Edited by
Mary Ellen Cavitt, Texas State University

Score Study Practices of Texas High School Choir Directors

Debbie Rohwer, Michelle Herring, Jordan Moore
University of North Texas

The link between music theory and music education has been demonstrated in many articles addressing both topics. Pragmatic articles have cited the benefits of experiencing theory for the choral student, with McCarry (2010) providing theory training software and activities to develop the overall singer, and Klonski (2006) detailing a sequence of instruction for aural skill learning designed to benefit the critical listening of high school musicians. In research, Decker (1984) found that the music theory concepts that were rated as most important to teaching were key signatures, accidentals, rhythmic notation, and meter signatures, and the lowest rated were serialism, neapolitan or phrygian II, pandiatonicism, and harmonic bases other than tertian. Johnson (2010) surveyed Texas music theory professors and determined that due to theory professors not teaching concepts that were in alignment with the Texas Essential Knowledge and Skills, collegiate music education students were not being adequately prepared to teach music in the public schools.

Score study combines the task of what music educators do to prepare for class everyday with many of the components that are taught in collegiate theory classes. Pragmatic articles about score study have documented that "a significant amount of time should be dedicated to score study" (Gillis, 2008, p. 37), with Lonis (1993) and Ulrich (2009) listing important common music study concepts that should be addressed before rehearsing any piece, such as form, cadences, key centers, and texture. Choral directors may spend extensive time linking text to musical concepts and either doing silent study or playing the score at the piano to get an overall feel for the music (Romey, 2008). Hale (2012) advocated that directors use technology to do an analysis of the key musical concepts in a piece that could then be shared with the choir.

Score study with conductor music educators has been investigated in research to determine what preparation techniques may be most effective. Crowe (1996) found that score study with an appropriate aural example was more effective than score study alone, and Silvey (2011) found that after training, conductors had improved eye conduct, confidence, and effective conducting gesture. Lane (2006) documented conductor experience to be an important variable, with more experienced band directors providing more specific score study verbalizations, being more organized in their rehearsal plan, talking less, and addressing expression more.

Music education books on choral methods have stressed the importance of aural and vocal exploration of a score (Brinson, 1996; Jordan, 1996). Jordan (1996) suggested that choral conductors hum or moan the melody of the piece and play or sing all vocal parts prior to marking the score. This process can allow the conductor to understand all combinations of the parts as well as make decisions regarding phrasing. Brinson (1996) encouraged conductors to listen to the score multiple times, performed by multiple choirs in order to provide a variety of options for

interpreting and understanding of the work holistically. In addition, Jordan (1996) advocated that the choral conductor conduct the piece while breathing through phrases during score study (Jordan, 1996). After aural exploration, the conductor can visually explore the score for dynamics, thematic and imitative material, non-harmonic tones, articulation, challenging areas of vowel placement, harmonic progressions, and syllabic stress in the text (Jordan, 1996). Additionally, Brinson (1996) urged the conductor to observe form, climatic points, melodic motives, modulations, rhythmic and meter changes, texture, relationship of parts, and historical background of the composition.

Although music theory pedagogy books have not tended to discuss application of analytical skills to score study for conducting, aural skills pedagogy has acknowledged the connection between score study and aural skills. In his aural skills pedagogy text, Karpinski (2000) emphasized that in order to study scores, a conductor must be able to hear internally the markings in a score including tempo, meter, rhythm, pitch, harmony, timbre, articulation, and phrasing. Instead of depending on the piano or recordings, Karpinski stated that a director's aural skills—as taught in music theory classes—should be strong enough to auralize (or hear mentally) a score.

In his music theory pedagogy text, Rogers (1984) considered the musical components listed in aural skills pedagogy and choral music education texts, not as part of analysis but as part of description—a lower-level step of finding and labeling cadences, harmonies, and other components. While Rogers (1984) did not address these lower-level details of score analysis specifically as an issue for theory classroom pedagogy, Rogers addressed the higher-order issue of horizontal (melodic) versus vertical (harmonic) approaches to analysis and encouraged a combination of the two as the best approach.

While non-research articles have cited the practical application of score study techniques, there is a need for research on score study to describe the ways choral educators pragmatically use the musical knowledge they learned in college. This information could help revise collegiate music and theory course content and sequencing through an understanding of what directors perceive to be important in their authentic score study practices. Therefore, the purpose of the current study was to describe score study practices of high school choir directors, with specific sub-questions being: (a) what steps do directors take when studying a score, (b) what musical components do the directors highlight as significant to their score study of a piece, and (c) which of the musical components do the directors see as a priority to introduce to their students in class, and why?

Method

Twenty Texas high school choral directors from 5A ($n = 17$) and 4A ($n = 3$) high schools were interviewed for the current study. The female ($n = 6$) and male ($n = 14$) participants had teaching experience that ranged from 3 to 34 years ($M = 16.50$, $SD = 9.14$), had earned bachelors ($n = 10$) or masters degrees ($n = 10$), and were traditionally certified ($n = 19$) or had alternate certification ($n = 1$).

Participants were given a 44-measure, Grade IV high school choral score that was written for use in the current study. In stage one, the participants were asked to study the score as they would normally in preparation for teaching the piece, and the interviewers observed their processes. Participants were then asked to describe the musical components that were significant to their score study. In stage two, the interviewers then prompted participants regarding identification of other musical components not mentioned in the initial prompt in order

to have comprehensive data on the musical concepts that were measured in the study. Finally, the interviewers asked the participants which of the musical concepts that they described were priorities to introduce to the high school choir students in their classes. All interviews were audio-recorded and transcribed for analysis.

There were eight musical concepts that were chosen as music theoretical concepts that were authentic to the 44-measure piece and that are commonly covered in undergraduate music theory coursework: (a) form/text, (b) sequences of repeated phrases, (c) phrasing, (d) climactic points/cadences/harmonic components, (e) rhythmic complexities, (f) texture, (g) key centers, (h) non-harmonic tones/anticipations/suspensions. The musical components from the piece were confirmed as valid by a panel of content validity members. The three authors compiled the coding of the themes and an external evaluator confirmed the accuracy of the results after reviewing all transcriptions, audio-recordings, and results.

Results

In answer to research question one (what steps do directors take when studying a score), 17 participants approached their score study by starting at the beginning of the score and progressing linearly to the end. Two participants skipped to sections throughout the score to locate examples of musical concepts such as key changes and form. For one participant, the specific score study process was not discernable.

When the participants discussed their score study of musical concepts, nine of them used single line melodic examples almost exclusively, three used chordal/harmonic examples almost exclusively, and eight participants used a combination of melodic and harmonic examples. Of the eight participants who used a combination approach, two were the score studiers who skipped to sections throughout the score. The participants used the following score study techniques: sing musical sections ($n = 2$), play musical sections on the piano ($n = 4$), both sing and play ($n = 5$), visual-without-sound-source technique ($n = 9$).

In answer to research question two (what musical components do the directors highlight as significant to their score study of a piece), the most common musical concepts that were addressed without any prompting were rhythmic complexities ($n = 16$), followed by form/text ($n = 13$), and texture ($n = 13$). The least common musical concepts that were addressed were cadences ($n = 9$), non-harmonic tones ($n = 6$), and sequences ($n = 3$).

In the second stage of the study process, the participants were shown a list of eight musical concepts and asked whether these were important in their score study (cadences, form/text, key center, non-harmonic tones, phrasing, rhythmic complexity, sequences, and texture). The second stage process only documented participant responses concerning concepts that were not highlighted in the first stage responses in order to have comprehensive data on the eight music theory concepts that were measured in the study. The most commonly cited important concepts in this second stage were phrasing ($n = 11$), key center ($n = 9$), and cadences ($n = 8$), and the least cited were form/text ($n = 5$), texture ($n = 4$), and rhythmic complexities ($n = 2$). There were concepts that were not addressed in either the first stage or the second stage of the process by teachers, with the most commonly un-cited concepts being sequences ($n = 11$), non-harmonic tones ($n = 7$), cadences ($n = 3$), and texture ($n = 3$).

In answer to research question three (which of the musical components do the directors see as a priority to introduce to their students in class), the most commonly cited teaching priorities were phrasing ($n = 14$), rhythmic complexities ($n = 14$), and key center ($n = 14$), while the least

commonly cited teaching priorities were non-harmonic tones ($n = 11$), texture ($n = 10$), and sequences ($n = 4$).

Conclusions

Results of the current study highlight the practices of one group of directors. It should be noted that these results may not generalize to other directors, especially given that the participants were a convenience sample of choral directors from a specific area in Texas. Future research that could replicate these research procedures in other locations may add context to these generalizability issues.

In the current study, most participants studied their score linearly, from beginning to end. This finding appears in contrast to Lonis's (1993) and Ulrich's (2009) music concept-focused approach to score study that highlighted the ability to identify music concepts early in the score study process. Directors may have approached their score study in a linear way due to the music having common characteristics associated with a UIL sight-reading piece; the directors, therefore, may have defaulted to the linear score study process since that would be common in the sight reading room. For those directors who skipped around in the music looking for concepts, as advocated by Lonis and Ulrich, it may have been for a similar reason as those who approached the score linearly; since the piece was in a familiar format, they may have been expecting to see certain key changes and formal properties in their score study and skipping around confirmed their expectations. Future research that could investigate authentic case study analyses of long-term study procedures of directors using complex, less formally-predictable music might provide further clarification to the practices directors may use over time in studying scores.

When the participants discussed their score study of musical concepts, the most common trend was to highlight single line melodic examples. It appears that a primary purpose of initial score study for the majority of the participants was to prepare for challenges that might occur in rehearsals for single voice parts, such as tenor line chromaticism or leaps. Brinson (1996) recommended that "locating these potential trouble spots in the music and contemplating possible solutions to the problems before rehearsal will save valuable rehearsal time" (p. 114). It seems logical that since choral textbooks have advocated for directors to search for individual challenges within parts prior to discovering harmonic relationships (Brinson, 1996; Jordan, 1996), directors may have a tendency to favor melodic score study initially. It may also be that some directors focus on individual lines because they feel less comfortable with open scores due to a lack of extensive harmonic score study instruction at the undergraduate level, or due to a possible deficiency of practical application in undergraduate piano courses.

It should be noted, though, that there were participants who approached the score with both a melodic and harmonic lens. This technique of melodic and harmonic score study was advocated by Rogers (1984) in his theory pedagogy text. If music education and music theory professors value students having access to both melodic and harmonic study skills, then they may want to weigh the pedagogical steps needed to instruct students on how to score study using both melodic and harmonic techniques. It may be that this combination technique would require extra training; future studies investigating the score study of participants in terms of high skill in piano and theoretical analysis may help educators understand this phenomenon more completely. Undergraduate theory and aural skills classes may need to determine an appropriate sequence of instructional steps for students to be able to approach the high-level skill of internal hearing of

multiple lines together.

In their score study, the largest number of participants used the visual-without-sound-source score study technique, which aligns with the music theory pedagogy literature as a higher level score study skill (Karpinski, 2000). There has also been music education literature that has advocated for either silent or piano score study techniques (Romey, 2008), and still other music education literature that has advocated for the use of some form of sound exploration with initial score study (Brinson, 1996; Crowe, 1996; Jordan, 1996). The topic of score study techniques is complex and clearly needs additional investigation. It may be that teaching experience and background variables are interacting with the finding in the current study. Lane (2006) found that highly experienced directors used different score study techniques than less experienced directors did. Future research that could measure pre-service, senior music education students' score study practices would be valuable to see if there is consistency across findings for the use of score study techniques with participants of different experience levels than those in the current study.

The most common musical components that were identified by choral directors without any prompting from the researchers were rhythmic complexities, form/text, and texture; the least common musical concepts that were addressed were cadences, non-harmonic tones, and sequences. For those participants who did not mention certain musical concepts, a page was given to them prompting them to discuss those concepts they had not yet addressed. In this second stage, the most commonly cited concepts were phrasing, key center, and cadences, and the least cited were form/text, texture, and rhythmic complexities. Additionally, directors identified non-theory musical components that were not on the provided list: tempo, tone, blend, dynamics, articulation, accidentals and chromatics, and vocal technique challenges. Many of these theoretical and non-theoretical musical components have also been cited in music education choral methods textbooks (Brinson, 1996; Jordan, 1996) and in research (Decker, 1984) as important in the preparation of a score for rehearsal. Teachers may perceive pragmatic, non-theoretical music issues to be as important or more important in their teaching than some of the music's endemic music theory components. It would be valuable for music education coursework to be able to sequence score study in terms of theoretical and non-theoretical music concepts so teachers could be experienced pedagogically with both sets of terms.

The most commonly cited teaching priorities in this study were phrasing, rhythmic complexities, and key centers. Since choral methods textbooks have stressed the importance of identifying specific challenges, such as breathing, rhythms, and pitches, for singers within scores, it is possible that is why directors chose these concepts as primary teaching ideas. It may be that the most common musical teaching priorities could be considered as music concepts that potentially allowed the directors to have the greatest success in early rehearsals; these concepts appear to be a basic framework for the structure of a piece instead of being expressive components that might be addressed later. It should also be noted that participants tended to state music concept descriptions in terms of their choirs' skill levels. Hence, some directors of outstanding choirs may not have cited what they considered to be concepts that would be obvious to their singers.

The least commonly cited teaching priorities in this study were non-harmonic tones, texture, and sequences. The least commonly cited teaching priorities and most commonly un-cited musical concepts may be due to music theory terminology misunderstandings. Sequences and non-harmonic tones may not be mentioned as teaching priorities possibly because directors may have varying definitions for the terms (such as sequences equating with form, and non-harmonic tones equating with accidentals). Rogers (1984) warned of possible inconsistent use of music

theory terminology across college music curricula. It may benefit undergraduate curricula designers to determine consistent terminology for these important concepts.

It may also be that the musical concepts stated as being less important in teaching are not being sequenced well enough across music theory curricula; therefore graduates may not feel able to internalize the concepts and apply issues such as sequences or non-harmonic tones in practical rehearsal settings. Designers of music theory curricula may want to consider how these topics can be reinforced consistently across a multiple semester sequence of aural skills and theory. Additionally, directors may not have chosen to indicate non-harmonic tones or texture because both can be discovered visually and aurally in rehearsal. Therefore, directors may not have stated that they would teach certain concepts because they felt that not identifying these concepts would have little to no effect on the rehearsal and performance of the music.

Based on the study's results, music education collegiate programs may benefit from organizational planning sessions with music theory faculty to discuss the sequencing of contextual score study skills across the two areas for undergraduate music education students. Weighing the major concepts, and the timing of introduction and reinforcement of the concepts may benefit students' choral score study development. Having practical, authentic score study assignments across both theory and music education classes may help music theory terminology and score study practices become more comfortable and systematized for the future choral music directors. Universities could offer an elective score study course that would provide music education students with the option to have in-depth practice on score study techniques and application skills.

Discussing terminology consistently across theory and music education areas may also help students learn the concepts in a way that could lead to deeper term understanding, leading to long term memory storage and easy recall. In addition, offering theory course sections specifically for music education students so that authentic examples could be highlighted may lead to greater transparency for the students; this transparency may lead to greater mastery, which could help future choral directors achieve their goals of being highly skilled educators.

References

Brinson, B. A. (1996). *Choral methods: Methods and materials*. Belmont, CA: Thomson Learning.

Crowe, D. R. (1996). Effects of score study style on beginning conductors' error-detection abilities. *Journal of Research in Music Education, 44*, 160-171.

Decker, R. L. (1984). *A survey to determine the use of music theory knowledge and skills by North Carolina public school music teachers* (doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 8417885)

Gillis, G. (2008). Conductor responsibilities and rehearsal preparation. *Canadian Music Educator, 49*(4), 36-39.

Hale, R. (2012). Using technology to create and share musical analysis. *Choral Journal, 53*(4), 44-53.

Johnson, V. V. (2010). *Competencies, curricula, and compliance: An analysis of music theory in music education programs in Texas* (doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3399494)

Jordan, J. (1996). *Evoking sound*. Chicago, IL: GIA.

Karpinski, G. S. (2000). *Aural skills acquisition: The development of listening, reading, and performing skills in college-level musicians*. Oxford, England: Oxford University Press.

Klonski, E. (2006). Improving dictation as an aural-skills instructional tool. *Music Educators Journal, 93*(1), 54-59.

Lane, J. S. (2006). Undergraduate instrumental music education majors' approaches to score study in various musical contexts. *Journal of Research in Music Education, 54*, 215-230.

Lonis, D. J. (1993). *Score preparation: A brief overview*. Columbia, MO: Unpublished Manuscript.

McCarry, M. (2010). Music theory for voice students. *Journal of Singing, 66*(4), 451-455.

Phillips, K. H. (1996). *Teaching kids to sing*. Belmont, CA: Thomson Learning.

Rogers, M. R. (1984). *Teaching approaches in music theory: An overview of pedagogical philosophies*. Carbondale, IL: Southern Illinois University Press.

Romey, K. (2008). The conductor's perspective. *Choral Journal, 49*(3), 34-63.

Silvey, B. A. (2011). Effects of score study on novices' conducting and rehearsing: A preliminary investigation. *Bulletin of the Council for Research in Music Education, 187*, 33-48.

Ulrich, J. (2009). Preparing the conductor as teacher. *Music Educators Journal, 95*(3), 48-52.