Skills Sequencing in Music Literacy Instruction:

A National Survey of the Pedagogy Practices of Secondary Choral Directors

by

Kyle James Weary

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy in Music Education

Auburn, Alabama
May 7, 2022

Keywords: music literacy, sight-singing, musicianship, choral pedagogy

Approved by

Jane M. Kuehne, Chair, Associate Professor of Music Education
Nancy H. Barry, Professor of Music Education
William C. Powell, Professor and Director of Choral Activities
Chih-hsuan Wang, Associate Professor of Educational Foundations, Leadership, and Technology

Abstract

The importance of sound before symbol (or sight) theories has been taught to educators for hundreds of years (Hicks, 1980; Jacobi, 2012; West, 2016). While the general consensus in choral music education is that choral directors must teach their students how to read music rather than relying on rote teaching completely, many teachers walk into the classroom and hand out music, completely negating the training they received (Ester, 2010; Hicks, 1980; Phillips, 2003). The purpose of this study was to provide information about the skills sequencing in music literacy instruction, placement of these teaching skills in the choral rehearsal, and if choral directors are linking the music literacy instruction directly to choral literature they are currently learning, or if it is taught separately from the literature. The survey was hosted by Qualtrics. A link was sent to participants via the National Association for Music Education (NAfME) research assistance program and the Texas Music Educators Association (TMEA). The survey was open for data collection for one month with reminders sent at the halfway mark. Results revealed that choral music educators are not only teaching music literacy skills, but they are spending additional time creating their own materials. In addition, choral music educators are spending more time teaching music literacy skills than in past surveys (Demorest, 2004). There was no positive significant correlation found between census region and physical music (other than hand signs) nor was a significant positive correlation found between census region and the use of moveable do with do-based minor. Significant positive correlations were found between years of teaching and where participants placed rhythm in their teaching sequence, years of teaching and where participants placed spaces in their teaching sequence, as well as census region and the use of Glover/Curwen hand signs.

Acknowledgements

I do not even know where to begin of who to thank – there are just so many... To every teacher who taught me to never give up, to always remain curious, and to never stop learning, thank you. To Dr. Carol Krueger, who set me on a journey to become the best music educator that I could possibly ever be – and to Joanna (Claycomb) Hale who introduced me to her – thank you. You both have made such an impact on who I am today as an educator.

First, I must thank my dissertation committee for their guidance and inspiration. To Dr. Jane Kuehne, one of the first people I ever quoted in a research paper I wrote on music literacy, thank you for the support, the guidance, and cheering me on through this entire process – I could not have done this without you. Thank you to Dr. Nancy Barry for always challenging me to think deeper and be a better researcher. Thank you Dr. William Powell whose words of kindness and lessons in conducting taught me so much. Dr. Chin-hsuan Wang, for your patience and guidance with me. I always came to our meetings feeling defeated and left feeling hopeful – thank you.

To my friends, family, and colleagues who supported me throughout this entire process, from the bottom of my heart, thank you so much. To Silver Spring Presbyterian Church who graciously gave me time off to finish writing this dissertation, I do not believe I could have finished it without that time, thank you. To my parents Kirk and Vicki, thank you for everything you have done along the journey to from my birth to my PhD.

To Mike Thorsen, Betty Morgen, Clyde Harrell, Robert Hovermale, and Vincent Groh – thank you for hiring me and creating the Barbara Ingram School for the Arts. Without that job, I would have never been able to have a dream job of opening a performing arts high school and founding the vocal program there. I was able to establish a legacy of music literacy in the choral

ensembles there, and it was there that I knew that I wanted to spend the rest of my life making sure choral singers could read music.

To my students – past, present, and future, may music literacy always be a part of our learning, and may we always strive to be the best choral musicians possible!

To Fran and Jerry Kishbach, thank you for the support, the love, and everything from day one of me being in your life.

To Gloria Weary, my best friend and co-parent. Life has taken us on this crazy journey, and I am glad that we have each other. Thank you for supporting me through this and helping me show Evie that we all still be 'okay.' To Evie Weary, the light of my life, the reason I breathe. I love you. You inspire me every day. To see the world through your eyes gives me such hope, happiness, and joy. You are a special young woman and musician. I cannot wait to see where life takes you.

To Jared Moody, my partner, my best friend, my love. Thank you. You have believed in me when I could not believe in myself. You have helped me up when I could not stand on my own. You have cheered me on and championed me every moment that I have needed it – even when I did not know that I did. I love you.

Dedication

This is dedicated in memory of my grandparents

Marlin "Bink" Kohler

Thelma Kohler

John Weary Jr.

Lois Weary

While no longer with us, each worked hard, loved music…and me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Jackson

When Jackson started trumpet lessons, not only was the band director focused on making sure that Jackson's tone quality was excellent from the very first time he started making sound, the band director focused on creating a solid foundation in his musicianship: working on embouchure placement, air support, tonguing placement and levels, and listening awareness. All of this was accomplished while making sure that Jackson was able to count the proper beats and name and be able to read the notes on the staff. As with most instrumental programs, Jackson had band rehearsal once a week, in addition to having a small group lesson with other trumpet players. As Jackson progressed in his education, they also learned about transposing instruments, intervals, key signatures, and time signatures. By the time Jackson was in high school, the band director had the students sightread a new Bach Chorale every rehearsal. Since the band director had been teaching for a significant number of years and knew that after playing something one time through, it was no longer sightreading, they would have students then switch to a different line allowing them to have four sightreading experiences with one short Chorale. Jackson's level of musicianship grew each and every year that he was in band.

Jesse

Jesse had a very different experience with his music education. Jesse loved to sing from the time he was a small child. He loved to sing so much that his parents said he never stopped singing and he sang in every choir possible. He started with church choir as a young child, then elementary chorus, middle school chorus, high school chorus, and then college choir. His music literacy journey was quite different from Jackson: he never learned how to read music until he

got to college. He never needed to learn how to read music in order to participate in choir. In every choir that Jesse sang in he was taught by rote. Middle school and high school choir rehearsals looked similar: singers would come into the rehearsal room, sing the same warmups, and go right to 'learning' music. These learning 'episodes' entailed the choir director singing or playing each part on the piano and having the section sing it back to the director. When working on interpretation, the director would typically speak in layman's terms of 'louder here', or 'get softer here'. In addition to being in choir at school and church, during high school, Jesse auditioned for many honor choirs, even making it to the state chorus his senior year. Every honors choir he auditioned for had a rehearsal CD or his choir director taught him each song by rote. When Jesse got to college, the choral director asked him to sight-sing some material and he was unable to do so. The choral director, needing tenors, conditionally accepted Jesse into the choir, informing him that he would need to get a tutor to learn how to read music. Jesse spent countless hours trying to catch up with his colleagues who had been learning how to read music for years.

What is my experience? In my teaching experience, I believe that because parents are purchasing an instrument, there is a greater demand for the instrumental musician to learn how to read music and become an independent musician, while the opposite is quite typical for choral musicians. If an instrumental musician must miss band to make up a test or cannot fit band into their schedule, parents can cause quite a scene, since they have paid for an instrument for their child. While their choral counterparts miss choir to make up tests, or they even may 'take the year off from choir.' If choral directors make their program invaluable and their teaching exemplary then choral musicians are less likely to fall through the cracks in regard to musicianship and music literacy.

Why Music Literacy and Why Sequencing in Music Literacy?

My journey of music literacy is one comment that I have heard many times over from educators all over the country: I need to better prepare my students become independent musicians. Usually, comments that follow that sentence include sentiments "like their band and orchestra counterparts." I often meet teachers and students who have been taught or are teaching completely by rote and get frustrated that they are unable to actually read what is one the page. For me, I was always a decent sight-reader. I cannot remember a time when I could not read music. I started playing piano when I was five and then, when I was ten, added saxophone. Through this, I continued singing. When I began to teach, I knew immediately that I needed to become an expert in this area for my choirs to succeed. In my first job, we were evaluated at district festival on our sight-reading ability: those scores were published for our county to see. I learned quickly what worked and what did not work. The missing piece to the puzzle for me was how to sequence it. I had access to resources and books, but they never quite gave me what I wanted. It was either too much or not enough. Most of the books I used were sequenced in a manner that were appropriate, but not applicable to me or the students in my classroom. We would practice certain rhythmic patterns, time signatures, tonal centers, etc., but the carry over to the choral literature was not there. Yes, there were elements of the sight-reading instruction, but not a direct relation to the literature instruction. This created a divide within my own instruction.

Enter Dr. Carol Krueger into my life: I attended one of her workshops about music literacy instruction and I immediately felt like what she gave were the missing pieces to the puzzle I was trying to create. In choir, we stopped "sight-reading instruction time" and I started calling it music literacy instruction. This was the first shift I made. The second shift was looking at everything tonally and rhythmically that the choir would be singing as two separate parts,

basing the instruction off those needs. While my workload increased since I was making my own examples and creating what Krueger called "curriculum maps," my students' success skyrocketed beyond what I could imagine. I knew from that point that this would be the focus of my future research, eventually in doctoral degree, even thought it would take me eight years to begin that program. I feel like this survey is the next natural step in Krueger's work (which is primarily based off the work of Gordon and Kodály). We need to know what teachers are doing nationally and why. My ultimate goal with this research is to create a publication that gives teachers access to materials that are sequenced in a way that are appropriate for various levels of learners and in different voicings so that all singers can be independent choral musicians.

Creating Independent Choral Musicians

Creating independent choral musicians should be the goal for choral directors across the globe. The general consensus in choral music education is that choral directors must teach their students how to read music, rather than relying on rote teaching completely (Ester, 2010; Krueger, 2014; Riegle & Gerrity, 2011). Teachers frequently get caught in the product versus process conundrum and they end up short-changing the education of their singers and inhibiting their own program without realizing it. Being able to look at music and sing it without having someone needing to play the part on the piano or listen to someone sing it is a skill that should be considered vital. With our instrumental counterparts, music educators would find it appalling to have an instrumental musician not be able to read music, yet with singers it is unfortunately commonplace to allow this to happen. Demorest (2001) suggested that few choral directors actually devote time to creating musically literate choral singers.

While there are many literacy expectations of instrumental programs, many choral programs have fewer expectations, and this is apparent when choral musicians are asked to sight-

sing a piece of music. In 2004, 58% of the states that held high school large group choral assessments required sight-reading as part of the festival. At the middle school level, it dropped to 42% (Norris, 2001). These results indicate the level of importance that choral directors who oversee these festivals believe the skills of music literacy are for students. By carefully sequencing learning within the choral rehearsal, directors are able to stream-line music literacy skills, and in turn their ensembles will be able to learn music faster and more confidently than before (Ester, 2010).

The importance of sound before symbol (or sight) theories has been taught to educators for hundreds of years (Hicks, 1980; Jacobi, 2012; West, 2016). While this is the case, many teachers walk into the classroom and hand out music, completely negating the training they have received (Ester, 2010; Hicks, 1980; Phillips, 2003). When looking at music, students must have it broken down for them in the beginning, so we do not overwhelm them. According to Stephanie Standerfer (2019), we give our students too much information and visual processing is needed to decode all of the symbols, and that can be overwhelming. We need to teach with a methodology in the choral rehearsal, just like we do in the general music classroom. Woodbridge was the first American to speak about the Sound-Before-Sight skill sequencing. Speaking at the American Institute of Instruction, Woodbridge referenced Heinrich Pestalozzi, and the need to train the ear before the eye (Jorgensen, 2009).

Need for the Study

While beginning instrumentalists have method books for beginning players, choral music does not have a standardized counterpart. There are many sight-singing method books, but in choral music, no specific standardized way of teaching music literacy. While many studies (Demorest, 2004; Goss, 2010; Kuehne, 2003; Nichols, 2013; Myers, 2008; Pollock, 2017)

identified information such as: how often choral directors are working on music literacy skills, how often choral directors tested their students, whether or not hand signs help sight-singing experiences, and whether or not students test differently on solo sight singing exams versus as a group, there is little-to-no research reporting the order in which choral directors teach music literacy skills. This research study may inform choral directors the sequence in which their students may be the most successful in learning music literacy skills.

Purpose and Research Questions

The purpose of this study was to provide information about the skills sequencing in music literacy instruction, placement of these teaching skills in the choral rehearsal, and if choral directors are linking the music literacy instruction directly to choral literature they are currently learning, or if it is taught separately from the literature. This research was guided by the following research questions:

1. What skills sequence do choral directors use when teaching music literacy instruction and why (rhythm, tonal, melodic)?
2. Is music literacy instruction directly connected to the choral literature-their ensembles are singing?
3. During what point of the rehearsal process does the choir receive instruction on music literacy skills (beginning, middle, or end)?
4. How do teachers assess their students for learning music literacy skills?
5. Where do teachers learn music literacy pedagogy skills?
6. What tools or systems are choral directors using to teach music literacy skills?
7. Is there a relationship between a national skills sequence and geographic regions?

8. Is there any significant differences in responses to survey questions based on demographic variables?
9. Is there a relationship between a national skills sequence and survey response questions?

Delimitations

I chose to invite participants who were members of the National Association for Music Education (NAfME) and the Texas Music Educators Association (TMEA). As a result, only members of these organizations had the opportunity to participate in this study. Further, NAfME's invitations were sent through NAfME to a randomly selected list of members that the organization created. I was aware of this and chose to use NAfME's research assistance. I chose to purchase the TMEA membership list and send invitations to that group through my own email.

Limitations

Participants were anonymous. Therefore, it is impossible to know if data reported are accurate and truthful. Some of the survey questions ask teachers to identify whether or not they were assessing students or teaching specific skills. There is a chance that they might not answer all survey items. However, there is no evidence to suggest they were not truthful with their responses. This study's data is limited to the actual participants (N=295).

CHAPTER 2

RELATED LITERATURE

There are many challenges to teaching music literacy. There is no shortcut or quick fix, music literacy must be developed over a long time period and it must be done methodically (Ester, 2010). Students must have consistent practice and if that practice does not follow a careful sequence, its value is diminished. Ester suggested having common systems for tonal and rhythmic syllable systems will aid in consistency. However, there is currently no nationally recognized methodological approach for choral directors to use. While many textbooks exist for pre-service choral music educators, none go into great detail on how to teach music literacy skills. The information included in these textbooks is typically quite limited and the book does not typically allow for expanding student learning and understanding beyond the very basics of music (Floyd & Haning, 2014).

Sound-Before-Sight Theory

Choral directors must prepare students aurally first, then train their eyes. Both Ester (2010) and Krueger (2017) suggested that by developing the ear first with a neutral syllable until students are able to reproduce those syllables is the foundation of music literacy. Introducing the students to the visual aspects of music needs to be done in a carefully sequenced method as well, helping the students learn how to organize sound (Floyd & Haning, 2014). Research supports that by training the ear first (aural training) and then training the eye (sight training), a singers solidify their musical understanding, and increase and deepen their musical skills (Hutton, 1953; Mishra, 2014).

Overwhelming students early in the music reading process is easy to do. If students see a measure of music notation, they will see many different symbols at one time. A simple measure

may consist of a clef sign, a time signature, the staff, different notes, and more. That one measure can quickly overwhelm a beginning singer. Breaking down the measure and training their eyes, the choral director can help them read and comprehend what is happening in the measure more efficiently (Penttinen & Huovinen, 2011; Standerfer, 2019).

The teacher should use the rhythm and tonal patterns from the repertoire that the students will be singing. This is typically the step that is missing. In Hales (1961) study, only 17% of teachers "regularly" related sections or patterns of new music to songs that were already familiar to students. In the same study (Hales, 1961), only 21% of teachers regularly practiced basic or prominent rhythmic patterns before learning a new song, and 60% of teachers stated regularly and 35% stated sometimes that they regularly played and practiced individual parts with the piano (Hales, 1961). Many teachers will utilize a method book, but that book usually has very little to do with the repertoire that the students are learning. This is a way for students (and teachers) to be immersed in the repertoire, rather than seeing musicianship (i.e. sight reading) as a separate activity from the repertoire.

Kodály

Zoltán Kodály was a Hungarian composer, ethnomusicologist, and music educator who desired to create a utopian society of musically literate Hungarians. His parents, who were both musicians filled his childhood home with music from the European tradition (Chosky, 1999). After graduating with degrees in composition and teaching in 1905 from the Academy of Music in Budapest, Hungary. As an educator, he worked tirelessly to change music education from inside. He attempted to work with Hungarian leadership for better music education for young children and in 1950, the first primary music school opening in Kecskemét, Hungary (Houlahan & Tacka, 2015).

Often young educators believe that Kodály concept is a methodology. However, his philosophy of music education was one that believed a music curriculum based on the folk songs and games from the Hungarian culture would keep the customs from being lost (Bonnin, 2005). His philosophy included children as 'stewards' of their cultural and musical heritage, their importance as performers, utilization of music literacy skills as critical thinkers and problem solvers, their importance as creative human beings, and active listeners (Houlahan & Tacka, 2015).

One main focus in Kodály's philosophy was using folk music from a student's heritage. In the late twentieth century many music educators teaching using his philosophy were still including folk songs that were not from their students' heritages or cultures (Houlahan and Tacka, 2015). This is a direct "violation" of his first principle. If they truly understood and embodied Kodály's approach, U.S. music educators would use music from the U.S.—from their students' cultural heritages within the U.S. Many music educators continue using folk songs identified as their major teaching tools for music literacy that do not align with Kodály's vision.

The "Kodály Method" established teaching sequence. Houlahan and Tacka (2015) and Chosky (1999) published material on both the melodic and rhythmic sequencing broken down by appropriateness for each grade level. They both point out that, while this sequencing works for those who use folk songs, some folk music may not be developmentally appropriate for students in the early learning stages. More specifically, they state that the "Kodály Method" begins with *sol* to *mi* for tonal patterns, but in the U.S. many popular music songs are in major keys and begin with *do* to *re*. Further, contrasting rhythmic pedagogy suggests using paired eighth notes and quarter notes for beginning musicians, but in current popular music, rhythms are more complex, which result in ears that distinguish more complex rhythms. Sequencing is important in

teaching music literacy, but few researchers report why practicing educators choose the way they sequence music literacy content.

Gordon's Music Learning Theory

Audiation is the foundation of Gordon's *Music Learning Theory* (MLT). Gordon believed that audiation was foundation of all musicianship (Gordon, 2012). Children are supposed to learn music skills in the same way they learn their language skills. They should be able to hear and speak first and then read and write second (Bluestine, p11, 2008). Being able to listen and discriminate between sounds should be the music educator's goal. Ensuring that students are able to hear and understand the differences between pitch, rhythm, dynamics, tempo and timbre is imperative to their success as a musician (Garner 2009).

Gromko's and Walters' (1999) research supports audiation's value in music learning. They found that school-aged children who had high audiation ability had a gain on a posttest when the utilized singing, dancing, playing recorders, hand drums, and pitched percussion in ensembles. They "painted melodies in the air" and utilized hand signs while singing and "created dances to show rhythm patterns and song form" (Gromko & Walters, 1999, p. 29).

Another foundational part of MLT is the concept of "Whole-Part-Whole" (WPW) This concept is central to learning how to use the sounds we know (both rhythmic and tonal) and how we translate them into new patterns. Like Kodály's principles, we must identify which tonal and which rhythm patterns to teach, how to teach them, and how these fit into the teaching curriculum. Gordon's MLT website describes the WPW process:

> The Whole/Part/Whole approach (sometimes called Synthesis/Analysis/Synthesis) is a common way in education to organize students' experience with content. The first whole stage (Synthesis) is an introduction, an overview that establishes basic familiarity with

what the topic is about. The second stage (Analysis) consists of detailed study of the parts of the topic. On returning to the whole (the second Synthesis) students have a more sophisticated understanding of how the parts fit together to form a unified whole.

(Gordon, 2022)

Gordon believed a beat-based system was most appropriate because it provided a way for students to experience the rhythm and helped facilitate their comprehension and retention of patterns in audiation (Dalby, 2005). His system, which was developed with James Froseth and Alvert Blaser, are in Appendix A.

Linking Philosophies

While choral music educators learn different methodologies and/or philosophies during their collegiate education, often, as they enter their own classrooms, they tend to forget what they studied and focus on performances. Further, Kuehne (2003, p. 120) reported that educators' instructional techniques are, to a degree, influenced by their previous educators Pk-12 and collegiate music educators as well as in-service opportunities. Choral educators must be sensitive to the community that they are teaching and what musical experiences and "language skills" those students have. It may be easier to teach difficult music by rote, but putting the music in singers' hands and allowing them to truly master the music, is completely different. Educators' are responsible for teaching students successfully read music and that is key to building independent choral musicians (Ester, 2010; Krueger, 2014; Riegle & Gerrity, 2011).

Assessing Student Learning

Students must learn to work individually as well as collaboratively in the music classroom. When students are assessed individually versus an ensemble being assessed as a group, many times it is found that the collective whole of the group are much better readers than

when tested individually (Brandler & Peynircioglu, 2015; Demorest & May, 1995; Nolker, 2001). Assessing students at the collegiate level, Myers (2008) found that most (72.9%) of college directors do not assess their students individually but rather by observation only.

While there is research for instrumental sight-reading instruction, the choral counterpart, is lacking in research. Researchers have indicated that the use of tonal patterns in instruction is quite successful (Boyle & Lucas, 1990; Cho, 1989; Foulkes-Levy, 1997; Frances, 1985). Henry (2004) utilized materials created by Foulkes-Levy, Cho, and Sheldon (1998) and modified them for use in the choral rehearsal, formulating 15 specific pitch skills to teach in the choral rehearsal. One group received instruction on known melodies with written music notation, while the other group was given visual iconic notation. While both groups made significant gains no matter the method of instruction, the singers who were in the higher-achieving group, did not improve, while those in the middle and lower categories improved. While the gains were small, they are still significant because it was only a 12-week period that this study was completed.

When examining how choral directors teach music literacy skills, Kuehne (2007) found most choral directors used a textbook for sight singing instruction that was not connected to the repertoire their choral ensemble was singing. The study also found most teachers taught students in ways that they learned in workshops and other in-services that the teachers attended. While it is growing in commonality, sight-reading for choral festivals is not as common as it is for band and orchestra festivals. Less than half of the states across the country have any type of sight singing requirement (Norris, 2004). While there are pockets of the country that do not require any type of sight singing requirement, in other areas of the country there are clusters that have rigid requirements. The trend of adding sight reading assessment to large choral ensemble festivals is something that is slowly changing nationwide and as this changes, singers will be

adjudicated on the skills choral directors are supposed to be teaching their students to create independent musicians (Henry, 2015). Making sure that students know exactly how to fix what is wrong must be taught early in the process of music literacy. In a study of time usage of choral directors prior to sight-singing adjudication, Yarbrough, Orman, and Neill (2007) found that high school choral directors spent 4.22% more time than middle school directors presenting specific musical information when working on sight-singing before being adjudicated.

Teaching Sight-singing in the Choral Rehearsal

Henry (2015) discussed the importance of teaching sight reading during the choral rehearsal but noted that finding group achievement was not an accurate indicator of individual achievement for sight singing. This study proves what Ester (2010), and Krueger (2017) have written about teaching music literacy in the choral rehearsal: the method should not be the approach or drive the approach, but the method should serve the needs of the learning approach. In a follow up to his book, *Building Choral Excellence*, Demorest (2004) added 94 participants for this survey and has limited the information to middle and high school teachers who currently teach sight singing in the choral rehearsal. The goal of this survey was to identify how much time directors spend teaching sight singing in the rehearsals and what materials they use and how they assess their students' progress. His findings were that 52% of the respondents teach sight singing in almost every rehearsal, while 28% taught it every rehearsal period. 71% taught sight singing after warmups, and most of the respondents taught it separately from the literature. The average time spent on sight-singing was nine and a half minutes per rehearsal period. There was no dominant overall method or material found in the survey. When examining whether respondents used fixed-do or moveable-do, most teachers used moveable-do and la-based minor. The materials survey showed that 72% of teachers used self-created materials, and 48% used octavos

and the rest used different published materials for sight singing instruction. Demorest found that some teachers place a large part of their student grade on sight singing assessment, while others do not. Demorest (1998) also examined what effect individual testing had on students' progress with group sight singing instruction verses students who only received group sight-singing instruction. The study was completed by 306 students at six different high schools in Washington. The results showed that students who had individual testing score consistently higher on testing as the study went on, than those of the group sight singing instruction only. The study had a pretest that consisted of a major and minor melody for the student to sing. The posttest was similar in content to the pretest but was not identical. Noted in the discussion that there was no change in the how the students performed on the minor melody because most teachers report that they spend very little time working on minor tonality sight singing. In Johnson's (1987) study, sight-singing was found to not be included in the majority of choral curriculums in the North Central region of the American Choral Directors Association due to performance pressure and lack of instructional time, as well as sight-singing skills are not being assessed by choral educators. In the study, less than 16% of the rehearsal was spent with sight-singing study.

Hammer (1961) completed an experimental study using a tachistoscope in the teaching of melodic sight-singing with fourth graders in Colorado. The 'method' for this study that was developed and used was a tonal pattern approach using patterns compiled by Robert Petzold. This experimental study separated two fourth grade classes where one functioned as a control group, and the other was the experimental group. Both classes were about the norm with I.Q. levels, and the control group had more students who had or were currently receiving private music lessons. Both classes were taught by the Hammer similarly except the time spent on the

pattern skills. During the time of patterning, the control class only received "conventional" techniques and the experimental class received instruction with the tachistoscope. Within the study, it was determined that the materials and procedures developed were significantly more effective with the tachistoscope than without.

Ritualistic Learning

Students must be taught a process and utilize a system that allows them to be successful when sight-reading a piece of music for the first time (Pollock, 2017). Research indicates that students who used a moveable-do system and who tonicized first before singing did best with their sight reading (Killian & Henry, 2005). Since students tend to rush through a practice period, they can hurt their own performance when this occurs. While thirty seconds can feel like a very long time for a student who is new to sight singing, all that time can be used to identify patterns, and identify difficult sections within the music, this allows the student to have a more accurate and successful experience in sight reading (Killian & Henry, 2005). Shehan (1987) found that when pairing sound (auditory) with visual for learning rhythms students were more successful in retention of rhythm patterns. In Gordon's *Music Learning Theory*, within the first level of learning, students are learning by rote, and they learn to recognize a pattern by hearing it over and over again (Reifinger Jr., 2020, p. 22). At the second level the student then associates the rhythm or tonal syllable to the note pattern, then at the next level, the student is audiating the syllables, then finally when they hear a pattern on a neutral syllable, they are able to determine syllables on their own (Reifinger Jr., 2020 p. 22).

Tools of the Trade

Since there is currently no nationally recognized methodology for choral directors to use for tonal and rhythmic pedagogies, choral directors have been creating their own system for

classroom use for years (Kuehne, 2010). Making use of Curwen hand signs, McClung (2008) found that students were more successful with sight-singing, when Curwen hand signs were used with students' preferred modes of learning, especially the kinesthetic mode. Chosky (1999), Houlahan and Tacka (2015), McClung (2008), Reifinger, Jr. (2020) have found that Curwen hand signs were best for student use in the rehearsal and classroom.

The Curwen "hand signs" were first developed by Sarah Glover and then modified and popularized by John Curwen in the 19th century (Bowyer, 2015). Curwen touted them as a physical mnemonic device to aid with tonal learning (Frey-Clark, 2017). The popularity and use of the hand signs were used internationally when students of Kodály began to incorporate them into their teaching (Chosky, 1999). There are many reasons that choral directors are advocates for the use of the Curwen hand signs. They not only are a multimodal approach utilizing both visual and kinesthetic reinforcement of solfège (Demorest, 2001, McClung, 2008, Reifinger, 2012), but many teachers find that in their classrooms the use of Curwen hand signs are beneficial for the teacher in visually scanning for student understanding. McClung (2008) found no significant difference between research subjects' sight-singing accuracy when using hand signs.

Tonal Systems

Since there are no methods books for beginning or advanced choirs, music educators must decide how they are going to teach tonal music literacy to their singers. According to Alan McClung (2001) there are nine commonly used melodic pitch systems:

1. Interval names (i.e., perfect fourth, major third, etc.).
2. Inflected letter names (i.e., G, G-sharp, etc.).
3. Non-inflected letter names (i.e., "G" for G and G-sharp, etc.).

4. Fixed-*do* (i.e., do = C, di = C-sharp, etc.).
5. Scale-degree numbers (i.e., 1 = tonic in both major and minor).
6. Scale-degree numbers (i.e., 1= tonic in major and 6 in minor).
7. Moveable-*do* (i.e., *do* = tonic in major and la = tonic in minor).
8. Moveable-*do* (i.e., *do* = tonic in both major and minor tonalities).
9. A neutral syllable (i.e., lah, lah, lah).

While choral directors have so many options to use, research suggests that sight-singing is still one of the areas in choral music education that is still lacking. Research shows many choral educators use moveable *do* in major and *la* in minor (Demorest, 2004; May, 1993; Smith, 1998; Yarbrough, Orman, & Neill, 2007).

Rhythmic Systems

Since there are no method books for beginning choirs, an educator must decide how they are going to teach rhythmic literacy to their students in their choral ensembles. There are many options to choose from including those systems that are internationally recognized as well as lesser-known ones (see Appendix A). We can sort our rhythmic systems in two subsets:

1. Notation based
2. Beat function based

In notation-based systems, there is the "Kodály system" and the Mc-Hose-Tibbs/Eastman system. For beat function-based systems there are the Gordon Method and Takadimi. Each system seems to have a 'pit-fall' somewhere within the system. For instance, Kodály's system (whether one is in compound or simple meter) labels all eighth notes as *ti*. This causes problem because in compound meter of 6/8 we end up having ti-ti-ti-ti-ti-ti. That can be very confusing on where the strong beats occur or where the downbeat is for a budding musician. Simply by

labeling the notes based on what they are visually, the system hinders the sound-to-sight strategy. With McHose-Tibbs/Eastman method, the beats are assigned a number based on where they fall in the measure, while the beat division distinguishes a difference aurally, the subdivision does not. Because the system requires one to understand meter before seeing the symbols this system also hinders the sound-to-sight strategy (Hoffman, Pelto & White, 1996, p. 11). The Gordon method fixes the beat number placement issue that is found in McHose-Tibbs/Eastman method, but it contains the same subdivision level problem as the McHose-Tibbs/Eastman. The Takadimi system was created out of need for pedagogical reasons as a tool to help remediate students at Ithaca College. Takadimi is a combination of all of the strengths of the major rhythmic systems of Kodály (French Time-Names), Gordon, Orff, McHose-Tibbs/Eastman), while dodging each of the pitfalls that they may have (Hoffman, Pelto, & White, 1996). Because it is a beat function-based system, all downbeats are *ta*, and (in simple) divisions are *di*, subdivisions are *ka* and *mi.* All subdivisions share the same vowel sound (i.e. *ta*-*ka* and *di*-*mi*) (Hoffman, Pelto, & White, 1996, p. 16).

Making sure that choral singers can not only sight-sing, but also can aurally distinguish sounds and process them is quite important (Dalby, 2015; Ester, 2010; Krueger, 2014; Riegle & Gerrity, 2011). Buonviri's (2015) study of students who sang before completing their music dictation performed worse than those who did not sing before completing their music dictation. In prior research by both Buonviri (2015) as well as Pembrook (1986) results showed that students might be distracted by the singing, resulting in a lowered score based on accuracy. Implications based on the results showed that students who made no sound, did generally better than those who could make sound. The research also indicates that teachers should use both options (silence or sound) for classroom instruction and practice. Buonviri (2015) suggests how

to allow students to make sound during a test without distracting the rest of the class: utilizing a listening lab of some sort, or in a school that is one-to-one with technology (where each student has an electronic device provided by the school). With technology, students could test via videoconferencing allowing students to be able to sing if they want to do so without distracting others.

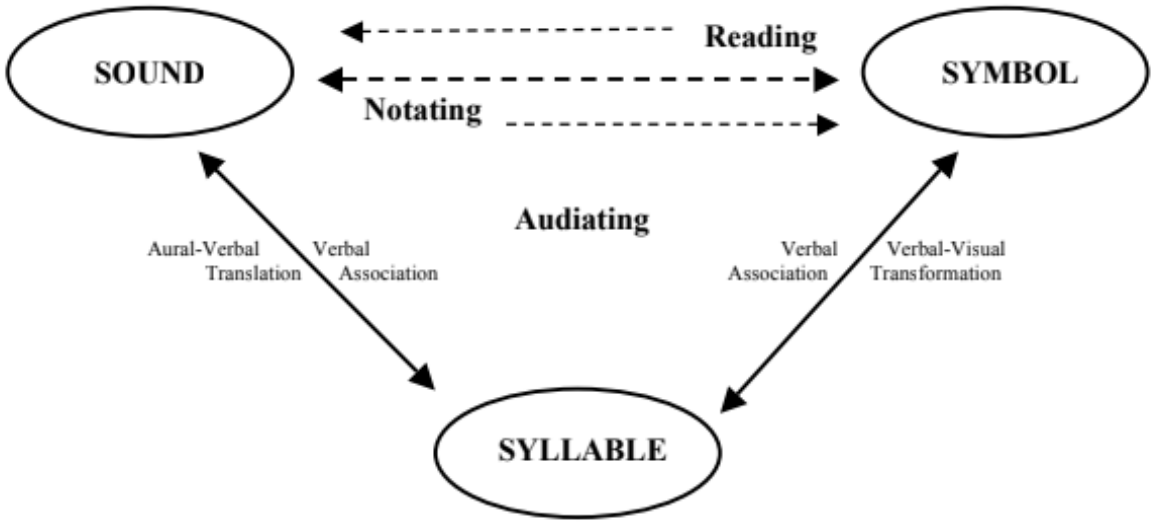
The Complete Choral Musician

"The encoding and decoding of aural and visual stimuli in the task of music reading is a complex perceptual process requiring extensive instruction" (Shehan, 1987, p. 117). Many times, after instructing students in areas of music literacy, choral directors believe that they have created the "complete" choral musician. They have produced a singer who is able to look at a series of notes and perform the tonal and rhythmic patterns that they see on the page, thus connecting the sound to the symbol. According to Ester (2010), a third part of making the musician "complete" is missing: the syllable. The syllable is important because that is what actually connects the sound to the symbol. Ester created "The Sound Connections Learning Triangle" (see Figure 1).

As Figure 1 shows, students should go from looking at the symbol, know the syllable, and create the sound, but they must also be able to do that in reverse! They must be able to hear the sound, know the syllable, and write the symbol. This is where dictation comes into the forefront of the choral rehearsal. If students are taught patterns when learning tonal and rhythmic skills, then they are able to quickly apply this into dictation. Research supports the notion that if choral music educators are applying the skills they are teaching in the appropriate steps, then students will be able to learn music faster and more efficiently (Casarow, 2002; Demorest, 2001; Floyd & Bradley, 2006).

Figure 1

Sound Connections Learning Triangle



According to Foulkes-Levy (1997) students need to be taught how to recognize tonal and rhythmic clues in melodic lines in music. She states, “The first step in implementing such a curriculum is to require students to memorize a variety of common patterns based on simple rhythm patterns…” (Foulkes-Levely, 1997, p. 13). Paney & Buonviri (2015) found that most teachers were focused on students internalizing patterns that they could aurally distinguish them when working on dictation. Buonviri (2015) found that a lack of systematic rhythmic training prior to college may be a contributing factor to a lack of dictation skills. Riegle and Gerrity (2011) found that choral students who had a background with piano instruction had a greater success in pitch matching skills than those without, even though their ensemble as a whole sang at an advanced level. They remind the choral music educator that they “should not assume, as many would, that high school choral students possess adequately developed tonal memories and subsequent pitch-matching skills” (Riegle & Gerrity, 2011, p. 13). When teaching students music

dictation skills, Pembrook (1987) suggests that there is a "dual processing problem" i.e. the student is trying to decode what they heard and then encode it into notation, and at the same time, they have a memory storage issue as well. As music educators we, must teach students to break it down, and this is where internalizing and audiating patterns (both tonal and rhythm) are important to musicians. Having students develop a method of shorthand for music dictation is something that Paney and Buoniri (2017) suggest.

Summary

The research that has been presented in this section has investigated topics from Sound-before-Sight theory and methodologies including the Kodály philosophy and Edwin Gordon's Music Learning Theory. In addition, assessing student learning was discussed, including research that concluded collective groups perform better than when students are tested individually (Brandler & Peynircioglu, 2015; Demorest & May, 1995, Henry 2015). Foulkes-Levy (1997), Cho (1989, Frances (1985), and Boyle and Lucas (1990) all found that instruction with tonal patterns is quite successful. Kuehne (2007) found that most choral directors used a textbook for sight singing instruction that was connected to the repertoire that the choral ensemble was singing. Kuehne's research also found that most teachers instructed students in a way that they learned in workshops and other in-services.

In regard to large group choral assessment, Norris (2004) found that less than half of the states across the country do not require any type of sight singing requirement, while there are few states that have rigid requirements. Instruction of sight-singing within the choral rehearsal, Demorest found that 52% of his survey respondents teach sight-singing in *almost* every rehearsal, while 28% taught it every rehearsal. 71% of respondents taught sight-singing after warmups, and most taught it separately from the literature. The average time spent on teaching

sight-singing was 9.5 minutes per rehearsal. Demorest also found that there was no dominant overall method or material. Finally, most teachers utilized moveable *do* with *la* based minor for instruction.

Having a system in place for reading music is crucial for all musicians, especially beginners. Reaching all types of learners in the choral rehearsal is important. There are many systems that choral directors may choose from when instructing students. Pollock (2017) found that students must be taught a process and utilize a system that allows the singers to be successful when reading literature for the first time. McClung (2008) found that those who were kinesthetic learners were more successful in sight-singing when they utilized the Curwen hand signs. Employing Curwen hand signs also helped students with both visual and kinesthetic reinforcement for those students who were multimodal (Demorest, 2001; McClung, 2008; Reifinger, 2012). For tonal systems, research found that many choral educators used moveable *do* in major and *la* in minor for solfège instruction (Demorest, 2004; May, 1993; Smith, 1998). For rhythmic systems, educators can choose from two different systems, notation (or visual) based or beat based. While each has their pitfall, I have found that Takadimi (Hoffma, Pelto, & While, 1996) is the most comprehensive with the least fallout in rhythm instruction.

The Current Study

The related literature was examined to determine if there was a need for this study. As stated in the introduction, the purpose of this study was to provide information about the skills sequencing in music literacy instruction, placement of these teaching skills in the choral rehearsal, and if choral directors are linking the music literacy instruction directly to choral literature they are currently learning, or if it is taught separately from the literature. Studies that closely relate to the current study discussed findings on what rhythmic and tonal systems are

used and how often sight-singing is being instructed (Brittain, 1998; Casarow, 2002; Daniels, 1986; Demorest, 1998 & 2004; Floyd & Haning, 2014; Kuehne, 2007; Lucas, 1994; McClung, 2001; May, 1993; Nichols, 2013; Pollock, 2017; von Kampen, 2003). When interpreting the data from the study, frequencies and percentages will be utilized to help determine the sequencing of music literacy instruction, when are choral directors teaching these skills within a rehearsal, and if they are linking the music literacy instruction to choral literature they are currently learning, or if it is separate from the literature.

CHAPTER 3

METHODOLOGY

This chapter outlines the methods and procedures that were completed to provide the organization of this study. Participant sampling and recruitment plans are discussed, followed by the survey and discussion on reliability and validity of the research instrument.

This research was guided by the following research questions to seek more information on the trends in sequencing in music literacy pedagogy practices:

1. What skills sequence do choral directors use when teaching music literacy instruction and why (rhythm, tonal, melodic)?
2. Is music literacy instruction directly connected to the choral literature that their ensembles are singing?
3. What point of the rehearsal process does the choir receive instruction on music literacy skills (beginning, middle, or end)?
4. How do teachers assess their students for learning music literacy skills?
5. Where do teachers learn music literacy pedagogy skills?
6. What tools or systems are choral directors using to teach music literacy skills?
7. Is there a relationship between a national skills sequence and geographic regions?
8. Is there any significant differences in responses to survey questions based on demographic variables?
9. Is there a relationship between a national skills sequence and survey response questions?

Research Design

This study used a quantitative research methodology based on data from survey research. I chose to use survey research as the most appropriate method to gain a large amount of

information from secondary choral directors across the nation to determine current trends in the sequencing of music literacy skills. This survey-was based upon regional surveys from past research Demorest (2004), Goss (2010), Kuehne (2003), Nichols (2013), Myers (2008), and Pollock (2017), in addition to new research questions developed by the researcher.

The data collection instrument for this study was an electronic survey. Dillman, Smyth and Christian (2014) said that one major element within electronic survey design for a researcher to consider is that of screen resolution (p. 307). I ensured questions were displayed similarly regardless of the device or web browser participants used.

Proper representation of secondary choral directors is important to gain a thorough understanding on how choral directors across the country are teaching music literacy skills to their singers. This was completed by making sure that the sample units were complete, and that each member only was included one-time within the frame (Dillman, Smyth, & Christian, 2014).

Participants and Recruitment

Participants were secondary-level (grades 6-12) choral educators located in the United States who were members of the National Association for Music Education (NAfME) or the Texas Music Educators Association (TMEA). There was a small chance that a participant was a member of both organizations. The survey included an initial question to ensure participants completed it only one time. In addition, each member list was cross-referenced in an attempt to keep the same potential participant from receiving the survey invitation from both organizations.

Potential participants received a survey link through music education associations including: the National Association for Music Education (NAfME) and Texas Music Educators Association (TMEA). Each member list will be cross-referenced to ensure that the correct survey

population was reached. Finally, in an attempt to increase the participant pool for this survey, I also used both snowball and purposive sampling methods for participant recruitment.

Survey Instrument

After reviewing previous research survey (Kuehne (2003), Goss (2010), Myers (2008), Pollock (2017), Demorest (2004), and Nichols (2013)), I adapted some of their questions, and devised my own questions to create this survey instrument. Through this process, I devised a web-based survey consisting of 43 questions. Beginning with participant demographic questions, I hoped to identify membership in professional organizations, degrees attained, and teaching experience and then cross-tabulate that with information on gathered on how they teach music literacy skills. Questions asked in this section included: How many years have participants been teaching, how many years have the participants been in current position, what professional music organizations they belong to, and what the highest degree that the participant has attained.

The second section of the survey included school specific demographics. Recognizing that not all educators live in the area in which they are employed, I wanted to get accurate information on where the participant is working, not living. Questions included what state and zip code the school is located. Other questions will include the size of the school, what grade levels does the participant teach, what are the total number of students in the choral program. In order to distinguish between ensembles that meet during the school day and outside of the school day, participants were asked the number of ensembles in their program within the school day and outside of the school day. Length of choral rehearsals were also be asked.

The major section of the survey consisted of 15 questions and those questions centered around the pedagogy of music literacy skills. Survey participants were asked the following multiple-choice questions: If they teach music literacy or sight-singing skills to all their choirs. I

will ask if not all their choral ensembles receive music literacy instruction, why not? At what point during the year does the participant teach music literacy skills? How often the participant teaches music literacy skills. Where in the rehearsal are music literacy skills placed? Do the participants teach music literacy skills separate from the literature, as part of rehearsing literature or both ways? How many minutes does the participant spend on teaching music literacy skills? I also asked the participations to rank the following skills in order of how they teach music literacy skills: rhythm, tonal (pitch), melodic (rhythm and pitch together), staff, lines, spaces. Participants were asked to explain why they taught them in that order. I explored what textbooks (printed or online) that participants used and why they are using those specific series. I also explored whether or not participants are creating their own materials, and if they do, why they create their own materials.

In the next section of the survey, participants identified what tools they use to teach music literacy skills to their students. They were asked to rate various items such as "students should learn music literacy skills by using solfège syllables" using a five-point Likert system (strongly disagree to strongly agree). The participants were also asked to identify all systems they use to teach music literacy skills with a checkbox question. The final two questions asked the participant to identify what tonal and rhythmic system(s) they use for teaching music literacy.

The section to follow identified how participants assess their students learning with music literacy. Questions included whether or not students are individually or group assessed in the choral rehearsal; the number of times they are assessed throughout the year; whether students are evaluated formally, informally or both informally and formally; and whether students are assessed singing alone in rehearsal, alone on a recording, alone for the teacher, in quartets in rehearsal, in quartets on a recording, in quartets for the teacher or they do not assess their

students. The final question regarding music literacy skills asked what percentage of a students' final grade in choir.

The final section of the survey pertained to teacher education and where they learned how to teach music literacy skills. Questions in a five-point Likert scale (strongly disagree to strongly agree) included "I learned from music in-service/workshops I've attended," and "I learned from the professor that taught my teaching methods or other music education courses as an undergraduate," "My music teacher in high school." The participant will ask the participant if they have attended at least one workshop, presentation, or interest session on the topic of music literacy or sight-singing in the choral rehearsal in the last 5 years and if that session/topic/workshop led to changes in their pedagogy for music literacy. The final question asked if music literacy instruction has improved their ensemble's ability to learn new repertoire faster.

Pilot Study

The survey was piloted with a group of participants that were retired secondary choral educators, collegiate choral educators, or those currently not teaching that would not allow them to participate in the research study when the survey sent to potential participants. The pilot survey was sent to participants using purposeful and snowball sampling. Through the pilot, I checked for face validity and hoped to gain insight on any questions that might not have been clear, in addition to looking and interpreting preliminary data within the results from the pilot participants. Data was destroyed from the pilot survey and not used for the study. After completion of the pilot survey, changes were made to the questions where necessary to ensure the accuracy of the instrument, based upon the feedback of the participants.

Reliability and Validity

The initial survey (see Appendix B) was written using the survey software, Qualtrics, and piloted to check for face validity. The pilot survey was distributed to retired secondary choral music educators and college music educators. Data from the pilot survey was not used for this study. Upon completion of the pilot survey, changes were made to the questions, where necessary, to ensure the accuracy, utilizing feedback from the participants. The Delphi method was used to assess validity in the content and questioning with a panel of experts, who have been experienced choral music educators (Green, 2014).

Procedures

After the pilot study and subsequent adjustments based on the pilot study, I applied for Internal Review Board (IRB) approval before completing this study. The IRB approval documents are in Appendix C.

This survey was hosted by the Qualtrics website utilizing their software. A link was sent to potential participants through the National Association for Music Education (NAfME) and Texas Music Educators Association (TMEA). Participation was completely voluntary. The participants were a convenience sampling from the various music education associations. There were no incentives or compensation for participants to complete the study. The survey was open for collection of data for one month with reminders sent at the halfway mark, and then the survey was closed to new data. Statistical Package for Social Science (SPSS) software was utilized to interpret the data of the survey.

Data Analysis Plan

Data were downloaded from Qualtrics and SPSS was utilized to analyze the data. Descriptive statistics such as percentages and frequencies were used to understand how participants responded to the survey questions.

Research Question 1

I used descriptive statistics to answer research question one. I ran frequencies and percentages to determine what skills sequence choral directors use when teaching music literacy instruction. I ran frequencies and percentages to determine if music literacy instruction is directly connected to the choral literature their choir ensembles are singing.

Research Question 2

I was interested in investigating whether choral directors teach music literacy skills as part of rehearsing literature or separate from the literature. I used descriptive statistics to answer research question two.

Research Question 3

I ran frequencies and percentages to answer research question three to determine at what point of the rehearsal process the choir receives music literacy instruction: beginning, middle, or end. I also ran a cross-tabulation to compare at what point of the rehearsal music literacy skills were taught, how often music literacy skills are taught, and the amount of time spent on teaching music literacy skills.

Research Questions 4, 5, and 6

I ran frequencies and percentages to determine how teachers assess their students for learning music literacy skills. Research question 5 asked where teachers learned their music literacy pedagogical skills. I ran frequencies and percentages to answer research question five

Question 6 focused on tools and systems used to teach music literacy. I ran frequencies and percentages to determine what tools and systems were most popular with choral directors for this question.

Research Questions 7, 8, and 9

I used Chi-square independence test to compare data with skills sequence ranking and geographic regions to examine any significant differences in responses to survey questions based on demographic variables. I also used Chi-square independence test to examine if there could be a relationship between a national skills sequence and survey response questions. I ran a Chi-square independence test to look for relationships and patterns within the length of a choral rehearsal, the number of times a choral director sees their choir a week, the length of time spent on music literacy skills within the choral rehearsal and how often participants assess their students' music literacy skills. This statistical test aided in looking for patterns and relationships within research questions one, four, seven, eight and nine. Table 1 shows the full data analysis plan.

Table 1

Data Analysis Plan

#	Question	Research Question	What data analysis will be used and why?
1	My ethnicity is…	Questions 7-9	Frequencies and Percentages
2	How many years have you been teaching total? (in years: i.e., 4)	Questions 7-9	Frequencies and Percentages Pearson Correlation to compare to see relationships between geographic region, education, experience
3	How many years have you been teaching in your current position? (in years: i.e.,2.)	Questions 7-9	Frequencies and Percentages
4	My age is [years]	Questions 7-9	Frequencies and Percentages
5	What professional music organizations are you a member of? (Check all that apply)	Questions 7-9	Frequencies and Percentages
6	The highest degree I have attained is…	Questions 7-9	Frequencies and Percentages

#	Question	Research Question	What data analysis will be used and why?
7	The school I attended for my highest degree was…	Questions 7-9	Frequencies and Percentages
8	My major area of study was…	Questions 7-9	Frequencies and Percentages
9	My schools' state (drop-down list of all US States)…	Questions 7-9	Frequencies and Percentages
10	Schools' Zip Code	Questions 7-9	Frequencies and Percentages
11	What is the size of your school?	Questions 7-9	Frequencies and Percentages
12	What grade level(s) do you teach? Check all that apply	Questions 7-9	Frequencies and Percentages
13	How many students are in the choral program TOTAL?	Questions 7-9	Frequencies and Percentages
14	How many ensembles are in the choral program at your school? (include during the school day and outside the school day.) (one blank for during the school day and one blank for outside of the school day)	Questions 7-9	Frequencies and Percentages
15	How often do you see your students for class?	Questions 7-9	Frequencies and Percentages
16	What is the length of time (in minutes) that you see your students for choir? (i.e., 20)	Questions 7-9	Frequencies and Percentages
17	Do you teach sight-singing/music literacy skills to your choir(s)?	Question 1	Frequencies and Percentages
18	If No: which choirs do not receive instruction and why?	Question 1	Frequencies and Percentages
19	At what point during the school year do you teach music literacy skills?	Question 1 Question 3	Frequencies and Percentages
20	When I teach music literacy skills, most of the instruction occurs…	Question 3	Frequencies and Percentages
21	When I teach music literacy skills, I position them…	Question 3	Frequencies and Percentages
22	I teach music literacy skills…	Question 2 Question 8 Question 9	Frequencies and Percentages Chi-square independence test
23	The number of minutes I spend on teaching music literacy skills during a single class period is: [number]	Questions 1-2	Frequencies and Percentages
24	Please rank in order which skills you start with first (number 1), when teaching music literacy skills to which skills you teach last (number 6)	Question 1 Question 7	Frequencies and Percentages Chi-square independence test
25	Please explain why you teach those skills in that particular order.	Question 1	Identify common themes from responses.
26	Sources of materials when teaching music literacy	Questions 1-2	Frequencies and Percentages
27	Do you use a published series for teaching music literacy skills? (Print or Online)	Questions 1-2 Question 6	Frequencies and Percentages
28	If yes, which series do you use? [series name/author]	Questions 1-2 Question 6	Frequencies and Percentages

#	Question	Research Question	What data analysis will be used and why?
29	If yes, why did you choose this series? (select all that apply)	Questions 1-2 Question 6	Frequencies and Percentages
30	Do you create your own materials?	Questions 1-2 Question 6	Frequencies and Percentages
31	If yes, why do you create your own materials?	Questions 1-2 Question 6	Frequencies and Percentages
32	Please rate strongly DISAGREE to strongly agree – statements about teaching music literacy.	Question 6	Frequencies and Percentages
33	How often do you use the following? (Never to always) – methods/approaches/tools for teaching music literacy	Question 6	Frequencies and Percentages
34	What type of rhythmic system do you use in your classroom?	Question 6	Frequencies and Percentages
35	Yes or No: I individually assess students on the music literacy skills being taught in the choral rehearsal	Question 4	Frequencies and Percentages
36	The number of times I assess individual student learning during the year is [number]	Question 4	Frequencies and Percentages
37	If you do individual student assessments, I evaluate students… (formal, informal, NA)	Question 4	Frequencies and Percentages
38	Ways students are assessed.	Question 4	Frequencies and Percentages
39	Music literacy skills account for what percentage of a students' final grade in choir? Please type a number. (i.e., 25.)	Question 4	Frequencies and Percentages
40	Please rate strongly DISAGREE to strongly agree - where participants learn(ed) music literacy pedagogy skills.	Question 5	Frequencies and Percentages
41	Have you attended at least one workshop, presentation, or interest session on the topic of music literacy or sight-singing in the choral rehearsal I the last 5 years?	Question 5 Question 8	Frequencies and Percentages Chi-square independence test
42	If yes, did this/these workshops, presentations, or interest sessions lead to changes in your pedagogy of music literacy skills in the choral rehearsal?	Question 5	Frequencies and Percentages
43	Please write any other comments you would like to make about teaching music literacy skills or this questionnaire.	Report in appendix	Report in appendix

Note. The full survey text is located in Appendix B.

CHAPTER 4

RESULTS

Participants

Participants for this study consisted of K-12 secondary choral music educators (*N*=295) the United States of American. The initial participants were recruited through email invitations sent through the NAfME Research Assistance Program and with an email list bought from TMEA and sent by the researcher. Two rounds of emails were sent through the NAfME program and the list from TMEA for a total of 8,845 emails sent to potential participants in this study. A total of 307 surveys were collected with usable data from 295 of those surveys, resulting in a valid response rate of 3.47%. The useable rate is 96.1% of responses.

Participant Demographics

Respondents reported their ethnicity,-age, total years they have been teaching,-years they have been teaching in their current position, what professional music organizations they were a member, highest degree attained, the state their school is in. Regarding ethnicity, 244 respondents were white (89.05%), nine were African American (two-point nine percent), nine were multi-racial (two-point nine percent), five were Asian (one-point eight percent), five were Hispanic (one-point eight percent), one was Middle Eastern (zero-point thirty-six percent) and one as did not self-identify (see Table 1). The mean years of experience of the respondents was 16.94 (SD = 11.15), with the minimum being less than one year and the maximum being 46 years. After grouping the respondents into four years of experience groups, most respondents had between eight and 15 years of experience (*n* = 74, 27.01%) (see Table 2). The mean years in their current position was eight point seventy-six years of experience (SD = 8.20), with the minimum being less than one year and the maximum being 36 years. Respondents indicated they

were members of their state level music educators association (*n* = 242, 30.52%), state choral directors associations (*n* = 123, 15.51%), NAfME (*n* = 237, 29.89%), ACDA (*n* = 132, 16.65%), other local music educators association (*n* = 25, 3.15%), other state music educators association (*n* = 15, 1.89%), other national music educators association (*n* = 18, 2.27%) (see Table 2).

Most respondents reported having at least their master's degree (*n* = 167, 60.73%) with 27.64% (*n* = 76, 27.64%) earning their bachelor's degree, nine-point eighty-two percent (*n* =27, 9.82%) earning their doctorate, and one-point eighty-two percent (*n* = 5, 1.82%) earning their Educational Specialist degree (see Table 2). When asked about the size of their school, 31.51% (*n* = 75, 31.51%) taught at a school that had 501-1000 students, 23.11% (*n* = 55, 23.11%) taught at school with 101-500 students, 21.43% (*n* = 51, 21.43%) taught at a school that had 1001-1500 students, 12.61% (*n* = 30, 12.61%) taught at a school that had 1501-2000 students, nine-point sixty-six percent (*n* = 23, 9.66%) taught at a school that had over 2000 students, and one-point sixty-eight percent (*n* = 4, 1.68%) taught at a school that had 1-100 students (see Table 2).

Research Question 1: What Skills Sequence Do Choral Directors Use When Teaching Music Literacy Instruction and Why (Rhythm, Tonal, Melodic)?

I used descriptive statistics to answer the first research question. To understand what sequencing choral directors use when teaching music literacy skills, I first had to find out whether or not they did indeed teach sight-singing/music literacy skills to their choirs. Ninety-two-point twelve percent of participants (*n* = 202, 92.12%) indicated that they did teach these skills to their choirs. Two-point eighty-eight percent of participants (*n* = 6, 2.88%) of indicated that they did not teach these skills to their choirs. When asked why they did not teach these skills to their choirs, the common themes that arose in respondents' comments were a lack of time,

pressure for performances, and not knowing how to teach it or being comfortable teaching students sight-singing/music literacy skills (see Table 2).

Table 2

Ethnicity, Experience, Music Association Membership, Education, School Size.

Demographic	*n*	%
Ethnicity		
White	244	89.05
American Indian or Alaska Native	0	0.00
Asian	5	1.80
Black or African American	9	2.90
Multi-racial	9	2.90
Other	2	0.73
Native Hawaiian or Pacific Islander	0	0.00
Hispanic	5	1.80
Years of Teaching Experience		
0 – 7	69	25.18
8 – 15	74	27.01
16 – 24	66	24.08
25 – 46	65	23.71
Music Association Membership		
State Music Educators Association	242	30.52
State Choral Directors Association	123	15.51
National Association for Music Education	237	29.89
American Choral Directors Association (National)	132	16.65
Other Local	25	3.15
Other State	15	1.89
Other National	18	2.27
I am not a member of any music organization	1	0.13
Education		
Bachelor's Degree	76	27.64
Master's Degree	167	60.73
Educational Specialist Degree	5	1.82
Doctoral Degree	27	9.82
School Size		
1 – 100 students	4	1.68
101 – 500 students	55	23.11
501 – 1000 students	75	31.51
1001 – 1500 students	51	21.43
1501 – 2000 students	30	12.61
More than 2000 students	23	9.66

When investigating at what point during the school year music literacy skills are taught, 95.71% of participants (n = 201, 95.71%) indicated they taught music literacy skills throughout the entire year, one point forty-three percent of participants (n = 3, 1.43%) indicated they taught music literacy skills in the beginning of the school year, one point forty-three percent of participants (n = 3, 1.43%) indicated they taught music literacy skills in the middle of the school year (see Table 2). The amount of time spent on teaching music literacy skills varied from zero minutes to 80 minutes, with a M = 13.24, SD = 8.02 (see Table 3).

Table 3

Average Number of Minutes Teaching Music Literacy Skills During a Single Class Period

Minimum	Maximum	Mean	Std. Deviation
0.00	80	13.24	8.02

Sequencing Instruction

When surveyed about ranking music literacy skills (in order) 44.75% of participants (n = 89, 44.75%) taught rhythm skills first, 29.65% of participants (n = 59, 29.65%) taught tonal skills second, 28.64% of participants (n = 57, 28.64%) taught staff skills third, 26.63% of participants (n = 53, 26.63%) taught line skills fourth, 24.12% of participants (n = 48, 24.12%) taught spaces fifth, and 55.28% (n = 110, 55.28%) taught melodic skills last (see Table 4). When identifying common themes from participant responses, the most common ones were sound-before-sight, rhythm-based learning first, slowly introducing new concepts, so students are successful. See Appendix D for full responses.

Table 4

Music Literacy Skills Ranked (in order) from Start to Finish

	Min	Max	Mean	Std. Dev	Variance	Count
Rhythm	1	6	2.51	1.71	2.92	199
Tonal (pitch)	1	6	2.97	1.62	2.64	199
Melodic (rhythm and tonal together)	1	6	4.63	1.71	2.93	199
Staff	1	6	2.92	1.47	2.15	199
Lines	1	6	3.67	1.28	1.65	199
Spaces	1	6	4.30	1.30	1.69	199

Patterns for Teaching

Twenty-five point nineteen percent of participants (*n* = 163, 25.19%) used rhythm patterns from the literature that the students will eventually sing, as well as 24.11% of participants (*n* = 156, 24.11%) use tonal patterns from the literature that the students will eventually sing. Nineteen point one percent of participants (*n* = 123, 19.01%) wrote their own examples for rhythm exercises, while 19.32% of participants (*n* = 125, 19.32%) wrote their own tonal pattern exercises. 12.21% of participants (*n* = 79, 12.21%) did "other" which was a combination of published series and their own materials, and zero-point fifteen percent of participants (*n* = 1, 0.15%) indicated that they did not teach music literacy skills (see Table 5).

Participants that used published series for teaching music literacy skills (either in print form or online), 46.67% (*n* = 98, 46.67%) indicated they used a published series, and 28.57% of participants (*n* = 60) indicated they sometimes used a published series (see Table 5). Those who used a published series (online or print) indicated that they chose the series because there were multiple examples for students to practice (*n* = 111, 36.11%), because the concepts were sequenced how they wanted students to learn (*n* = 99, 32.57 %), the cost per textbook was good (*n* = 36, 11.84%), and that it was in the choral library (*n* = 25, 8.22%). 10.86% (*n* = 33, 10.86%) chose "other" and common themes were ease of use, suggested by other teachers, web based, and

district selected. See Appendix F for full responses. See Table 6 for the titles/names of the printed published series and Table 7 for online series participants used.

Table 5

Patterns Used for Teaching Music Literacy Skills, and Published Series Use (Print or Online).

Materials Used	*n*	%
Patterns from the literature		
Rhythm patterns from the literature the students will eventually sing	163	25.19
Tonal patterns from the literature the students will eventually sing	156	24.11
Write my own rhythm pattern exercises	123	19.01
Write my own tonal pattern exercises	125	19.32
Other	79	12.21
I do not teach music literacy skills	1	0.15
Use of a published series (book or online)		
Yes	98	46.67
Sometimes	60	28.57
No	52	24.76

Table 6

Published Series Used

Title/Author or Publisher	*n*	%
77/55/15 two part singing exercises (Kodály)	1	0.47
90 Days to Sight Reading Success (McGill and Stevens, Jr.)	2	0.95
185 Unison Pentatonic Exercises (Bacon)	1	0.47
333 Reading Exercises –(Kodály)	3	1.43
Change One (Welch)	1	0.47
Choir Builders (Dilworth)	2	0.95
Choir Karate (Owens)	1	0.47
Choral Approach to Sight-Singing (Eilers and Crocker)	1	0.47
Conversational Solfège (Feierabend)	3	1.43
Essential Sight Singing (Crocker and Leavitt)	3	1.43
Essentials for Music Theory (Alfred)	1	0.47
Experiencing Choral Music: Sight Singing (Hal Leonard)	1	0.47
Festival Sight Reading (Blutman and Blutman)	1	0.47
FMEA MPA Sight reading Books	1	0.47
Habits of a Successful Choral Musician (Wilkinson and Rush)	4	1.90
High School Sight-Singer (Masterworks Press)	1	0.47
Hymnals	1	0.47
Introduction to treble (S/A) or bass (TB) singing, An (Winebrenner)	6	2.86
Level Up Series (Henry)	1	0.47
Masterworks Press	5	2.38
Music For Sight-Singing – (Ottman and Rogers)	2	0.95
Music Literacy for Singers (DeWitt)	6	2.86
Music Theory for Choirs (Masterworks Press)	1	0.47
One-Minute Theory and Sight Singing (Shaw-Slabbinck and Slabbinck)	8	3.81
Patterns of Sound (Eilers and Crocker)	8	3.81

Title/Author or Publisher	*n*	%
Progressive Sight singing (Krueger)	12	5.71
S-Cubed (Dale Duncan)	4	1.90
Sight Singer, The (Snyder)	3	1.43
Sight Singing Made EZ (Sanders)	2	0.95
Sing at First Sight (Andy Beck)	19	9.05
Sing on Sight (Audrey Snyder)	5	2.38
SMART: Sight Singing Made Accessible, Readable, Teachable (Eaton)	5	2.38
SOS: Simplifying Our Sightreading (Farnell and Phillips)	2	0.95
Steps to Harmony (Masterworks Press)	3	1.43
Successful Sight Singing (Telfer)	3	1.43
STEPS: Strategies & Tools Encouraging Proficient Sight Singing (Eaton & Bradshaw)	2	0.95
Voices in Concert (McGraw-Hill)	1	0.47
Young Singer, the (Snyder)	1	0.47

Table 7

Online/Websites

Websites	*n*	%
Flat.io	2	0.95
Breezinthrutheory.com	2	0.95
Musictheory.net	4	1.90
Sightreadingfactory.com	42	20.00
Smartmusic.com	3	1.43
Teoria.com	1	0.47
Thepracticeroom.net	2	0.95

Creation of Own Materials

Fifty-three-point eleven percent of participants (*n* = 111, 53.11%) indicated they sometimes created their own materials, 37.80% of participants (n = 79, 37.80%) indicated they created their own materials, and nine-point zero nine percent of participants (*n* = 19, 9.09%) indicated they did not create their own materials. Forty two point twenty two percent of participants (*n* = 152, 42.22%) indicated they created their own materials because they were able to sequence them how they wanted, 26.39% of participants (*n* = 95, 26.39%) indicated they were able to create voicings they wanted, 11.67% of participants (*n* = 42, 11.67%) indicated they were unable to find materials that matched the skills needed for the repertoire their choral ensembles were singing, 10.83% of participants *(n* = 39, 10.83%) indicated they were unable to find

materials that match the skills they are teaching (see Table 8). When identifying common themes from participant responses, the most common ones were being able to tailor exercises for students, price (i.e., free), making it specific to current literature. See Appendix E for full responses.

Table 8

Creating Own Materials, Reasons

Items	*n*	%
Creation of own materials		
Yes	79	37.08
Sometimes	111	53.11
No	19	9.09
Reasons for material creation		
I am able to sequence them how I want	152	42.22
I am able to create voicings I want	95	26.39
I am unable to find materials that match the skills I am teaching	39	10.83
I am unable to find materials that match the skills needed for the repertoire my choral ensembles are singing.	42	11.67
Other	32	8.89

Research Question 2: Is the Music Literacy Instruction Directly Connected to The Choral Literature That Their Ensembles Are Singing?

I used descriptive statistics to answer the second research question. When investigating the connection between music literacy instruction and choral literature, 41.09% of participants (n = 88, 41.09%) indicated they did both instruction separate from the literature and as a part of rehearsing literature, but more as skills separate from literature, than as a part of rehearsing literature. 30.95% of participants (n = 65, 30.95%) indicated they did instruction equally a part of rehearsing the literature as well as skills separate from the literature. Fifteen-point-seventy-one percent of participants (n = 33, 15.71%) indicated they both instruct separate from the literature and as a part of rehearsing literature, but more as a part of rehearsing literature, than as skills separate from literature. Eight-point ten percent of participants (n = 17, 8.10%) indicated

they taught music literacy skills as a part of rehearsing literature, while two-point thirty-eight percent of participants (n = 5, 2.38%) taught it separate from the literature. Zero-point ninety-five percent of participants (n = 2, 0.95%) indicated they do not teach music literacy skills (see Table 9).

Table 9

Connection of Music Literacy Instruction and Choral Literature

When teaching music literacy skills:	*n*	%
As skills separate from the literature	5	2.38
As a part of rehearsing literature	17	8.10
Both, but more as skills separate from literature, than as part of rehearsing literature	88	41.90
Both, but more as a part of rehearsing literature, than as skills separate from literature	33	15.71
Both equally a part of rehearsing the literature as well as skills separate from the literature	65	30.95
I do not teach music literacy skills	2	0.95

When investigating the number of minutes that participants spend on teaching music literacy skills during a single class period, the minimum was zero minutes, the maximum 351 minutes with a mean of 16.85 minutes (SD = 30.66).

While 25.19% of participants (n = 163, 25.19%) used rhythm patterns from the literature that the students will eventually sing, and 24.11% of participants (n = 156, 24.11%) use tonal patterns from the literature that the students will eventually sing. Nineteen-point one percent of participants (n = 123, 19.01%) wrote their own examples for rhythm exercises, while 19.32% of participants (n = 125, 19.32%) wrote their own tonal pattern exercises.

Participants that used published series for teaching music literacy skills (either in print form or online), 46.67% of participants (n = 98, 46.67%) indicated they used a published series, and 28.57% of participants (n = 60, 28.57%) indicated they sometimes used a published series. Twenty-four-point seventy-six percent of participants (n = 52, 24.76%) indicated they did not us

a published series for teaching music literacy skills. See Table 6 for the titles/names of the published series for print and Table 7 for published online series that participants used.

Creation of Own Materials

Fifty-three-point eleven percent of participants (*n* = 111, 53.11%) indicated they sometimes created their own materials, 37.80% of participants (n = 79, 37.80%) indicated they created their own materials, and nine-point zero nine percent of participants (*n* = 19, 9.09%) indicated they did not create their own materials. Forty-two point twenty-two percent of participants (*n* = 152, 42.44%) indicated they created their own materials because they were able to sequence them how they wanted, 26.39% of participants (*n* = 95, 26.39%) indicated they were able to create voicings they wanted, 11.67% of participants (*n* = 42, 11.67%) indicated they were unable to find materials that matched the skills needed for the repertoire their choral ensembles were singing, 10.83% of participants *(n* = 39, 10.83%) indicated they were unable to find materials that match the skills they are teaching, eight point eighty-nine percent of participants (*n* = 32, 8.89%) indicated "other". When identifying common themes from participant responses, the most common ones were ease of use, product being aligned with their adjudication, or price point. See Appendix E for full responses.

Research Question 3: What Point of The Rehearsal Process Does the Choir Receive Instruction on Music Literacy Skill (Beginning, Middle, Or End)?

I used descriptive statistics to answer the third research question. When asked how often participants taught music literacy skills, 50.24% of participants (*n* = 105, 50.24%) indicated that they teach music literacy skills almost every rehearsal, 33.01% of participants (*n* = 69, 33.01%) teach music literacy skills every rehearsal, 12.92% of participants (*n* = 27, 12.92%) teach music literacy skills several rehearsal a month, 2.87% of participants (*n* = 6, 2.87%) selected other,

with common themes of one time per week and less time spent leading up to concert dates. Zero-point ninety-six percent of participants (*n* = 2, 0.96%) do not teach music literacy skills at all (see Table 10).

When asked about where participants placed music literacy instruction in their rehearsal 53.11% (*n* = 111, 53.11%) indicated that they placed music literacy instruction after warm-ups. 22.49% (*n = 47,* 22.49%) of participants selected "other" with the most common theme being throughout the entire rehearsal (see Appendix G for full responses). Eighteen-point sixty-six percent (*n* = 39, 18.68%) of participants placed instruction at the very beginning of rehearsal, while four-point seventy-eight percent of participants (*n* = 10, 4.78%) placed music literacy instruction in the middle of rehearsal, and zero point ninety-six percent (*n* = 2, 0.96%) do not teach music literacy instruction at all (see Table 10).

Table 10

Frequency of Music Literacy Skills Taught, Location in Rehearsal

Item	*n*	%
How often taught		
Every rehearsal	69	33.01
Almost every rehearsal	105	50.24
Several rehearsals a month	27	12.92
Other	6	2.87
Where is music literacy are placed in the choral rehearsal		
At the very beginning of rehearsal	39	18.66
After warm-ups	111	53.11
In the middle of rehearsal	10	4.78
At the end of rehearsal	0	0.00
Other	47	22.49
I do not teach music literacy skills	2	0.09

Research Question 4: How Do Teachers Assess Their Students for Learning Music Literacy Skills?

I used descriptive statistics to answer the fourth research question. When asked how teacher assess students for learning music literacy skills, 81.64% of participants (n = 169, 81.64%) indicated they assess their students for the music literacy skills learned in the rehearsal. 15.46% of participants (n = 32, 15.46%) indicated they did not assess music literacy learned in the rehearsal, while two-point nine percent (n = 6, 2.90%) indicated they did not assess music literacy at all. Participants indicated they evaluated students both formally and informally (n = 141, 67.79%), while 12.98% of participants (n = 27, 12.98%) indicated they informally assess where students are not given a grade, but progress is tracked to inform teacher of what the students knows. Nine-point sixty-two percent (n =20, 9.62%) of participants indicated they formally assess where students are given a grade, based on the accuracy of what the student performs, while 9.62% (n = 20, 9.62%) of participants do not perform individual assessments at all (see Table 11).

Table 11

Music Literacy Skills Assessment

Items	*n*	%
Do participants assess music literacy skills?		
Students are assessed for music literacy skills taught in the rehearsal	169	81.64
Students are not assessed for music literacy learned in the rehearsal	32	15.46
Students are not assessed for music literacy at all	6	2.90
Formal and Informal Evaluation		
Both formally and informally	141	67.79
Informally - Students are not given a grade, but progress is tracked to inform teacher of what the students knows.	27	12.98
Formally - Students are assessed based on the accuracy of what the student performs	20	9.62
Students are not individually assessed at all	20	9.62

For assessment methods, 23.61% of participants (n = 123, 23.61%) indicated they have students singing alone on a recording, while 20.92% of participants (n = 109, 20.92%) had students singing alone for the teacher. Fourteen-point forty percent of participants (n = 75, 14.44%) assess by having students sing one person on a part in rehearsal, while 14.20% of participants (n =74, 14.20%) assess by having students sing one person a part for the teacher. In contrast, 12.09% of participants (n= 63, 12.09%) assess by having students sing alone in rehearsal, and four-point twenty-two percent of participants (n = 22, 4.22%) indicated they do not assess students (see Table 12).

Table 12

Music Literacy Skills Assessment Methods

Assessment Methods	*n*	%
Students sing alone on a recording	123	23.61
Students sing alone for the teacher	109	20.92
Students sing one person on a part in rehearsal	75	14.40
Students sing one person a part for the teacher	74	14.20
Students sing alone in rehearsal	63	12.09
Students are not assessed	22	4.22

When calculating final grades for choir, music literacy skills accounted for the following percentages: a minimum of zero percent, a maximum of 80% with a mean of 20.28% (see Table 13).

Table 13

Music Literacy Accounts for What Percentage of The Students' Final Grade

Minimum	Maximum	Mean	Std. Deviation
0.00	80	20.28	14.26

Research Question 5: Where Do Teachers Learn Music Literacy Skills?

Research question five asked the participants to rate their level of agreement with statements concerning the learning of music literacy pedagogy skills for their own classroom instruction. A majority of the participants either somewhat agreed or strongly agreed with statement one (*n* = 168, 81.12%), "I learned from music in-services/workshops I've attended". A majority of the participants either somewhat agreed or strongly agreed with statement two (*n* = 146, 70.19%), "The professors that taught my aural skills and theory skills when I was an undergraduate student". A majority of the participants either somewhat agreed or strongly agreed with statement three (*n* = 138, 66.6%), "The professors that taught my teaching methods or other music educator courses as an undergraduate student". A majority of the participants either somewhat disagreed or strongly disagreed with statement four (*n* = 89, 44.05%), "The professors that taught my aural skills and theory skills when I was a graduate student". A majority of the participants either somewhat agreed or strongly agreed with statement five (*n* = 83, 41.29%), "The professors that taught my teaching methods or other music educator courses as a graduate student". A close split with statement six, participants either somewhat agreed (*n* = 61, 29.61%) or strongly disagreed (*n* = 60, 29.15%) with the statement, "Other teachers in my school district". A majority of the participants somewhat agreed with statement seven (*n* = 83, 40.10%), "Other teachers in my local area". A close split with statement eight, participants either somewhat agreed (*n* = 54, 26.41%) or strongly disagreed (*n* = 51, 25.00%) with the statement, "My music teacher in high school" (see Table 14).

When asked if they attended at least one workshop, presentation, or interest session on the topic of music literacy or sight-singing in the choral rehearsal in the past five years, 84.06%

(n = 174) participants indicated that they had attended at least one, while 15.94% (n = 33) had not attended at least one workshop, presentation, or interest session on the topic of music literacy or sight-singing in the choral rehearsal in the past five years (see Table 13). Participants were then asked if those workshop(s), presentation(s), or interest session(s) lead to changes in their pedagogy of music literacy skills in the choral rehearsal. 76.06% (n = 143, 76.076.06% 6%) indicated yes, it led to changes, while 23.94% (n = 45, 23.94%) indicated no, it did not lead to changes in their pedagogy of music literacy skills (see Table 15).

Table 14

Where choral directors learn music literacy pedagogy skills

Items	Strongly Agree		Somewhat agree		Neither agree nor disagree		Somewhat disagree		Strongly disagree	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
I learned from music in-service or workshops attended	72	34.78	96	46.38	15	7.25	11	5.31	13	6.28
From the professors that taught the aural skills and theory skills an undergraduate student	72	34.62	74	35.58	13	6.25	28	13.46	21	10.10
From the professor that taught the teaching methods or other music education courses as an undergraduate student	58	28.02	80	38.65	21	10.14	22	10.63	26	12.56
From the professors that taught the aural skills and theory skills a graduate student	38	18.81	32	15.84	43	21.29	23	11.39	66	32.67
From the professor that taught the teaching methods or other music education courses as a graduate student	41	20.40	34	16.92	43	21.39	16	7.96	67	33.33
Other teachers in the school district	37	17.96	61	29.61	29	14.08	19	9.22	60	29.13
Other teachers in the area	46	15.00	83	27.00	22	7.20	24	7.80	32	10.40
My music teacher in high school	42	20.59	54	26.74	30	14.71	27	13.24	51	25.00

Table 15

Attendance at Workshop(s), Presentation(s), or Interest Session(s) in the last Five Years, Did Attendance Lead to Change in Pedagogy Skills?

Items	*N*	%
Attended at least one workshop, presentation, or interest session on music literacy in the last five years		
Yes	174	84.06
No	33	15.94
If yes, did they lead to pedagogical changes?		
Yes	143	76.06
No	45	23.94

Research Question 6: What Tools or Systems Are Choral Directors Using to Teach Music Literacy Skills?

When identifying what tools choral directors use to teach music literacy skills in the choral rehearsal, 53.11% of participants (*n* = 111, 53.11%) indicated they sometimes created their own materials, 37.80% of participants (n = 79, 37.80%) indicated they created their own materials, and nine point zero nine percent of participants (*n* = 19, 9.09%) indicated they did not create their own materials (see Table 8). Forty-two point twenty-two percent of participants (*n* = 152, 42.22%) indicated they created their own materials because they were able to sequence them how they wanted, 26.39% of participants (*n* = 95, 26.39%) indicated they were able to create voicings they wanted, 11.67% of participants (*n* = 42, 11.67%) indicated they were unable to find materials that matched the skills needed for the repertoire their choral ensembles were singing, 10.83% of participants *(n* = 39, 10.83%) indicated they were unable to find materials that match the skills they are teaching, eight point eighty-nine percent of participants (*n* = 32, 8.89%) indicated "other" (see Table 8). When identifying common themes from participant

responses, the most common ones were ease of use, product being aligned with their adjudication, or price point (see Appendix F for full responses).

Educator Attitudes Towards Tools Used in Classrooms

Participants reported a moderate to high level of agreement with most of the statements regarding the usage of specific tools within the choral rehearsal for teaching music literacy skills. Ninety-three-point three percent of participants (n = 195, 93.03%) either somewhat agreed or strongly agreed that students should learn music literacy skills by using solfège syllables. Seventy-four-point six percent of participants (n = 156, 74.06%) either somewhat agreed or strongly agreed that students should learn music literacy skills by using Curwen hand signs. Eighty-six-point six percent of participants (n = 181, 86.06%) either somewhat agreed or strongly agreed that solfège syllables should be used during choral warm-up activities.

While 92.20% of participants (n = 199, 92.20%) either somewhat agreed or strongly agreed that the moveable DO method (DO changes to tonic of the key signature) is an effective method to use, 60.70% of participants (n = 127, 60.70%) either somewhat disagreed or strongly disagreed that the fixed DO method (where DO is always "C") is an effective method to use. Eighty-nine-point four percent of participants (n = 187, 89.04%) either somewhat agreed or strongly agreed that movement activities were useful in the choral rehearsal for teaching music literacy skills. Sixty-four-point ten percent of participants (n = 134, 64.10%) either somewhat agreed or strongly agreed that students should learn melodic patterns aurally first, before reading notation. Fifty-four-point six percent of participants (n = 113, 54.06%) either somewhat disagreed or strongly disagreed that students should learn staff notation first, while 38.28% of participants (n = 80, 38.28%) somewhat agreed that students should learn staff notation and aural pattens together and 25.36% of participants (n = 53, 25.36%) neither agreed or disagreed with

the statement. Eighty-two-point fifty percent of participants (*n* = 170, 82.50%) either somewhat disagreed or strongly disagreed with the statement that the piano should never be used, while 29.33% of participants (*n* = 61, 29.33%) neither agreed or disagreed, and 27.40% of participants (*n* = 57, 27.40%) somewhat agreed that using the piano is necessary.

Eighty-point four percent of participants (*n* = 168, 84.04%)) either somewhat agreed or strongly agreed that students should learn to sight-sing in two or more parts. How rhythm and melody should be taught were split among participants. Thirty-one-point fifty-eight percent of participants (*n* = 195, 31.58%) somewhat agreed that rhythm and melody should be taught separately, while 27.27% of participants (*n* = 57, 27.27%) neither agreed or disagreed with the statement, and 22.49% of participants (*n* = 47, 22.49%) somewhat disagreed with the statement (see Table 16).

Table 16

Educators Attitudes Towards Specific Use of Tools in the Choral Rehearsal

Items	Strongly disagree		Somewhat disagree		Neither agree nor disagree		Somewhat agree		Strongly agree	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Students should learn music literacy skills by using solfège syllables	1	0.48	2	0.96	11	5.26	62	29.67	133	63.64
Students should learn music literacy skills by using Curwen/Glover hand signs	4	1.91	4	1.91	45	21.5	78	37.32	78	37.32
Solfège syllables should be used during warm-up activities	0	0.00	6	2.87	22	10.50	75	35.89	106	50.72
Moveable DO method (where DO changes to tonic of the key signature) is an effective method to use	2	0.96	1	0.48	7	3.35	25	11.96	174	83.25
Fixed DO method (where DO is always “C”) is an effective method to use	70	33.5	57	27.27	48	23.00	25	11.96	9	4.31
Rhythm and tonal skills should be taught separately	10	4.78	47	22.49	57	27.30	66	31.58	29	13.88
Movement activities are useful	0	0.00	3	1.44	19	9.09	47	22.49	140	66.99

Items	Strongly disagree		Somewhat disagree		Neither agree nor disagree		Somewhat agree		Strongly agree	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
Students should aurally learn patterns first, before reading notation	2	0.96	20	9.57	53	25.40	63	30.14	71	33.97
Students should learn staff notation and aural patterns at the same time	12	5.74	41	19.62	53	25.40	80	38.28	23	11.00
Students should learn staff notation first	44	21.4	69	33.50	54	26.20	32	15.53	7	3.40
Using the piano is necessary in rehearsal	17	8.17	43	20.67	61	29.30	57	27.40	30	14.42
The piano should never be used in rehearsal	121	58.7	49	23.79	31	15.10	3	1.46	2	0.97
Students should learn to sight-sing in two or more parts	0	0.00	10	4.78	31	14.80	74	35.41	94	44.98

Educator Use of Specific Tools in the Choral Rehearsal

The use of specific tools in the choral rehearsal to aid in the teaching of music literacy was surveyed among participants. Eighty-seven-point zero one percent of participants (*n* = 181, 87.01%) either most of the time or always used solfège syllables, and 62.50% of participants (*n* = 130, 62.50%) either most of the time or always used Curwen/Glover hand signs. Sixty-nine-point seventy-one percent of participants (*n* = 145, 69.71 %) either most of the time or always used solfège syllables during warm-ups. Forty-eight-point zero five percent of participants (*n* = 99, 48.05%) either most of the time or always used rhythm syllables (of some type), and 45.19% of participants (*n* = 94, 45.19%) either most of the time or always used physical movement (other than hand signs) in the choral rehearsal. Fifty-seven-point sixty-nine percent of participants (*n* = 120, 57.69%) either most of the time or always used moveable DO with La-based minor, while 45.85% of participants (*n* = 94, 45.85%) never used moveable DO, with Do-based minor. Participants indicated that 85.10% (*n* = 177, 85.10%) never used fixed Do, 40.78% of participants (*n* = 84, 40.78%) never used scale degree numbers, while 40.29% of participants

(*n* = 83, 40.29%) sometimes used scale degree numbers. In contrast, 36.06% of participants (*n* = 75, 36.06%) sometimes used note names for instruction, while 43.48% of participants (*n* = 90, 43.48%) sometimes used a neutral syllable (i.e. "lah") in the choral rehearsal (see Table 17).

Table 17

Use of Specific Tools in the Classroom

Items	Never		Sometimes		About half the time		Most of the time		Always	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	%
Solfège syllables	4	1.92	9	4.33	14	6.73	62	29.81	119	*57.21*
Glover/Curwen hand signs	29	13.94	23	11.06	26	12.50	64	30.77	66	31.73
Solfège syllables during warmups	8	3.85	24	11.54	31	14.90	64	30.77	81	38.94
Rhythm syllables	29	14.08	51	24.71	27	13.11	45	21.84	54	26.21
Physical movement (other than hand signs)	16	7.69	65	31.25	33	15.87	54	25.96	40	19.23
Moveable do with do-based minor	94	45.85	33	16.10	9	4.39	22	10.73	47	22.93
Moveable do with la-based minor	45	21.63	38	18.27	5	2.40	29	13.94	91	43.75
Fixed do	177	85.10	19	9.13	5	2.40	3	1.44	4	1.92
Scale degree numbers	84	40.78	83	40.29	17	8.25	14	6.80	8	3.88
Letter names	48	23.08	75	36.06	44	21.15	30	14.42	11	5.29
Neutral syllables (i.e., lah)	27	13.04	90	43.48	40	19.32	29	14.01	21	10.14

Rhythmic Systems in the Choral Rehearsal

For the use of rhythmic systems in the choral rehearsal, count singing (i.e. 1 and 2 and, etc.), was the most common system was used by participants (55.50%, *n* = 116) for instruction in their rehearsal. Among systems used, 16.26% of participants (*n* = 34) used the Kodály system (i.e. ta, ti-ti) and 13.40% of participants (*n* = 28) used the Takadimi (i.e. ta-di) system. One point ninety-one percent of participants (*n* = 4) used the Gordon system (i.e. Du-De), and zero point forty-eight percent of participants (*n* = 1) used the Orff system (i.e., Ap-ple). 26 participants (*f* = 12.44%) indicated they used "other" for their system (see Table 18). Common themes with "other" were moving from one system i.e., Kodály and moving to count singing, a teacher modified system, or a teacher made system (see Appendix H for full responses).

Table 18

Rhythmic Systems Used in the Choral Rehearsal

Items	*n*	%
Count Singing (1 and 2 and, etc.)	116	55.50
Kodály (ta, ti-ti)	34	16.27
Takadmi (ta-di)	28	13.40
Gordon (Du-De)	4	1.91
Orff (Ap-ple)	1	0.48
Other	26	12.44

Research Question 7: Is There a Relationship Between a Skills Sequence and Geographic Regions?

I ran Chi-Square independence test to determine if there was any significant relationship between a skills sequence and census geographic regions. The independent variable was each skill sequence (rhythm, tonal (pitch), melodic (tonal and rhythm together), staff, line, spaces), while the dependent variable was the census based geographic region. A Chi-Square test of independence showed there was not a significant association between census region and the placement of rhythm in the skills sequence χ^2 (15, N = 196) = 22.769, p = .089. Within the south (census region three), 40 (53.33%) participants ranked rhythm as number one, while only 8 (27.58%) participants from the Midwest (census region two) ranked rhythm as number one. A Chi-Square test of independence showed there was not a significant association between census region and the use of tonal (pitch) signs χ^2 (15, N = 196) = 14.601, p = .481.

Within census regions, the south (region three), 25 (33.33%) of participants ranked tonal (pitch) second, while in the west, 13 (32.35%) participants ranked rhythm as second. A Chi-Square test of independence showed there was not a significant association between census region and the use of staff χ^2 (15, N = 196) = 5.527, p = .987. Within census regions, the south (region three), 20 (29.41%) of participants ranked staff fourth, while in the west, 12 (35.29%)

participants ranked lines as fifth. A Chi-Square test of independence showed there was not a significant association between census region and the use of lines x^2 (15, N = 196) = 10.279, p = .802. Within census regions, the south (region three), 18 (24.00%) of participants ranked lines second, while in the south, 12 (35.29%) participants ranked lines as fourth and in the west 12 (35.29%) participants ranked lines as fifth. A Chi-Square test of independence showed there was not a significant association between census region and the use of spaces χ^2 (15, N = 196) = 13.198, p = .587. Within census regions, the south (region three), 20 (26.66%) of participants ranked spaces third, while in the northeast, 15 (30.61%) participants spaces rhythm as sixth. The Cramer's V correlation results showed no significant relationship between the variables of skills sequence and rhythm, tonal (pitch), melodic (tonal and rhythm together), staff, lines, and spaces.

A cross-tabulations was completed to determine the skills sequence teaching ranking-based census regions (see Tables 20 - 25). Census region was selected based on the state the participant chose and then the participants ranked in order the sequence of music literacy skills they taught: rhythm, tonal (pitch), melodic (tonal and rhythm together), staff, lines, and spaces. In Census Region 1 (Northeast) 24 (48.98%) participants ranked rhythm first, 19 (38.78%) participants rank tonal second, 16 (32.65%) participants ranked staff fourth, 17 (34.69%) participants ranked lines fifth, and 15 (30.61%) participants ranked spaces sixth, while 22 (44.89%) participants ranked melodic sixth (see Tables 20 - 25). In Census Region 2 (Midwest) 8 (27.58%) participants ranked rhythm first, 7 (24.13%) participants ranked staff first, second, or fourth, 11 (37.93%) participants ranked lines third, and 9 (31.03) participants ranked spaces fourth, 10 (34.48%) participants ranked tonal fifth, while 17 (58.62%) participants ranked melodic sixth (see Tables 20 - 25). In Census Region 3 (South) 40 (53.33%) participants ranked

rhythm first, 25 (33.33%) participants rank tonal second, 20 (29.41%) participants ranked staff fourth, 17 (22.66%) participants ranked lines fifth, and 14 (18.66%) participants ranked spaces sixth, while 18 (52.94%) participants ranked melodic sixth (see Tables 20 - 25). In Census Region 4 (West) 17 (39.54%) participants ranked rhythm first, 10 (29.41%) participants rank tonal second, 12 (27.90%) participants ranked staff, lines, or spaces fourth, while 21 (48.83%) participants ranked melodic sixth (see Tables 19 – 24).

Table 19

Cross-Tabulation of Census Region and Rhythm

Ranking	1		2		3		4		5		6		Total
(in Order	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	24	48.98	6	12.25	4	8.16	7	14.29	6	12.25	2	4.08	49
Midwest	8	27.58	6	20.69	3	10.71	2	6.89	6	20.69	4	13.79	29
South	40	53.33	8	10.66	3	4.00	13	17.33	10	13.33	1	1.33	75
West	17	39.54	11	25.58	2	4.65	2	4.65	7	16.27	4	9.30	43
Total	89		31		12		24		27		11		196

Table 20

Cross-Tabulation of Census Region and Tonal (Pitch)

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	10	20.50	19	38.80	4	8.16	4	8.16	10	20.40	2	4.08	49
Midwest	7	24.10	5	17.20	2	6.89	4	13.8	10	34.50	1	3.44	29
South	13	17.30	25	33.30	3	4.00	7	9.33	24	32.00	3	4.00	75
West	13	38.20	10	29.40	6	14.00	5	11.60	9	20.90	0	0.00	43
Total	43		59		15		20		53		6		196

Table 21

Cross-Tabulation of Census Region and Melodic (Tonal and Rhythm Together)

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	3	6.12	4	8.16	14	28.60	2	4.08	4	8.16	22	44.90	49
Midwest	5	17.2	1	3.44	2	6.89	2	6.89	2	6.89	17	58.60	29
South	1	1.33	3	4.00	17	22.70	1	1.33	3	4.00	50	66.70	75
West	3	6.96	4	9.30	9	20.90	3	6.96	3	6.96	21	48.80	43
Total	12		12		42		8		12		110		196

Table 22

Cross-Tabulation of Census Region and Staff

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	10	20.40	9	18.40	7	14.30	16	32.70	2	4.08	5	10.20	49
Midwest	7	24.10	7	24.10	5	17.20	7	24.10	2	6.89	1	3.44	29
South	18	24.00	15	20.00	16	21.30	20	29.40	3	4.00	3	4.00	75
West	10	23.30	9	20.90	7	16.30	12	27.90	1	2.94	4	9.30	43
Total	45		40		35		55		8		13		196

Table 23

Cross-Tabulation of Census Region and Lines

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	1	2.04	9	18.40	8	16.30	11	22.50	17	34.70	3	6.12	49
Midwest	1	3.44	16	55.20	11	37.90	5	17.20	5	17.20	1	3.44	29
South	3	4.00	18	24.00	16	21.30	17	22.70	17	22.70	4	5.33	75
West	0	0.00	8	18.60	9	20.90	12	27.90	12	27.90	2	4.65	43
Total	5		41		44		45		151		9		196

Table 24

Cross-Tabulation of Census Region and Spaces

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Census Region													
Northeast	1	2.04	2	4.08	12	24.48	10	20.40	10	20.40	15	30.61	49
Midwest	1	3.44	4	13.79	6	20.68	4	13.79	4	13.79	5	17.24	29
South	0	0.00	5	8.00	20	26.66	18	24.00	18	24.00	14	18.66	75
West	0	0.00	1	2.94	10	23.25	11	25.58	11	25.58	12	27.90	43
Total	2		13		48		44		42		44		196

Research Question 8: Is There any Significant Difference in Responses to Survey Questions Based on Demographic Variables?

I ran a Chi-square independence test on the time of school year when music literacy skills are taught and census region. A Chi-Square test of independence showed there was not a significant association between census region and when music literacy skills taught $\chi^2(12, N = 207) = 10.795$, $p = .547$. The majority of all census region groups teach music literacy skills throughout the entire school year (see Table 25).

Table 25

I Teach Music Literacy

Item	Throughout the entire year		In the beginning of the year		In the middle of the year		At the end of the year		I do not spend any time		Total
	n	*%*	*n*	*%*	*N*	*%*	*n*	*%*	*n*	*%*	
Census Region											
Northeast	46	92.00	1	4.00	2	0.00	0	0.00	1	2.00	50
Midwest	33	97.05	0	0.00	0	0.00	0	0.00	1	2.94	34
South	76	96.20	2	0.00	0	1.26	1	1.26	0	0.00	79
West	43	97.72	0	2.27	1	0.00	0	0.00	0	0.00	44
Total	198	198	3	2.00	2	1	1	1	2	2	207

I ran a Chi-square independence test on census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop. Across the census regions, the majority of participants chose either “strongly agree” or “somewhat agree” (see Table 27). A Chi-Square test of independence showed there was not a significant association between census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop in years of experience “1” (zero to seven years) χ^2 (12, $N = 205$) = 12.657, $p = .394$.

A Chi-Square test of independence showed there was not a significant association between census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop in years of experience “2” (eight to 15 years)

χ^2 (12, N = 205) = 8.628, p = .734. A Chi-Square test of independence showed there was not a significant association between census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop in years of experience "3" (16-24 years), χ^2 (12, N = 205) = 9.274, p = .679. A Chi-Square test of independence showed there was not a significant association between census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop in years of experience "4" (25-46 years), χ^3 (12 N = 205) = 7.140, p = .848. Overall, a Chi-Square test of independence showed there was not a significant association between census region, years of teaching experience, and if teachers learned their pedagogy skills from attending a music in-service workshop χ^2 (12 N = 205) = 12.321, p = .420.

Table 26

I've Learned from Music In-Service or Workshops I've Attended

Years Teaching	Census Region	Strongly agree		Somewhat agree		Neither agree nor disagree		Somewhat agree		Strongly disagree		Total
		n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
0 – 7	Northeast	1	7.69	6	46.15	3	23.08	1	7.69	2	15.38	13
	Midwest	2	25.00	3	37.50	2	25.00	1	12.50	0	0.00	8
	South	8	47.06	6	35.29	2	11.76	0	0.00	1	5.88	17
	West	5	41.67	3	25.00	1	8.33	0	0.00	3	25.00	12
	Total	16		18		8		2		6		50
8 – 15	Northeast	4	23.53	8	47.06	1	5.88	2	11.76	2	11.76	17
	Midwest	3	27.27	6	54.55	1	9.09	1	9.09	0	0.00	11
	South	10	52.63	7	36.84	1	5.26	0	0.00	1	5.26	19
	West	4	36.36	6	54.55	0	0.00	1	9.09	0	0.00	11
	Total	21		27		3		4		3		58
16 – 24	Northeast	2	22.22	6	66.67	1	11.11	0	0.00	0	0.00	9
	Midwest	4	40.00	4	40.00	0	0.00	1	10.00	1	10.00	10
	South	7	41.18	6	35.29	2	11.76	2	11.76	0	0.00	17
	West	3	42.86	4	57.14	0	0.00	0	0.00	0	0.00	7
	Total	16		20		3		3		1		43
25 – 46	Northeast	2	20.00	7	70.00	0	0.00	0	0.00	1	10.00	10
	Midwest	2	40.00	3	60.00	0	0.00	0	0.00	0	0.00	5
	South	8	32.00	15	60.00	0	0.00	1	4.00	1	4.00	25
	West	6	42.86	5	35.71	1	7.14	1	7.14	1	7.14	14
	Total	18		30		1		2		3		54

I ran Chi-Square independence tests to determine if there was any significance between census region and tools used in the choral rehearsal. A Chi-Square test of independence showed there was a significant association between census region and the use of Glover/Curwen Hand signs χ^2 (12, N = 206) = 31.514, p = .002, with small effect size, *Cramer's V* = .226. While 61 (78.20%) participants from the south region indicated they most of the time or always use Glover/Curwen hand signs, 22 (44.00%) participants from the northeast indicated they sometimes or never use Glover/Curwen hand signs. A Chi-Square test of independence showed there was a significant association between census region and the use of rhythm syllables χ^2 (12, N = 206) = 1935.91, p < .001, with small effect size, *Cramer's* V = .242. While 32 (41.02%) participants from the south region indicated they always use rhythm syllables, 11 (32.35%) participants from the Mid-west indicated they never use rhythm syllables.

A Chi-Square test of independence showed there was no significant association between census region and the use of solfège syllables χ^2 (12, N = 206) = 19.890, p = .067. While 49 (62.82%) participants from the south region indicated they always use solfège syllables, 17 (34.00%) participants from the northeast indicated they most of the time use solfège syllables. A Chi-Square test of independence showed there was no significant association between census region and the use of solfège syllables during warm-ups, χ^2 (12, N = 206) = 19.890, p = .781. In the south region 32 (41.02%) participants and 16 (32.00%) indicated they always use solfège 5syllables during warm-ups.

A Chi-Square test of independence showed there was no significant association between census region and the use of physical movement χ^2 (12, N = 206) = 14.456, p = .273. While 24 (48.00%) participants from the northeast region indicated they use physical movement most of the time or about half of the time, 11 (32.36%) participants from the Mid-west indicated they

sometimes use physical movement .A Chi-Square test of independence showed there was no significant association between census region and the use of moveable do and do-based minor χ^2 (12, N = 206) = 18.805, p = .093. While 53 (49.35%) participants from the south region indicated they never use moveable do and do-based minor, 14 (32.55%) participants from the west indicated they always use moveable do and do-based minor. A Chi-Square test of independence showed there was no significant association between census region and the use of moveable do and la-based minor χ^2 (12, N = 206) = 19.433, p = .079. While 41 (52.56%) participants from the south region indicated they always use moveable do and la-based minor, 13 (38.23%) participants from the Mid-west indicated they never use moveable do and la-based minor.

A Chi-Square test of independence showed there was no significant association between census region and the use of fixed do χ^2 (12, N = 206) = 19.180, p = .084. While 45 (90.00%) participants from the northeast region indicated they never use fixed do, only 64 (82.05%) participants from the south indicated they never use fixed do. A Chi-Square test of independence showed there was no significant association between census region and the use of scale degree numbers χ^2 (12, N = 206) = 17.952, p = .117. While 16 (32.54%) participants from the northeast region indicated they never use scale degree numbers, 17 (39.53%) participants from the west indicated they sometimes use scale degree numbers. A Chi-Square test of independence showed there was no significant association between census region and the use of letter names χ^2 (12, N = 206) = 7.003, p = .857. While 33 (66.00%) participants from the northeast region indicated they never or sometimes use letter names, 44 (56.40.%) participants from the south indicated they sometimes or about half of the time use letter names. A Chi-Square test of independence showed there was no significant association between census region and the use of

neutral syllables χ^2 (12, N = 206) = 13.034, p = .367. While 33 (42.85%) participants from the south region indicated they sometimes use neutral syllables, only 6 (12.00%) participants from the northeast indicated they never use neutral syllables.

Research Question 9: Is There a Relationship Between a Skills Sequence and Survey Response Questions?

I ran a Chi-Square Independence Test to determine the any significance between skills sequence teaching ranking and years of teaching (see Tables 28 - 33). Years of teaching was grouped into the following four brackets: zero to seven years of teaching, eight to 15 years of teaching, 16 – 24 years of teaching, and 25 – 46 years of teaching. Each participant ranked in order the sequence of music literacy skills they taught: rhythm, tonal (pitch), melodic (tonal and rhythm together), staff, lines, and spaces and cross-tabulations were run against the two factors.

Regarding years of teaching grouping one, 22 (46.80%) participants ranked rhythm first, 14 (29.78%) participants rank tonal second, 14 (29.78%) participants ranked staff fourth, and 15 (31.91%) participants ranked lines fifth. 15 (31.91%) participants ranked spaces sixth, while 27 (57.44%) participants ranked melodic sixth (see Tables 28 - 33). In years of teaching grouping two, 25 (46.29%) participants ranked rhythm first, 15 (27.77%) participants ranked staff second, while 13 (24.07%) participants ranked tonal second. 15 (27.77%) participants ranked lines third, while 18 (33.33%) participants ranked spaces fourth, and 34 (62.96%) participants ranked melodic sixth (see Tables 28- 33). In years of teaching grouping three, 19 (44.18%) participants ranked rhythm first, 12 (27.96%) participants ranked lines second, 13 (30.23%) participants ranked spaces third, 13 (30.23%) participants ranked staff fourth 12 (27.96%) participants rank tonal fifth, while 24 (55.81%) participants ranked melodic sixth (see Tables 28 - 33). In years of teaching grouping four, 23 (42.59%) participants ranked rhythm first, 21 (38.88%) participants

rank tonal second, while 21 (38.88%) participants ranked staff fourth. 14 (25.92%) participants ranked spaces third or sixth and 15 (27.77) participants ranked lines fifth, while 25 (46.29%) participants ranked melodic sixth (see Tables 27 – 32).

A Chi-Square test of independence showed there was a significant association between years of teaching, and the ranking of rhythm χ^2 (15, N = 198) = 25.632, p = .042 with small effect size, *Cramer's* V = .208. All years of teaching groups ranked rhythm as first for skill sequencing overall (see Table 28). A Chi-Square test of independence showed there was no significant association between years of teaching and the ranking of tonal (pitch) χ^2 (15, N = 198) = 14.652, p = .477. The 16 – 24 years group had 12 (27.96%) participants rank tonal fifth, while the 25 – 46 years group had 21 (38.88%) participants rank tonal second.

A Chi-Square test of independence showed there was no significant association between years of teaching and the ranking of melodic (tonal and rhythm together) χ^2 (15, N = 198) = 17.307, p = .171. The 25 – 46 years group had 25 (45.29%) participants ranked melodic sixth, while another 19 (35.18%) ranked melodic third. The zero to seven years group had 27 (57.44%) participants, the eight – 15 years group had 34 (62.96%) participants and the 16 – 24 years group had 24 (55.81%) participants rank melodic sixth.

A Chi-Square test of independence showed there was no significant association between years of teaching and the ranking of staff χ^2 (15, N = 198) = 17.971.632, p = .264. The 25 – 46 years group had 21 (38.88%) participants ranked staff fourth, while, the eight to 15 years group had 15 (27.77%) participants and the 16 – 24 years group had 10 (23.25%) participants rank staff second.

A Chi-Square test of independence showed there was no significant association between years of teaching and the ranking of lines χ^2 (15, N = 198) = 20.190, p = .165. The eight to 15

years group had 15 (27.77%) participants rank lines third and fourth, while the 25 – 46 years group had 15 (27.77%) participants rank lines fifth.

A Chi-Square test of independence showed there was a significant association between years of teaching and the ranking of spaces χ^2 (15, N = 198) = 17.466, p = .292. The eight to 15 years group had 18 (33.33%) participants rank spaces fourth, while the 25 – 46 years group had 14 (25.92) participants rank spaces both third and sixth.

Table 27

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Rhythm

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Years Teaching													
0 – 7	22	46.80	11	23.4	3	6.38	7	14.89	4	8.51	0	0.00	47
8 – 15	25	46.29	12	22.22	1	1.85	4	7.47	9	16.66	2	3.73	54
16 – 24	19	44.18	5	11.62	3	6.97	2	4.65	7	16.27	7	16.27	43
25 – 46	23	42.59	5	9.25	5	9.25	10	18.51	9	16.66	2	3.70	54
Total	89		33		12		24		29		11		198

Table 28

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Tonal (pitch)

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Years Teaching													
0 – 7	8	17.02	14	29.78	7	14.89	3	6.38	15	32	0	0.00	47
8 – 15	14	25.92	13	24.07	4	7.40	6	11.11	13	24	4	7.40	54
16 – 24	10	23.25	11	25.58	3	6.97	6	13.95	12	28	1	2.32	43
25 – 46	12	22.22	21	38.88	2	3.70	5	9.25	13	24	1	1.85	54
Total	44		59		16		20		53		6		198

Table 29

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Melodic (Rhythm and Tonal)

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Years Teaching													
0 – 7	5	10.6	2	4.25	9	19.14	3	6.38	1	2.12	27	57.00	47
8 – 15	2	3.70	2	3.70	9	16.66	2	3.70	5	9.25	34	63.00	54
16 – 24	4	9.30	3	6.97	6	13.50	2	4.65	4	9.30	24	56.00	43
25 – 46	2	3.70	5	9.25	19	35.18	10	18.51	2	3.70	25	46.00	54
Total	13		12		43		8		12		110		198

Table 30

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Staff

Ranking	1		2		3		4		5		6		
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	Total
Years Teaching													
0 – 7	10	21.27	10	21.27	10	21.27	14	29.78	1	2.12	2	4.25	47
8 – 15	11	20.37	15	27.77	12	22.22	8	14.81	3	5.55	5	9.25	54
16 – 24	9	20.93	10	23.25	7	16.27	13	30.23	3	6.97	1	2.32	43
25 – 46	15	27.77	5	9.25	6	11.11	21	38.88	2	3.70	5	9.25	54
Total	45		40		35		56		9		13		198

Table 31

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Lines

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Years Teaching													
0 – 7	2	4.25	5	10.63	10	21.27	12	25.53	15	31.91	3	6.38	47
8 – 15	1	1.85	11	20.37	15	27.77	15	27.77	11	25.58	1	1.85	54
16 – 24	0	0.00	12	27.96	11	25.58	9	20.93	11	25.58	0	0.00	43
25 – 46	2	3.70	13	24.07	8	14.81	9	16.66	15	27.77	7	13.00	54
Total	5		41		44		45		52		11		198

Table 32

Cross-Tabulation of Years Teaching and Ranked Skills Sequence: Spaces

Ranking	1		2		3		4		5		6		Total
(in Order)	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	
Years Teaching													
0 – 7	0	0.00	5	10.63	8	17.02	8	17.02	11	23.40	15	31.91	47
8 – 15	1	1.85	1	1.85	13	24.07	18	33.33	13	24.07	8	14.81	54
16 – 24	1	2.32	2	4.65	13	30.23	11	25.58	6	13.95	10	23.25	43
25 – 46	0	0.00	5	9.25	14	25.92	8	14.81	13	24.07	14	25.92	54
Total	2		13		48		45		43		47		198

CHAPTER 5

DISCUSSION

Summary of Findings

There are many challenges to teaching music literacy: there is no shortcut or quick fix, music literacy must be developed over a long period of time, and it must be done methodically (Ester, 2010). Students must have consistent practice and if that practice is not carefully sequenced it is of little value. The issue with this is that there is currently no nationally recognized methodology for choral directors to use. Making sure that choral singers can not only sight-sing, but also can aurally distinguish sounds and process them is quite important (Dalby, 2015; Ester, 2010; Krueger, 2014; Riegle & Gerrity, 2011). Even though research has shown that there has been growing requirements in state music assessments for choral festivals (Norris, 2004), there are still teachers across the country who are not teaching music literacy skills. The results of this study indicate that choral music educators are not only teaching music literacy skills, but they are spending additional time creating their own materials. In addition, choral music educators are spending more time teaching music literacy skills than in past surveys (Demorest, 2004). There was no significant correlation found between census region and physical movement (other than hand signs), nor was a significant correlation found between census region and the use of moveable do with do-based minor. Significant positive correlations were found between years of teaching and where participants placed rhythm in their teaching sequence, years of teaching and where participants placed spaces in their teaching sequence, as well as census region and the use of Glover/Curwen hand signs.

Findings and Interpretations

The following section includes discussion and interpretations for skills sequencing and instructional sequencing, patterns, materials, and tools used skills sequence and survey questions.

Skills Sequencing and Sequencing Instruction

Responses from participants demonstrate that a large majority of choral directors are teaching music literacy skills within the choral rehearsal. Those that are not teaching these skills stated that they did not have the time due to pressure of performances or not knowing how to teach the skills. Responses from participants indicate that the majority of choral directors teach music literacy skills throughout the school year. They do this because they recognize that this is a skill that has to be developed over time and cannot be taught just before festival. The average time spent on teaching music literacy skills was 16.85 minutes. This is an increase from Demorest's 2004 study when the average time was 9.5 minutes.

Overall, participants indicated they started with rhythm first when sequencing music literacy instruction. One participant stated "I begin with rhythm because students have a greater chance of success. In a beginning singer (who may not even match pitch) it builds confidence and higher-level skills." Comments like this participant were quite common when explaining why they started with rhythm. Most felt that was the fastest way to building success with beginning readers. Participants overall taught tonal (pitch) second. One participant said that after they work on rhythm first, they "then work on tonal reading by exploring the staff as a graph of sound." Many participants wrote about the reasons they chose to work on tonal second. Most indicated because it lacked rhythm, it allowed students to be successful with mastery before it was combined with rhythm (to make it melodic). Many also indicated they combined teaching lines, spaces, and staff together and most saw that as the subject matter for discussion and visual

orientation. Finally, the majority of participants indicated that the taught melodic (rhythm and tonal together) last.

When reading responses from participants, many are utilizing the Kodály methodology or a modified version of this, but common themes that emerged within the data was sound-before-sight, rhythm-based learning first, slowly introducing new concepts for student success, as well as making sure students have mastered concepts before moving onto a new concept. This indicates that choral directors are still following the sound-before-sight methodology that is both adopted by Kodály as well as Gordon, but when analyzing the data, there was no significant difference on the ordering based on census region. When determining whether or not choral directors directly connected music literacy skills to the choral literature they were rehearsing, most indicated they taught it as both skills separate from the literature as well as a part of rehearsing the literature, but more as skills separate. This indicates that most directors are trying their best to have students master concepts before applying those concepts to the literature. In my experience, this is typically the missing link in teaching music literacy skills. If directors teach the skill, but they forget to teach students how to apply it to the literature (i.e. find the patterns, break the patterns down, etc.) then it is all for naught.

Patterns, Materials, and Tools Used

When teaching music literacy skills, a majority of participants indicated they used both rhythm patterns and tonal patterns found in the literature their students would eventually sing, and over half of participants indicated that they created their own materials. Participants indicated they made their own materials because they were able to sequence them how they wanted versus what was in readily published materials. When identifying what tools choral directors used, research data found that the majority of research participants utilized solfège

syllables, Glover/Curwen hand signs, solfège syllables during warm-ups, and moveable do with la-based minor. In addition, many used rhythm syllables as well. Many research participants indicated they attended a workshop or in-service in the last five years and it lead to change in how they teach music literacy in their rehearsal. All of this indicates that choral directors are not utilizing every possible way to reach every learning style that each singer may have in their choral rehearsal, but they are yearning for information on how to reach each and every singer to achieve success with them in their ensemble.

Skills Sequence and Survey Questions

Data analysis revealed correlations with geographic location (based on census regions) and where research participants placed tonal (pitch) in their skills sequencing. Data analysis also found correlations where participants placed staff, lines, and spaces in their skills sequencing. No other significant relationships were found between the other variables of tonal (pitch), staff, or line and geographic region. Data analysis utilizing Chi-Square indicated that there was a significant relationship between years of teaching experience and ranking of rhythm for skills sequence. A Chi-Square test of independence showed there was a significant association between census region and the use of rhythm syllables χ^2 (15, n = 198 size) = 25.632, $p < .042$. Data analysis indicated that there was no significant difference in the number of minutes spent teaching music literacy skills and census regions.

When examining if teachers learned their pedagogy skills from workshops or in-services, those in groupings 2 (eight to 15 years of experience), 3 (16-24 years of experience) and 4 (25-46 years of experience) all had large effect sizes when analyzed with *Cramer's V*. I believe this could be for several reasons. Within the past two years, there have not been many (if at all) music conferences due to COVID-19, so newer teachers have less opportunity to attend such

conferences. Newer teachers typically also have less extra money to attend conferences, so due to expenses, they skip them if their school system does not pay for them.

When identifying if tools used and census regions had any significant association, a Chi-Square test of independence indicated that there was a significant association between census region and the use of Glover/Curwen hand signs as well as a significant association between region and the use of rhythm syllables. Because many participants indicated that they start with rhythm, this aligned with the data. I believe that in many school systems rhythm is focused on heavily at elementary level, and so secondary directors prefer to start with rhythm. I also believe that since many elementary teachers utilize the Glover/Curwen hand signs and since many students are kinesthetic learners, this is just another tool to reach more students faster.

When examining years of teaching and ranking of skills sequence, the only significant association that came from the Chi-Square test of independence was between years of teaching and rhythm. The rest of the variables (tonal, melodic, staff, lines, and spaces) all yielded no significance with years of teaching.

Limitations of the Study

NAfME noted an extraordinary drop in rates of response for surveys distributed by their Research Assistance program. The response rate for the initial two emails sent via NafME (and by the researcher to TMEA participants) was consistent with the average response rate for surveys distributed by this program. While respondents represent almost the entire country, it cannot be generalized to the whole population of the nation but reveal a view into the specific choral rehearsals of the survey participants because of low response rates.

Implications and Conclusions

The research has shown that while considerable progress has been made in choral music education in some areas, many are still teaching music literacy skills the way we were fifty years ago. Some are still not teaching them at all. Still the choral music world lacks any kind of national curriculum for teaching music literacy skills. While music literacy is included in the national standards for music education, we must have administrators who understand the standards and the importance of using them.

We have seen the shift from teaching skills separate from the literature to teaching skills from patterns from the literature, since Demorest's (2004) study, this tells me that it is time for music publishers aid choral education in creation of materials to do so. Researchers found that participants use the repertoire that students are learning to teach rhythm and tonal patterns while others are still writing their own. The shift from what Demorest (2004) revealed that most were teaching skills separate from the literature. This tells me that it is time for choral directors to have a better and more complete curriculum at the national level. Almost half of the participants in the study utilized some type of published material but are still creating their own material. Choral educators purchase textbooks without the requisite teaching materials (lesson plans, teaching materials, quizzes, tests, etc.). I believe, in addition to performance octavos, choral educators must receive the same types of materials their peers in other teaching areas receive (teachers' guide, quizzes, tests, worksheets, etc.). I understand monetary implications exist, but I believe without that connection between education and teaching materials, choral students globally are being done a disservice.

Not Teaching Music Literacy

One participant indicated that they did not teach music literacy to their choral ensembles. I decided to look at their data set individually to see what they had selected and reasons given as a glimpse into why they would not teach music literacy to their choral singers. This participant has been teaching for four years and in their current position for three years. They have a master's degree and teach grades sixth through twelfth grades for choir. They said that they do not teach music literacy to any of their ensembles "because I do not feel comfortable to teach it properly (was trained to be an instrumental teacher)." Another participant who had a master's degree, but not in education and one year of teaching experience, said they do not teach music literacy skills said, "Each choir course is only 9 weeks long, so we cover other literacy skills, but do not have time to master them well-enough to practice sight-singing." Another participant who had a bachelor's degree and 31 years of teaching experience said, "Time constraints. We rehearse before school for 35 minutes twice a week. 75% of the Chorus are also in instrumental ensembles. We have more time in those classes to work on music literacy." When asked to rank in order their skills sequence for teaching first to last (rhythm, tonal (pitch), melodic, lines, spaces, staff), three of the participants said they like to teach melodic (rhythm and tonal first), two said they teach it second, and one said they taught it third.

This information is great insight for future publication information. Too often, inexperienced teachers put the "cart before the horse" and that does not allow for students to succeed. The key is to break it down methodically for them, so they have a process to learn the music on their own.

Future Research Implications

The purpose of this study was to provide information about the skills sequencing in music literacy instruction, placement of these teaching skills in the choral rehearsal, and if choral directors are linking the music literacy instruction directly to choral literature they are currently learning, or if it is taught separately from the literature. Further investigation suggestions would be to break this down even further. Identifying top level choral programs across the country and using qualitative research to identify the *how* and the *why* of the success of their programs may shed some light for others in duplicating a program of such success.

Results of this study indicated the majority of choral directors who participated in my research study want to teach music literacy skills in a manner that allows students to not only master concepts, but apply these concepts to new material (i.e., music) in future instances. They are not only utilizing the tools that publishers are making available, but they are spending valuable time creating their own materials for student success.

Closing

The importance of teaching music literacy skills to choral singers to create independent musicians is a debate that has been going on for decades. It is a compounded issue, since we have popular television shows like American Idol, The Voice, and many others where we have contestants who are amazing performers, win the competition, but in reality, cannot read music at all. Such a disservice has been done to these singers if they ever where in a school choir where music literacy skills were not taught.

I hope that through this research study fellow and future researchers see that we not only have a far way to go in choral music education with teaching music literacy skills, but I also hope that publishers see that there is a need for curricula for teaching these skills. If choral

educators were able to purchase such materials to aid in their teaching, they would be able to spend more time preparing their students and less time creating materials for students' success.

REFERENCES

Armstrong, M (2001). Adjudicated sight-reading for the choral ensemble: An incentive for musical literacy. *The Choral Journal. 41*(10), 21-30. https://www.jstor.org/stable/23553926

Bluestine, E. (2000). *The ways children learn music* (2nd edition). GIA Publications.

Bonnin, J. (2005). Katinka Dániel and her contributions to Kodály pedagogy in the United States. *Journal of Historical Research in Music Education*. *27*(1), 49-64. http://dx.doi.org/10.1177/153660060502700105

Bowyer, J. (2015). More than solfège and hand signs: Philosophy, tools, and lesson planning in the authentic Kodály classroom. *Music Educators Journal, 102*(2), 69-72. https://doi.org/10.1177/0027432115611232

Bowyer, J. (2015). Selecting sight-singing curricula for the choral rehearsal. *The Choral Journal*. *56*(2), 69-71. https://www.jstor.org/stable/24643348

Boyle, D., & Lucas, K (1990). The effect of context on sightsinging. *Bulletin of the Council for Research in Music Education,* 106, 1-9. https://www.jstor.org/stable/40318858

Brandler, B. & Peynircioglu, Z. (2015). A comparison of the efficacy of individual and collaborative music learning in ensemble rehearsals. *Journal of Research in Music Education*, *63*(3), 281-297. http://dx.doi.org/10.1177/0022429415597885

Brittain, L. (1998). Sight-singing pedagogy: Research applied to classroom methods. *The Choral Journal*, *39*(1), 9-15; 17-18. https://www.jstor.org/stable/23552445

Brown, K. (2003). An alternative approach to developing music literacy skills in a transient society. *Music Educators Journal, 90*(2), 46-54. https://doi.org/10.2307/3399934

Buonviri, N.O. (2019). Effects of silence, sound, and singing on melodic dictation accuracy. *Journal of Research in Music Education. (66)*4, 365-374. http://dx.doi.org/10.1177/0022429418801333

Buonviri, N. O., (2015). Effects of a preparatory singing pattern on melodic dictation success. *Journal of Research in Music Education*, 63(1), 102-113. http://dx.doi.org/10.1177/0022429415570754

Buonviri, N.O. & Paney, A (2015). Melodic dictation instruction: A survey of advanced placement music theory teachers. *Journal of Research in Music Education.* 63(2), 224-237. http://dx.doi.org/10.1177/0022429415584141

Casarow, P. (2002). *Sight-singing pedagogy: Analysis of practice and comparison of systems as described in related literature.* (Unpublished doctoral dissertation). Arizona State University.

Cha, J. (2015). The Takadimi system reconsidered: Its psychological foundations and some proposals for improvement. *Psychology of Music. 43*(4), 563-577. http://dx.doi.org/10.1177/0305735614528063

Chosky, L. (1999). *The Kodály method I: Comprehensive Music Education* (3rd ed.). Prentice Hall Publishing.

Cho, G. (1989). *Melodic, dyadic, and harmonic sight singing: Graded exercises.* (3rd ed.). Kendall/Hunt Publishing.

Colley, B. (1987). A comparison of syllabic methods for improving rhythm literacy. *Journal of Research in Music Education, 35*(4) 221-235. https://doi.org/10.2307%2F3345075

Dalby, B. (2005). Toward and effective pedagogy for teaching rhythm: Gordon and beyond. *Music Educators Journal, 92*(2) 54-60. https://doi.org/10.2307/3400228

Dalby, B. (2015). Teaching movable *du*: Guidelines for developing enrhythmic reading skills. *Music Educators Journal. 101*(3) 91-99. https://doi.org/10.1177%2F0027432114565008

Daniels, R. (1986). Relationships among selected factors and the sight-reading ability of high school mixed choirs. *Journal of Research in Music Education. 34*(4) 279-289. http://dx.doi.org/10.2307/3345261

Demorest, S.M. (2004). Choral sight-singing practices: Revisiting a web-based survey. *International Journal of Research in Choral Singing*. *2*(1). 3-10.

Demorest, S.M. (2001). *Building Choral Excellence.* Oxford University Press.

Demorest, S.M. (1998). Improving sight-singing performance in the choral ensemble: The effect of individual testing. *Journal of Research in Music Education*, *46*(2), 182-192. http://dx.doi.org/10.2307/3345622

Demorest, S.M. (1998). Sightsinging in the secondary choral ensemble: A review of the research. *Bulletin of the Council for Research in Music Education,* 137, 1-15. https://www.jstor.org/stable/40318928

Demorest, S & May, W., (1995). Sight-singing instruction in the choral ensemble: Factors related to individual performance. *Journal of Research in Music Education, 43*(2), 156-167. http://dx.doi.org/10.2307/3345676

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th edition). Wiley.

Ester, D. (2010). *Sound Connections*. Author.

Ester, D., Scheib, J., & Inks, K. (2006). Takadimi: A rhythm system for all ages. *Music Educators Journal*, *93*(2), 60-65. http://dx.doi.org/10.1177/002743210609300222

Floyd, E., & Bradley, K. (2006) Teaching strategies related to successful sight-singing in Kentucky choral ensembles. *Update: Applications of Research in Music Education, 25*(1), 70-81. https://doi.org/10.1177/87551233060250010108

Floyd, E. G., & Haning, M. A. (2014). Sight-singing pedagogy: A content analysis of choral methods textbooks. *Journal of Music Teacher Education*, *25*(1), 11-22. http://dx.doi.org/10.1177/1057083714539767

Foulkes-Levy, L. (1997). Tonal markers, melodic patterns, and musicianship training, part I: Rhythm reduction. *Journal of Music Theory Pedagogy*, 11, 1-25.

Foulkes-Levy, L. (1998). Tonal markers, melodic patterns, and musicianship training, part II: Contour reduction. *Journal of Music Theory Pedagogy*, 12, 1-25.

Frances, R. (1985). Tonal principles as teaching principles in music. *Music Perception*, *2*(3) 389-396. http://dx.doi.org/10.2307/40285306

Frey-Clark, M. (2017). Pitch systems and Curwen hand signs: A review of literature. *Update: Applications of Research in Music Education, 36*(1), 59-65. http://dx.doi.org/10.1177/8755123316689812

Garner, A. (2009). Singing and moving: Teaching strategies for audiation in children. *Music Educators Journal, 95*(4) 46-50. https://doi.org/10.1177/0027432109335550

Gordon, E. E. (1989). *Manual for the advanced measures of music audiation.* GIA Publications.

Gordon, E. E. (2012). *Learning sequences in music: A contemporary music learning theory*. GIA Publications.

Gordon, E.E. (2022, February 22). *The MLT approach: The Whole/Part/Whole curriculum*. https://giml.org/mlt/methodology/

Goss, D. (2010). *Sight-singing assessment: A study of current beliefs and practices of Georgia middle and high school choral directors.* (Unpublished doctoral dissertation). Cappella University.

Green, R. (2014). The Delphi technique in educational research. *SAGE open, 4*(2), 1-8. https://doi.org/10.1177/2158244014529773

Gromko, J., & Walters, K. (1999). The development of musical pattern perception in school-aged children. *Research Studies in Music Education, 12*(1), 24-29. https://doi.org/10.1177/1321103X9901200103

Hales, B. (1961). *A study of music reading programs in high school choruses in the Rocky Mountain states.* (Unpublished doctoral dissertation). University of Oregon.

Hammer, H. (1961). *An experimental study of the use of the tachistoscope in the teaching of melodic sight-singing.* (Unpublished doctoral dissertation). University of Colorado.

Hash, P. (2012). George F. Root's Normal Music Institute, 1853-1885. *Journal of Research in Music Education*, *60*(3), 267-293. http://dx.doi.org/10.1177/0022429412455202

Hedden, D. (2012). An overview of existing research about children's singing and the implications for teaching children to sing. *Update: Applications of Research in Music Education, 30*(2), 54-62. http://dx.doi.org/10.1177/8755123312438516

Henry, M. L. (2004). The use of targeted pitch skills for sight-singing instruction in the choral rehearsal. *Journal of Research in Music Education*, *52*(3), 206-217. http://dx.doi.org/10.2307/3345855

Henry, M. L. (2015). Vocal Sight-Reading Assessment: Technological advances, student perceptions, and instructional implications. *Update: Applications of Research in Music Education*, *33*(2), 58-64. http://dx.doi.org/10.1177/8755123314547908

Hicks, C. (1980). Sound before sight: Strategies for teaching music reading. *Music Educators Journal, 66*(8), p53-55, 65, 67. http://dx.doi.org/10.2307/3395858

Hoffman, R., Pelto, W., & White, J.W. (1996). Takadimi: A beat-oriented system of rhythm pedagogy. *Journal of Music Theory Pedagogy*, 10, 7-30. http://dx.doi.org/10.2307/3878473

Houlahan, M., & Tacka, P. (2015). Kodály today: A cognitive approach to elementary music education (2nd ed.). New York, NY: Oxford University Press.

Hutton, D. (1953). A comparative study of two methods of teaching sight- singing in fourth grade. *Journal of Research in Music Education*, *1*(2), 119-126. https://doi.org/10.2307/3344546

Jacobi, B. (2012). Kodály, literacy, and the brain: Preparing young music students to read pitch on the staff. *General Music Today*, *25*(2), p11-18. http://dx.doi.org/10.1177/1048371311414182

Johnson, G. (1987). Johnson, G. D. (1987). *A descriptive study of the pitch-reading materials and the amount of time utilized to teach sight-singing by high school choral directors in the north central region of the American Choral Directors Association.* (Unpublished master's thesis). The Univesrity of Nebraska – Lincoln.

Jorgensen, E. (2009) William Channing Woodbridge's lecture "On vocal music as a branch of common education" revisited. *Visions of Music Education*, *14*(June), 1-32. (Original work printed in 1984).

Killian, J. N., & Henry, M. L. (2005). A comparison of successful and unsuccessful strategies in individual sight-singing preparation and performance. *Journal of Research in Music Education*, *53*(1), 51-65. http://dx.doi.org/10.1177/002242940505300105

Kuehne, J.M. (2003). A survey of sight-singing instructional practices in Florida middle-school choral programs. (Unpublished doctoral dissertation). Florida State University. http://purl.flvc.org/fsu/fd/FSU_migr_etd-2941

Kuehne, J.M. (2007). A survey of sight-singing instructional practices in Florida middle-school choral programs. *Journal of Research in Music Education*, *55*(2), 115-128. http://dx.doi.org/10.1177/002242940705500203

Kuehne, J.M. (2010). Sight-singing: Ten years of published research. *Update: Applications of Research in Music Education*, *29*(1), 7-14. http://dx.doi.org/10.1177/8755123310378453

Krueger, C. (2017). *Progressive Sight Singing* (3rd ed). Oxford University Press.

Krueger, C. & Wilson, J. (2018). Foundation of music literacy. *The Choral Journal, 59*(1), 18-29.

Lucas, J. & Gromko, J. (2007). The relationship of musical pattern discrimination skill and phonemic awareness in beginning readers. *Contributions to Music Education, 34*, 9-17. https://www.jstor.org/stable/26600186

Lucas, K. (1994). Contextual condition and sightsinging achievement of middle school choral students. *Journal of Research in Music Education, 42*(3), 203-216. http://dx.doi.org/10.2307/3345700

McClung, A.M. (2008). Sight-singing scores of high school choristers with extensive training in movable solfège syllables and Curwen hand signs. *Journal of Research in Music Education*, *56*(3), 255-266. http://dx.doi.org/10.1177/0022429408323290

McClung, A.M. (2001). Sight-singing systems: Current practice and survey of All-State choristers. *Update: Applications of Research in Music Education, 20*(1), 3-8. https://doi.org/10.1177/875512330102000102

McPherson, G. (1994). Factors and abilities influencing sightreading skill in music. *Journal of Research in Music Education,* 42(3), 217-231. http://dx.doi.org/10.2307/3345701

Mason, E. (2012). Idea Bank: Using Kodály to promote music literacy skills. *Music Educators Journal, 99*(1), 28-31. http://dx.doi.org/10.1177/0027432112456967

May, J.A. (1993). *A description of current practices in the teaching of choral melody reading in the high schools of Texas.* (Unpublished doctoral dissertation). University of Houston.

Menhart, D. (2016). Literacy in the choral classroom: A pedagogical analysis celebrating contemporary choral compositions. *The Choral Journal, 57*(2), 24-41. https://www.jstor.org/stable/44722157

Mishra, J. (2014). Factors related to sight-reading accuracy: A meta-analysis. *Journal of Research in Music Education*, *61*(4), 452-465. http://dx.doi.org/10.1177/0022429413508585

Musco, A. (2011). Beyond "line by line" strategies for performance and learning transfer. *Music Educators Journal, 98*(1), 59-67. https://doi.org/10.1177/0027432111415689

Myers, G. C. (2008*). Sight-singing instruction in the undergraduate choral ensembles of colleges and universities in the southern division of the American choral directors association: Teacher preparation, pedagogical practices and assessed results.* (Unpublished doctoral dissertation). The University of North Carolina at Greensboro.

Nápoles, J., Springer, D., Silvey, B., & Adams, K. (2019). Effects of pitch source on pitch-matching and intonation accuracy of collegiate singers. *Journal of Research in Music Education, 67*(3), 270-285. http://dx.doi.org/10.1177/0022429419863034

Nichols, B. (2013). The way we do the things we do: A survey of middle-school choral educators' sight-singing attitudes and influences. *Contributions to Music Education, 39*, 87-107. https://www.jstor.org/stable/24127246

Nolker, B. (2001). *Individual sight-singing success: Effects of testing condition, large ensemble sight-singing rating, school size, and selected background factors.* (Unpublished doctoral dissertation). University of Missouri-Columbia.

Norris, C. E. (2004). A nationwide overview of sight-singing requirements of large-group choral festivals. *Journal of Research in Music Education*, *52*(1), 16-28. https://doi.org/10.2307/3345522

Paney, A. & Buonviri, N. (2017). Developing melodic dictation pedagogy: A survey of college theory instructors. *Update: Applications of Research in Music Education, 36*(1), 51-58. https://doi.org/10.1177/8755123316686815

Pembrook, R. G. (1986). Inference of the transcription process and other selected variables on perception and memory during melodic dictation. *Journal of Research in Music Education, 34*(4), 238-261. https://doi.org/10.2307/3345259

Pembrook, R. G. (1987). The effect of vocalization on melodic memory conservation. *Journal of Research in Music Education, 35*, 155-169. http://dx.doi.org/10.2307/3344958

Penttinen, M. & Huovinen, E. (2011) The early development of sight-reading skills in adulthood: A study of eye movements. *Journal of Research in Music Education*, 59(2), 196-220. http://dx.doi.org/10.1177/0022429411405339

Phillips, K. H. (2003). *Directing The Choral Music Program*. Oxford University Press.

Phillips, K. H. (1998). Teaching singers to sight-read. *Teaching Music, 3*(6), 32-33.

Phillips, M. J. (2013). Middle school junior high music: Making sight-reading fun: Ten ideas for success at the middle school level. *The Choral Journal, 53*(7), 59-63. https://www.jstor.org/stable/23561419

Pollock, M. L. (2017) *Sight-singing pedagogy: A survey of high school choral directors.* (Unpublished master's thesis). University of Louisville. https://doi.org/10.18297/etd/2698

Reifinger Jr., J. (2005). Skill development in rhythm perception and performance: A review of the literature. *Update: Applications of Research in Music Education, 25*(1), 15-27. https://doi.org/10.1177/87551233060250010103

Reifinger Jr., J. (2012). The acquisition of sight-singing skills in second-grade general music: Effects of using solfège of relating tonal patterns to songs. *Journal of Research in Music Education*, *60*(1), 26-42. http://dx.doi.org/10.1177/0022429411435683

Reifinger Jr., J. (2020). Teaching pitch notation-reading skills. *General Music Today*, *33*(3) 21-28. https://doi.org/10.1177/1048371319891419

Riegle, A. M. & Gerrity, K. W. (2011). The pitch-matching ability of high school choral students: A justification for continued direct instruction. *Update: Applications of Research in Music Education*, *30*(1), 10-15. http://dx.doi.org/10.1177/8755123311418618

Ross, M. E., & Shannon, D. M. (2016). *Handbook on applied quantitative methods in education.* Kendall Hunt.

Shehan, P. (1986). The oral transmission of an aural art. *American Music Teacher, 35*(4), 16-17.

Shehan, P. (1987). Effects of rote versus note presentations on rhythm learning and retention. *Journal of Research in Music Education, 35*(2), 117-126. https://doi.org/10.2307/3344987

Sheldon, D. (1998). Effects of contextual sight-singing and aural skills training on error-detection abilities. *Journal of Research in Music Education*, 46, 384-395. http://dx.doi.org/10.2307/3345550

Smith, S.A. (1998). *Sight singing in the high school choral rehearsal: Pedagogical practice, teacher attitudes, and university preparation.* (Unpublished doctoral dissertation). The Florida State University at Tallahassee.

Standerfer, S. (2019). *Line by Line.* Oxford University Press.

Stokes, W.A. (1996). Is Edwin Gordon's Learning Theory a cognitive one? *Philosophy of Music Education Review*, *4*(2), 96-106. https://www.jstor.org/stable/40495421

Strunk, K. & Mwavita, M. (2020) *Design and analysis in educational research: ANOVA designs in SPSS®.* Routledge.

Turner, D. (2007). Seeing progress with Takadimi. *Music Educators Journal*, *93*(5), 6.

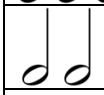
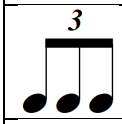
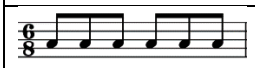
von Kampen, K. (2003). *An examination of factors influencing Nebraska high school choral directors' decisions to use sight-singing instruction.* (Unpublished doctoral dissertation). The University of Nebraska.

West, C (2016). Sound foundations. *Music Educators Journal, 102*(4), p. 56-61. http://dx.doi.org/10.1177/0027432116636941

Yarbough, C., Orman, E., & Neill, S. (2007). Time usage by choral directors prior to sight-singing adjudication. *Update: Applications of Research in Music Education*, *25*(2), 27-35. https://doi.org/10.1177/87551233070250020104

APPENDIX A

Rhythmic Systems

Note Values	*Kodály*	*McHose/Tibbs (Eastman)*	*Gordon*	*Takadimi*
	ta – ta – ta – ta	1-2-3-4	du-du-du-du	ta-ta-ta-ta
	ti – ti	1-te	du-de	ta-di
	ti – ri – ti – ri	1-ta-te-ta	du-ta-de-ta	ta-ka-di-mi
	ta-a – ta-a	1-3	du-du-	too
	toh-oh-oh-oh	1---	du-u-u-u	tah-ah-ah-ah
	tri – o – la	1-la-le	du-ba-bi	ta-ki-da
	ti-ti-ti-ti-ti-ti	1-la-le-2-la-le	du-ba-bi-du-ba-bi	ta-ki-da-ta-ki-da

APPENDIX B

Survey Instrument: Skills Sequencing in Music Literacy Instruction

You are invited to participate in a research study provide information about the skills sequencing in music literacy instruction, when are choral directors teaching these skills within a rehearsal, and if they are linking the music literacy instruction to choral literature they are currently learning, or if it is separate from the literature. The study is being conducted by Kyle J. Weary, PhD candidate, under the direction of Dr. Jane Kuehne, Associate Professor in the Auburn University Department of Curriculum and Teaching.

You are invited to participate because you are secondary choral music educator who is a member of either NAfME and/or TMEA. What will be involved if you participate? If you decide to participate in this research study, you will be asked to an online survey. Your total time commitment will be approximately 20 minutes.

There are no risks or discomforts for this study, nor are there any benefits, costs, or compensation to you for this study.

If you participate in this study, your responses in the survey will aid the researcher identify trends and practices in sequencing music literacy skills.

If you change your mind about participating, you can withdraw at any time during the study by closing your browser window before you click the final submit button. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you click the final submit button, your data is recorded and anonymous and cannot be removed. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Curriculum and Teaching.

Your privacy will be protected. Any information obtained in connection with this study will remain anonymous. Information obtained through your participation may be fulfill an educational requirement for coursework. If you have questions about this study, please ask them now or contact Kyle J. Weary at kjw0045@auburn.edu or Dr. Kuehne at 334-844-6852.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

Thank you for taking the time to complete the survey!

The Auburn University Institutional Review Board has approved this Document for use from 09/08/2021 to ---------- Protocol # 21-416 EX 2109

Have you already taken this survey?

- ❍ Yes
- ❍ No

My ethnicity is

- ❍ American Indian or Alaska Native
- ❍ Asian
- ❍ Black or African American
- ❍ Native Hawaiian or Pacific Islander
- ❍ White
- ❍ Multi-racial
- ❍ Other

How many years have you been teaching in your current position? (in years: i.e., 2.)

_____

My age is (in years - i.e., 47)

_____

What professional music organizations are you a member of? (Please check all that apply)

- ❒ I am not a member of any professional music organizations
- ❒ State Music Educators Association
- ❒ State American Choral Directors Association
- ❒ National Association for Music Education
- ❒ National American Choral Directors Association
- ❒ Other Local (Please specify) _____
- ❒ Other State (Please specify) _____
- ❒ Other National (Please specify) _____

The highest degree I have attained is

- ❍ Bachelors
- ❍ Masters
- ❍ Educational Specialist
- ❍ Doctoral

The School I attended for my highest degree was:

_____

My major area of study was:

_____

The state my school is in (list of all states in the U.S.)

▼ AK ... WY

The zip code my school is in is (i.e., 90210)

_____

The size of my school is:

- ❍ 1-100 students
- ❍ 101-500 students
- ❍ 501-1000 students
- ❍ 1001-1500 students
- ❍ 1501-2000 students
- ❍ More than 2000 students

What grade level(s) do you teach? (Please check all that apply)

- ❒ 6th grade
- ❒ 7th grade
- ❒ 8th grade
- ❒ 9th grade
- ❒ 10th grade
- ❒ 11th grade
- ❒ 12th grade

What is the TOTAL number of students in the choral program? (i.e., 75)

_____

How many ensembles are in the choral program at your school?
Please enter a number (i.e., 4)

- ❍ During the school day? _____
- ❍ Outside the school day? (i.e., before and after school)

_____

How often do you see your students for class?

- ❍ Every day
- ❍ Every other day
- ❍ Other [please specify for more information] _____

What is the length of time (in minutes) that you see your students for choir? (i.e., 20)

_____

Do you teach sight-singing (music literacy skills) to your choir(s)?

- ❍ Yes
- ❍ No

If no: which choirs do not receive instruction and why?

_____

At what point during the school year do you teach music literacy skills?

- ❍ Throughout the entire year
- ❍ In the beginning of the school year
- ❍ In the middle of the school year
- ❍ At the end of the school year
- ❍ I do not spend any time teaching music literacy skills.

When I teach music literacy skills, most of the instruction occurs:

- ❍ Every rehearsal
- ❍ Almost every rehearsal
- ❍ Several rehearsals a month
- ❍ Other _____
- ❍ I do not teach music literacy skills

When I teach music literacy skills, I position them:

- ❍ At the very beginning of rehearsal
- ❍ After warm-ups
- ❍ In the middle of rehearsal
- ❍ At the end of rehearsal
- ❍ Other _____
- ❍ I do not teach music literacy skills

I teach music literacy skills

- ❍ As skills separate from the literature
- ❍ As a part of rehearsing literature
- ❍ Both, but more as skills ***separate from literature***, than as a part of rehearsing literature.
- ❍ Both, but more as a ***part of rehearsing literature***, than as skills separate from literature.
- ❍ I do not teach music literacy skills

The average number of minutes I spend on teaching music literacy skills during a single class period is:
Please type a number (i.e., 12).

_____

Please rank in order which skills you start with first (number 1), when teaching music literacy skills to which skills you teach last (number 6)
_____ Rhythm
_____ Tonal (pitch)
_____ Melodic (rhythm and tonal together)
_____ Staff
_____ Lines
_____ Spaces

Please explain why you teach those skills in that particular order.

_____

_____

_____

_____

When teaching music literacy skills: (please check all that apply)

- ❒ I use rhythm patterns from the literature the students will eventually sing
- ❒ I use tonal patterns from the literature the students will eventually sing
- ❒ I write my own rhythm pattern exercises
- ❒ I write my own tonal pattern exercises
- ❒ Other _____
- ❒ I do not teach music literacy skills

Do you use a published series for teaching music literacy skills? (Print or Online)

- ❍ Yes
- ❍ No
- ❍ Sometimes

If yes, what series do you use? (Please include the name, author, publisher)

_____

If yes, why did you choose this series? (Select all that apply)

- ❒ It is sequenced how I want students to learn.
- ❒ There are multiple examples for students to practice.
- ❒ The price per textbook is good.
- ❒ It was in the choral library.
- ❒ Other _____

Do you create your own materials?

- ❍ Yes
- ❍ No

If yes, why do you create your own materials?

- ❒ I am able to sequence them how I want.
- ❒ I am able to create voicings I want.
- ❒ I am unable to find materials that match the skills I am teaching.
- ❒ I am unable to find materials that match the skills needed for the repertoire my choral ensembles are singing.
- ❒ Other _____

How much to do you agree or disagree with these statements?	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Students should learn music literacy skills by using solfège syllables.	❍	❍	❍	❍	❍
Students should learn music literacy skills by using Curwen hand signs	❍	❍	❍	❍	❍
Solfège syllables should be used during warm-up activities	❍	❍	❍	❍	❍
Moveable DO method (where DO changes to tonic of the key signature) is an effective method to use.	❍	❍	❍	❍	❍
Fixed DO method (where DO is always "c") is an effective method to use.	❍	❍	❍	❍	❍
Rhythm and tonal skills should be taught separately.	❍	❍	❍	❍	❍
Movement activities are useful.	❍	❍	❍	❍	❍
Students should aurally learn patterns first, before reading notation.	❍	❍	❍	❍	❍
Students should learn staff notation and aural patterns at the same time.	❍	❍	❍	❍	❍
Students should learn staff notation first.	❍	❍	❍	❍	❍
Using the piano is necessary in rehearsal	❍	❍	❍	❍	❍
The piano should never be used in rehearsal.	❍	❍	❍	❍	❍
Students should learn to sight sing in two or more parts.	❍	❍	❍	❍	❍

Indicate the frequency you use the following?	Always	Most of the time	About half the time	Sometimes	Never
Solfège syllables	❍	❍	❍	❍	❍
Glover/Curwen hand signs	❍	❍	❍	❍	❍
Solfège syllables during warm-ups	❍	❍	❍	❍	❍
Rhythm Syllables	❍	❍	❍	❍	❍
Physical movement (other than hand signs)	❍	❍	❍	❍	❍
Moveable *do* with *do*-based minor	❍	❍	❍	❍	❍
Moveable *do* with *la*-based minor	❍	❍	❍	❍	❍
Fixed *do*	❍	❍	❍	❍	❍
Scale degree numbers	❍	❍	❍	❍	❍
Letter Names	❍	❍	❍	❍	❍
Neutral syllables (i.e., lah)	❍	❍	❍	❍	❍
Other	❍	❍	❍	❍	❍
Other	❍	❍	❍	❍	❍
Other	❍	❍	❍	❍	❍

What type of rhythmic system do you use in your classroom?

- ❍ Count singing (1 and 2 and, etc.)
- ❍ Kodály (ta, ti-ti)
- ❍ Gordon (Du-de)
- ❍ Takadimi (Ta-di)
- ❍ Orff (Ap-ple)
- ❍ Other _____

I **individually** assess students on the music literacy skills being taught in the choral rehearsal

- ❍ Yes
- ❍ No
- ❍ I do not assess music literacy skills

The number of times I assess individual student learning during the year is:
(Please type a number (i.e., 4)

_____

I evaluate students individually:

- ❍ Formally - students are given a grade, based on the accuracy of what the student performs.
- ❍ Informally - students are not given a grade, but progress is tracked to inform teacher of what the students knows.
- ❍ Both formally and informally
- ❍ I do not evaluate students individually

Students are assessed (select all that apply)

- ❒ Singing alone in rehearsal
- ❒ Singing alone on a recording
- ❒ Singing alone for the teacher
- ❒ Singing with on person on a part in rehearsal
- ❒ Singing with on person on a part on a recording
- ❒ Singing with on person on a part for the teacher
- ❒ I do not assess students.

Music literacy skills account for what percentage of a students' final grade in choir?
Please type a number (i.e., 25.)

_____

Please answer the following questions regarding music literacy pedagogy skills.	**Strongly agree**	**Somewhat agree**	**Neither agree nor disagree**	**Somewhat disagree**	**Strongly disagree**
I learned from music in-service or workshops I've attended.	❍	❍	❍	❍	❍
I learned from my professors that taught my aural skills and theory skills when I was an **undergraduate** student.	❍	❍	❍	❍	❍
I learned from the professor that taught my teaching methods or other music education courses as an **undergraduate** student.	❍	❍	❍	❍	❍
I learned from my professors that taught my aural skills and theory skills when I was a **graduate** student.	❍	❍	❍	❍	❍
I learned from the professor that taught my teaching methods or other music education courses as a **graduate** student.	❍	❍	❍	❍	❍
Other teachers in my school district.	❍	❍	❍	❍	❍
Other teachers in my area.	❍	❍	❍	❍	❍
My music teacher in high school	❍	❍	❍	❍	❍

Have you attended at least one workshop, presentation, or interest session on the topic of music literacy or sight-singing in the choral rehearsal in the last 5 years?

- ○ Yes
- ○ No

If yes, did this/these workshop(s), presentation(s), or interest session(s) lead to changes in your pedagogy of music literacy skills in the choral rehearsal?

- ○ Yes
- ○ No

Please write any other comments you would like to make about teaching music literacy skills or this questionnaire.

_____

APPENDIX C

IRB Approvals and Recruitment Email

Subject: Weary Approval Exempt Protocol #21-416 EX 2109, "Skills Sequencing in Music Literacy Instruction: A National Survey of the Pedagogy Practices of Secondary Choral Directors"

Date: Tuesday, September 21, 2021 at 11:32:01 AM Eastern Daylight Time

From: IRB Administration

To: Kyle Weary

CC: Jane Kuehne, Marilyn Strutchen

Attachments: Investigators Responsibilities rev 1-2011.docx, Weary 21-416 EX 2109 New revisions 1.pdf

Use IRBsubmit@auburn.edu for protocol related submissions and IRBadmin@auburn.edu for questions and information.
The IRB only accepts forms posted at https://cws.auburn.edu/vpr/compliance/humansubjects/?Forms and submitted electronically.

Dear Kyle,

Your protocol titled "Skills Sequencing in Music Literacy Instruction: A National Survey of the Pedagogy Practices of Secondary Choral Directors" was approved by the AU IRB as "Exempt" under federal regulation 45 CFR 46.101(b)(2).

Official notice:
This e-mail serves as notice the protocol has been approved. By accepting this approval, you also accept your responsibilities associated with this approval. Details of your responsibilities are attached. Please print and retain.

Information Letter:
A copy of your approved protocol is attached. However you still need *to add the following IRB approval information to your information letter(s):* "**The Auburn University Institutional Review Board has approved this document for use from September 8, 2021 to --------- Protocol #21-416 EX 2109, Weary"**

You must use the updated document(s) to consent participants.

Expiration:
Continuing review of this Exempt protocol is not required; however, all modification/revisions to the approved protocol must be reviewed and approved by the IRB.

When you have completed all research activities, have no plans to collect additional data and have destroyed all identifiable information as approved by the IRB, notify Office of the IRB via e-mail. A final report is **not** required for Exempt protocols.

Please Note:
a. The IRB Reviewer noted the Student PI did a particularly good job at revising the previous submission.
b. When agreements from NAfME amd TMEA are received, submit a MODIFICATION request with copies of the agreements.

Best wishes for success with your research!

IRB Admin
Office of Research Compliance
Auburn University
115 Ramsay Hall
Auburn, AL 36849

Email Invitation

Hello,

I am a graduate student in the Department of Curriculum and Teacher at Auburn University. I would like to invite you to participate in my research study entitled "**Skills Sequencing in Music Literacy Instruction: A National Survey of the Pedagogy Practices of Secondary Choral Directors".** You may participate if you are currently a secondary choral music educator who is a member of TMEA and/or NAfME.

Participants will be asked to complete a brief survey about music literacy skills sequencing and tools that you use to teach music literacy skills. The survey is completely anonymous and has open-ended questions for you to provide your thoughts in your own words. This survey will take no more than 20 minutes.

There is no compensation, risks, or cost to participate in this study. If you participate in this study, your responses in the survey will aid the researcher identify trends and practices in sequencing music literacy skills.

If you would like to know more information about this study, an information letter can be obtained by clicking **HERE**. If you decide to participate after reading the letter, you can access the survey from a link in the letter.

If you have any questions, please contact me at kjw0045@auburn.edu or my advisor, Dr. Jane Kuehne at kuehnjm@auburn.edu. If you have questions about your rights as a participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone at (334) 844-5966 or by e-mail at IRBadmin@auburn.edu.

Thank you for your consideration,

Kyle J. Weary
Auburn University
PhD candidate

APPENDIX D

Comments on Sequencing Music Literacy Instruction in a Specific Order

Rhythm so students understand beat vs. rhythm Tonal so students understand tonal relationships Lines/Spaces to understand the visual Melodic to put everything together Staff - reinforce melodic
Melodic is the way to teach for me. I want students to understand pitch and rhythm in the music
Best sequencing
Seems logical...understanding of pitch placement has to follow understanding of staff, understanding of rhythm structures are key to correct pitch duration, and melodic comprehension follows understanding of staff, etc.
Rhythm first then notes on the staff, last thing would be pitch/range/tone accuracy
Separating the two skills of rhythm and pitch makes it more accessible for the students.
You must have the backloaded knowledge before you can put all the skills together.
I feel like rhythm is a good basis and most students remember rhythm lessons from their elementary music teachers. That is why I start with that. I then make sure we can recognize the music staff and begin teaching Tonal as I teach lines and spaces. So...basically, steps 2-5 are all sort of taught combined. Then I go into using the pitch with the rhythm.
I do it in the order of building on the one before. Rhythm does not need a precurser. Once you get the lines and spaces with the staff, students can use various rhythms to get pitches. I think it is more effective to have students see the correct noteheads when doing pitches so they make that connection.
Tonal instruction builds the foundation for sight reading success. The rest of the items listed are the mechanics of organizing tone into melody and then harmony
Rhythm and pitch go hand in hand, so I separate them from each other at first. Rhythm reading seems to come faster to my students than pitches. Then we add pitches, and join them together. At this point in the year, we have learned skips, but we have not learned the names of the lines and spaces yet. At this point, all the students really need to know is where Do is. Then they can sight-read what they need to. In addition, we have discussed the different staffs, but the students are all sight reading in unison right now (soon to split into parts). Soon, we will learn the lines and spaces and how to find Do.
Starting with the basics and moving or zooming out of the telescope helps them put things in perspective

Keep things as basic as possible; start from the beginning and celebrate small successes. Lines and spaces are easier than key signatures, so as long as they're involved in the process, we can add more rigorous training down the road, once they've mastered the smaller, more vital basics.
We work on sol-feg and rhythm daily because it is foundational. That leads to rhythm and tonal together. Staff, lines, and spaces are discussed as needed.
Music is like learning a different language. First you memorize symbols, vocabulary word and definition. Then you analyze sheet music by identifying those symbols. Any terminology not previously learned that is in the sheet music is taught during the song.
I believe that pitch and rhythm are the most important fundamentals of a choir class. Teaching those two skills separately will make it easier for them to learn melodies. I save staff, lines, and spaces as a subject that is ongoing. I'm always reviewing these and I make sure to have visible aids on the walls.
Based on. Kodaly approach
I find working rhythm first - strengthens the remaining list. Tonal and Melodic are saved for later
I teach rhythm first because they most likely are comfortable with that more than tonal. I like to start with a rap/chanting rhythm unit, then I go on to echoing and partial synthesis of tonal patterns to separate that from rhythm reading. We do LOTS of solfege games. Then we start doing basic sight reading (lots of stepwise motion to get them comfortable with seeing notes on a staff, then skipping patterns)
It makes the most sense to me.
With using Solfa, the first thing I work on is pitch without any reading. After this we transition to putting it on a staff without any key signatures or clefs (assuming the key of C every time). After students understand the intervalic placements of the notes, I introduce note names for finding DO and identifying key signatures.
"Right notes at the wrong time are wrong notes." - Mr. Mark Lawley Rhythm is first since it is the temporal aspect - where the notes go. Then pitch skills separately for a bit. Once we are comfortable with basic rhythms and scale singing, we can start with conjunct (step-wise) motion while reading rhythms. From there it we build more complex patterns. (My sequence is based on the work of Dr. Michele L. Henry.) Staff/Lines/Spaces are not super important to singers, as we don't have buttons to push. It's more important to establish tonal relationship, which, while dependent on key signature, don't require different fingerings to sing the right pitches.
I direct both the chorus and band and most of my students overlap so this answer is really pertaining to my Band rehearsals.

The ability to read rhythms is much more exacting than learning how to press the right keys. We also will play every scale in that our literature uses and discuss any particularly interesting use of harmony. We also learn to recognize the form of every piece we play. All of this carries into my choral rehearsals, because it's mostly the same students.
Based on learning to sing first. Add literacy after. Based on language acquisition skills.
Lines for introducing so/mi Spaces for introducing so/mi/la and then to patterns using both Recognition of patterns visually Note names introduced Rhythm is introduced separate from pitch Rhythm and melody are introduced together at a lower level than they are learned separately
Students will sing and imitate their favorite artists. It is relevant to them and encourages participation.
I try to teach the skills in a basic pattern to allow middle school students to fully understand how music composition works.
Rhythm is the basis of all music. Pitch can be worked with wrote and solfege. Once that is in place the students can begin to read. Just as we usually learn to speak before we learn to read.
Rhythm is the most known skill in my class. Then we label solfege and ID any note names as well as any leaps/skips. Then we sing a scale and read the passage.
Students must have a reference point in literacy skills. That is the staff and its lines and spaces. Then, comes tonality, blend, vowels/consonants in choral sound. The last is rhythm.
Always basic rhythm starting with eighth notes first. Build up from the subdivision. Then tonality using solfeggio and hand signs before reading notes on paper.
I have a background in Kodaly methodology and teach concepts in a sequenced manner. While I do not always teach Sol-Mi first (as Kodaly methodology would have me do), I do start with a logical progression of concepts and alternate between rhythmic and melodic content.
Rhythm is usually the easiest for students to understand and feel successful. Tonal is usually a little more difficult for some students. However I do teach all of these things simultaneously.
I think that's the most logical way to teach singing. Reading music is a separate skill from singing, and pitch-matching and rhythmic subdivision has to come first.
I do not teach lines and spaces separately. I think that defeats the purpose of literacy - it teaches students to read every note separately instead of in a line, and does not teach musical context. 99% of my students do not have perfect pitch - the letter name of a note is not nearly as important to me as the function/context of the note in a line.

Students need to know the music theory basics before learning about more difficult concepts (scaffolding).
The progression is logical to move from basic theoretical (many of my students are resistant to that and would rather just sing) to a synthesis of all pieces. Pitch always comes first because it tends to be the most difficult to train. Solfege knowledge and vocal technique directly support the correct reproduction of pitch. Most students do well enough following rhythmic exercises and counting to move straight from tonal to melodic, in my experience so far at this school.
Seems most logical to me
Scaffolding of skills of the most essential parts to read/sing from basic to more complicate. Slowly isolating and folding in new skills as we reach Melodic proficiency.
I find that students do well with pitch and rhythm separately. They seem to have the hardest time putting the two together. I usually start with explaining the staff and identifying note names while simultaneously talking about rhythm in terms of 4/4 time. Then we identify idioms that we have already been singing, such as do mi sol mi do, on the staff. After students feel comfortable identifying idioms and singing them, I add rhythm. I use sightreadingfactory.com for exercise examples mostly. That is not a book so I didn't include it below.
Rhythm is the hardest concept in my opinion. I believe if the students can learn to read rhythms, the tonal and staff reading will naturally follow.
We review note names on staff and music terms to make sure students remember, then move to more difficult concepts.
This has been the concept I feel most comfortable teaching so it's the rut I've been stuck in.
I put the most importance on pitch (especially in my middle school group), because many of the students are not used to matching pitch. A lot of the kids aren't aware at first that they can use their voices like an instrument, so we work on solfeggio and intervals.
A right note at the wrong time is the wrong note. Then interval patterns and ear training are more important than specific lines and spaces.
I find many vocalists lack the music literacy skills that are fundamental in grasping sight reading. I spend some lesson time teaching key signatures.
Sound, sight, theory
I teach rhythm and tonal at the same time through warm-ups and easy to semi hard(# of parts) songs throughout the year. My students work online on their own (homework) on music theory and sight singing that I reinforce during rehearsals.
Not only does this seem logical to me as a musician, but I am using Conversational Solfege at the high school level and this is how the skills are sequenced in this methodology.

It's really a three way tie for first between the staff, the lines, and the spaces. I feel like you have to explain what those are and what their relationship is to build understanding. I do rhythm next because I want to build a solid foundation there first, and because I want the students to practice couniting and feeling the pulse in their music early. Then we move on to pitches and melody.
I want students to understand the staff, lines, and spaces, to help them advance through the rhythmic, tonal, and melodic exercises.
I prepare the ear using solfege and rhythm syllables for clear pitch and sense of rhythm. Then I introduce the Staff before beginning to read the music.
Rhythm is very important in reading music and most students are apt to skip this fgact when they are reading music. Pitch and melodic are crucial for blend Staff, lines, spaces are mostly learned in lower grades (6,7,8)
Students need to understand what the staff and line and spaces stand for since they are simultaneously learning music literacy skills and choral music. They learn to read solfege sometimes before note names (depending on what they know when they come to high school). Then we focus on rhythm and then put the two together.
I usually teach the Staff, lines and space at the elementary level... it is already there when they are in the upper level. I bow-tie effect my rehearsals Start large picture-get down to the nitty gritty and work smaller sections and skills, then look at the big picture again .
In my experience, most students who are starting from ground zero will catch on to rhythms more quickly than they learn to match pitch. Not always, but generally. I think starting with the rhythm also allows us to do more kinesthetic activity, which reaches a broad range of learning styles. I teach pitch and melody before we begin to read because that is kinesthetic and aural, touching on two learning styles, as opposed to reading which is only visual.
I don’t but there wasn’t a way to show what I mean. I teach skills first as aural, both pitch and rhythm separately but at the same time. After students have an aural vocabulary, I begin teaching written literacy (melody and rhythm separate but equal).
This is the general order, but I teach rhythm and pitch simultaneously, and I teach pitch through solfege and note letter names simultaneously.
I see success in my students through physically doing music first. There isn't need to explain it at first because then students instantly become insecure and are less likely to sing and participate confidently. Once they accomplish the skills I teach them, then we break down to what they're actually singing and where it sits on written dictation, etc.
Rhythm and pitch are the building blocks of all music making, and require separation so the act of reading is not overwhelming. I delay asking students to do a lot of specified melodic reading until much later in the year. For a long preparatory period, we look at elements as distinct parts of a larger whole.
Habits 😬

Rhythm does not require pitch matching, so beginning singers are less intimidated and experienced musicians feel comfortable leading the learning process. Once rhythm is mastered, adding pitch then music notation literacy is a natural progression.
It is important for my kids to hear and produce before they read. It's easier to connect seeing to what they can hear and produce. I often say, "now, look at your music so you see what it looks like and do it looking at the music this time"
It's a toss-up between rhythm and notes, and I could teach in either order any given year. Generally, district and state auditions occur early in the year, so I do spend a good deal of time teaching notes and intervals to start. As we dig into the music, we hit rhythm quite heavily.
Matching pitch is a fundamental skill that every musicians needs to have, so we focus on that (Choir Band or Orchestra). The rest just makes sense in how music should be taught.
I teach rhythm first because beat is integral to the understanding of music and music literacy. It is also, often, the easiest component for students to find success with as young singers. I teach the concept of beat first, then beat division, then beat grouping, and then the combination of those things to form meter and rhythm. From there, I teach call and response tonal patterns and melodies, and discuss the rhytmic components of those things. I always teach sound before sight before theory. The last thing we discuss is reading on a staff. I start with mini staves - one or two lines/spaces, to read solfege patterns. It takes us a few weeks to work up to a full staff.
Rhythms are typically most accessible for students learning to match pitch. They can be immediately successful on the first day even with their Concert literature. I then work on tonal reading by exploring the staff as a graph of sound. After students feel successful knowing that the higher lines and spaces are higher sounds (and vice versa), students begin working on melodic reading.
Literacy is the act of reading and comprehending. Therefore, students must be familiar with the staff, the clef(s), brackets, etc. (what they see on the page). This leads to lines and spaces, then add rhythm and pitch. I find this sequence to be the best practice in my classroom. Each skill builds upon the previous (scaffolding) and allows for natural growth.
I think it makes most sense as they build off of each other in that order. I teach lines and spaces at the same time.
I find this way to be easier with my students because most of them come in not reading music so teaching the staff as a whole and then breaking it down by lines and spaces makes it easier for them to learn to read music. And the same for Rhythm and Tonal.

Rhythm is usually easy to incorporate into games right from the beginning of the year. I typically teach it without the staff (just using notes on a flashcard or blank screen) and then teach the staff. I usually put the notes on a staff for rhythm exercises and then start teaching note names on the staff with lines and spaces. Then I add the pitches to the actual note names and movement within the staff for quite some time before combining pitch and rhythm.
I teach with a Kodaly inspired skill building. I often receive students that have not had music in a few years or did not cover literacy in their other music classes, so I have to start very low and we build momentum quickly.
The sequence nicely in my way of thinking. One leads to the next.
My class focuses mainly on singing their concert songs with correct pitch and rhythm.
I use basic rhythm and pitch recall games to quickly assess skills at the beginning of the term, and I equally value rote skills as well as musical literacy. The notational aspect of literacy is something that is often best attached after students feel they possess some level of mastery creating sound.
Much of this goes hand in hand. I introduce the staff with the lines and spaces, explaining the purpose and history. I practice the names of the notes on the lines and spaces so the students can memorize them before adding pitches (this is what the sound you made looks like on a staff). I then add in rhythm, explaining that it tells a musician how long to hold the particular pitch. Finally, I culminate with putting everything together (melodic). I choose to teach in this way because I feel it best scaffolds the knowledge for complete understanding and application.
The first thing we do in class is sing, so pitch is happening daily with vocal warm-ups. Teaching simple rhythms come on their own, then we start looking at note names and the staff. I break the rhythm and note naming into individual parts for students a clearer understanding of each. Singing repertoire is throughout each day, so that never stops. Eventually students can transfer/correlate what they've learned with rhythm and note names to their repertoire music. It is a circular process with constant learning.
Since we don't have a strong feeder program, this is the quickest way for my students to learn the skills.
I use a modified Takadimi system for teaching rhythm. In a single first day of school lesson I can have the class reading rhythms up to 8th notes from a place of zero prior knowledge. It makes a great first day lesson because the ensemble can experience a meaningful initial success that motivates them to move on. The very next day I teach the staff and the letter names of the lines and spaces. Teaching these two so close together helps students better understand that the shape of the note denotes rhythm and the placement of the note denotes pitch. I also begin teaching the major scale on solfege including Curwen hand signs. This paves the way to start teaching solfege (Movaeable Do) on the staff in the first week. So really, on a macro scale, i teach all of the listed skills essentially simultaneously. Then we work to increase range of the sight-reading, add more rhythmic figures, time signatures, key signatures, steps, skips, leaps, etc. I should also note that within the first 3 weeks I've already begun having them compose their own rhythms because I believe music literacy is both the ability to read and write music.

Students need to understand what the staff is and how it works before they move to other areas of literacy. I keep rhythm and melody separate at the start as that's in line with the Gordon school of thought.
Rhythm and steady beat are the most important thing. If that is not in place early, the music will not be organized.
Rhythm is the basis of music composition, and what generally catches the students attention first. Then we move to how music is made, notated and then combine rhythm and melody.
I start with pitch because the students are there to sing. I make sure they have a hood foundation in aural skills (which includes rhythm and pitch) and then introduce them to the staff. I relate the pitches to each other in the staff using solfege.
scaffolding with little or no previous experience. Staff, lines, and spaces are interwoven and taught simultaneously.
Rhythm is easier than tonal. Melodic obviously should go after rhythm and tonal. I introducw the staff first and show contour and then I teach note names. Spaces and then lines but I teach both on the same day.
Students must understand rhythm and pitch to begin rehearsing. They must also understand the staff - lines and spaces to enable their reading skills. Do they move step wise or do they move up or down a third or a fourth? What does a third or a fourth sound like? If they don't know what a third or a fourth sounds like they will be lost before they start, so they must understand pitch.
In the elementary and sec. classroom or in the rehearsal I (recommend) use Solfy (https://www.4solfy.com/) for an average of 10-12 minutes: 5-6 minutes to sing together the solfeges from the previous week, and 5-6 to present and explain the new lesson, the new solfeges and the new notion and elements that appear in the next Lesson. I assign homework, asking them to practice solfege with Solfy at least three times a week, each time 10-12 minutes. Solfy stands for Self Singing Solfege and Auto Evaluation. Solfy sings Solfeges from digital scores with synthesized voices, listens, record, and appreciate users' performance, gives feedback, and keeps progress records. It helps teachers, students (and parents) practice singing from the score without any additional musical instrument. Learning to sing Solfege is equivalent to learning a new language: in our case, the (intimate) language of (western) music. Furthermore, practicing solfeges with Solfy outside the classroom, 30+ minutes a week, will add many hours of individual guided tuition to the education system, without requiring a particular budget for supplementing frontal teaching hours. So using this new didactic solution artificial-intelligence-based for promoting singing and music literacy, can make a positive impact in public music education. The program is still in R&D, but already in use in schools from Romania, Israel, Cyprus, Greece, the US and Canada.
My literacy instruction is based on MLT/ conversational solfège sequences; I focus on hearing, echoing, and singing before focusing on notation
I don't have a standard "sequence" that I follow rigidly. My focus of literacy concepts focuses on different areas depending on current strengths/weaknesses, literature, etc.

I start with ear training so that students are following a sound-before-sight structure. Once they are able to sing melodic or rhythmic concepts by ear, I then go to the staff and have them read what they can already sing.
Our students are taught music literacy through a Kodaly inspired curriculum from 1st grade. By the time they get to me, most students are well versed in all of these (above), but need to work on applying rhythm and pitch together as well as sight-reading from a choral octavo. I teach staff, lines and spaces in conjunction with "tonal," but it's mostly a review. We do go over the concept again in bass clef specifically since my students are going through vocal change.
Start with solfege to engage singing and create tonality. Introduce staff, lines & spaces immediately after and relate them to solfege. Add rhythm the next week - separate at first, using clapping & ta ti. Keep separate until they have a good grasp on both, it gives them too much to pay attention to if we do both at the beginning. Then combine them when ready, usually after a few weeks.
My students come to me with background knowledge of the staff, lines, and spaces. I focused on rhythms first because most of my struggle with rhythms since they are not an instrumental ensemble setting.
1,2,3 is done with warm ups and will vary upon the warm ups used Note identification on the staff, lines, spaces are done as we are reading music and depend on the situation.
Rhythm first to get the students feeling the beat. Staff, lines and spaces is almost simultaneous. Tonal after they see it on the staff they can read and add the rhythm.
I feel that is staring at the basic and adding on the more difficult.
Rhythm first because students already have an understanding of it and can "feel" it; followed by pitches.
I think rhythm is more important when sight singing.
Rhythm is the most important element of music and must lay the foundation for everything else to follow. The staff, spaces and lines all present the basis for pitch notation learning/comprehension. Applying pitch relationships learned by ear to their visual representation helps to give meaning to music literacy. Melodic skills can only be taught once all other concepts have been sufficiently mastered.
Singers do not count like instrumentalists and can get by through aural aids.
In my district the most students are lacking skills in reading rhythm which to me is primary in reading music. From there I find it is easier to move to teaching them about pitch, placement on the staff and putting it together. The way I teach 2 - 6 are taught together. Students grasp those better when they see them working together to create musical phrases or the music they are currently working with.

I start my students singing solfege from the beginning. This ear training helps with their intonation and sound. Rhythm is super easy for students who haven't had much previous music literacy training to master. When I introduce note names, we isolate the spaces first, then the lines, then put it all together. Once students have been introduced to these things, we address them in our music.
The biggest weakness my students have is in counting and reading rhythm.
Sing the outcome first then work lyrics and rhythm Details follow those basics
I begin with rhythm because students have a greater chance of success. In a beginning singer (who may not even match pitch) it builds confidence and higher level skills. I use takadimi rhythm syllables and work in Common time. During the rhythm study I am also practicing solfege-wanting to get pitch into the ear before the eye. I am practicing this more as an ear training exercise first. When adding pitch to rhythm the staff can be visually overwhelming. I focus on spaces first with a one line staff. After the initial exercises (do, re, mi) I move to do, mi, sol-and add a line. This transfers nicely to F Major-which is the soprano/tenor key for District Chorus auditions.
The students need to find do. We look at the key signature to determine that. Once we know where do is, we can figure out where everything else is. I tend to have my students focus on pitch, then isolate rhythm, then put them together.
I actually teach rhythm and tonal passages at the same time - but teach each skill separate of the other dimension. I teach lines and spaces at the same time but before I teach the entire staff. I combine rhythm and pitch as soon as they have mastered the concepts of each dimension of music.
Rhythm first because it is the best for immediate engagement. Next Tonal because it is Choir and we use our voices. After this, it I teach spaces/lines in tandem to demonstrate the differences of two pitches (either a step or a skip) and we establish those skills first before moving to the staff. All of this comes together with melodic (rhythm and tonal together) on and off the staff. I guess you can say that I also teach this last element separately from the staff as well by using stick notation and solfa syllables (absent from a line or space).
Starting with rhythm gives students something to physically practice (clapping rhythms, etc.) so they have a sense that they are learning/accomplishing something. I usually combine the staff, lines, and spaces into one concept and they work on pitch (using solfege syllables). Once we introduce solfege, we incorporate rhythm with pitch and continually add pitches. This order of instruction has seemed to make the most sense to students and provide the fastest results.
It works up to reading from the score.

I generally take the Kodaly approach. Experiencing and performing before seeing it written down. I concentrate on building aural skills, singing, performing rhythmic patterns, etc. before I introduce what they look like written down.
I feel students need to understand what they are looking at first and then be able to apply skills to what they see.
Basically I teach staff as a graph, move on to lines and spaces primarily to gain functionality in solfege. Working Rhythm and Pitch separately give students and understanding that the problems can be solved (practiced) individually and then put together. I hold a level 2 Kodaly certificate so I teach from that pedagogical perspective.
I feel that rhythm is the basis of music and that a student won't know how to sing a note if they don't know the duration of the note first. Also, it's the very first thing I start with, echo rhythms. Students aren't afraid to clap, tap, or say rhythms out loud, but they do sometimes feel apprehensive about singing out loud. Plus, the very first week of school I do a lesson called "Remedial Rhythm" where EVERYONE regardless of level/grade reviews the value of all common notes. Helps 9th graders who may have not had music since 6th grade and puts everyone back on the same page for sight reading. I also always start with state level I and progress quickly to state level III so that we can progress as needed to levels IV and V.
NOTE: I don't spend a lot of time on the Staff/lines/spaces. My students covered that extensively in MS. I'll review them at the beginning of the year, but my focus is with other 3. I begin with rhythm exercises. students clap and count aloud examples. they begin easy and get progressively more complicated. Tonal: concentrate on Intervals. Singing and reading of M3, P5, P4, P8. then moving on M2, M6 and M7. Later in the spring will get to Major, minor, augmented, diminished.
I usually start with making sure they know beat values, then introducing the staff and pitches, then putting it together with the rhythm.
My students are from an illiterate culture. I have to trick them into reading anything. I am always inventing ways to force them to actually read. Like handing them recorders and music. Or passing out actual choral music and starting from scratch: Read left to right. See the bar lines? All these happen at the same time. Your line is ... They have a strong since of rhythm & are more successful with rhythms. I let them feel this is going to be easy. And then they try to guess pitches without reading no matter what I try. They cannot tell me which line or space any note is on no matter what I teach. I am told they are abysmal at reading all graphs and charts. I start in Kindergarten and hope that they learn, but they usually avoid the reading and try to cheat by going home and playing YouTube or iTunes. We also have a problem that they are used to highly improvisational music and positively resist singing anything the same way twice.
I teach skills in this order because, in my opinion, it follows logical thought. I teach things as one step at a time.

Some of these skills are simultaneous. I start rhythm reading skills with actual exercises at the beginning of the year. In those same classes, we a solfege scale on the board to start tones. (Students and I each take turns pointing to the solfege syllables for the class to sing.) When students start reading rhythm and tones together, it is on a staff, which obviously has lines and spaces. When I start reading actually letter names instead of just solfege, I do lines and spaces on the same day.
Students must be able to count before they can sing. Pitch mistakes can usually be overcome...rhythm mistakes are much harder to correct during a performance. Also, being able to count helps 10 fold when learning pitch.
I teach rhythm and pitch separately but at the same time - for example, a rhythm and and a pitch exercise daily. Then, when those are secure, I combine rhythm and pitch I teach note names , but do not use those much when teaching kids to read.
Singers must have the aural skills in their brain before they can sing them from sight by reading. I use vocal connections throughout the fall semester with my beginners (6th grade) while simultaneously going through the Rhythm Reader curriculum. Once they are able to correctly sing from my handsigns d-m-s vs. d-r-m, I know they are ready to move on. We then transition to reading solfege sheets in which the solfege is spelled out with letters and moves up and down like it would on the staff. From there we read actual music notation on the staff.
I teach literacy as one would teach reading and writing; hearing, listening, responding first, then connecting it to that which is on the page
At the moment, I do not have a feeder program at the middle schools in my district. With that in mind, I have to look at my choirs as beginners at the beginning of the year. I start with pitch matching, scales, and intervals, then I teach them what it looks like. We had a big discussion about sound before sight in one of my Master's Degree courses.
Rhythm is foundational to everything that we do. The group must be together and the rhythm should not be in the way. Tone - We teach the solfege method with movable DO. I show them the line and/or space on which it begins and then the tonic triad. We sing the main triad warm-up with open rounded tones. I could say that 2-5 are taught at the same time. I don't think that teaching rhythm and tone together is productive until they have gotten a grasp on all of it
I believe sight-singing starts with rhythm. As students begin to sight-read more independently, they will build on those skills (first counting through it, then recognizing the solfege, then singing the solfege, etc.)
Students need to understand the basic set up of the staff (lines, spaces, ledger lines, treble clef vs bass clef) before they understand how to use pitch. I find it easier to address these things at the beginning and then move into rhythms and pitches. It makes for an easier transition.
Using popular music to establish and discuss rhythm, then connecting that to the staff and notes. This allows them to at least start with something innate, which is and can be a sense of rhythm.
I teach sound before sight, so they hear what they're singing before we identify it on the staff.

The students who are more nervous to sing feel more comfortable with rhythm first. When they find success with rhythm, they are able to learn pitch.
I believe students need to understand what they are seeing on the page before reading what's on the page...therefore, Staff, Lines, and Spaces get introduced first to orient the student. We then count the rhythm. After the rhythm is solidified we focus on the pitch (usually chanting solfege and audiating prior to vocalizing). Finally we put it all together. Focusing on one aspect at a time allows for better acquisition of knowledge.
Most students come already having sung something, so they already have kind of an idea about how to perform melodically. We start with a solfege scale and they have to learn to perform it at a specific tempo. We also jump right into learning warm-ups and choral literature, in order to be ready for our concert, then incorporate the specifics of how to read the notes, rhythms, etc., using examples from our concert music. Depending on the demands of the repertoire, we may learn the literacy skills in a slightly different order (if there are very difficult rhythms, we might learn rhythmic notation prior to pitch notation).
Rhythm is the most important in my opinion, because if the students don't know how to perform the rhythm correctly then they have a hard time trying to sightread the melodic pitch correctly.
I actually teach rhythm with melody. Visually I want students to see and understand how I am connecting solfeggio to each note.
I teach them very separately. A student can certainly read notes and still have no tonal center. It depends on where my students are. This year, getting students to phonate is most important.
As an instrumental instructor, I feel most vocalist lack rhythm reading (counting) skills.
As an instrumental primary myself, it is important to me that my choral students be able to sight-read as effectively as my band students. In addition, since our program is so small and piano is not my primary, we do a lot a cappella pieces (student pianists dynamically cover them up). I have found that the instruction of solfege aids them immensely in independence, understanding difficult harmonies, and retention of the part.
I guess it's from my early days as an instrumental student. We always did rhythm patterns first thing in class, and as I developed as an instrumentalist, my sight reading skills were far above most of the people I interacted with due to my abilities to read rhythms. I learned to read music as a piano student starting at age 7, so music reading was never an issue for me. As a choral teacher, it seems that most students can figure out their notes by being observant of whether the notes move up/down, step/skip, etc...so if they can learn how to read rhythms, that's half the battle. Once a basis for rhythms and note reading has been established, we move into sight reading on solfege as well as rhythmic and melodic dictation.
Rhythm is what the students are most familiar with. I then teach solfege. We look at steps and skips within a three-lined staff. We put it together. After they are confident with steps and skips within a five-note scale, I show them a full staff.

I find that since I am teaching multiple grade levels at the same time the students are at different levels musically, so I start with rhythm patterns that are present in our music that everyone can see. Then we add pitch to those patterns, sometimes on solfege, sometimes by rote. We then move to learning about lines and spaces on the staff using the solfege skills that we already learned. Then we focus on letter names on the staff and finally, reading the whole section of music.
My students tend to feel more successful with rhythms when they enter my program so I start where they are comfortable and scaffold appropriately from there. I also want to make sure that everyone is using the same rhythm syllables from the beginning since students come from many programs across the county.
I don't need kids to necessarily know what is f or c, I need them to know in relationship to each other.
Staff is taught first to discuss the pitch direction, this is review from younger grades. Tonal pitch center and sight singing pitches as it relates to directional on the staff is the foundational essence of choir, which is second. Then we discuss scale and Wolfe get patterns as it relates to pitch letter names on the spaces, then lines. Rhythm is taught later and then put together with earlier literacy exercises and skills.
In my brain, the scaffolding makes sense. We start with meter and just first listen for duple/triple/quadruple, then rhythm....and so on.
It is important to me that students understand where the notes are and how they fit into what we are singing for rep but also when we are sight singing. I find it helps to move the process along when students already know note names.
By the time I get to "melodic," I expect students to be able to find 'do' without me telling them what it is. In order to do that, they must know key signatures, and that requires knowledge of the letter names/staff
To allow student the opportunity to build on the staff entirely, not in separate forms. This prepares them to read rhythms, pitches and melodies more proficiently in written scores of music.
I choose easier rhythmic sight-reading so we can focus on the pitches, but if there are rhythmic errors I always stop to address them. Staff, lines and spaces are already solidly taught so I do not have to address them as much.
Everything has rhythm. If they can't read the rhythm it's more difficult to fix. Then if I can get them to hear the harmony it's easier to hold their part. Reading from the staff needs to come after or at the same time as hearing. Reading melody and rhythm together is the most difficult and comes last.
I typically start with solfege syllables and hand signs in order to familiarize the students with the order and varying patterns by singing and listening. Then when I introduce written notation, they are more easily able to transfer what they've learned first by hearing into identifying pitches on the staff. When I teach the staff, I do not necessarily separate the learning of lines vs. spaces. We learn to identify the tonic pitch and then how to identify the remaining scale degrees based on the established key signature. Once "Do" has been

identified, students can recognize the other pitches and this is when we incorporate rhythmic learning. I allow the students to "practice" on their own using internal audiation skills, by speaking/chanting through the rhythm still using solfege syllables. Finally, we put rhythm and tonality together in singing. Part of the reason we practice these steps, is that this is the required process for my choirs to follow when participating in our district performance and sight reading assessment. I want my students to feel comfortable sight reading for contest because we do it almost every day. Also, I have found that this process of sight singing drastically improves music literacy in a manner of weeks. Even among students who may not be the strongest singers, or often have a hard time "getting it," making connections through music literacy in this way allows students a deeper engagement and focus through both sight reading exercises and repertoire practice.
Most of my students already have some music literacy. In addition, I have a music appreciation class in 9th grade where we hit the theoretical skills hard, all the way to chords, chord progressions, form, and simple composition and improvisation.
Rhythm does not require a staff Staff, lines, and spaces all get taught together (the elementary teacher does a great job introducing students to melodies without staff notation) Pitch to help understand intervals Melodic last to put everything together, beginning first with stepwise motion and moving on to skips and leaps.
I believe (especially as singers) if the rhythm is correct you have a chance at getting the pitch correct within the harmonic structure. If your rhythm is off the polyphony or chordal sttucture will not match up.
Students have to understand how a staff works, moving up in pitch and down in pitch, from line to space to line to space, before they put anything on it--solfege, pitches, etc. However, I also teach students tonal systems separate from the staff before we combine them. Same with rhythms. Sound before sight, always.
Rhythm is easily accessible, even for students who struggle with matching pitch early on. I incorporate pitch almost immediately, keeping melodies very limited with range, mostly stepwise. We do call and response with solfege and Kodaly hand signs to acquaint students with matching pitch and using solfege, then, when they see it on the page, they already know how it sounds. I use this technique frequently, even when teaching reading with literature. They learn the staff, clefs, notes, etc., as part of every day music literacy. We often cover these topics as "Bell Ringers" at the Middle School level. Since we use moveable "Do," it's crucial that they can use key signatures to find their starting pitch within the scale. All of these skills are built over time with LOTS of DAILY practice.
I like to start with the overall structure of the page. Students need direction on which staff to follow for their parts. Then, we look at rhythm and melodic contour. Next we begin to identify form. Familiar patterns follow.

Most of my students have had little to no musical instruction before enrolling in my beginning classes. I start with clapping basic rhythms (whole, half, quarter) so they can concentrate on just the values of notes. I then progress to identifying notes on the staff as the tools for naming notes (lines/spaces). I usually combine lines, spaces, and pitch (#3, #4, #5 above). Then we approach melodic reading.
I start with the staff to familiarize students with how to staff shows pitch. I then introduce simple stepwise phrases on the staff (noteheads only) labeled with solfege, which we sight sing together. I do this before teaching the names of the lines and spaces on the staff because I find that it is more immediately applicable to real life music making. To me, knowing that a particular note is an "E" on the staff doesn't help the student to audiate or sing the note - but knowing it is scale degree 5 or "sol" in the key does.
I think starting with aural exercises makes understanding the written notation easier and more practical to the singer.
This order seems to yield the best understanding and results for my students and makes the most sense.
The students avoid following the notes at all and try to just look at the words, so I focus on the “highs and lows” of the notes. We do note names and solfege relatively concurrently so that I can hand them “real” music, talk about the shape of the line and encourage them to follow the notes. I have enough students who are also in band that they instinctively read the rhythms and the non-band kids follow along. But both the band and non-band kids need to learn to follow the pitches and intervals with their voice so focusing on that helps level the music literacy playing field.
I think when the students understand the rhythm they can put the melody in context. The staff, lines and spaces are very 6th-8th Grade
It's a logical way to scaffold the complexities of music notation. Another valid approach is to isolate rhythm before melodic content, but my warm-ups tend to emphasize melodic content over rhythmic content when developing vocal technique.
Rhythm is the basis for which speech and music originate. It is easily accessible and provides a foundation for melodic dictation and sigh reading. I introduce ta/ti style rhythm and then add solfeggio with movable do. The staff is taught as pitch names, but also within the context of the music. I prefer to use melodic reading exercises and also isolate passages in an octave for literacy skills.

Rhythm is (1) the skeleton of music and (2) a great leveler: 1. It doesn't matter if you are singing the correct pitches if they are at the wrong time. I tend to teach literacy skills in the same manner that I would teach a piece of music. So I make sure they know the rhythms which allows us to place the pitches in the correct place and also work on diction and musicality before we start pitch. The popular music tends to have far more complicated rhythms than pitches. So I try to get them as rhythmically proficient as possible. 2. Student are much braver at making rhythmic mistakes than pitch mistakes. Speaking rhythms they feel less vulnerable than singing pitches. Particularly young, new singers. Tone is not an issue. No one expects to sound "good" speaking rhythms or performing the text in rhythm without pitch. So there is less anxiety in that sense. Staff and lines and spaces: Not sure why you would separate they three. I would assume when you teach the staff you are teaching lines and spaces..., but maybe you mean clef? So I guess they need to know what lines and spaces are before they know what a staff is? Yeah, I don't know. The staff and clefs would be next (including ledger lines). Tonal - because... you know at this point they need to sing. Melodic - because... yeah... I'm not sure what you mean here. But putting it together or forcing them to read both pitch and rhythm at the same time would be last.
Most effective way to warm up and learn.
Rhythm is the part of music that allows for the introduction of Beat, which is what I have found many students are familiar with in our American culture. Also, depending on where in the United States one is located, I have found that certain areas listen to certain styles of music that are more conducive to intricate rhythms and consistent beats, versus more melodic and harmonic styling. Pitch is connected to the use of the pitch recognition system I use, Solfege. After I have introduced, and helped the students begin the development of an inner musical ear to recognize a major scale, the next step I use to introduce music notation are the lines and spaces, and the staff. Upon their ability to identify note names, I show how rhythm and pitch combines to make a melody. The next step for sight-reading skill development, is to show how solfege and note names are combined to help with recognizing intervals and melodic direction to develop internal audiation of the music the student is trying to learn.
I actually teach them all at the same time. I start with the staff so they can begin to read notes and/or solfege.
I begin with reviewing and reteaching if necessary, basic counting, note values, and rhythms common to the level of music I select for my students. I begin with ear training and apply what they can hear and sing to what they read and interpret in music. I believe this is a good progression that culminates into the skill of reading music. This provides a foundation for the high school to build on.
Recognizing notes on the staff seem to be the thing my beginning students have the hardest time retaining. Many of them seem to have a better time with rhythms. You need to have staff to understand lines and spaces. Pitches are indicated by their place on the staff. Rhythm can be separate but eventually has to be incorporated with the melody.

Students can develop a functioning ear without any knowledge of the staff. It's easier to translate into actual notation in that order
I think students have to develop aural skills (tonal and rhythm) before seeing it on the page.
My students respond well to rhythm by rote and "rhythm sight words". I introduce rhythmic patterns as sight words with the "sound" of the sight words being the applicable counting. On the occasion where classes aren't able to insert the correct number (for example if counting 2-e-+-a) then we use 1 for every beat regardless if beat 2 or beat 4. Once they become familiar with the sound we begin breaking down correct counts, beats, and steady pulse. Despite having elementary and middle school music/chorus my students usually aren't able to count quarter notes/rests in the beginning. The average English literacy at my school is below level at 2 out of 5 with 3 being on level. Whilest working rhythmic sight words and rote I also introduce notehead direction and solfege patterns. "Which pattern do you hear?" Short patterns of noteheads without rhythm are displayed on a staff and students id which pattern and why. Solfege and Curwin-Gordan handsigns are employed as well. This is another version of "sight/aural words"; recognizing the visual as aural patterns and vice versa. Once the framework of patterns is developed and there is a basic vocabulary of rhythmic patterns and aural patterns then we are able to transition to unison sight reading in both treble and bass clef with simple rhythms until finally moving to parts and then parts with more difficult rhythm. Retention in the music programs, especially after Covid, has been an ongoing, frustrating challenge. As a result, each year I wind up starting at step 1 and going through this process despite the fact that we are supposed to be at high school level. The few students who are retained are employed as teachers and helpers to the new students.
I believe for students who do not start out reading music they grasp on to pitch and rhythm more quickly. Then I can show them what they already know as it appears on the staff.
They really overlap for me. First we work on singing on pitch before we look at notation. Rhythm and melody are dealt with individually then put together. So they are taught along side of each other.
6th grade is the first choral experience for students in my district so I begin with the basics to be certain they know the terminology and symbols. Rhythm is next because I believe rhythm is the foundation of good sight-singing skills and singing.
Audiation is everything, especially with pitch.
To help build on prior knowledge or establish a knowledge base since students come from various musical backgrounds.
Rhythm is the most important aspect of music, which is organized noise. If it has no rhythm it is only noise. Melody is how a song goes, so naturally important. Using your ears is necessary for any musical group, especially choir. Lines, spaces, and staff all tie for the same.
A song we sing discusses this particular vocabulary…

Because I have placed what I feel is more foundational and integral to success first.
They seem to start with the most basic skill and end with putting it all together
Rhythm is the most beneficial aspect of music literacy to have when looking at sheet music. Even with no tonal understanding, students can understand WHEN to sing melodies they have learned by wrote if they understand rhythmic notation. Then I begin teaching students to apply solfege (a skill developed as soon as possible) to written notation and then learn how to visually follow notes up and down the staff. This allows them to understand the relationships between notes rather than the individual notes out of context. Only once students are deeply familiar with applying solfege to tonal music do I begin working with advanced students on knowing the specific names of notes and how key signatures affect notes.
I'm most concerned with students holding their own harmony parts. That's why I start with pitch, then transfer over to reading on the staff w/ lines and spaces. I often go straight to melodic and just dictate to students what the rhythm is. I should spend more time on rhythm, but I am super focused at this time on the art of harmonizing.
I actually do rhythm exercises daily, even after the students are reading melodic lines on the staff. I find that students are able to perform and understand complex rhythms more easily whenever tonal reading is not also a factor. I introduce the staff with its lines and spaces before we introduce tonal and melodic reading. I typically do one rhythm reading exercise followed by a few melodic exercises (with “easier” rhythms) daily.
rhythm is the fastest entry point for a student to experience success. We can put pitch on top of rhythm to create tunes. pitch needs to be experienced before it can be placed visually in the "fixed" system of lines and spaces (hence why those two elements are next) Then combining the lines and spaces into a staff. Finally putting it all together has melodic which has duration (rhythm) and pitch on a fixed system (the staff) It's going from concrete/experience to the abstract of sheet music. I follow Kodaly inspired pedagogy.
Tone is basic, It all is included in the lesson and all have the same equal importance.
The logical flow of how to best communicate literary skills.
We always begin with listening and singing, then connect that to the written notation. I have found this helps to develop the voice while also making the concepts in music reading concrete for the students immediately. I would also say that most of my students have basic knowledge of these skills prior to entering the HS, we are working towards more advanced concepts in the HS rehearsals and often just quickly review lines/spaces in the first couple weeks of rehearsals.

I use moveable solfege and moveable takadimi. I also use the Carol Krueger method of "sound before sight." I teach many of these concepts at the same time. For example, I teach simple AND compound meter at the same time, as well as major AND minor. Once students can repeat and identify these intervals/rhythmic patterns/etc. aurally, I then introduce the notation.
I utilize strategies I've learned from Dr. Carol Krueger regarding music literacy. She emphasizes "sound, before sight, before theory." I weave music literacy through most every rehearsal. I don't necessarily teach it separately. I try and structure my instruction as if I were teaching a student how to read or learn a foreign language, which I believe applies to learning music. I get the sound in their ears, help them understand and organize and label what they hear, then perform/demonstrate how to create those sounds, and then show them what it looks like in the form of music notation.
Over the years I have found that my student understand the skills in this order. Note that I teach staff first only because I teach a “score navigation” unit before everything else. Students use sheet music right away, but they don’t always know how to track their individual parts. So I teach parts of the score before everything else. Lines and spaces occur together temporally - I have separated them here only because the tank system forced me to.
Get them singing first by ear(call and response, by rote etc..). This preps them for a musical environment and then the learning can begin.
I feel like the staff, lines, and spaces are covered well into elementary. I vary instruction so it’s hard to say which order I do it. I might do a tonal ear training and a rhythmic reading exercise one day, and something totally different the next.
I actually begin with handsigns and maintain those through the year. As they get comfortable with handsigns, I introduce them to music on the staff, teaching them to identify the note by solfege on the staff. I do not spend as much time teaching rhythm as I should. A couple times a year I break out rhythm flash cards. I prefer to spend more time teaching focused on solfege -- using hands and the staff -- because it's a more difficult skill than reading rhythms.

APPENDIX E

Why Participants Create Their Own Material

I am able to use content my students are familiar with in music they listen to.
It allows me to incorporate upcoming skills they will see in their literature.
I am able to create content that I want to teach tailored specifically for my students strenghts and weaknesses
I use Sight Reading Factory because I can set the specific factors I want in the exercises and it will save my exercise templates for future use.
I am able to tailor exercises to the needs of my students
I am adapting a methodology written for elementary students to be useful for high school students
I create materials to correspond to the repertoire we are learning
Sometimes it's just faster than searching for a specific exercise for what you want to teach the kids.
Currently Solfy have only 3 PROGRESSIVELLY Levels, more to come.
All of the above
When I need extra class work for my absence
Can't afford a lot of other materials.
I can make it specific to literature.
I do if it helps connect music literacy to the rep.
No money for materials
I don't
When I am teaching something that requires a unique set of skills. And this is usually decided around the literature
I create them using examples from our current repertoire.
Book 2 moves a little faster than I'd like when adding the fa and sol chords, this gives us more practice.
Every year, every class, and every ensemble is constantly changing. I can't keep cooking the same meal with different ingredients, so my content has to be flexible.
I can create examples specific to parts the ensemble is having difficulty with.
I do a lot of vocal pedagogy and voice building and there are not HS level materials out there
I can use excerpts of their music.

I create warm-ups to teach specific skills (intervals, triads, etc.)
I can make examples that directly correlate to the repertoire.
I want flexibility
The use of physical materials and music
For extension exercises or for creative teaching moments when I see an opportunity
I create exercises based on the literature I'm teaching
All of the above. I write examples to cover the content at hand, and *especially* to differentiate learning in a multi-level class (e.g., seniors might sing a n advanced melody over whole note “accompaniment” provided by first year readers.
To isolate patterns in repertoire

APPENDIX F

Published Materials Used by Participants

progressive sight singing
Sight Reading Factory, Patti DeWitt, Emily Crocker
sing at first sight book
Smart Book, UIL SR examples
Oxford Folk Song SightSinging Series
Sight Reading Factory + Patterns of Sound
S-Cubed, Patti DeWitt SR, Rhythm Reader Books, Rhythm Bee, Three Minute Theory
Tim w Music
SOS - Simplifying Our Sightreading
Sight reading factory
Michelle Henry's series and the Winebrenner series.
Patterns of Sound - Emily Crocker, Joyce Eilers, Halleonard
One-Minute Sight-Singing Book
Tim Winebrinner and BriLee
Rhythm Reader Lev. 1 and Patterns of Sound. or make up my own
Denise Eaton with AMC Publications.
Patti deWitt sight reading
Sight reading factory
Foundations for Superior Performance by Jeef King and Richard Williams (Grades9-12)
Carol Krueger, progressive sightreading
Sight Singing Factory
Melodia
Jenson Sight Singing Course by David Bauguess (Hal Leonard), Masterworks Press
Ottman/Rogers, Music for Sight Reading
Anything by Carol Kreuger, Sing on Sight
Nancy Telfer, Successful Sight-Singing, Kjos Music
Sight Reading Factory
Solfege des Solfege and Music for Sight Singing

Sightreadingfactory.com Musictheory.net
Sing, First
Sing at First Sight Book 1--Beck--Alfred; Choir Builders--Dilworth
Sight Reading Factory
30 Days to Music Theory
Sight Reading Factory
Sight-Singing 101
Conversational Solfege
sightreadingfactory.com
SCubed, Dale Duncan
Sing at First Sight
Steps to Harmony, Treble and Bass Volume 1-5, Masterworks Press
Sing at first sight, Beck/Surmani/Lewis, Alfred. Also Essential Musicianship, Crocker/Leavitt, HalLeonard
Scubed, some kodaly resources (333 etc), but I mostly create my own
Carol Kreuger various books, sight reading factory, and OUP
Breezin Thru Theory
Sightreadingfactory
Ear Training Immersion Exercises for Choirs, James Jordan. GIA Publications
Sight Reading Factory (online), InSight Singing (Carl Fischer), Sight-Singing for SSA (Hal Leonard) and various other supplemental materials.
The Sight-Singer, Belwin, Audrey Snyder
Habits of a Successful Choral Musician, Erik Wilkinson/Scott Rush, GIA Publications; MLT Any Teacher Can Du...De, Andy Mullen
Andy Beck's series and SIghtreading Factory
Sight Reading Factory
One Minute Theory by Holly Shaw-Slabbinck, Kjos Music Publishing
Sing at First Sight, Level 1 Foundations in Choral Sight-Singing By Andy Beck, Karen Farnum Surmani, and Brian Lewis; CHOIR BUILDERS Fundamental Vocal Techniques for Classroom and General Use Composer: Rollo Dilworth
Hal Leonard flash cards (pitch and rhythm)
Cherry Tree Sight Reading sheets
Sightreading Factory

Masterworks Press Steps to Harmony, Breezin' Thru Theory
Sing at First Sight, Alfred Publishing
Sing on Sight by Audrey Snyder
Alfred's Essentials for Music Theory, Alfred Publisher;
Voices in concert mcgraw hill
Progressive Sign Singing (3rd editions),Carol Krueger, Oxford University Press
Solfy includes some solfeges from the classical music and collections of Solfeges
Conversational Solfège, John Fierabend
Patterns of Sound, Emily Crocker, Hal Leonard
Steps to Harmony
Kodaly 333, Denise Bacon 185 Unison Pentatonic
Sight Reading Factory
Sight singing for the High School Singer
One minute theory slabbick
Sight Reading Factory
Habits of a Successful Choral Musician, Choir Karate, Teoria.com
Sight Reading Factory
Patters of sound
Sight Reading Factory
Festival Sight Reading, Pinnacle Music Press, Blutman and Blutman
Progressive Sight singing, Carol Krueger, Oxford
I often use the exercises from 333 Reading Exercises or the 77/55/15-two part singing exercises of Kodaly and/or Classical Canons
The Sight-SInger, Audrey Snyder, Alfred; Sing On Sight, Audrey Snyder, Hal Leonard; One-Minute Theory, Slabbinck, NeilA. Kjos
One-minute sight reading
Sing at First Sight- Beck; Sight Reading Factory
Sight Reading Factory.com
campbell
Sight Reading Factory
If the students can take it, I would use Hindemith. It is amazing.
Singing at First Sight,

The Sight-Singer, Audrey Snyder, Alfred
Sight reading factory, Smart sight reading
SOS - Simplifying our Sightreading by Farnell/Phillips
Rhythm Reader, Vocal Connections, and then a bunch of out of print material
Patterns of Sound Joyce Eilers & Emily Crocker - Hal Leonard Corporation
Sight Reading Made EZ by Ronnie Sanders
Sight Reading Factory - Online
Sing at First Sight, Andy Beck, Alfred
One Minute Theory
Winebrenner
Progressive Sight Singing/Krueger/OUP
90 Days to SightReading Success, Mcgill/Stevens/AMC Pub. Music Literacy for Students, DeWitt Sing at First Sight, Beck/Surmani/Lewis/Alfred Pub. Sight Singing Made EZ, Sanders
Gawronski, Smart Music, Sightreading Factory, & and basic Rounds
Na
Sing at First Sight
"One Minute Sight Singing" Holly Shaw-Slabbinck, Ronald Slabbinck, Neil A. Kjos Publishing
Sight Reading Factory; Vic Firth Web Rhythms, Musictheory.net
Sight-Reading Factory
Musictheory.net and Tonal Harmony for theory skills and Sightreadingfactory.com and The Sight Singing Series for sight reading
Sight Reading Factory, Masterworks Press
Sight Reading Factory and One-Minute Sight Singing by Ronald Slabbinck and Holly Shaw-Slabbinck
SmartMusic - Sing At First Sight: Beck, Concone School of Sight Singing: Schrimer
So many. Carol Krueger is one. I still use my undergrad ear training book. I wish I knew names, authors and publishers off the top of my head, but my classroom is packed up. Sorry!
Sing at First Sight, Habits for a Successful Choral Musician
The (Episcopal) Hymnal, 1982
Essential Sight Singing
Music Theory in a Minute; Patti Dewitt's Music Literacy for Singers
I use Sightreadingfactory.com; "Patterns of Sound" by Crocker & Eilers. Hal Leonard; "Experiencing Choral Music- Sight Singing" Hal Leonard

Forseth for rhythm
sightreading factory & habits of a successful choral musician
Tim Weinbrenner's Series and the SMART Books by Denise Eaton
Don't know if it counts, but I use SightReadingFactory.com. I also use some concepts from Carol Kruger's [sic] method.
Sing at First Sight by Beck, Surmani, and Lewis, Alfred Publishing and SightReadingFactory.com
Sing at First Sight- Andy Beck
Sing at First Sight, levels 1 & 2; by Andy Beck, Karen Farnum Surmani, and Brian Lewis; Alfred Publishing
Masterworks assessment examples
Choral Approach to Sight-Singing
Sing on Sight, Snyder; Patterns of Sound, Eilers and Crocker; Music Literacy for Singers, DeWitt; Change One (on Teachers Pay Teachers)
I use www.thepracticeroom.net for sequential rhythmic and melodic exercises
The Young Singer, Audrey Snyder
Progressive Sight Singing, Carol Krueger, Oxford U Press
John Feierabend
Sight-Reading Factory
Sight signing books
Masterworks Press
Masterworks Press
Progressive Sight Singing (Carol Krueger)
sight reading factory online and FMEA MPA Sight Reading books
Sing On Sight - Audrey Snyder
Sight Reading Factory
Sight reading factory
Flat.IO, Sight Reading Factory, Teaching Kids to Sing by Kenneth Philips
Sing at first sight
Sight-reading factory
Sightreading Factory

We use a variety of music literacy resources including some teacher-created resources. Some of the published resources we use include: 90 Days to Sightreading Success, the SMART books, and STEPS.
Middle School - S-cubed / High School - I use a combination of the "The High School Sight-Singer" and "Music Theory for Choirs" available from Masterworks Press
Progressive Sightsinging by Carol Krueger
Tefler, Ottman for advanced students
Sight Reading Factory, Flat io, MusicTheory. net various publications
Tim Winebrenner’s “an introduction to soprano and alto sight singing”

APPENDIX G

Where Participants Place Music Literacy Instruction in the Choral Rehearsal

throughout the entire rehearsal
Throughout each class
As needed/as occuring
Depends on the pieces being studied, sometimes in the middle, sometimes at beginning
It depends on my rehearsal plan
Mostly after warm-ups, but I try to switch it up sometimes to keep things interesting
All different times
various times
Mostly beginning, but also throughout as we rehearse
Throughout the rehearsal
Throughout to aid in transfer of application
Throughout
throughout the rehearsal
There are skills throughout rehearsal
I vary their placement in rehearsal
Incorporated Throughout the rehearsal.
It varies depending on the day's plan.
Throughout the rehearsal, when I am presenting new information is happens usually after warm-ups
Various times based on the repertoire I'm teaching and time of the school year.
throughout
During every piece we are rehearsing.
5-10 minutes together & individual practice at home with Solfy - https://www.4solfy.com/
It varies depending on the day, time of year, and concept
After warm-ups, or in the middle, and sometimes at the end.
With warm up
Scaffolded throughout the lesson, through repertoire

Varied times
Always
vary the time depending on rehearsal plan
Throughout the rehearsal, often connected to repertoire pieces
Throughout the entire rehearsal
it depends, all of these answers
Throughout rehearsal
Throughout the lesson, depending on how they relate to the task at hand
In relationship to what we are doing. It is integrated into the music
Depends on the day
Throughout the rehearsal. We begin with sight-reading exercises in warm-ups, but I ask score study questions all through out like, "Who sings La on the and of 3 in measure 12." All of my music literacy is geared toward fostering musicianship for productive and efficient rehearsals.
Varies
I teach music literacy in sight reading in the beginning of rehearsal, but also in our repertoire rehearsals. Some days, music literacy is all we do with our "Sight Reading Rockstars!" pass-offs program.
Sight-singing after warmups, but other literacy skills throughout rehearsal
As the arise in pieces
Throughout rehearsal
various times depending on the day and the needs of the ensemble
Depending upon need
throughout rehearsal
I try to mix it up!

APPENDIX H

Rhythmic Systems Used by Participants

1 te 2 te 3 te 4 te
Down, down-up, Down-la-li, Down-e-and-a
Maryland Children's chorus
Count and takadimi
We do not use one - all notes are "Ta", all rests are "Ts"
Counts, Kodaly, and Orff
Both kodaly and count singing
I count sing and I use Kodaly as well! Both are extremely effective! I count sing more than I use Kodaly, however! Count singing is fantastic!
All students come knowing Kodaly syllables, many students take classical Indian and know Takadimi, HOWEVER, our curriculum mandates that they use counting grade 6 and up. I'm fine if they use other systems, but teach counting.
Count and Kodaly
A combination of Count singing and Kodaly
count singing and Kodaly
Eastman
Eastman Counting
Mixture of count singing (my preference) and Kodaly (used in elementary schools in our district)
Modification ofn Kodaly.
I use a combination of all of them. My students have found success with one, and it's different- I employ differentiated teaching-as long as the student gets it, I don't care what method they use.
American Kodaly ta, ta-ti, ta-ka-ti-ki
Count singing for 9-12, Kodaly for 6-8
I use both counts and kodaly because I don't like Kodaly for dots and syncopation
My own system, and I've been trying to shift to count singing.
I use Kodaly in middle school and beginning high school, but upper ensembles use count-singing
Count singing and Kodaly

Kodaly, transferring to count singing
“Down-ee Up-ee”
I start with 5th grade, so I start with what they know (kodaly) the. Transition them to counts when they are ready

APPENIDIX I

Additional Comments

I teach middle school choir but also have my Kodaly levels which strongly influences the pedagogy I use.
I use Sight Reading Factory with my students. It is inexpesnive and an effective way to evaluate their progress in music literacy.
N/A
Than you!
Literacy is key to musicianship; otherwise, our students are simply repeating what they hear, not making choices and interpretations!
I am a Music teacher, not a just a band or just a choral director and my experience in both areas can't really be separated. This especially true in my situation because the crossover between the two areas are so great.
Students must be taught that the notes on the staff are only "ink on a page". Musicanship comes from the choral sound achieved from rehearsal without piano. My students only hear the piano for starting pitches--all rehearsal is done a cappella.
Much of my training was with John Armstrong, who is now retired from HS teaching and was the founder of the American Music Literacy Association. This is a link to his website: www.americanmusicliteracy.com While this group is no longer active, I'm sure he could be a great asset to you and your work. Also, I woul d be more than happy to speak with you further, should you have any questions: DawnBeck88@aol.com (Dawn Amthor, Wallkill Senior High School, Wallkill, NY).
I will put literacy and sight-reading activities on hold in a week or two before performances. I will program repertoire that is far more advanced than their reading skills, but I will definitely find excerpts in our repertoire that they can read and have the students identify and read/analyze those portions.
It is very important!!
My undergraduate degrees are in music education and voice performance, fyi. My masters degree is in math.
Music literacy is a requirement, in my mind, for successful choral singing. Soflege, Curwen hand signs, and counting are the technical part of vocal pedagogy that is most analogous to instrumental students learning how to use their bodies to manipulate their instruments. A consistent pedagogy regarding music literacy leads to students and teachers who all speak the same "language" in reference to reproducing the music on the page in a faithful way.
Consistency is key
I am interested in your results.

N/A
My school district has not used a specific music literacy methodology until this year. I have started using Conversational Solfege even at the high school level, with some adaptations. Although we are starting with Unit 1, the students (even those who can read music) appreciate and benefit from the lessons and sequence.
Great survey! I look forward to seeing the results. Music literacy is an important aspect of music education.
I evaluate students daily with WRITTEN assessments (finding do, writing in solfege, etc). I do not evaluate solo sight singing except for honors students. My class is graded on a point system, not a percentage system, so I don't know the percentage of my grade that is literacy based.
Does music literacy equal teaching sight-singing? That connection was not made clear in how the questions were presented.
war eagle, good luck
To assess my singers individually, most of the time they sing all together and make a recording. This is the most authentic form of assessment, singing in a group, but holding their phone or computer up to record. That was not a choice in that question.
Best to you.
Thanks for doing this! I've been told that, because my main background is in band, that I care more about music literacy than most choir teachers do or should. I really feel like choir students should be as adept at music literacy as band students and I teach both my choir and band students with similar techniques. I learned most of my pedagogy that I use from Carol Krueger.
N/A
IT would have been helpful to know the surveyors definition of "Music Literacy" before taking the survey. I've learned most of my skills from actually teaching. I was much less skilled as a younger teacher, but through trial and error I'm continuing to learn what works for the students that I teach.
I used to be all about count singing for rhythm, but then I attended a workshop done by Carol Krueger and she really advocated for Takadimi so I switched to teaching that.
It is incredibly important!!!
După 45 de ani de predare a muzicii pot concluziona că alfabetizarea muzicală ar trebui să fie o preocupare continua a prof. de muzică cel puțin în proporție de 50% din orice activitate muzicală.

I learned about music literacy mostly from my Kodaly coursework. Had some EXCELLENT teachers including Carol Brown, David Vinden, and Susan Brumfield. Takadimi was taught at Ithaca where I attended undergrad. My students mostly like theory and sight-singing. They actually enjoy dictation. Many find it a challenge and we call it "sight-reading fun or torture...you decide." As they become more confident, the more they ask to do it. I try to make it fun and exciting in class. Differentiated activities, centers, multiple tiers of learning for those who are very confident and those who are not. Everybody learns and grows...well almost. There's always one or two who defy the odds. ;)
I've learned a lot from great choral podcasts
I've found that assessing students formatively rather than summatively allows them to push themselves to harder "levels" and not worry about perfection.
I am the child of a music teacher and the product of a school district with a strong music program. These are the basis for my education and the way that I teach.
I am a certified Kodaly Teacher
In an ideal world, music literacy would have a higher priority than performing literature.
Music literacy is very important to me as an educator. If I'm not teaching my students to be fluent music readers, then I am not doing my job!
we constantly evaluate our curriculum, but this survey made me think about what I teach and how I teach it.
You left out community and church choir experience. I had learned advanced skills before I ever entered high school choir. I largely taught myself in church and later church choir. Our directors there and in Civic Chorus were excellent and taught vocalises & caught reading errors as well as introducing music from other eras (e.g. English Renaissance or medieval). College never covered psalmody although I majored in music as an undergraduate.
I have found that teaching music literary skills particularly sight reading has taken a small choir of high school kids from mediocre to great. They tune better and their tone is better.
None.
Thank you! Best of luck!
I think that Music Literacy is extremely important, but I also believe that we have to be careful when we get to the point that we won't do a piece if students can't sight read most of it. If that were the case, it would eliminate a lot of very important and diverse rep from our students' lives. Students need to be exposed to music from all cultures, nations, backgrounds, etc. Sometimes that means learning by rote. Music Literacy is essential and a huge part of my program, but priority will always go to my students getting to experience the rich diversity of music and composers that exist. I think that is something a lot of directors don't tend to think about and we need to be very careful about that.
I believe music literacy is a tool, and teach it as such. I don't believe in "literacy" for its own sake alone. Fluency in notation is not making music. But we emphasize it because it's useful to our administrators for data gathering.

Teaching music literacy is vital to the success of choirs! It helps develop singers into more well-rounded musicans
Music literacy has always been a part of my teaching for 47 years. My students were singing solfege before it was commonly accepted as part of the choral rehearsal. Even after all these years, the materials and pedagogy have been trial and error refined and still are being refined. This is because of the changes in our student populations and our increased knowledge in dealing with students with differing abilities.
I sometimes spend more time on music literacy than I do on performance literature, but it does make the learning of said literature faster and the students are doing the work not the director
In terms of teaching literacy through sight-reading, I also incorporate aural prediction by "auditating" silently through new music before reading it aloud. This is a technique I picked up at an in-service and it made a big difference with my groups at every level.
I make the students write the key, and the note names or solfege for all three SAB parts on a daily basis for class credit, then we sing that example. I don't do individual assessments on their ability to actually sing individually. Despite that, my choirs routinely receive exemplary ratings in sight-reading at music festivals.
I do not assess individual sight reading skills due to the fact that I teach a sixth grade beginning choir of two and three part voices. I award 60% of the grade for participation and divide the other 40% between effort formative and summative group skills and theory excercises.
Some of the questions I was not sure were about teaching literacy skills in isolation or as part of the rehearsal process of a piece of music.
Thank you.
I also teach 4th and 5th grades, in addition to the 6-12th grades. I am currently creating a tiered curriculum incorporating music literacy as foundational for my students. Music Literacy is important to give freedom to the student to develop their musicianship.
I Cannot think of anything.
It has been difficult finding Ms/Hs literature with a sequence for solfege singing.
I attended hart University and did the Feierabend program recently for my +20 credits after my masters
I would be happy to share more about our rhythm counting method with you. My associate director and I presented a session at TMEA with a demonstration choir a few years ago. You can reach me at jay.martin@comalisd.org. Best wishes to you in your research project!
Good Questions
Go to Carol Krueger's workshops. I've been twice and plan to go to one workshop annually for the rest of my career. I learned more about teaching music literacy from her workshop than I did in my master's program.

N/a, just a note to say “good luck with your study” and I will look forward to reading the results. I am often surprised when my alum tell me how far ahead of the “average” singer they are in terms of literacy/solfège/etc. Makes me wonder if a comprehensive literacy program for singers is unusual. Hope you get a lot of data that help answer this question, and i hope folks who don’t teach literacy skills will honestly respond to the survey in its entirety. Best of luck to you!.
Thanks!
I received my kodaly training and that helped a lot.
I have not yet tried using method books, but I hope to in the future. If the state organizations wish to make music literacy important to the students, they need to emphasize it more in the regional and all-state auditions -- make it weighted more heavily in their scores.