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SHOWING THE MUSIC:
AN EXPLORATION OF THE EFFECT OF EXPRESSIVE CONDUCTING ON
ELEMENTARY BAND PERFORMANCE

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Abstract

The purpose of this study was to examine the effect of expressive conducting on elementary band performance. One music teacher conducted a fifth grade band using both strict and expressive conducting styles. The strict conducting consisted of a simple time beating pattern, no facial expression, and no eye contact. The expressive conducting included expressive gestures, dynamic changes through gesture size, eye contact, specific cues, and emotive facial expressions. The band was given a single verbal cue prior to performance in order to encourage focus on the conductor. Both styles were performed on the same one-minute excerpt from the same piece of music and the band's performance was recorded. The recordings were then analyzed by a group of senior collegiate music education majors. Analysis criteria included dynamic contrast, phrasing, style, precision, overall expressiveness, overall musical effect, and overall performance. The results indicated that the expressive conducting did have a significant effect on ensemble performance.

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**SHOWING THE MUSIC:
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Chapter I: Introduction

Conducting an instrumental ensemble is a challenging form of music education. This challenge comes not only from the technique of communicating with musicians, but also from the difficult balance between intellectual analysis of music and aesthetic interpretation. A conductor must have a thorough knowledge of the score in terms of the construction of the music. Simultaneously, however, a conductor must also possess deep convictions about the emotion behind the music and create a unique interpretation. A conductor's challenge is to balance all of these factors at once while communicating the music to the ensemble.

In this way, conducting is more of a way of life than a simple activity. In front of the group, the conductor constantly uses all methods at his/her disposal to communicate information to both the entire group as well as specific players (Demaree & Moses, 1995). The conductor must use every skill s/he possesses to communicate his/her analysis and ideas to the ensemble (Bernstein, 1954). The conductor is a leader in that s/he guides the interpretation of the entire group. However, the conductor is also a member within the ensemble itself (Stokowski, 1943), and must possess control as s/he leads from within. In addition to affecting the performers with nonverbal communication, the conductor also influences the audience enjoyment of the music (Fuchs, 1969). This understanding of the music can also be divided into score study, rehearsal, and performance (Ormandy, n.d.).

In the performance aspect of this scenario, the conductor's greatest challenge is communicating with only gesture, body language, and facial expression. Of the skills required to be a conductor, nonverbal communication is the most used while on the podium in front of the group. Many researchers have attempted to categorize nonverbal gesture in order to better understand this channel of communication. Ekman & Friesen (1969) explored nonverbal communication by classifying gestures in systems of origins and coding. These categorizations apply not only to conducting gesture but to all nonverbal communication behavior. The origin category relates to the way in which the behavior entered the nonverbal repertoire. These origins include natural human reflexes, reactions to environmental stimuli, and varying behaviors due to culture or class. The coding categories describe the relationship between the gesture and its intended meaning. Gestures are coded as pictorial, spatial, rhythmic, kinetic, and pointing (Ekman & Friesen, 1969).

Beyond kinetic gestures, another important feature of nonverbal communication is facial expression. The face and eyes allow a conductor to show limitless emotion, as well as maintain the concentrated focus of the ensemble. Mehrabian (1972) found that facial expressions account for 55% of all of the feeling communicated in a message. Reese & Whiteman (1962) found that facial expression contributes a feeling of warmth from a person, as well as increases the amount of intellectual responses when participants were interviewed under different facial expression conditions. Clearly, facial message encoding plays an extremely important role in nonverbal communication.

Within this sphere of nonverbal communication, researchers have begun to study the type and effect of various nonverbal gestures on ensemble performance and audience opinion. Several researchers (Byo & Austin, 1994; Green, 1997; Sousa, 1998) have

worked to categorize nonverbal gestures as they are used within the field of conducting. Byo and Austin (1994) categorized conducted gestures based on physical motion, Sousa (1998) concentrated on those gestures labeled as emblems, and Green (1997) focused on activeness and passiveness of gestures.

Beyond categorizing gestures, researchers have also begun to examine the effects that conducting gestures have on ensemble performance. Sidoti (1990), Durrant (2009), and Grechesky (1985) all explored the impact that expressive gestures have on ensemble performance. As conductors, results from these studies will be helpful in assessing the effectiveness of our nonverbal communication with the group in helping the musicians to play more musically. Each of these researchers found that more expressive conducting had a positive impact on band performance or behavior.

While these studies focused on expressive conducting of high school level bands, little research has been performed on expressive conducting in a young band setting. Prince & Chang (2001) explored a possible correlation between conductor expressivity and band performance, however no correlation was found. Price & Winter (1991) investigated middle school band performance differences when the group was conducted both strictly and expressively. This study also yielded results that did not indicate a relationship between gesture and performance. While these studies did not indicate a correlation between expressive conducting and expressive performance, the results are certainly not conclusive that conducting gestures have no impact on young band performance. Additionally, a dearth of research has been performed with elementary band students, who are the students with the least ensemble experience. These students can perhaps provide the most insight into student performance differences under varied conducting conditions.

Purpose of the Study

The purpose of this study was to investigate the effect of conducting gestures on elementary band performance. Students were conducted under two types of conducting gesture conditions, expressive or strict. Judges evaluated the recordings of the students based on expression in the performance.

Problems of the Study

The problems of this study were as follows:

- 1) Devise a tool for the evaluation of elementary band performances, drawing on varied aspects of performance.
- 2) Develop recordings of an elementary band playing under both strict and expressive conducting conditions.
- 3) Evaluate those recordings using the evaluation tool to determine if there was a difference in ensemble performance between expressive and strict conducting.

Chapter II: Review of Literature

In this chapter, areas of literature are outlined that deal directly with conducting philosophy, nonverbal communication, and conducting research. Conducting is an aesthetic art form, placing great weight upon the opinions and convictions of those central to the philosophical background of this art. In the same token, conducting is, at its roots, nonverbal communication. Lastly, the research that has been conducted is presented to provide a foundation of research that has been conducted on genre, broken into both the categorization and effectiveness of gesture, as well as the effect that expressive gesture has on ensemble performance.

Conducting Philosophy

There are as many definitions of conducting as there are conductors, as seen by analyzing the varying opinions from leading individuals in this field. These opinions were synthesized into a definition for the purpose of this study. The analysis of literature will include the definition of conducting, the purpose of conducting, and the role of the conductor. The following conductors and musicians have been chosen based on their importance in the musical field and to provide a variety of opinion.

Demaree & Moses (1995)

In the conducting text *The Complete Conductor*, Demaree & Moses (1995) outlined the most basic definition of conducting as “the act of communicating musical ideas to an ensemble through gesture” (p. 2). They explained that all of a conductor’s gestures have intended musical meaning for someone in the ensemble. Besides this physical side of conducting, the authors describe how conducting is also deeply rooted in intellectual stimulation. The conductor must analyze the music constantly in order to balance his interpretation, the players’ talents, performance practice, the composer’s

intentions, and the appeal to the audience. In this elemental definition, the conductor uses his mind and body to shape the creation of the music.

According to Demaree & Moses (1995), the responsibility of the conductor is first and foremost to communicate with the ensemble. In this way, the conductor must persuade the ensemble to his or her interpretation of the music by allowing superior musicianship to govern all aspects of the physical gesture. The authors also explained the three understandings that every conductor must possess: understanding of the music, understanding of the performers, and understanding of the audience. This understanding of these three important elements forms the intellectual basis behind conducting.

Bernstein (1954)

Leonard Bernstein, in the chapter The Art of Conducting from his book, *The Joy of Music*, outlined four main responsibilities of the conductor. First is the control of timing that conductor must possess. He described the conductor as a “sculptor whose element is time instead of marble” (p. 271). The conductor utilizes this timing to pace and control the music for maximum emotional impact. Second, the conductor is a great communicator, using every resource in his power to display his interpretation to the players. Third, Bernstein described the chief technical element of conducting as the preparatory gesture. In order to properly communicate, “the conductor always has to be at least a beat or two ahead of the orchestra” (p. 272), or any ensemble for that matter. Finally, the fourth element of conducting is to make the ensemble want to play; the conductor must inspire a love of the music from the performers.

Stokowski (1943)

Leopold Stokowski, one of the greatest conductors of the twentieth century, attempted to define the facets of a great conductor in his book *Music for All of Us* (1943).

Stokowski explained the importance of the conductor being a part of the ensemble, rather than a personality outside of the group. He explained how a conductor who does not possess this inner communication becomes “a time beater” (p. 199). Stokowski also described how simple time beating should be avoided. He illustrated his ultimate ideal of a born conductor in the following passage: “Good conductors have control of themselves and the orchestra – they are sensitive to many kinds of feeling – they have within them many kinds of imagination – they are alive to the poetry of music and the poetry of all life – they bring to music a creative, dynamic power” (p. 199).

Fuchs (1969)

In his book *The Psychology of Conducting* (1969), Peter Paul Fuchs presented a contrasting view of conducting. Fuchs described the phenomenon of the conductor as a mystical creator of the music, who never actually plays. You go to the orchestra “not to hear Tchaikovsky’s Fifth but to hear it conducted by Ormandy” (p. 3). The audience, on some level, judges the musical performance based on not only the aural music itself, but also the visual stimulation provided by the conductor. Fuchs described how, like it or not, the conductor is seen as an “iron-fisted czar” simply because he leads a “perfectly disciplined performance” (p. 8). While some may view this conductor perception as irrelevant to the actual role of the conductor, this view is important to note because the audience perception of the conductor does influence the enjoyment of the music. This fact will be discussed in the future chapters.

Ormandy (n.d.)

Eugene Ormandy, principal conductor of the Philadelphia orchestra for 44 years, related yet another view of the roles of a conductor in his article *Art of Conducting* (n.d.). Ormandy explained how the conductor functions on three distinct levels: personal study,

rehearsal, and performance. While this view of conducting applies less to this study than those outlined above, Ormandy presented a view of which all conductors must be aware when working with an ensemble. In personal study, the conductor must fully analyze the work and prepare to conduct. This means analyzing the technical elements of the music, examining the expressive elements, and creating an aural image of how the music should sound. In rehearsal, the conductor “prepares the orchestra both technically and artistically” (p. 253). Here Ormandy echoed the sentiments of Stokowski that a conductor must play with the ensemble, rather than over them. Lastly, the author described the final level: performance. In performance the conductor separates from technique, and is able to function at his or her highest level by creating a completely artistic experience.

Summary

After review conducting philosophies from some of the most respected and well-known musicians in history, it becomes clear that an exact definition of conducting is difficult to establish. However, it is equally clear that there are some constants upon which conductors agree. Using these constants, this study defined conducting as using physical gesture to communicate with an ensemble. The purpose of conducting is to unite the group to one musical interpretation. The role of the conductor is essentially to show the ensemble how the music should go. This will include any aspects of aural sensation, including dynamics, phrasing, style, and precision (togetherness). All of these elements will be further explored through research-based analysis in later chapters.

Nonverbal Communication

Teachers have many options for communication at their disposal, especially in music. Conductors must balance these communication forms in order to most

appropriately and effectively give musical meaning to the ensemble. While conductors have the ability to utilize verbal communication in a rehearsal situation, nonverbal communication is the sole interaction channel during a performance situation. The classification and understanding of nonverbal gestures become important when analyzing how a conductor interacts with his or her ensemble.

Ekman & Friesen (1969)

A variety of methods have been proposed for the classification of nonverbal gestures, however perhaps the most widely used is the work of Ekman & Friesen (1969). The authors used several different methods to analyze nonverbal communication from different perspectives. All nonverbal gestures can be classified using both “origins” and “coding” (p. 59). The origin refers to the way in which the nonverbal behavior entered the repertoire of the information sender. The coding describes the relationship between the gesture and its intended meaning.

The first origin refers to a nonverbal response to a stimulus exhibited by every member of a species. This contains all reflexes displayed naturally by all humans. The second origin is also behavior exhibited by all humans, but in response to all environments, rather than a reflex. The authors indicated the fact that all humans use their hands to eat as an example of the second origin. The third origin is behavior that varies with “culture, class, family, or individual” (p. 59). All behaviors fall within these three categories of origin, and with few exceptions, most conducting gestures fall into the third origin category.

Gestures can be coded five different ways: Pictorial, Spatial, Rhythmic, Kinetic, and Pointing. Pictorial involves drawing a picture of an object, person, etc., and is rarely used in musical conducting. Spatial coding is distance described using the nonverbal

gesture. This distance could be used in conducting to show loud and soft dynamics, using spatial contrast of the hands. Rhythmic coding carries only tempo information. While this limits the scope of this gesture to communicate information, it is instrumental in music when the conductor indicates tempo to the ensemble. While many consider this to be the main role of the conductor, it is important to note that this is just one of the five codes utilized with gesture. Kinetic coding describes the gesture as having meaning that parallels another physical activity. This code has broad implications for the physical style of the ictus demonstrated by a conductor. For example, a *pesante* musical passage is properly portrayed by a conductor when it looks as if he or she were lifting something heavy. Finally, the pointing gesture is used to indicate a specific person or group of people. This pointing code is used extensively by a conductor while showing cues to the ensemble.

Another system for the categorization of gestures focuses mainly on the intention behind the gesture, rather than the gesture itself. Ekman and Friesen (1969) outlined these categories as five distinct groups. 1) **Emblems** have a direct meaning translation, such as a “thumbs up” meaning correct or positive. 2) **Illustrators** are used to support messages, for example tapping your foot to show a sense of urgency. 3) **Regulators** are gestures that help us to interact, such as head nodding during conversation. 4) **Affect Displays** reflect emotional intensity, for example body tension. 5) **Adaptors** are unintentional behaviors, usually exhibited during stress, such as nail biting. Conductors use gestures from each category on the podium.

Mehrabian (1972)

Beyond these kinesthetic behaviors in conducting, one of the most important communication channels the conductor possesses is his face. Much of the philosophical

arguments about conducting outlined above concentrate significant time to the importance of facial expression in communicating to an ensemble. Mehrabian (1972) explored the importance of various channels of communication, and concluded that the total feeling of a message breaks down to 7% verbal feeling, 38% vocal feeling, and 55% facial feeling (p. 182). This has immense implications for conducting, as conductors utilize their faces at all times while conducting. Mehrabian also explored the importance of gesture over verbal communication, and concluded that, “non-verbal behavior is a developmentally earlier and more primitive form of communication” (p. 14).

Reece & Whiteman (1962)

Reece & Whiteman (1962) explored the perception of verbal and non-verbal “warmth” and “coldness” with regard to facial expression and eye contact. Participants were asked to say whatever words came to mind for 15 minutes. The experimenters varied how the test was administered to participants, some smiling and using eye contact, some frowning and looking away. Those experimenters with smiling and eye contact were both rated as more warm, and resulted in more words contributed from those participants.

Summary

The above studies outline both the classification of all nonverbal communication, as well as the importance of facial expression in the nonverbal communication model. By categorizing conducting gestures in each of the ways listed, we become more informed on both the intent of the gesture and the predicted effectiveness. Above all else, it is clear that facial expressions are crucial in order to create the strongest message possible between conductor and ensemble. This communication includes not only frequency of facial expression, but also content of emotion involved. As seen in the

conducting research, all of these elements become invaluable to the art of conducting.

Research on Conducting

When combining the above factors, several researchers have explored the technique, effectiveness, and feasibility of expressive conducting in an ensemble setting. The studies outlined below are concerned with two main themes: defining expressive in concrete terms and analyzing the effect of expressive conducting on ensemble performance and audience perception.

Definition and Categorization of Expressive Gestures

Byo & Austin (1994)

The researchers in this study devised a system of grouping conducting gestures, and then used these categories to explore differences between the conducting behavior of both novice and experienced conductors. Byo & Austin described conducting gestures as fitting into one of six main categories: right arm/hand, left arm/hand, eye contact, facial expression, body movement, and cuing. Rehearsal tapes were analyzed of novice and expert conductors to document how much time in rehearsal they devoted to the above categories. Results indicated that experienced conductors used more expressive patterns than novice conductors, whose patterns were more often neutral. Additionally, experienced conductors used more eye contact, more expressive body movement, more facial expression, and less hand mirroring.

Sousa (1998)

Much research in particular has been conducted on Mehrabian's (1972) emblem category of nonverbal expression in conducting. Sousa (1988) explored the different emblematic gestures used in conducting by first developing a list of gestures from five standard conducting texts. These gestures were organized into eight general categories:

beat patterns, dynamics, styles, preparations, releases, fermata/holds, tempo changes, and phrasing. These gestures were then utilized by conductors, and recorded on a videotape of each gesture. This videotape was then presented to instrumental performers, along with a multiple-choice questionnaire to determine if the performers could identify what the gesture is showing. Instrumental participants included junior high students (n=110), high school students (n=102) and university students (n=94). Results showed that out of the 55 gestures included on the videotape/questionnaire, 38 received 70% or more recognition, the percentage required for the gesture to be considered a conducting emblem.

Green (1997)

Another method of categorizing conducting gesture involves the implementation of active gestures and passive gestures. Green (1997) defined active gestures as those that request a response from the players, including legato, staccato, tenuto, or gestures of syncopation. Passive gestures request silence from the players, such as dead gestures and preparatory beats. It is the combination of these gestures that create conducting that is clear, yet musically expressive for the players. Green explained that the musical expression in conducting is shown between the *icti*, known as declaration of intent. During this time, the conductor actually shows musicians *how* to play, rather than simply *when* to play.

Effect of Expressive Conducting on Ensemble Performance

Sidoti (1990)

Gestures become more of a grey area, however, when described in terms of musical expression. It is crucial to remember that writing about physical gestures cannot adequately portray the expressive meaning behind the gestures (Durrant, 2009). Sidoti

(1990) explored the performances of expressive markings (staccato, legato, marcato, accelerando, ritardando, crescendo, decrescendo, and fermata) by individual high school instrumentalists. The students were conducted both expressively and with simple time beating, and audio recorded. Results indicated that students' performances of expressive markings were more accurate while being conducted using expressive gesture, rather than simple time beating. This reasons that expressive conducting may not only assist an ensemble with expressive performance, but also technical accuracy.

Durrant (2009)

This research study focused on the observable reactions created by high school students when conducted expressively. A group of high school choral conductors were selected to take a sequence of professional development courses focused on expressive conducting. The participants then recorded observations and took questionnaires about how their ensembles reacted to them over the course of the study. The conductors reported that after developing their expressive conducting skills, their ensemble members were more focused on conducting gestures, more attentive, and more responsive. Durrant also discussed how conductors of amateur and children's groups often have a tendency "to think that they have to do everything" in terms of "conducting cues, mouthing words, exaggerated beat patterns, and often exaggerated facial expressions" (p. 335). Durrant also inferred that these tendencies are unconscious ways of keeping control of the group, with a lack of trust for the young musicians.

Grechesky (1985)

In this dissertation study, high school bands were randomly selected from Indiana as participants. Verbal and nonverbal behaviors were analyzed for their effects upon band performance. Additionally, band audio performances were rated by a panel of

judges as either “musical,” or “less musical” (p. v). The observed rehearsal analysis was then compared to the musical performance ratings for each band. Below are the concluding points found in the study:

A summary of the findings shows that: 1) Some verbal explanation is necessary in rehearsal, but verbal imagery had a much stronger impact on ranking; 2) Minimal time should be spent on talk or instructions about nonmusical matters; 3) The conductors of the more musical groups displayed significantly more body movement. 4) Approving facial expressions had a positive effect on performance, whereas disapproving facial expressions had a negative effect; 5) Conductors who demonstrated more use of the left hand, and coordination of right and left hands had better results; 6) Emblems and illustrators, iconic behaviors, had the most powerful effect of any of the variables. (p. vi)

According to Grechesky’s results, the bands with higher audio performance ratings were the bands with a more expressive conductor. Grechesky’s conclusion that approving facial expressions had a positive effect on performance also supports the aforementioned conclusions of Reese and Whiteman (1962) regarding positive facial expressions.

Price & Chang (2001)

This study also evaluated the correlation between expressive conducting and expressive performance, but used a different methodology. Fifteen middle school and high school bands and their conductors were rated by 27, 3rd and 4th year undergraduate instrumental music education majors. The evaluators were shown a 60 second video of each conductor, with no audio. They were asked to rate each conductor’s expressivity on a scale from 1 to 100. The evaluators then listened to the 60-second excerpts of music from the same performances, not knowing which band corresponded to which conductor.

Finally, they rated each audio performance again on a scale of 1 to 100.

Conclusions, however, revealed no correlation between conductor expressivity and band performance. One possible explanation for these results outlined in the study is the different rehearsal strategies that were used prior to the performance for each band, such as verbal instruction. Also, this study deviates from other work in that the ensembles were assessed in a performance situation, rather than a rehearsal. This may have affected the ensemble response to the conductor.

Price & Winter (1991)

While the previous studies have discussed ensemble performance under different conducting conditions, no research has been presented regarding how younger students react to conducting gestures. In this research study, 52 members of an eighth-grade band were conducted using both expressive and strict gestures. Two pieces were used for the recordings. The expressive conducting included “frequent body movement, expressive gestures, group eye contact, and approving and disapproving facial expressions” (p. 34). Strict conducting included “little or no body movement, expressive gestures, group eye contact, or approving or disapproving facial expressions” (p. 34). The students were asked to complete a questionnaire regarding the different conducting styles, using a seven-point Likert scale. Two pieces were used for the recordings: *Portsmouth Overture* by Robert W. Smith (1988) and *Bristol Bay Legend* by Robert Sheldon (1988).

The evaluators were composed of three experienced adjudicators, eleven graduating instrumental music education majors, and thirty-one ensemble members. The evaluators listened to the excerpts in varied pairings, comparing each pair on dynamic contrast, phrasing, style, precision, overall expressiveness, overall musical effect, and overall performance. Results, however, showed no correlation between the expressive

conducting and performances. The student surveys, on the other hand, showed a significant preference for the expressive conducting gestures.

Summary

Conducting gestures can be clearly sorted into several categories, and this assists a great deal in establishing criteria for the evaluation of gestures. Outside of gesture categorization, however, research-based conducting studies have led to mixed results. Sidoti (1990), Durrant (2009), and Grechesky (1985) yielded positive increases in expressive playing from their studies, whereas Price & Chang (2001) and Price & Winter (1991) found varying results. While the results were mixed, there are several key points to be taken from these research studies. First, expressive conducting not only affects the ensemble's musical response, but also their work ethic and attention. Secondly, the conducting research mirrors nonverbal communication research in its emphasis on facial expressions. Lastly, expressive conducting can have a positive impact on not only expression, but also other aspects of performance, such as clarity and precision.

Chapter III: Methodology

Experimental Design

This study sought to explore the effect of conducting gestures on the performance of a fifth grade band using an experimental design. The independent variable was the expressivity of conducting, either expressive or strict. All other variables of ensemble, repertoire, room, conductor, etc. were controlled for each of the experimental settings. The fifth grade band was composed of volunteer second year instrumentalists from one school district. The band was assembled for the purposes of a capstone experience for senior music education majors at a major university, and to allow an additional ensemble experience for the grade school students.

The repertoire used of this study was *Over the Rainbow* by Michael Story. This piece was chosen for the flowing, expressive nature of the music, as well as because most students already know the melody. Prior to the experimental procedures, this piece was rehearsed with the ensemble once a week for 15 minutes a week for four weeks, for a total of one hour of rehearsal time. During the fifth week's rehearsal, the band was conducted one time strictly, and one time expressively through a section of the music. This excerpt was 21 measures long. The two performances of the excerpts were video and audio recorded. During the sixth rehearsal, the same excerpt was conducted and recorded again, this time expressively first, then strictly. The order of gestures was reversed in the sixth rehearsal in order to ensure that the order of gesture had no effect on the results. Additionally, specific care was taken that this specific excerpt was performed the same number of times in each rehearsal prior to recording for maximum elimination of excess variables.

The excerpt of music chosen was approximately one minute in length. This

differs from the Price & Winter (1991) study where the recording length was 30 seconds long. This excerpt was chosen because it featured melody in almost all sections at some point, as well as two tutti crescendos and diminuendos.

The strict conducting consisted of a simple time beating pattern, no facial expression, and no eye contact. The expressive conducting, on the other hand, included expressive gestures, dynamic changes through gesture size, eye contact, specific cues, and emotive facial expressions (Price & Winter, 1991). The research recordings were completed in two different sessions. In the first session, the group was conducted strictly (Recording A) and then expressively (Recording B). In the second session, they were first conducted expressively (Recording C) and then strictly (Recording D). This produced a total of four recordings, two from each day.

In all of the previous research studies outlined earlier, students were given no instruction regarding the conducting gestures. In this study, the conductor gave the instrumentalists one small instruction before conducting. Before all four recordings, the group was told by the conductor to “Play the way that I am conducting.” This was done to give the ensemble no information about the expressivity of the gesture, but to heighten their awareness of the gestures presented to them.

Pilot Study

In order to evaluate the recordings, a form had to be designed for evaluators to rate each performance. A pilot study was developed, using two different evaluation forms. The criteria used for evaluation in the Price & Winter (1991) study was used on both of these forms. These categories included dynamic contrast, phrasing, style, precision, overall expressiveness, overall musical effect, and overall performance. The two forms used in this study were Form A and Form B (see Appendix A for each of these

forms). Form A used the same evaluation tool presented in Price & Winter (1991). Evaluators were played two different recordings, and asked to choose the recording that most exhibited each of the seven evaluation categories. Each answer also had a “same” evaluation choice. The Form B presented the same seven categories, except with a seven-point Likert scale analysis of each category. For Form B, the evaluators only listened to one recording at a time.

For the pilot study, the recordings were played for a group similar to the group to be used in the actual research. All of the pilot participants (n = 5) were senior music education majors at a large university. There were a total of four recordings used in this pilot study, labeled Recordings A-D. The recordings were taken from rehearsals of the same elementary school band used in the actual study, but were from a different piece, with a different conductor. The recordings were ordered to compare the evaluation standard deviations of both of the forms. The forms and recordings were organized into six worksheets. The order of the recording played for evaluators, and the corresponding forms, are outlined in Table 1 below.

Table 1
Pilot Study Form Order

Worksheet Number	Form	Recording(s)
1	A	A, B
2	B	C
3	B	D
4	B	A
5	B	B
6	A	C, D

Through this configuration of recordings and forms, each recording was both rated on a Likert scale and evaluated using the comparison form. The variation in order was intended to prevent evaluators from recognizing the recordings they had already

heard. After these recordings were evaluated, the results indicated a much higher consistency among the raters when using the comparison survey (Form A). Additionally, the pilot study evaluators indicated that the Likert scale was more difficult to gauge, while the comparison scale was much more straight-forward. For these reasons, the comparison evaluation form (Form A) was chosen for the purposes of this research study.

Recording Evaluation

After all of the recordings were created, the sound files were compiled onto a single track, including instructions before and between recordings for the evaluators to complete the forms. The evaluators were unaware of which recordings were conducted expressively and which were conducted strictly. The recordings were paired in such a way that only recordings of the same day were compared with one another. Recordings A and B were from the first day, C and D from the second day. Therefore, recording A was only compared to B, and recording C was only compared to D. The recordings were structured to include variety in the order of strict examples and expressive examples. Additionally, two pairs of the recordings were the same recording played two times in a row. Care was taken that one of the identical pairs was comprised of excerpts conducted expressively, while the other pair was comprised of excerpts conducted strictly. Table 2 below outlines the order of the recordings on the evaluation track. There were a total of six pairs, requiring six separate evaluation forms (Forms 1-6).

Table 2
Recording Order and Gestures Expressivity

Form	Recording	Day	Conducting
1	A	1	Strict
	B	1	Expressive
2	C	2	Expressive
	D	2	Strict
3	B	1	Expressive
	B	1	Expressive
4	D	2	Strict
	C	2	Expressive
5	D	2	Strict
	D	2	Strict
6	B	1	Expressive
	A	1	Strict

All of the evaluators in this study were senior music education majors from a large university with an emphasis in instrumental music. All of the evaluators were participating in their student teaching semester during the evaluation stage of this research project. The names of all of the undergraduates who meet this criteria (n = 11) were entered into randomization software. The five names that appeared first on the list were then contacted for participation. If one of the invited evaluators declined participation, the next person on the list was then contacted. A total of five evaluators were chosen for this study.

The recordings were played for the evaluators in the order listed in Table 2, and the participants were instructed to complete each form after each pair of recordings. The evaluator answers were then recorded on a spreadsheet for future data analysis.

Chapter IV: Results

The purpose of this study was to investigate the effect of conducting gesture style on elementary band performance. An elementary band was conducted using both strict and expressive conducting gestures, and recorded a total of four times. Five senior collegiate music education majors then evaluated the recordings, using the comparison Evaluation Form developed in the pilot study outlined in Chapter 3. The evaluators' answers were then compiled and analyzed for statistical significance. For a complete listing of evaluator selections for each category on all forms, consult Appendix D.

Scoring of Evaluator Responses

Once the evaluator responses were compiled, a scoring system was implemented in order to analyze the data. Each of the seven categories on the Evaluation Forms was assigned point values. If the evaluator chose the recording as the most expressive in that category, the recording received two points in that category. If the evaluator chose "Same," then each recording received one point for that category. If the recording category was not chosen as either expressive or similar, the recording received no points in that category. Therefore, with seven categories rated for each recording, the maximum number a points a recording could receive from a single evaluator was 14 (two points per category if the evaluators chose the recording as most expressive in every category). The lowest score a recording could receive was zero.

The evaluators individually listened to six pairings of the four recordings (two expressive and two strict). All of the evaluator results on the six evaluation forms were scored using the method described above. Scores for the recordings were grouped together based on the style of their conducting. A and D were grouped (strict conducting) and B and C were grouped (expressive conducting) for the purposes of data analysis. The

average scores for each of these recordings were then compared using a two-tailed *t*-test. The analysis was done to indicate which conducting style received higher performance ratings overall.

Results

After the scoring analysis was completed, the results could be analyzed for statistical trends. The strict recordings (A and D) received an average score of 6.8 points. The expressive recordings (B and C), on the other hand, received an average score of 11.6 points. The two-tailed *t*-test revealed that the evaluators' scores for the expressively conducted recordings were statistically significantly higher than the evaluators' scores for the strictly conducted recordings at the $p < .05$ level.

Chapter V: Discussion

Introduction

The conductor of any ensemble has the challenging task of communicating with his or her ensemble through nonverbal gesture alone. This communication involves not just elements of *when* musicians should play, but also *how* the music should sound. The conductor's gestures must communicate his/her unique interpretation of the music, reacting in real time to the performance of the ensemble. The ensemble also has the tall order of both playing the music with technical accuracy, but also responding to the gestures shown by the conductor.

A review of the literature about the art of conducting revealed several broad categories. First, the authors of the philosophical articles focused on this art form highlighted the importance of conducting, as well as the role of the conductor. This role includes both an aesthetic understanding of the music, as well as the ability to visually display that aesthetic understanding to the ensemble (e.g., Bernstein, 1954; Demaree & Moses, 1995; Fuchs, 1969; Ormandy, n.d.; Stokowski, 1943). Secondly, nonverbal communication research was analyzed to examine the categorization of different aspects of nonverbal gesture (e.g., Ekman & Friesen, 1969; Mehrabian, 1972; Reece & Whiteman, 1962). Finally, research on the art of conducting revealed definitions and categorization of expressive gestures (e.g., Byo & Austin, 1994; Green, 1997; Sousa, 1998), as well as the effect that these gestures have on ensemble performance (e.g., Durrant, 2009; Grechesky, 1985; Price & Chang, 2001; Price & Winter, 1991; Sidoti, 1990).

While previous studies have explored these important topics, very few studies to date have investigated expressive conducting of young bands. The studies that have been

conducted utilized middle school bands and found little evidence to support the hypothesis that expressive conducting has an effect on ensemble performance (Price & Chang, 2001; Price & Winter, 1991). This study differed from previous studies in two ways. First, an elementary band was used as participants in this study. Elementary band studies provide a great deal of insight into the study of reaction to conducting gesture, as students at this age have the least amount of experience in this kind of situation. Secondly, the group was given a verbal message prior to performing, drawing their attention to the conductor. This was included to heighten student awareness of conducted gestures without placing a performance bias to play more or less expressively.

Purpose and Methodology

The purpose of this study was to determine if expressive conducting gestures have an effect on elementary band performance. One music teacher conducted an elementary band both strictly and expressively during two separate rehearsals, one week apart. Recordings of their performances were scored by a group of undergraduate music education majors ($n = 5$). There were a total of four recordings, divided into six different pairs of recordings for evaluation. Two of the pairs contained one recording, played twice for the evaluators and for the other pairs, only recordings made on the same day were paired.

Aspects of band performance were divided into the following categories developed from previous literature regarding expressive performance: dynamic contrast, phrasing, style, precision, overall expressiveness, overall musical effect, and overall performance. The evaluators listened to each pair of recordings, and then the recording for each category that they felt most exhibited that particular performance characteristic. The ratings on the evaluation forms were then compiled and analyzed.

Results

As stated earlier, the recordings were assigned point values based on whether the recording was considered more expressive by evaluators in each category. Every time a recording was selected as more expressive for each category, it was assigned two points. If the evaluator chose “Same,” each recording received one point. After the analysis of all evaluator forms, those examples that were conducted strictly, A and D, had an average score per evaluation form of 6.8. The recordings that were conducted expressively, B and C, had an average score per evaluation form of 11.6. A two-tailed *t*-test revealed the expressively conducted examples were statistically significantly higher than the scores for the strictly conducted examples at the $p < .05$ level.

Discussion

These results imply that the conducting expressivity did indeed have a positive performance effect on the elementary band students. Several conclusions can be drawn from these data results. While these students are only in their second year of instrumental music, they have the ability to perform and watch the conductor simultaneously. Additionally, they have the capability of interpreting and responding to the conductor’s gestures. This reasons that even children who are relatively new to their instruments are capable of deciphering conducting gestures and relating this nonverbal communication to physical changes in musical performance.

This nonverbal communication affected student performance in two ways. First, the gestures reinforced concepts already presented on the music. The largest example of this reinforcement is dynamic contrast within the music. The relative size of the conducting gestures corresponded to the dynamics written on the page, which served as a positive reminder for students to follow these dynamic levels. Secondly, conducting

gestures communicated elements of performance to the students that are interpretive, and therefore not included on the music itself. Examples of this include phrasing, style, and precision. These aspects of performance are the true essence of conducting in that these are what the conductor must communicate to the ensemble through gesture alone. The results of the present study suggest that both reinforcing and interpretive gestures can be conveyed to fifth grade students using only nonverbal communication.

One surprising element that rose from the results of this study is that of musical precision under different conducting conditions. It can be assumed that conductors who use primarily strict gestures do so in order to convey tempo more than any other aspect of musicality. Under these conditions, the conductor becomes a visual metronome for the students. It would seem that giving the musicians only a concrete metronome would result in more accurate entrances and precision from the ensemble, given the fact that all beats are clearly and specifically shown by the conductor. However, the results of this study show that the precision of the musical excerpts was higher under the expressive conducting gestures. There are several possible explanations for these results. First, when students are not given specific beat information, they are forced to rely on listening more. It is possible that students listened to each other more to stay together during the expressive conducting, rather than relying solely on the conductor for this information. Secondly, the expressive conducting involved eye contact with students, whereas the strict conducting involved no eye contact. As outlined in previous research of Mehrabian (1972) and Reese & Whiteman (1962), eye contact is one of the most important aspects of nonverbal communication. This may explain why the precision of the musical performance was enhanced by expressive conducting.

Several other interesting trends in the data appear to warrant further discussion.

As shown in Table 3, the “Overall Expressiveness” category received slightly more ratings of “Same” on each of the evaluator forms. One possible explanation for this trend is that expressivity is a difficult musical characteristic to describe and evaluate. While this category did receive slightly more “Same” ratings, the evaluators still preferred the expressively conducted recordings as more expressive.

Table 3
Number of Times Pairs Were Rated “Same”

Category	Number of “Same” Ratings
Dynamic Contrast	8
Phrasing	9
Style	8
Precision	9
Overall Expressiveness	11
Overall Musical Effect	8
Overall Performance	7

Another aspect for discussion is noticeable discrepancies between the evaluators’ scores. In particular, two evaluators had answers that were different from the other three evaluators. Table 4 displays the percentage of times that each evaluator chose the expressively conducted example for each category. The pairs that were the same example played twice were left out of this table. Additionally, in this table, only answers where the evaluator chose the expressively conducted example are included in the percentage. If the evaluator chose “Same,” this was not counted as the expressive example for this table only. As shown on Table 4, answers from Evaluators 2 and 4 were different from the other three evaluators.

Table 4
Percent of Pairs Where the Expressively Conducted Example was Preferred

Category	Percentage				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	100.0	50.0	100.0	50.0	100.0
Phrasing	100.0	50.0	100.0	0.0	100.0
Style	100.0	50.0	100.0	25.0	100.0
Precision	75.0	50.0	100.0	75.0	100.0
Overall Expressiveness	100.0	50.0	25.0	50.0	100.0
Overall Musical Effect	100.0	50.0	100.0	50.0	100.0
Overall Performance	100.0	50.0	100.0	100.0	100.0

Evaluator 2 selected the same recording for each pair, but only selected the expressive performance 50% of the time. However, s/he did not select the same recording each time. For example, on Form 1 s/he preferred Recording A to B, but on Form 6 s/he preferred Recording B to A. This is an example of the subjective nature of this kind of analysis. When asking evaluators to provide opinions on an aesthetic art form like music, discrepancies of opinions are likely to arise. Another possible solution to this inconsistency is the tendency of some evaluators to select a recording based on order in a sequence. Price & Winter (1991) found that evaluators had a tendency to select the second excerpt in a pair of recordings. While this evaluator tended to select the first excerpt, the same concept is exhibited here. Even with Evaluator 2's answers, however, there was still statistically significant evidence that the expressive conducting had a positive effect on performance.

Evaluator 4's answers, however, are less straightforward than those of Evaluator 2. These answers showed much more discrepancy, with different excerpts preferred for different categories within each pair. Additionally, Evaluator 4 tended to choose "Same" more than any other evaluator within pairs of recordings that were not the same recording played twice. This again reflects the subjectivity of evaluations of this kind, as well as

the subjective nature of the musical art form.

Relation to Previous Research Studies

This study both reaffirms and contradicts findings from previous research studies in this field. Many of the philosophical opinions regarding the art of conducting are confirmed by these findings. The communication that existed between conductor and ensemble in this study confirmed the elements of conducting established by Demaree & Moses (1995) in that the conductor's interpretation of the music was specifically conveyed to the ensemble through physical gesture alone. These results also confirmed the philosophy developed by Stokowski (1943) that a conductor must intimately communicate with the ensemble or become simply a time beater. In this respect, the strict conducting was time beating alone, whereas the expressive conducting was the actual art form of communication.

In terms of nonverbal communication, gesture categories labeled by Ekman & Friesen (1969) were utilized in the conducting gestures. Gestures were included from four of the five gesture codes, including spatial, rhythmic, kinetic, and pointing. The results of this study confirm the effectiveness of these gesture codes in nonverbal communication. The immense implications of facial communication described by Mehrabian (1972) and Reese & Whiteman (1962) are very much confirmed by this research study. It stands to reason that the facial feedback given to the ensemble by the conductor in the expressively conducted examples had a significant role in the elevation of performance expressivity in these examples.

When analyzing conductor behaviors, this study supports the results of Byo & Austin (1994), who found that more experienced conductors utilized more expressive patterns. The conducting emblems discussed in Sousa (1998) were also clearly present in

the methodology and results of this study. These emblematic gestures have a direct meaning, interpreted by the ensemble. This study sheds more light on these emblematic gestures, as the ensemble used in this study is very new to following a conductor. The less experience the ensemble has, the more emblematic the gestures must be to communicate with the musicians. Green (1997) described conducting icti as either showing musicians *how* to play, or *when* to play. This concept is supported through this study in that the strict conducting only shows when, whereas the expressive shows how.

In terms of ensemble response to expressive conducting, the results of Durrant (2009), Grechesky (1985), and Sidoti (1990), all of which found that expressive conducting gestures had a positive impact on elements of expressive performance. While all of these studies were performed using older ensembles (junior high and high school), this study differed in that it used elementary school students. However, results reflected similarities of student response to conducted gestures.

When considering research most similar to this study, however, the results are often contradictory. Price & Chang (2001) explored the correlation between band performance and conductor expressivity in junior high and high school bands. However, the researchers found no relationship between these two factors. There are several possible explanations for why the results for this study differed from those of Price & Chang (2001). While Price & Chang (2001) assessed the correlation between conducting and performance using different bands and conductors, this study used a single band, and a single conductor. This means that rehearsal strategy outside of conducting, such as verbal feedback, was kept much more consistent in this study. One other possible solution to this discrepancy is the conditions under which the recordings were obtained. Price & Chang (2001) obtained their recordings in a performance situation, whereas the

recordings used in this study were obtained during rehearsal. These are entirely different situations, which could explain the discrepancy of results.

The study most similar to this research in both purpose and methodology is Price & Winter (1991). However, the results of these studies significantly contradict one another. Price & Winter (1991) found that while middle school band students preferred expressive conducting gestures, there was no correlation between expressive conducting and expressive performance. This study differed from Price & Winter (1991) in several ways, which may explain the discrepancies in findings. Price & Winter (1991) used 30-second clips of band performances, whereas this research study used one-minute clips. The size of clip length may have made a significant difference in the opinions formed by evaluators regarding the different performance criteria. These longer excerpts gave evaluators a better aural picture of the ensemble, and provided them with more time to evaluate performance aspects. Additionally, there are a variety of factors in a research study of this type that are subject to variation between different participants. For example, the skill level of the players, the experience of the evaluators, and the ability of the conductor all factor in to the results of the study.

This study has reinforced the importance of many of the fundamental aspects of conducting. The role of the conductor is to share his or her interpretation of the music with the ensemble, through nonverbal communication. This study demonstrates that musical styles can be communicated via nonverbal gestures to not only advanced ensembles, but young bands as well. In terms of the conflicting findings with similar studies, this research exemplifies the fact that music is an expressive art form, and is therefore open to subjectivity and personal variation. Education deals with people, and people are all different. Additionally, this study brings to light the significant effect that

research structure can have on results.

Recommendations for Future Research

This study presented several issues that should be taken into account for further research. While the musical excerpt used in this study was chosen for its expressive potential, further studies should consider using a variety of musical examples, representing varying styles. A greater variety of styles would evaluate ensemble response to not only legato conducting, but also an assortment of gesture patterns and styles. Additionally, stylistic changes within a piece of music would help evaluate performers' ability to respond to changing conducting gesture styles within a piece.

While this study focused on musical performance in a group setting, future research is warranted on natural responses to conducting gestures. When considering students at this young age level with limited experience with conducting gestures, research should focus on what natural perceptions students have regarding nonverbal communication. These natural perceptions exist outside what has been taught to students about conducting gesture, and highlight the “emblems” nonverbal communication category from Ekman & Friesen (1969). These emblematic gestures are the core of conducting, as they naturally represent musical style without needing additional student instruction.

Finally, more research should be conducted involving student opinions of conducting gestures. Students are the ones who are actually making the music, and researchers should evaluate student perceptions of the gestures that help them the most. Price & Winter (1991) found that middle school students preferred expressive conducting to strict conducting, and research in this area should be performed using elementary school students as well.

Application to Music Education

Conducting is an integral part of all undergraduate music education programs. However, many educators do not always see the value of this training when conducting elementary ensembles. Teachers at times perceive that students need a specific beat to stay together, and that children are unable to translate conducting nuances into expressive playing. However, the results of this research study indicate that students are both able to understand expressive conducting gestures, as well as apply this nonverbal communication to instrumental performance. These results indicate that educators should evaluate the role of conducting in *all* elementary music ensembles.

In order to implement these instructional strategies in a classroom setting, all teachers must evaluate their instructional skills. Conducting is an area of music education that many teachers do not practice often, and therefore their conducting becomes routine. Establishing instruction based on expressive gesture means that all teachers must constantly hone their conducting skills through self-analysis and professional development. Furthermore, these results illustrate that elementary students must be thought of as “musicians,” no matter what their performance skill level.

Music education involves imparting students with intellectual knowledge, providing aesthetic artistic experiences, and empowering students to think and reason for themselves. Using expressive gestures in the classroom accomplishes teaching aesthetic experiences as well as students’ thinking and cognitive skills. Additionally, applying this element to the elementary classroom encourages students to begin thinking in the expressive realm *while* they learn the physical characteristics of instrumental performance, rather than *after* they possess these skills. Gestures of this nature not only improve student performance, but also prioritize the “why” in music education. Through

expressive performance, students learn that music is more than simply playing notes; it is a communication language to express what words cannot.

Furthermore, these results complete the link between advanced professional musicians and elementary band directors. While the quality of sound from students is vastly different, children who play an instrument at any level are playing a part in the creation of music. Expressive conducting is a link between professional orchestras and beginning bands; anyone making music is expressing him or herself. By providing students with elevated musical experiences using expressive conducting, we are helping them to discover what is possible as they grow as musicians and as people.

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Appendix A
Pilot Study Forms

Form A

Please listen to the pair of recorded excerpts. For each category listed below, indicate whether the first performance was better, the second was better, or they were the same. Circle the answer that you feel is the best.

1. Dynamic Contrast

Recording 1	Recording 2	Same
-------------	-------------	------

2. Phrasing

Recording 1	Recording 2	Same
-------------	-------------	------

3. Style

Recording 1	Recording 2	Same
-------------	-------------	------

4. Precision

Recording 1	Recording 2	Same
-------------	-------------	------

5. Overall Expressiveness

Recording 1	Recording 2	Same
-------------	-------------	------

6. Overall Musical Effect

Recording 1	Recording 2	Same
-------------	-------------	------

7. Overall Performance

Recording 1	Recording 2	Same
-------------	-------------	------

Form B

Listen to the following musical except recordings, and rate each recording on the scales listed below. Please select the answer that you feel most appropriately describes each performance. A score of 1 indicates that this characteristic was not evident in the performance, and a score of 7 indicates that it was very evident.

1. Dynamic Contrast

1	2	3	4	5	6	7
Not evident						Very evident

2. Phrasing

1	2	3	4	5	6	7
Not evident						Very evident

3. Style

1	2	3	4	5	6	7
Not evident						Very evident

4. Precision

1	2	3	4	5	6	7
Not evident						Very evident

5. Overall Effectiveness

1	2	3	4	5	6	7
Not evident						Very evident

6. Overall Musical Effect

1	2	3	4	5	6	7
Not evident						Very evident

7. Overall Performance

1	2	3	4	5	6	7
Not evident						Very evident

Appendix B

Evaluator Implied Consent Form



Informed Consent Form for Social Science Research
The Pennsylvania State University

Title of Project: An Investigation of Expressive Conducting in Elementary Band

Principal Investigator: Christopher Nation, Undergraduate Student
Music Building 1
University Park, PA 16802
(717) 826-4394; ckn5010@psu.edu

Advisor: Dr. Linda Thornton
208 Music Building I
University Park, PA 16802
(814) 863-5723; lct12@psu.edu

1. **Purpose of the Study:** The purpose of this study is to investigate whether elementary band students play more expressively when conducted using expressive gesture beyond simple time beating.
2. **Procedures to be followed:** You will be asked to listen to several recordings of bands, and will be asked to rate each performance using two brief surveys.
3. **Duration:** It will take approximately 30 minutes to complete these surveys.
4. **Statement of Confidentiality:** Your participation in this research is confidential. The data will be stored and secured in a locker on a in a password protected computer. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared.
5. **Right to Ask Questions:** Please contact Chris Nation at (717) 826-4394 with questions or concerns about this study.
6. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion and return of the survey is considered your implied consent to participate in this study. Please keep this form for your records.

Appendix C

IRB Approval Letter

From: [Brown, Amanda](#)
To: ["ckn5010@psu.edu"](mailto:ckn5010@psu.edu);
cc: ["lct12@psu.edu"](mailto:lct12@psu.edu);
Subject: IRB#35187 An Investigation of Expressive Conducting in Elementary Band
Date: Tuesday, November 16, 2010 12:29:00 PM

Christopher,

The Office for Research Protections (ORP) has reviewed the eSubmission application for your research involving human participants and determined it to be exempt from IRB review. You may begin your research. This study qualifies under the following category:

Category 1: Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods. [45 CFR 46.101 (b)(1)]

PLEASE NOTE THE FOLLOWING:

- The principal investigator is responsible for determining and adhering to additional requirements established by any outside sponsors/ funding sources.
- **Record Keeping**
 - The principal investigator is expected to maintain the original signed informed consent forms, if applicable, along with the research records for at least three (3) years after termination of the study.
 - This correspondence will also be available to you in PRAMS at www.prams.psu.edu.
- **Consent and Recruitment Document(s)**
 - The exempt consent form(s) will no longer be stamped with the approval/expiration dates.
 - The most recent consent form(s) that you uploaded for review is the one that you are expected to use
- **Follow-Up**
 - The Office for Research Protections will contact you in three (3) years to inquire if this study will be on-going.
 - If the study is completed within the three year period, the principal investigator may complete and submit a **Project Close-Out**

Report: <http://www.research.psu.edu/orp/areas/humans/applications/index.asp#other>

- **Revisions/Modifications**
 - Any changes or modifications to the study must be submitted through the eSubmission application for this protocol in PRAMS (www.prams.psu.edu).

Please do not hesitate to contact me if you have any questions or concerns.

Thank you,

Amanda E. Brown, CIP
Research Compliance Coordinator II
The Pennsylvania State University | Office for Research Protections | The 330 Building, Suite 205 | University Park, PA 16802
Telephone (814) 865-7986 | Main Line (814) 865-1775 | Fax (814) 863-8699 | EMAIL: aeb29@psu.edu | WEB www.research.psu.edu/orp

Appendix D

Evaluator Responses

Table 5
Form 1 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	2	1	2	2	2
Phrasing	2	1	2	Same	2
Style	2	1	2	2	2
Precision	2	1	2	2	2
Overall Expressiveness	2	1	Same	2	2
Overall Musical Effect	2	1	2	2	2
Overall Performance	2	1	2	2	2

Table 6
Form 2 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	1	1	1	2	1
Phrasing	1	1	1	2	1
Style	1	1	1	2	1
Precision	1	1	1	1	1
Overall Expressiveness	1	1	Same	2	1
Overall Musical Effect	1	1	1	2	1
Overall Performance	1	1	1	1	1

Table 7
Form 3 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	Same	1	Same	Same	Same
Phrasing	Same	1	Same	Same	Same
Style	Same	1	Same	Same	Same
Precision	Same	1	Same	Same	Same
Overall Expressiveness	Same	1	Same	Same	Same
Overall Musical Effect	Same	1	Same	Same	Same
Overall Performance	Same	1	Same	Same	Same

Table 8
Form 4 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	2	1	2	2	2
Phrasing	2	1	2	Same	2
Style	2	1	2	Same	2
Precision	Same	1	2	Same	2
Overall Expressiveness	2	1	Same	2	2
Overall Musical Effect	2	1	2	2	2
Overall Performance	2	1	2	2	2

Table 9
Form 5 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	Same	2	Same	2	Same
Phrasing	Same	2	Same	1	Same
Style	Same	2	Same	1	Same
Precision	Same	2	Same	1	Same
Overall Expressiveness	Same	2	Same	Same	Same
Overall Musical Effect	Same	2	Same	Same	Same
Overall Performance	Same	2	Same	1	Same

Table 10
Form 6 Evaluator Responses

Category	Evaluator Selection of Recording 1, 2, or Same				
	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Evaluator 5
Dynamic Contrast	1	1	1	Same	1
Phrasing	1	1	1	2	1
Style	1	1	1	2	1
Precision	1	1	1	1	1
Overall Expressiveness	1	1	1	2	1
Overall Musical Effect	1	1	1	2	1
Overall Performance	1	1	1	1	1

Academic Vita of Christopher Nation

Name: Christopher Nation

Email Id: ckn5010

Education

Major: Music Education

Honors: Music Education

Thesis Title: Showing the Music: An Exploration of the Effect of Expressive Conducting on Elementary Band Performance

Thesis Supervisor: Dr. Linda Thornton

Work Experience

Dates: January – May 2011

Title: Student Teacher

Description: Taught elementary general music classes (grades K – 5), conducted the high school symphonic band, taught small group instrumental lessons, designed assessment tools, implemented standards-based curriculum, and taught conducting classes.

Institution: East Stroudsburg Area School District

Dates: August 2007

Title: Band Director, Manheim Township Summer Band Program

Description: As Band Director, conducted both an elementary and middle school band during a two-week summer band program, planned and implemented performance-based master classes.

Institution: Manheim Township School District

Honors:

Pi Kappa Lambda National Music Honor Society

Penn State Civic Engagement Public Speaking Contest – Second Place

Professional Memberships:

Music Educators National Conference (MENC)

Pennsylvania Music Educators Association (PMEA)

International Tuba and Euphonium Association (ITEA)

Leadership Positions:

President – Pennsylvania Music Educators Association Penn State Chapter

Vice President – International Tuba and Euphonium Association Penn State Chapter

Tuba Christmas Chair – Penn State Marching Blue Band

Community Service:

Panhellenic Dance Marathon Operations Committee