Article



Strategies for Improving Rehearsal Technique: Using Research Findings to Promote Better Rehearsals

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Brian A. Silvey

Abstract

Music education researchers and conducting pedagogues have identified numerous behaviors that contribute to increased verbal and nonverbal teaching effectiveness of conductors on the podium. This article is a review of literature concerning several conductor behaviors that may (a) increase the effectiveness of rehearsals, (b) enhance the expressivity of conductors and/or their ensembles, or (c) improve ensemble performance. Suggestions and recommendations suitable for instrumental and vocal preservice teachers, in-service teachers, and faculty charged with teaching undergraduate conducting and rehearsal techniques courses are offered.

Keywords

conducting, ensemble warm-up, ensemble performance, nonverbal conducting behaviors, rehearsal techniques, teacher talk

One of the greatest challenges large ensemble music directors face when entering the profession is learning how to maximize their rehearsal efficiency for an extended period of time. Prior to their student teaching internship, undergraduates are rarely afforded the opportunity to conduct or rehearse for more than 10 or 15 minutes during a single teaching episode, leading many students to feel that the lack of podium time is the biggest impediment to developing their rehearsal skills (Silvey, 2011). This line of thinking, consistent with perceptions cause of some university conducting faculty (Romines, 2003; Zirkman, 1984), may lead many to mistakenly believe that all of their rehearsal weaknesses are the result of inadequate time in front of students rather than perhaps their own limited understanding of key principles of effective large-group instruction. The rehearsal issues that conductors face are commonplace, and many of these can be remedied once the underlying instructional problems have been diagnosed.

Although music education specialists try to prepare students for the inherent difficulties in teaching—especially with large ensembles—there are so many issues to consider that even the most systematic pedagogues cannot cover every important rehearsal principle nor do they agree on the importance of such topics (Chapman, 2008; Manfredo, 2008). When confronted with students in an environment away from the skillful guidance of their instructors, many novice conductors often forget the helpful instruction from their preparation. Even experienced teachers are sometimes unaware of unproductive rehearsal

habits that may have formed over time or the strategies necessary for their eradication or improvement.

The goal of this article is to illuminate conducting and rehearsal behaviors that may impede the productivity and efficiency of the daily rehearsal. It should be noted that the decision to include these general topics—while excluding others that were also deserving of further examination was intentional. I first identified specific conducting and rehearsal skills that I believed were problematic issues for many teachers, basing this list primarily on my observations of preservice and in-service teachers' rehearsals. After reviewing extant conducting and rehearsal technique research, I selected six topics that (a) appeared frequently in the literature and (b) epitomized rehearsal skills that large ensemble music directors could change quickly. Using extant research findings as a basis for discussion, solutions that might positively affect all conductors who struggle with these problems are described.

The Importance of the Warm-Up Period

Conductors sometimes mismanage the warm-up period, one of the most important aspects of daily rehearsal in

¹University of Missouri, Columbia, MO, USA

Corresponding Author:

Brian A. Silvey, University of Missouri, 202B Loeb Hall, Columbia, MO 65211, USA.

Email: silveyba@missouri.edu

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terms of building fundamentals and musicianship. From giving a litany of announcements while taking attendance to never altering the content of warm-up activities such as lips slurs, vowel matching exercises, or scales, teachers unwittingly indicate to their students that warming-up is not a critical part of their time together. Because conductors establish the intensity of a rehearsal in the opening minutes of a class period, teachers would be advised to treat the warm-up period seriously. A casual demeanor can undermine the intensity of a rehearsal (Madsen, 1990), and even fumbling through scores and the mere appearance of unreadiness can negatively influence perceptions about a conductor's effectiveness (Fredrickson, Johnson, & Robinson, 1998).

I believe that adopting a nonverbal approach, in which the first thing that happens in the rehearsal is sound production (even in terms of long tones or a chorale), puts the emphasis where it belongs—on music making. During this time, conductors can focus on providing insightful comments regarding students' posture, tone quality, and technique. For example, in the choral rehearsal, modifying vowel formation and using Curwen hand signs and solfeggio will benefit students. Greater specificity and attention-to-detail during the warm-up will let students know that they must be mentally, physically, and emotionally engaged from the first moments they play their instruments or open their mouths to sing.

The Need for Eye Contact

Many conductors find it difficult to make specific and meaningful eye contact with their students during rehearsals. It is not difficult to imagine scenarios in which students misbehave, consistently use incorrect fingerings, or never look up from their music as a result of their conductor's limited eye contact. Poor eye contact can be the result of not knowing the music well enough, an unwillingness to visually engage the performers, lack of confidence, or caused by speaking to the ensemble while looking down at the score. Not surprisingly, performers prefer conductors who make lots of eye contact during rehearsals (Fredrickson, 1994), and expert conductors have been shown to maintain eye contact for longer periods of time than novices (Byo & Austin, 1994). Frequent eye contact between teachers and students increases on-task behavior in the classroom (Yarbrough, 1975; Yarbrough & Madsen, 1998), and eye contact influences overall ratings of conductor effectiveness (Carvalho, 1997; Harden, 2000; VanWeelden & McGee, 2007).

Although eye contact during music performance is perhaps most often regulated based on music complexity (Byo & Lethco, 2001), it can also provide important information about students' behavior before the rehearsal

begins. One strategy that will improve eye contact is to start with the exercises, scales, and chorales that generally take place during a typical warm-up. Instead of looking down at music that is probably already memorized, focus on individuals throughout the rehearsal hall. Detailed observation of students' posture, hand position, fingers, and embouchures will be enlightening. Also, rather than going from one warm-up exercise to another, concentrating your gaze on students' playing will help direct attention toward student performance and learning (Fredrickson, 1992).

Another approach is to mark in the score, perhaps at each phrase or important musical starting or stopping point, the individual or section with whom to make eye contact. In fact, Fredrickson (1991) found that adding eye contact prompts to the music score increased the amount of time that conductors looked at their ensembles. Increasing the amount and frequency of eye contact will also benefit overall classroom management, as conductors may begin to understand more clearly students' musical and nonmusical habits and behaviors.

Working to Reduce Conductor Talk

Most likely, students who enroll in performing ensembles do not intend to hold their instruments for a long time without getting to play or stand without singing; however, this is a common feature in many teachers' classrooms. The main reason that most students want to perform in an ensemble, especially at the beginning stages of instruction, is to *perform*. Some teachers, especially novices, tend to talk too much, often at the detriment of student learning and ensemble performance achievement. Expert conductors have been shown to spend more than 50% of their rehearsal time in performance, whereas novice conductors spend a majority of their rehearsals talking (Caldwell, 1980; Goolsby, 1996, 1999). Furthermore, high school choral students paid greater attention during rehearsal when teacher talk was limited (Napoles, 2006). Regardless of previous conducting experience or the level of the performance group, conductors should strive to emulate what expert conductors do in regard to time spent in rehearsal, with the likely result being increased rehearsal efficiency and superior ensemble performance gains.

The most drastic way in which to cut down talking time is to not talk—at all. These silent rehearsals have been dubbed monk rehearsals because neither the conductor nor the students speak. An excellent summary of the musical and nonmusical benefits of monk rehearsals can be found in a recent issue of the Music Educators Journal (Graulty, 2010). By focusing on gesture, eye contact, and facial expression, conductors can convey expressive information to their students without always having to

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explicitly tell them. Although results involving the effects of expressive conducting on ensemble performance are mixed, research indicates that musicians and observers prefer expressive conductors over unexpressive conductors (House, 1998; Laib, 1993; Morrison, Price, Geiger, & Cornachio, 2009; Price & Winter, 1991; Sidoti, 1990).

A less extreme alternative that I have found successful is to give an ensemble member a stopwatch with the direction that they raise their hand if any single instance of talking goes beyond *X* seconds in duration. The entire ensemble will need to be informed so that they realize the conductor is trying to better their time management skills. When students and colleagues know that personal improvement is the goal, they will be enthusiastic collaborators. Keep enlisting help from time to time until unnecessary verbalizations are kept to a manageable duration. Researchers have also employed similar strategies by using computer software to help decrease novice conductors' talk time during rehearsals (Lethco, 1999; Worthy, 2005).

A final strategy might include drafting a list of usable terms to say during a single rehearsal. For instance, choose pairs of words such as "louder and softer," "brighter or darker," and "shorter and longer," and only use these words throughout a rehearsal. The focus of these strategies should be on streamlining what is said to increase productivity.

Making Feedback More Specific

"Great job!" "That doesn't sound good!" "Let's try it again, but better this time!" All of these statements represent an attempt at conveying information to our students. The problem, however, is that this type of feedback does not explicitly describe to the ensemble (or individual students) the precise nature of what they have done successfully or unsuccessfully, nor does it offer any real diagnostic information focused on changing student performance. Try to imagine students' thoughts after hearing these types of general statements. Their responses might range from "I don't need to work on this any longer because the director thinks I'm great" to "I'll never be able to play or sing this at all." In an effort to eliminate this type of thinking, teachers should use specific feedback, an idea that is consistent with research that found that observers preferred teachers who used specific feedback compared to general feedback (Price & Yarbrough, 1993; Siebenaler, 1997).

Often, conductors feel more comfortable complimenting the ensemble first, then immediately rattling off a list of errors they just heard in the performance. Rather than stating positive or negative feedback in general terms—especially for younger or less experienced performers—conductors should think about offering specific feedback

that will illuminate more than what the problem is, but how to fix that problem. In many cases, students already know that they were out of tune on a particular note or did not play or sing that technical passage accurately at tempo. The task should be to deliver specific feedback that will elicit quicker change in students' performance and to move beyond generalities such as "better" and "not good."

In thinking about ways in which to help the undergraduate conductors who I teach to become more effective in delivering specific feedback, I often make them attach a musical description to the nonspecific "good" and "bad" that they say too frequently. For instance, instead of saying "Good job, flutes!" after a few measures have been performed, say, "Good job flutes on making those sixteenth notes more crisp with a lighter tongue!" This procedure also works for negative feedback. Using the same hypothetical scenario: "Flutes, you used too much tongue on those eighth notes and they sounded too harsh and long. Crisper notes, please." With this statement, students know exactly what they did incorrectly, and there is no guesswork as to what needs to be achieved when playing that passage again. Perhaps most important, make sure to give students ways to fix their mistakes. With regard to tonguing, Sullivan (1998) found that woodwind performers who learned a variety of articulation syllables (e.g., tah, dah, tut, taht) were able to execute articulations more effectively than those who used a one-syllable approach. Combining specific feedback with physical actions to improve performance would appear to be an excellent method of delivering instruction.

In addition to providing specific feedback, conductors should not be afraid of giving their students negative feedback. Not only do expert music teachers use more negative than positive feedback during their teaching (Buckner, 1997; Duke & Simmons, 2006; Whitaker, 2011), but also the use of negative feedback does not adversely affect students' attitudes about music teachers or ensemble rehearsal (Cavitt, 2003; Duke & Henninger, 2002). Indeed, negative feedback can be a very powerful tool in shaping our students' performance. An example of productive negative feedback might be telling your tenor saxophonist that his "tone sounds airy" rather than saying the less helpful and unspecific "your tone sounds bad." After delivering this type of feedback, the student is more aware of what is deficient in their playing, perhaps enabling them to fix this issue on their own or with your assistance.

Moving Beyond Notes and Rhythms

Although the technical aspects of music making often represent the bulk of complaints made by conductors to their students in rehearsal, much of the insecurity about 14 Update 32(2)

these technical issues can be avoided. Rather than just complaining about the precision of those 16th notes, describe ways in which the students could practice those measures outside of the rehearsal. Not surprisingly, researchers have indicated that middle school and high school students' practice sessions lack structure (Barry, 1992; McPherson & Renwick, 2001; Oare, 2012). However, this lack of focus while practicing can be lessened when teachers discuss with their students a variety of practice strategies (Rohwer & Polk, 2006). In addition to describing how to rehearse a technical passage, model for the students by performing on a primary or secondary instrument. Studies suggest that modeling may encourage musical independence (Morrison, Montemayor, & Wiltshire, 2004) and the development of performance expressivity (Woody, 1999). If students can hear improvement in your modeled sound, they may be more willing to use these strategies in their own practice.

Many conductors seem to spend all of their rehearsal time fixated on "right notes, right rhythms" because these issues are somewhat easier to address and correct in rehearsal than balance, blend, or intonation. Researchers have found that middle and high school band directors most often address issues related to rhythm and tempo when working with their ensembles (Carpenter, 1986; Pontious, 1982; Sherill, 1986). Some conductors may believe that you either play or sing the written rhythm and notes on the page or you don't, right? Perhaps there is no subjectivity about assessing whether a student performed an F-major scale in quarter notes at a specified tempo marking. However, for experienced conductors, there is a lot more to an F-major scale than "right notes, right rhythms." Elements such as tone quality, expression, and intonation must also be taken into consideration. Interestingly, research findings have indicated that experienced teachers addressed intonation, expression, balance, and blend much more frequently than did novices, who spent the majority of their rehearsals getting their ensembles to play together (Birkner, 1992; Goolsby, 1997, 1999).

One of the best ways to spend more time talking about sophisticated musical skills is to choose less technically demanding repertoire. What if rehearsals were also centered on higher-level musical skills, not just notes, rhythms, and dynamics? By choosing repertoire that is not dominated purely by technical demands, more time can be spent on musical elements such as expression, balance, blend, and musical nuance. It is important to note that I am not advocating playing or singing music with no technical challenge because overall ensemble technique would be stifled. However, think carefully about when to program such pieces. A suggestion might be to program repertoire that is slightly too difficult for some ensemble

members in a less threatening and stressful environment than a large group contest performance.

Leaving Time for Contextualized Performance

For conductors who have thoroughly prepared their scores, each rehearsal presents an opportunity to make significant improvement based on familiarity with the music. From achieving rudimentary skills such as notes and rhythms to more advanced nuances such as dynamic inflection and tapered releases, each phrase and large section of music deserves special attention. Although this level of musicianship is necessary to elevate any performance from good to excellent, conductors can easily become fixated on one specific technical passage or getting two different instrument groups or choir sections to line up perfectly. While this specificity in rehearsal is a valuable asset, if that single-mindedness impedes ensemble members from understanding how that piece of music functions as a whole, than that is not a desirable outcome. Beyond just teaching students to perform technically on their instruments or with their voices, teachers need to instill the importance of how phrases and sections join together to create an entire piece of music, a concept known as comprehensive musicianship (Austin, 1998; Garafolo, 1983).

A suggestion that will help curtail "spot-to-spot" rehearsing is to name the measure numbers that will be rehearsed. Rather than telling students "Let's start rehearsing at measure 10," tell them "I'd like to hear measures 10 through 20." This type of rehearsing promotes two very important ideas. First, the ensemble knows that the expectation is to play or sing from measure 10 through measure 20 without stopping. Although mistakes may happen, students should continue to the end of the section. With specific directions based on rehearing phrases or bigger sections, students' "big picture" musical thinking will be developed. Given that knowledge of teaching goals can affect perceptions of teacher effectiveness (Henninger, 2002), it is likely that students would appreciate and benefit from knowledge of rehearsal goals. Second, rather than growing frustrated because the ensemble does not quit playing after you cut them off because students cannot reliably predict when that might happen—there is a greater likelihood that students will stop playing based on your explicit instructions. At this point, the ensemble may be served better by rehearsing individual measures, especially with regard to vertical tuning, specific technical passages, or vowel placement.

Finally, try to end the rehearsal of each piece with at least a run-through of the measures that were practiced that day. This gives the conductor the opportunity to

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determine whether the performance issues that were addressed during the rehearsal actually improved in a larger context than just the few measures or phrases that were rehearsed. Equally important, ensemble members get another chance to solidify their performance with increased understanding of how their individual part fits into the musical whole.

Final Thoughts

Regardless of the quality or depth of previous conducting and rehearsal preparation, there is always room for improvement. One way that teachers can begin to analyze their instruction is by developing procedures for reflective practice, a process that allows teachers to carefully describe, analyze, explain, and reflect on their teaching (Ostermann & Kottkamp, 1993). Examples of reflective practice strategies that might lead to professional growth include journal keeping, guided observation, discussion with peers, and videotaping (Schmidt, 1998). For large ensemble directors, regular videotaping of rehearsals should be a commonplace event. Research results have indicated that videotaped analysis of rehearsal is an important part of the overall self-assessment process and aids in the development and refinement of teaching and conducting skills (Lethco, 1999; Stanley & Madsen, 1991; Worthy, 2005; Yarbrough, 1987). Even though it can sometimes be difficult to analyze teaching videos from an unbiased perspective, invite a trusted colleague from a neighboring school district to provide feedback, consider sending a teaching video to a professor at your alma mater, or ask a friend in your degree program to give advice.

Although rehearsing effectively takes experience and training, certain skills—including the timing, pacing, and content of conductor verbalizations—are teachable and can be improved with practice (see reviews by Duke, 1999; Price & Byo, 2002). By addressing and correcting errors more quickly and with greater detail, conductors can help solve students' performance problems and establish an environment in which individual and ensemble musicianship are the main priorities. Given that most ensemble directors will rehearse daily for their entire teaching careers, the drive to improve and find more effective and efficient ways to lead rehearsals should be of great importance—not just for our betterment, but most important, for that of our students.

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References

- Austin, J. R. (1998). Comprehensive musicianship research: Implications for addressing the national standards in music ensemble classes. *Update: Applications of Research in Music Education*, 17, 25–32. doi:10.1177/ 875512339801700106
- Barry, N. (1992). The effects of practice strategies, individual differences in cognitive style, and gender upon technical accuracy and musicality of student instrumental performance. *Psychology of Music*, *20*, 112–123. doi:10.1177/0305735692202002
- Birkner, T. F. (1992). An analysis and classification of conductor vocal communication in the rehearsals of selected jazz ensembles. University of Illinois at Urbana-Champaign, Champaign. Dissertation Abstracts International, 53, 3467A.
- Buckner, J. L. J. (1997). Assessment of teacher and student behavior in relation to the accomplishment of performance goals in piano lessons (Unpublished doctoral dissertation). The University of Texas at Austin.
- Byo, J. L., & Austin, J. R. (1994). Comparison of expert and novice conductors: An approach to the analysis of nonverbal behaviors. *Journal of Band Research*, 30(1), 11–34.
- Byo, J. L., & Lethco, L. A. (2001). Student musicians' eye contact with the conductor: An exploratory investigation. *Contributions to Music Education*, 28(2), 21–35.
- Caldwell, W. M. (1980). A time analysis of selected musical elements and leadership behaviors of successful high school choral conductors (Unpublished doctoral dissertation). Florida State University, Tallahassee.
- Carpenter, R. A. (1986). A descriptive analysis of relationships between verbal behaviors of teacher-conductor and ratings of selected junior high and senior high school band rehearsals. Ohio State University, Columbus. *Dissertation Abstracts International*, 47, 05A.
- Carvalho, E. D. (1997). Choral students' attentiveness and attitude as related to conductors' score utilization and eye contact. University of Missouri, Columbia. *Dissertation Abstracts International*, 59, 2410A.
- Cavitt, M. E. (2003). A descriptive analysis of error correction in instrumental music rehearsals. *Journal of Research in Music Education*, 51, 218–230. doi:10.2307/3345375
- Chapman, C. C. (2008). An investigation of current instruction practices for the undergraduate instrumental conducting student concerning left hand technique and facial gestures. University of Washington, Seattle. *Dissertation Abstracts International*, 69, 06A. (UMI No. 3318171)
- Duke, R. A. (1999). Measures of instructional effectiveness in music research. *Bulletin of the Council for Research in Music Education*, 143, 1–43.
- Duke, R. A., & Henninger, J. C. (2002). Teachers' verbal corrections and observers' perceptions of teaching and learning. *Journal of Research in Music Education*, 50, 75–87. doi:10.2307/3345694

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Duke, R. A., & Simmons, A. L. (2006). The nature of expertise: Narrative descriptions of 19 common elements observed in the lessons of three renowned artist-teachers. *Bulletin for* the Council of Research in Music Education, 170, 7–19.

- Fredrickson, W. E. (1991). The effect of focus of attention on conducting behaviors including eye-contact of preservice conductors. *Southeastern Journal of Music Education*, 3, 54–60.
- Fredrickson, W. E. (1992). Research on eye contact with implications for the conductor: A review of literature. *Update: Applications of Research in Music Education*, *11*, 25–31. doi:10.1177/875512339201100106
- Fredrickson, W. E. (1994). Band musicians' performance and eye contact as influenced by loss of a visual and/or aural stimulus. *Journal of Research in Music Education*, 42, 306–317. doi:10.2307/3345738
- Fredrickson, W. E., Johnson, C. M., & Robinson, C. R. (1998). The effect of pre-conducting and conducting behaviors on the evaluation of conductor competence. *Journal of Band Research*, 33(2), 1–13.
- Garafolo, R. (1983). *Blueprint for band*. Fort Lauderdale, FL: Meredith Music.
- Goolsby, T. W. (1996). Time use in instrumental rehearsals: A comparison of experienced, novice, and student teachers. *Journal of Research in Music Education*, 44, 286–303. doi:10.2307/3345442
- Goolsby, T. W. (1997). Verbal instruction in instrumental rehearsals: A comparison of three career levels and preservice teachers. *Journal of Research in Music Education*, 45, 21–40. doi:10.2307/3345463
- Goolsby, T. W. (1999). A comparison of expert and novice music teachers' preparing identical band compositions: An operational replication. *Journal of Research in Music Education*, 47, 174–187. doi:10.2307/3345722
- Graulty, J. (2010). Don't watch me! Avoiding podium-centered rehearsals. *Music Educators Journal*, *96*, 53–56. doi:10.1177/0027432110370565
- Harden, M. C. (2000). The effect of differentiated levels of conductor eye contact on high school choral students' ratings of overall conductor effectiveness. University of Missouri-Kansas City. *Dissertation Abstracts International*, 61(05), 1777A. (UMI No. 9974577)
- Henninger, J. C. (2002). The effects of knowledge of instructional goals on observations of teaching and learning. *Journal of Research in Music Education*, 50, 37–50. doi:10.2307/3345691
- House, R. E. (1998). Effects of expressive and nonexpressive conducting on the performance and attitudes of advanced instrumentalists. Arizona State University, Tucson. *Dissertation Abstracts International*, 59A, 4004.
- Laib, J. R. (1993). The effect of expressive conducting on band performance. University of Georgia, Athens. *Dissertation Abstracts International*, 54, 3258A.
- Lethco, L. M. (1999). Preparing undergraduate music majors to teach beginning instrumentalists: The effects of selfevaluation, teacher observation, and performance-oriented instructional approaches on teacher behaviors and pupil

- responses. Louisiana State University, Baton Rouge. Dissertation Abstracts International, 60, 1058.
- Madsen, C. K. (1990). Teacher intensity in relationship to music education. *Bulletin of the Council for Research in Music Education*, 104, 38–46.
- Manfredo, J. (2008). Factors influencing curricular content for undergraduate instrumental conducting courses. *Bulletin of the Council for Research in Music Education*, 175, 45–62.
- McPherson, G., & Renwick, J. (2001). Longitudinal study of self-regulation in children's musical practice. *Music Education Research*, 3, 169–186. doi:10.1080/14613800120089232
- Morrison, S. J., Price, H. E., Geiger, C., & Cornacchio, R. (2009). The effect of conductor expressivity on ensemble performance evaluation. *Journal of Research in Music Education*, 57, 37–49. doi:10.1177/0022429409332679
- Morrison, S. J., Montemayor, M., & Wiltshire, E. S. (2004). The effect of a recorded model on students' performance self evaluations, achievement, and attitude. *Journal of Research* in Music Education, 52, 116–129. doi:10.2307/3345434
- Napoles, J. (2006). The effect of duration of teacher talk on the attitude, attentiveness, and performance achievement of high school choral students. *Research Perspectives in Music Education*, 11, 22–29.
- Oare, S. (2012). Decisions made in the practice room: A qualitative study of middle school students' thought processes while practicing. *Update: Applications of Research in Music Education*, 30, 63–70. doi:10.1177/8755123312437051
- Ostermann, K., & Kottkamp, K. (1993). Reflective practice for educators: Improving schooling through professional development. Newbury Park, CA: Corwin Press.
- Pontious, M. F. (1982). A profile of rehearsal techniques and interaction of selected band conductors. University of Illinois at Urbana-Champaign, Champaign. *Dissertation Abstracts International*, 43, 2920.
- Price, H. E., & Byo, J. L. (2002). Rehearsing and conducting. In R. Parncutt & G. E. McPherson (Eds.), The science and psychology of music performance: Creative strategies for teaching and learning (pp. 335–351). New York, NY: Oxford University Press.
- Price, H. E., & Winter, S. (1991). Effect of strict and expressive conducting on performances and opinions of eighth-grade band students. *Journal of Band Research*, 27(1), 30–43.
- Price, H. E., & Yarbrough, C. E. (1993). Effect of scripted sequential patterns of instruction in music rehearsals on teaching evaluations by college nonmusic students. *Bulletin of the Council for Research in Music Education*, 119, 170–178.
- Rohwer, D., & Polk, J. (2006). Practice behaviors of eighthgrade instrumental musicians. *Journal of Research* in *Music Education*, 54, 350–362. doi:10.1177/ 002242940605400407
- Romines, F. D. (2003). A survey of undergraduate instrumental conducting curricula. *Journal of Band Research*, 38(2), 80–90
- Schmidt, M. (1998). Defining "good" music teaching: Four student teachers' beliefs and practice. *Bulletin of the Council for Research in Music Education*, *138*, 19–46.

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Sherill, M. H. (1986). An analytical study of videotaped rehearsal and conducting techniques of selected junior and senior high school band conductors. University of Rochester, Rochester, NY. *Dissertation Abstracts International*, *52*, 18A.

- Sidoti, V. J. (1990). The effects of expressive and nonexpressive conducting on the performance accuracy of selected expressive markings by individual high school instrumentalists. Ohio State University, Columbus. *Dissertation Abstracts International*, 51, 3270A.
- Siebenaler, D. J. (1997). Analysis of teacher-student interactions in the piano lessons of adults and children. *Journal of Research* in Music Education, 45, 6–20. doi:10.2307/3345462
- Silvey, B. A. (2011). Undergraduate music majors' perceptions of instrumental conducting curricula. *Journal of Music Teacher Education*, 21, 27–38. doi:10.1177/1057083710387521
- Stanley, J. M., & Madsen, C. K. (1991). An observation procedure to differentiate teaching experience and expertise in music education. *Journal of Research in Music Education*, 39, 5–11. doi:10.2307/3344604
- Sullivan, J. M. (1998). Syllabic articulation instruction for woodwinds and its effect on articulation accuracy and ensemble precision (Unpublished doctoral dissertation). University of Iowa, Iowa City.
- VanWeelden, K., & McGee, I. R. (2007). The influence of music style and conductor race on perceptions of ensemble and conductor performance. *International Journal of Music Education*, 25, 7–19. doi:10.1177/0255761407074886

- Whitaker, J. A. (2011). High school band students' and directors' perceptions of verbal and nonverbal teaching behaviors. *Journal of Research in Music Education*, *39*, 5–11. doi:10.1177/0022429411414910
- Woody, R. (1999). The relationship between explicit planning and expressive performance of dynamic variations in an aural modeling task. *Journal of Research in Music Education*, 47, 331–342. doi:10.2307/3345488
- Worthy, M. D. (2005). The effects of self-evaluation on the timing of teacher and student behaviors in lab rehearsals. *Journal of Music Teacher Education*, 15, 8–14. doi:10.117 7/10570837050150010103
- Yarbrough, C. (1975). Effect of magnitude of conductor behavior on students in selected mixed choruses. *Journal of Research in Music Education*, 23, 134–146. doi:10.2307/3345286
- Yarbrough, C. E. (1987). The relationship of behavioral selfassessment to the achievement of basic conducting skills. *Journal of Research in Music Education*, 35, 183–189. doi:10.2307/3344960
- Yarbrough, C. E., & Madsen, K. (1998). The evaluation of teaching in choral rehearsals. *Journal of Research in Music Education*, 46, 469–481. doi:10.2307/3345344
- Zirkman, R. A. (1984). Review of educational objectives for conducting classes for the undergraduate through the doctoral degree. Ball State University, Muncie, IN. *Dissertation Abstracts International*, 45(07), 1912A.