- Listening and intonation have greatly improved.
- They are able to hear what the music sounds like before attempting to play on the instrument. Solfege is a quicker way to teach heterogeneous groups, especially with large beginner classes.
- Tuning
- Intonation, Understanding of Musical phrase, Tone production.

- Singing can help students get past the awkward mechanics of trying to figure out how to operate that weird machine in their hands. It helps internalize and audiate what is supposed to come out.
- Allows their brain to process what the music should sound like before they attempt to play it on their instrument.
- Better musicianship.
- Pitch matching.
- Awareness of different parts, better in-tune playing.
- Not so self-conscious, not scared to sing in other words.
- More alert to pitch.
- My students are able to internalize pitch, and largely understand how scale degrees work to resolve and move.
- Better sense of tonality and tone quality; intonation improvement.
- Improves pitch/tonal center.
- Intonation, sight reading, confidence.
- Tone production has improved significantly as well as phrasing.
- Better understanding of resonance and pitch center.
- Brass players finding the correct pitch, confidence in individual lines, tonality.
- They are able to play better in tune.
- It has exposed where they need to focus their individual practice. If they can't sing it, they don't really know "how it goes"
- They can get the articulation and work towards matching pitch. It's especially relevant to brass so they can try to match then replicate correct partials.
- Much better knowledge of notes (both pitch and rhythm).
- It greatly reinforces the connection between their ear and hands.
- Students understand if a note is higher/lower and can hear it before they play it. Brass players know if they are on the right note more often.
- Intonation
- They play with a more centered tone
- Students ears develop much faster.
- Helps intonation quickly and dramatically.
- Singing helps internalize pitch.
- It strengthens their aural skills and error detection. It builds their listening skills for balance and blend. It builds their confidence in performing their musical line correctly.
- My students are able to be on pitch and recognize when they are out...while they may not know the exact tendency, they at least have the awareness to know the difference.
- Pitch awareness/intonation. Listening/awareness.
- More confident and independent players. They play in time more often.
- Intonation! Hearing where they belong within the ensemble. (some sing while others play).
- Tuning and phrasing has significantly improved.
- Tuning has improved.

- Better intonation.
- It helps with vertical and horizontal alignment. It has helped the brass players find pitches.

APPENDIX F: Open-Ended Question #27 Full Responses

Please list any and all books and resources you use to supplement your teaching of sight-reading, ear-training, and music theory within the ensemble rehearsal

This is a full list organized by the # of participants referencing each resource.

Book/Resource	**Author(s)**	**Publisher**	**#**
Foundations for Superior Performance	Richard Williams & Jeff King	Neil A. Kjos Music Company	37
Habits of a Successful Musician	Scott Rush & Various Authors	GIA Publications	16
Habits of a Successful Middle School Musician	Scott Rush & Various Authors	GIA Publications	16
Sight Reading Factory	Web-based Resource	Sightreadingfactory.com	16
Tradition of Excellence	Bruce Pearson & Ryan Nowlin	Neil A. Kjos Music Company	12
Measures of Success	Various Authors	FJH Music Company, Inc	9
Alfred's Essentials of Music Theory	Various Authors	Alfred Music Publishing	7
14 Weeks to a Better Band	Roger Maxwell	C L Barnhouse	6
Bach and Before for Band	Arr. by David Newell	Neil A. Kjos Music	6
Daily Warm up/Rhythm/Vocab	Ed Sueta	EdSuetaMusic.com	6
Essential Elements Interactive	Various Authors	Hal Leonard Corp.	6
Function Chorales	Stephen Melillo	https://stephenmelillo.com/teaching-tools	6
Sound Innovations	Robert Sheldon & Various Authors	Alfred Music Publishing	6
Teaching Rhythm Logically	Darcy Vogt Williams	Self-published	6
Essential Musicianship for Band (Masterwork Studies)	Paula Crider & Jack Saunders	Hal Leonard Corp.	5
Superior Bands in 16 Weeks	Quincy Hilliard	FJH Music Company	5
101 RHYTHMIC REST PATTERNS	Grover C. Yaus	Alfred Publishing Co.	4
Basics in Rhythm	Garwood Whaley	Meredith Music	4
Exercises for Ensemble Drill	Raymond C. Fussell	Alfred Music Publishing	4
Musictheory.net	Interactive Website	www.musictheory.net	4
Standard of Excellence books	Bruce Pearson	Neil A. Kjos Music	4
Treasury of Scales	Leonard B. Smith	Alfred Music Publishing	4
Wind Band Method	Lewis Norfleet	Self-published	4

Winning Rhythms	Edward Ayola	Neil A. Kjos Music	4
204 Progressive Sight Read	R. Winslow	Harold Gore Publishing	3
Best in Class	Bruce Pearson	Neil A. Kjos Music	3
Making Music Matter	Frank Ticheli & Gregory B. Rudgers	Manhattan Beach Music	3
Orchestra Expressions	Various Authors	Alfred Music Publishing	3
Rhythmbee	Web-based Resource	RhythmBee.com	3
16 Chorales by J.S. Bach	Arr. Mayhew Lake	G. Schirmer, Inc.	2
36 Chorales for Band	Aaron Cole	http://aaronmcole.com	2
Music First	Web-based Resource	musicfirst.com/software	2
Band Technique Step by Step	Robert Elledge & Donald Haddad	Neil A. Kjos Music	2
Band Today	James D. Ployhar	Alfred Music Publishing	2
Breezin' Thru Theory	Web-based Resource	breezinthrutheory.com/	2
Flow Studies #1	Cichowicz	Studio 259 Productions	2
FUNdamental Music Mastery	Dr. Kristen Smistad & Sonja Sarr	Northern Sound Press	2
String Basics	Terry Shade & J. Woolstenhulme	Neil A. Kjos Music	2
The Sight-Reading Book for Better Bands	Jerry West	Wingert-Jones Pub.	2
Warm-ups and Beyond	Timothy Loest & Kevin Lepper	FJH Music Company	2
100 Days to Sight Reading Excellence	Timothy Cotov & Tom Murphy	Music Educator's Resource	1
12 Keys to Success: A Comprehensive Daily Warm-up Routine	Mitch McNallan	The Music Collaborative	1
42 Chorales for Band	Philip Gordon	Bourne Co.	1
Accent on Achievement	John O'Reilly & Mark Williams	Alfred Music Publishing	1
Advanced Lip Flexibilities	Charles Colin	Charles Colin Corp	1
Band Director's Curriculum Resource	Connie M. Ericksen	Prentice Hall Direct	1
Band Fundamentals	Steve Hedrick	Hedrick Music, Inc.	1
Breeze Easy	John Kinyon & Valentine Anzalone	Alfred Music Publishing	1
Choral Approach to Sight Singing	Emily Crocker & Joyce Eilers	Hal Leonard Corp.	1
Daily Warm-Ups	Wayne Markworth	Shadow Lake Music	1
Do It! Play in Band	James O. Froseth	GIA Publications, Inc.	1

Elementary Training for Musicians	Paul Hindemith	Schott Music Dist.	1
Five Progressive Chorales for Developing Bands	Brian Balmages	FJH Music Company	1
Free Music Resources	John McAllister	https://tinyurl.com/uq6po96	1
Habits of Musicianship Book	Jim Byo & Robert Duke	https://tinyurl.com/vxaw498	1
Harmony Director (technology)	Instructional Keyboard	Yamaha	1
Lip Benders	Ray Cramer	Curnow Music Press	1
Master Theory Book 1-6	Charles S. Peters & Paul Yoder	Neil A. Kjos Music	1
Music Literacy Workshop Materials	Carol Kruger	https://www.carolkruegermusic.com/about1	1
Music Theory Practice Papers (Book Series)		Associated Board of Royal School of Music	1
Practical Theory Complete	Sandy Feldstein	Alfred Music Publishing	1
Rhythm and Dictation	Jerry Woolstenhulme	Neil A. Kjos Music	1
Rhythm Busters	David Mendenhall	Increase Music Inc.	1
Rhythm Master	J.R. McEntyre & Harry Haines	Southern Music Co.	1
Rhythm Studies for Band	James Curnow	Curnow Music Press	1
Rhythms Complete	Charles Colin & Bugs Bower	Charles Colin Music	1
Row-Loff Mallet / Snare Drum toolboxes	John R. Hearnes	Row-Loff Productions	1
Rubank Advanced Method (HS)	Himie Voxman & William Gower	Rubank Inc. Music Pub.	1
Simple Rhythmatician, The	David Newell	Neil A. Kjos Music	1
SmartMusic	Web-based Resource	Smartmusic.com	1
Sound Innovations: Ensemble Development - Intermediate Band	Peter Boonshaft & Chris Bernotas	Alfred Music Publishing	1
Symphonic Warm-Ups for Band	Claude T. Smith	Hal Leonard Corporation	1
Technical Exercises	Wolfahrt	G. Schirmer	1
Tuned In: A Comprehensive Approach to Band Intonation	Brian Balmages & Robert Herrings	FJH Music Company	1
Uni-Tunes: Fundamental Music Reading Supplement	Carold Nunez	Neil A. Kjos Music	1

APPENDIX G: Open-Ended Question #28 Full Responses

Please list 3 works (and composers) your ensemble performed in a concert in the past year.

Work	Composer	Mentions
Great Locomotive Chase, The	Smith, Robert W.	3
English Folk Song Suite	Vaughn Williams, Ralph	3
Aftershock	Clark, Larry	2
America the Beautiful (with choir)	Dragon, Carmen	2
Air for Band	Erickson, Frank	2
Dragon Slayer	Grice, Rob	2
On a Hymnsong of Philip Bliss	Holsinger, David	2
First Suite in Eb	Holst, Gustav	2
Second Suite in F	Holst, Gustav	2
Windsprints	Saucedo, Richard	2
Encanto	Smith, Robert W.	2
Stars and Stripes Forever, The	Sousa/Fennel	2
Afterburn	Standridge, Randall	2
An American Elegy	Ticheli, Frank	2
A Little Night and Day Music	Adler, Samuel	1
Purple Carnival	Alford, Harry L.	1
Four Scottish Dances	Arnold, Malcolm	1
Prelude, Siciliano and Rondo	Arnold, Malcolm	1
Tam O'Shanter Overture	Arnold, Malcolm	1
Prelude and Fugue in Bb major	Bach/Moehlmann	1
Prelude and Fugue in G minor	Bach/Moehlmann	1
Arabian Dances	Balmages, Brian	1
Colliding Visions	Balmages, Brian	1
Fanfare on a Theme of Imagination	Balmages, Brian	1
Fireflies	Balmages, Brian	1
Lost Temple, The	Barnes, Jared	1
Of Wizards and Warriors	Barrett, Roland	1
Divertimento	Bartok, Bela	1
Flash!	Beck, Brian	1
Slava	Bernstein/Longfield	1
Carmen Suite	Bizet, Georges	1
Lion King Broadway Selections	Bocook, Jay (arr.)	1
Song for Lyndsay	Boysen Jr., Andrew	1
Blessed are They	Brahms/Buehlmann	1
Machine Awakes, The	Bryant, Steven	1
Havana	Cabello, Camila	1
In This Quiet Place	Calhoun, Bill	1
Whispers	Clark, Larry	1
Gypsy Dance	Compello, Joseph	1

Outdoor Overture	Copland, Aaron	1
Suite from Appalachian Spring	Copland, Aaron	1
Down a Country Lane	Copland/Patterson	1
With Quiet Courage	Daehn, Larry	1
Bells for Stokowski	Daugherty, Michael	1
En Bateau	Debussy, Claude	1
Chant Rituals	Del Borgo, Elliot	1
Inglesina	Della Cese, Davide	1
March Bristol	Edmondson, John	1
Serenade in E minor	Elgar, Edward	1
Americans We	Fillmore, Henry	1
Our Own Red, White and Blue	Fillmore, Henry	1
Simple Gifts	Frank Ticheli	1
Only Light, Only Love	Gilreath, Leslie	1
Heartbeat 5	Gilroy, Gary	1
Grace in Being, The	Giroux, Julie	1
Colonial Song	Grainger, Percy	1
Lincolnshire Posey	Grainger, Percy	1
Shepherd's Hey	Grainger, Percy	1
Southern Harmony	Grantham, Donald	1
New Wade in the Water	Hailstork, Adolphus	1
Attack of the Slide Trombones	Hannickel, Mike	1
Arabesque	Hazo, Samuel	1
Georgian Suite	Hazo, Samuel	1
Our Kingsland Spring	Hazo, Samuel	1
Ride	Hazo, Samuel	1
Danse Diabolique	Hellmesberger/Kamei	1
Black Wolf Run	Higgins, John	1
Pueblo	Higgins, John	1
Prairie Dances	Holsinger, David	1
Jupiter (from The Planets)	Holst, Gustav	1
Black Granite 3	Hosay, James L.	1
Third Suite	Jager, Robert	1
Imperial	King, Karl	1
Rough Riders March	King, Karl	1
Lexington March	King/Swearingen	1
Peacemaker March	King/Swearingen	1
Trombone Tiger Rag	LaRocca/Sharp	1
Andalucia	Lopez, Victor	1
Wine-dark Sea	Mackey, John	1
Color	Margolis, Bob	1
Atlantis	McGinty, Anne	1
Renaissance Fair	McGinty, Anne	1
Wexford Carol, The	McGinty, Anne	1

Triumphant Overture	Mesang, Ted	1
Suite Francaise	Milhaud, Darius	1
Junk Funk	Mixon, Kevin	1
Fable	Morales, Erik	1
Highland Legend	Moss, John	1
Russian Folk Song Suite	Moss, John	1
Christmas Can-Can	Neeck, Larry	1
Shipwrecked	Nowlin, Ryan	1
Cyclone	Oare, Michael	1
Burst	O'Laughlin, Sean	1
First Winters Sleighride	O'Reilly, John	1
Kaleidoscope	O'Reilly, John	1
Two Modal Episodes	O'Reilly, John	1
Maesong	Owens, William	1
El Relicario	Padilla/Longfield	1
In the Open Air, In the Silent Lines	Perrine, Aaron	1
Pageant	Persichetti, Vincent	1
Manon Lescaut	Puccini/van de Braak	1
Ulterior Motifs	Putnam, Matthew	1
Hounds of Spring	Reed, Alfred	1
Fate of the Gods	Reineke, Steven	1
Pirates of the Caribbean	Ricketts, Ted (arr.)	1
Crescent Meadow	Romeyn, Rob	1
Saturn: The Ringed Planet	Romeyn, Rob	1
Danse Macabre	Saint-Saens/Laurendeau	1
Into the Clouds	Saucedo, Richard	1
Snow Caps	Saucedo, Richard	1
Unfinished Symphony	Schubert	1
Into the Light	Shaffer, David	1
When Angels Weep	Shaffer, David	1
Black is the Color	Sheldon, Robert	1
Bristol Bay Legend	Sheldon, Robert	1
Gently Touch the Sky	Sheldon, Robert	1
In the Center Ring	Sheldon, Robert	1
Longford Legend	Sheldon, Robert	1
Pevensey Castle	Sheldon, Robert	1
Reflections on a New Tomorrow	Sheldon, Robert	1
Galop	Shostakovich, Dmitri	1
At the Crossroads	Smith, Robert W.	1
Black Horse Troop	Sousa, John Philip	1
Semper Fidelis	Sousa, John Philip	1
Thunderer, The	Sousa, John Philip	1
Washington Post March	Sousa, John Philip	1
Rampage	Stalter, Todd	1

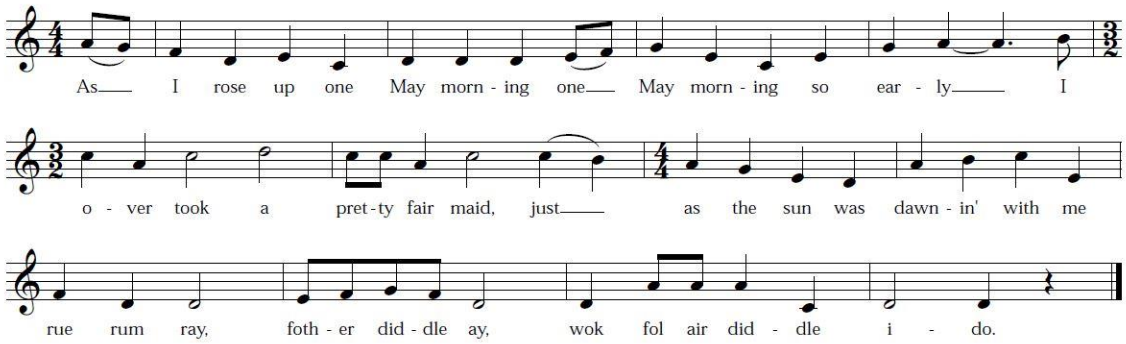
Scramble	Stalter, Todd	1
Bazaar	Standridge, Randall	1
Boom-Boom Gallop, The	Standridge, Randall	1
Celebration	Standridge, Randall	1
Cha'la	Standridge, Randall	1
Darklands March	Standridge, Randall	1
Nine, The	Standridge, Randall	1
How the Grinch Stole Christmas	Story, Michael (arr.)	1
Berceuse and Finale from Firebird	Stravinsky, Igor	1
Alamo March	Swearingen, James	1
Celebration for Winds and Percussion	Swearingen, James	1
Celtic Air and Dance No. 3	Sweeney, Michael	1
Where the Sun Breaks Through the Mist	Sweeney, Michael	1
Cajun Folk Songs	Ticheli, Frank	1
Earth Song	Ticheli, Frank	1
Vesuvius	Ticheli, Frank	1
Bingo	Traditional/Cook	1
La Procession du Rocio	Turina, Joachim	1
Archangel Raphael who leaves a House of Tobias	Tyruya, Masanori	1
Expert March, The	Vandercook/Grauer	1
Flourish for Wind Band	Vaughn Williams, Ralph	1
Rhosymedre	Vaughn Williams, Ralph	1
Overture to Nabucco	Verdi/Monday	1
Nabucco	Verdi/Singleton	1
Brandenburg Gate	Vinson, Johnnie	1
In My Garden	Vogel, Kirk	1
Meistersinger	Wagner, Richard	1
Laniakea	Wilds, Jack	1
Carol of the Bells	Wilhousky/Strommen	1
Dedicatory Overture	Williams, Clifton	1
Free Spirit Overture	Williams, Jerry	1
Star Wars Saga, The	Williams, John	1
Centurion	Williams, Mark	1
Rogue One: A Star Wars Story	Williams/Murtha	1
Chorale and Shaker Dance 2	Zdechlik, John	1
A Mighty Fortress	Nehlybel, Vaclav	1

APPENDIX H: Complete Folksongs Used in English Folk Song Suite

MOVEMENT I

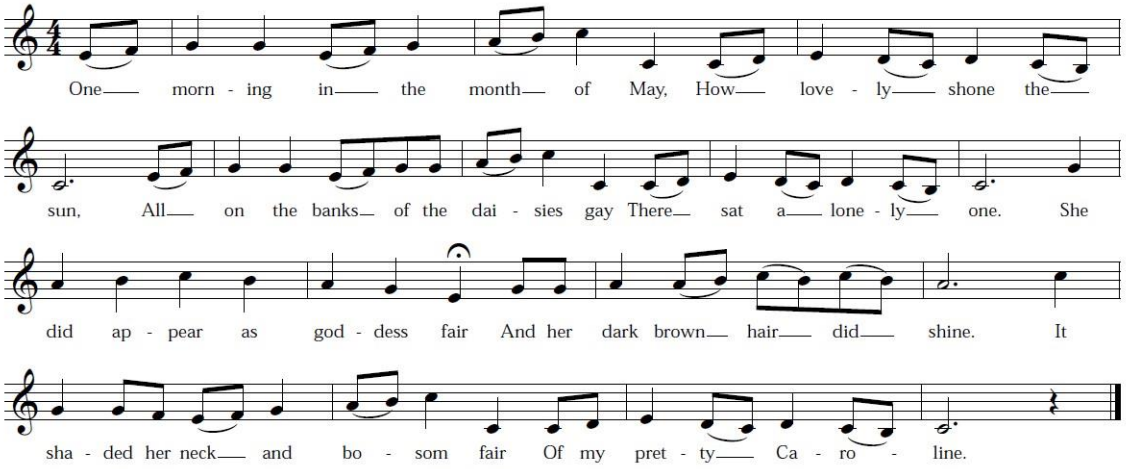
Seventeen Come Sunday

Mvt. I mm. 4–30



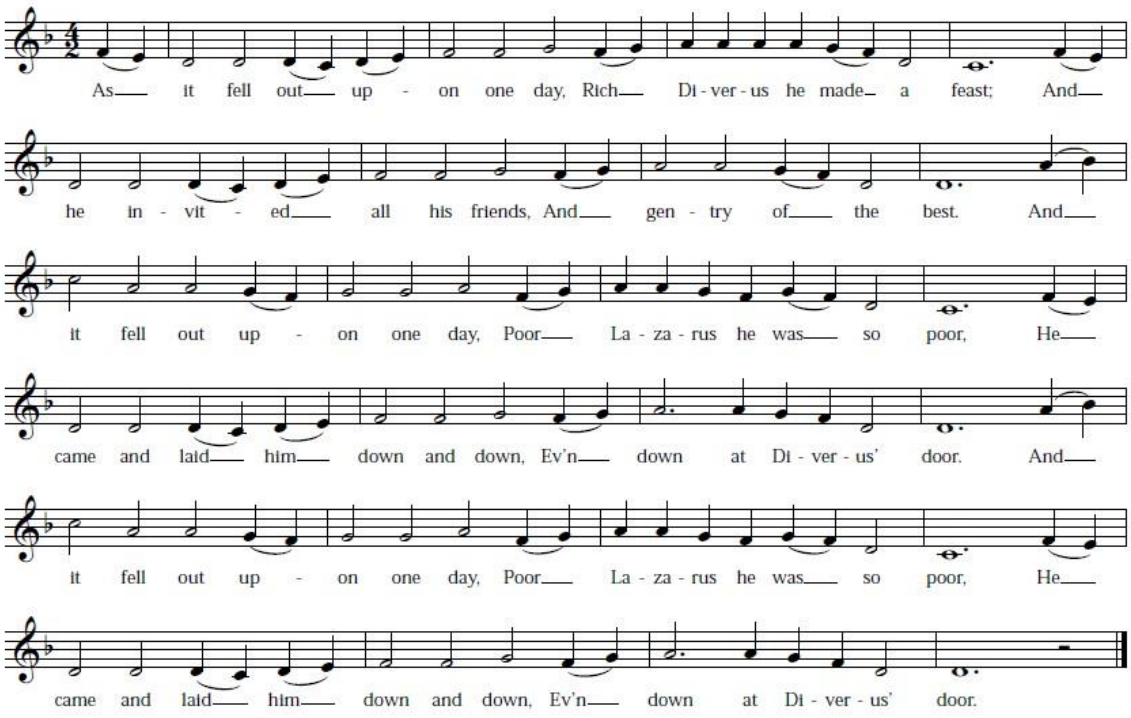
Pretty Caroline

Mvt. I mm. 32–63, 97–129



Lazarus

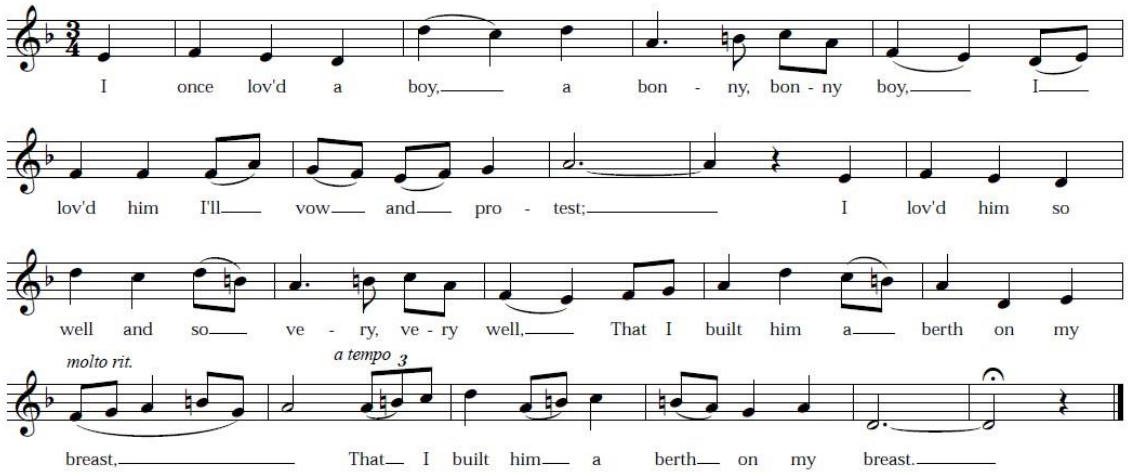
Mvt. I mm. 64–97



MOVEMENT II

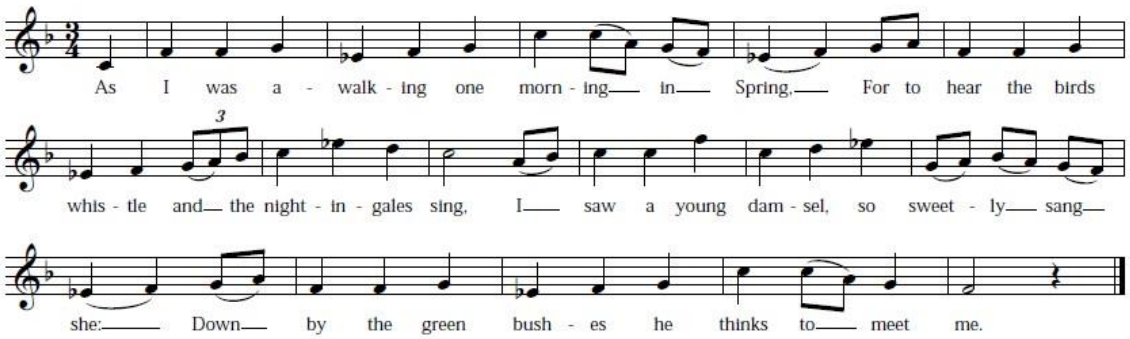
My Bonny Boy

Mvt. II mm. 2–40. 77–97



Green Bushes

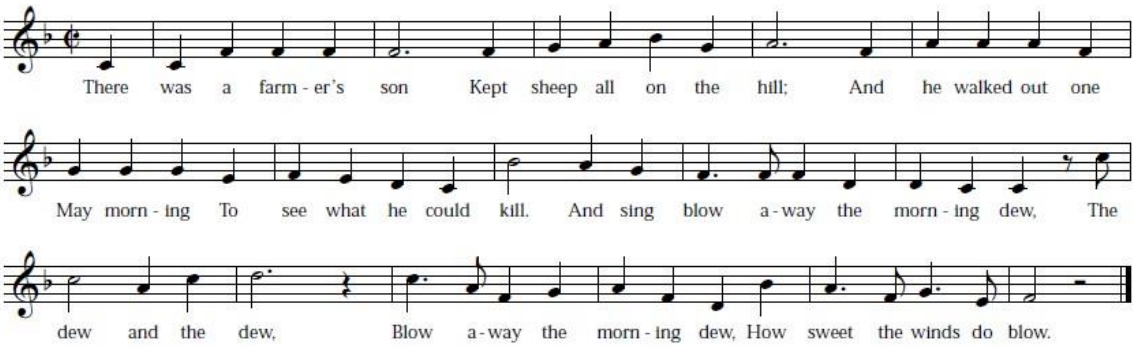
Mvt. II mm. 43–76



MOVEMENT III

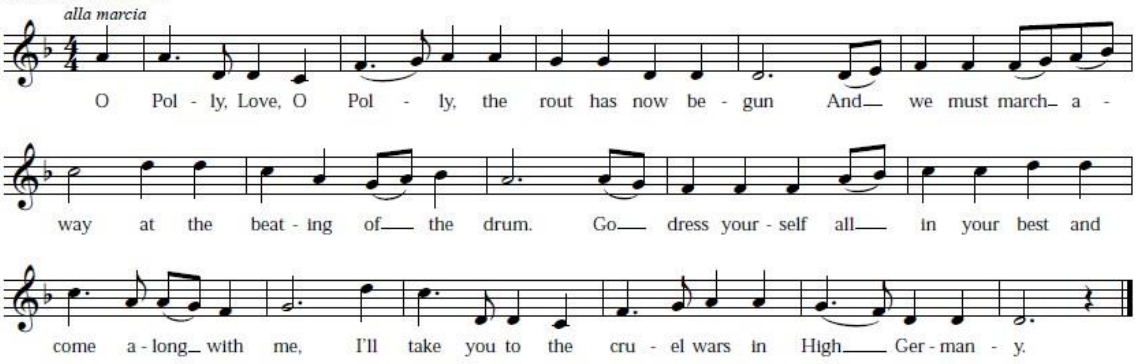
Blow Away The Morning Dew

Mvt. III mm. 5–28, 45–68



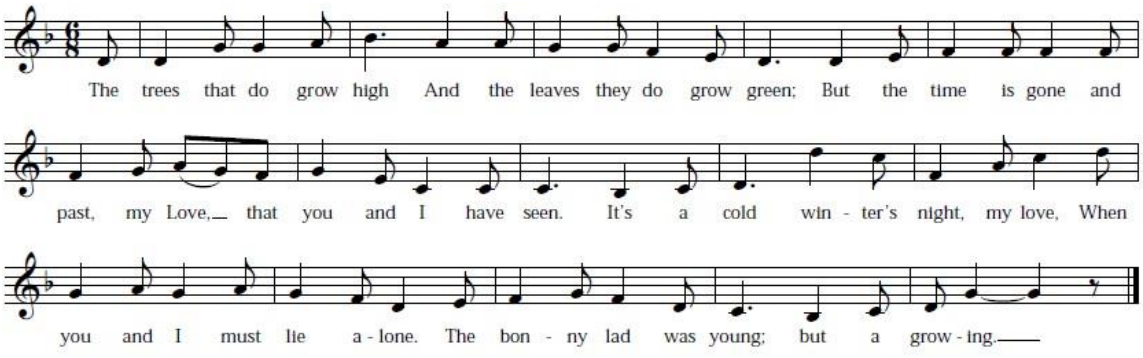
High Germany

Mvt. III mm. 29–44



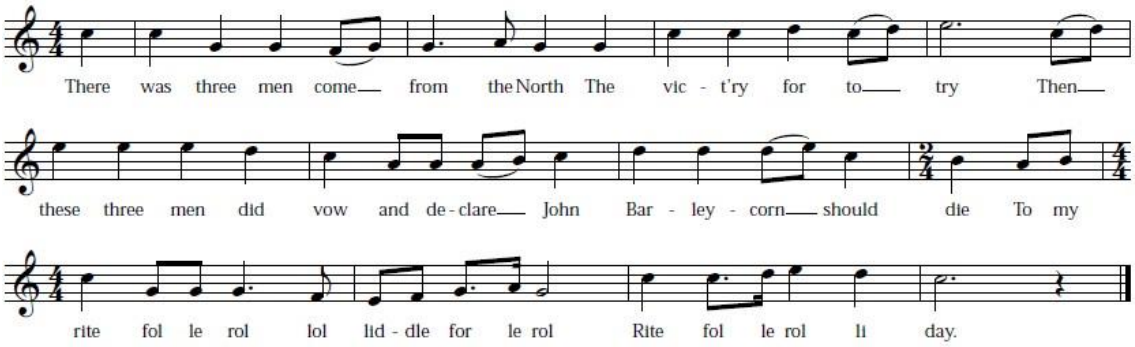
The Tree So High

Mvt. III mm. 73–88



John Barleycorn

Mvt. III mm. 89–113



VITA

Adrian Hartsough grew up in Goshen, IN, graduating with honors from Northridge High School in Middlebury, IN in May 1998. He attended Anderson University in Anderson, IN, earning his Bachelor of Arts in Music Education in May 2003. Upon graduating, Adrian taught middle and high school bands and choirs for twelve years in Indiana. His middle and high school concert, marching and jazz bands, and choirs and vocal jazz ensembles received consistent superior ratings. Adrian also served as a member of the state board of the Indiana State School Music Association for six years. In addition to teaching, Adrian has experience adjudicating concert and jazz band festivals, solo and ensemble contests, as well as adjudicating sight singing for choral festivals. His professional associations include NAFME, Indiana Music Educators Association, Indiana Association of Jazz Educators, Indiana Bandmasters Association, College Music Society, Phi Kappa Phi, Pi Kappa Lambda and Phi Mu Alpha Sinfonia.

As a graduate teaching assistant at the University of Tennessee-Knoxville, Adrian has taught five different classes for the School of Music, including all four levels of ear-training, and the "Fundamentals of Music" class in both standard and hybrid formats. His research interests include aural skills curriculum development, music theory pedagogy, as well as analysis of film music, popular music and music written for wind bands. Adrian will begin pursuing his PhD in music theory in the fall of 2020 at the University of Kansas, where he will serve as a graduate teaching assistant, with the intention of teaching music theory at the collegiate level upon graduation. He also aspires to publish music theory and aural skills resources for middle and high school.