A DESCRIPTIVE ANALYSIS OF SECONDARY INSTRUMENTAL CONDUCTOR REHEARSAL PROBLEM-SOLVING APPROACHES, ADDRESSED MUSICAL ELEMENTS AND RELATIONSHIP TO STUDENT ATTITUDE

DISSERTATION

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CHAPTER I
THE PROBLEM

INTRODUCTION

In today's school systems, the high school band program remains the focal point of music education for many students. Charles Leonhard, (1972) states that the organization of band classes "in spite of resistance in some quarters . . . has proved remarkably successful." (p. 63) The secondary instrumental program can serve as an ideal music teaching medium, and it also provides for many extrinsic values such as learning, cooperation, responsibility. Leonhard (1972) reiterates:

Here perhaps more than in any other area of music program, the twin factors of competition and cooperation may operate to their best advantage. (p. 63)

Since bands often involve large number of students, they serve as one of the most suitable settings for disseminating music instruction. Music ensembles serve as a source of instant feedback for testing the effectiveness of their teachers. Moreover, these ensemble can serve as a proper environment for instruction in the theoretical, historical, fundamental and expressive elements of music as well as the basic fundamentals and pedagogical aspects of performing. Richard F. Goldman (1963) affirms that the purpose of ensemble experience is to go beyond these basics to achieve artistic goals.

. . . students should achieve something beyond technical proficiency and a sense of togetherness. . . . it must provide some aesthetic pleasure. . . . no matter how simple and more important, it must provide the groundwork for future growth-intellectually . . . aesthetically and morally. It's not enough to train and drill youngsters to play notes on an instrument (p. 262).
Few would disagree that expressiveness is the ultimate aim of instruction in performance, but research in this area is not extensive. Nonetheless, those investigators who have explored this dimension, including Carpenter (1986), Fox (1985) and Jelinik (1984) all conclude that music expression is both a measurable and necessary component of secondary instrumental instruction. It is a general consensus throughout the profession that the ability to discriminate expressively should be incorporated into all music instruction. Band programs provide a viable experience for achieving this goal. They are also conducive to instruction of a wide array of musical information. Therefore, it is necessary that the teacher/conductor of ensembles be informed concerning matters of psychological and communication principles.

One of the most useful means of investigating the communication process in rehearsals is through observation studies. The past decade has yielded many studies of conductor behaviors. These studies have dealt with various aspects of conductor behaviors, conductor effectiveness and teaching strategies, including the isolation of both verbal and non-verbal behaviors of teacher/conductors. Nevertheless, more studies are needed in order to gain critical information regarding teacher/conductor interaction. Yarbrough (1978) expresses this view of band conducting in the following statement:

It is imperative that we as a profession acquire more data-based research on one of the most crucial aspects of our profession - band conducting. More data-based research is needed.

More descriptive research is needed in order to analyze various common teacher/conductor approaches. The effectiveness of approaches
remain to be determined through systematic research. For example, secondary teacher/conductors employ a variety of problem-solving approaches, such as the following forms of verbal and non-verbal communication:

a) Verbalization
b) Visual expressive gestures/conducting
c) Demonstration/Modeling

Each of these conductor problem-solving approaches possesses strengths and weaknesses. One of the obvious strengths of verbal communications is the wide variety of specifics and generalizations that can be addressed. Since both parties involved are fluent in verbal language a great range of issues can be addressed both generally and specifically. However, Spradling (1980) conducted a study to measure the off-task behavior patterns of college music majors in concert band. His study concluded that time out from music performance, including verbalization of musical concepts, is perceived by students as a form of punishment. Musical performance at constant intervals was found to have less off-task behaviors. Thus, it appears that verbal feedback must be used discriminately if it is to be used effectively.

In rehearsals, non-verbal communication is initiated by either conducting or demonstration/modeling. Conducting is a form of communication which is effective in preparation for a performance and, in most cases, must be relied upon in the actual concert. A variety of hand, baton and facial gestures provide needed information to the players throughout the preparation and performance. Conducting gestures, in addition to basic time-keeping, offer a great advantage.
Green and Reynolds (1981) emphasize that providing a "visual dialogue" leads to better musical spontaneity and sensitivity. This "dialogue" will then foster greater independence and musicianship from the ensemble both collectively and individually. Secondly, these gestures allow for execution of non-verbal directions which the ensemble may have learned previously. This can provide opportunities to adjust certain technical idiosyncrasies without actually stopping the ensemble. This maximizes the use of invaluable rehearsal time.

Ensemble conductors each have individual teaching styles, and these depend on a great deal of verbal communication. This is inevitable in any teaching situation. However, the question remains whether there exists any combination of verbal, visual gesture or demonstration which better serve the problem solving approaches to musical issues. It also remains to be determined whether there are certain combinations that facilitate the learning of expressive qualities in music.

In addition to clerical and administrative duties, ensemble conductors basically deal with four main musical categories when applying problem-solving approaches. These include a) fundamental elements - the recognition of notated marking and symbols; b) pedagogical elements - coordination of all aspects of instrumental playing; c) expressive elements - the "musical" interpretation of fundamental elements and d) other elements - such as exposure to "higher order" configurations in the music (e.g., form, theory).

Many music education authorities have recently stated that it is apparent that often, because of competitive motivations, instrumental
teachers are so immersed in the teaching of fundamental and technical elements that expressive skills are often not sufficiently cultivated.

**NEED FOR THE STUDY**

According to authorities, the teacher/conductor should, in the process of preparing for a musical performance, teach higher order (expressive) musical principles to his/her pupils. The performance itself is educational, but the process in preparation should also be aesthetic and rewarding. Charles Leonhard (1972) states this most important view:

... Above all he (band conductor) must recognize that the band like all school music organizations should be a means to the musical education of the students and not an end in itself (p. 264).

Geyer (1982) elaborates the same basic view.

... the band performance class provides the place and the opportunity for the student to achieve more insight and perceptual awareness of the expressive content of wind literature. (p.11)

In order to achieve aesthetic goals, instrumental conductors must keep in perspective the importance of developing fundamental performance skills. Wehner (1979) and Jelinik (1986) both emphasize that, because of competitive motivations and external pressures to produce the next performance, the current process inadvertently produces students "who are little more than musical technicians" (p.79). It is clear that the performance ensemble must successfully incorporate techniques, methods and pedagogical concepts which foster musical expressiveness. By emphasizing expressive elements in rehearsals students may be better able to appreciate expressive
qualities in the music. Music education research studies are needed which are directed toward this seemingly elusive phenomenon. Fundamental inquiry into this crucial aspect of instrumental education is necessary if reliable and valid conclusions are to be drawn. Quantitative and qualitative data must be gathered in order to properly address these topics.

Observational studies, such as the one taken here, can often reveal musical variables which may be subject to experimental manipulation. Subsequently, by establishing possible cause-effect relationship between independent and dependent variables in rehearsals, invaluable insight can be obtained regarding the nature of the band teaching medium. The current study was conducted toward that eventual purpose.

SIGNIFICANCE OF THE STUDY

All band teacher/conductors share not only a common end in preparing music but also common means of achieving these ends. Conductors also address common musical elements while achieving these results. Systematic observation studies can strengthen the understanding of the various aspects of the band conductor profession and lead to improving the education of future band teachers/conductors. Thus, it is important to objectively observe and categorize the musical instruction behaviors of secondary instrumental teachers. Moreover, since the ultimate purpose of instruction is to influence student behaviors and attitudes, this study could provide useful information regarding the variables related
to student attentiveness in rehearsals.

PURPOSE

The purpose of the study was to observe, categorize and summarize musical instruction behaviors of secondary school conductors and to determine any potential relationship between these behaviors and the attitudes of their students. Musical rehearsals involve a complex educational process as conductors endeavor to teach musical knowledge and skills while preparing public performances. In the current study, only music instructional events were analyzed. Those clerical and administrative aspects of school teaching, as well as the management of social behavior, were not included in the study.

Much of what a conductor does is to solve musical problems. In order to do this, several common approaches are used in rehearsals. These were broadly categorized in the present study as the following: (1) verbal behavior, (2) visual expressive gesture (conducting), and (3) demonstration. Therefore a specific purpose of the study was to summarize ways by which conductors solve problems through these approaches.

Another purpose was to examine what rehearsal elements caused the subsequent conductor action. Numerous dimensions of musical behaviors of students can lead to action. In the present study, these causes were initially categorized into the following: (1) fundamental elements, 2) expressive elements, 3) pedagogical elements and 4) other elements. These broad categories were divided further into subparts including musical rehearsal elements (expressive or fundamental),
pedagogical aspects (e.g., breath support, posture), and other (e.g., theory, style, form). Thus, an array of instructional aspects of conductor behavior could be analyzed.

Another major purpose of the study was to determine what relationship, if any, exists between various conductor behaviors and the attitudes of students in their ensembles. Therefore, an attitude survey of students was conducted and descriptive analyses of the student attitude data were provided, in addition to examining relationships between conductor behaviors and student attitude.

QUESTIONS

Specifically the study sought to answer the following questions:

1. What percentage of conductor problem-solving actions is devoted to the respective conductor problem-solving approaches - a) verbal b) visual expressive gesture and c) demonstration?

2. What percentage of rehearsal elements which caused conductor action is devoted to the respective rehearsal element categories - a) Fundamental b) Expressive c) Pedagogical and d) Other?

3. What percentage of rehearsal elements, which caused conductor action, is devoted to the respective sub-parts of the above categories? (Tone, pitch, rhythm, etc.)

4. What are student attitude ratings, concerning enjoyment and benefit of various conductor approaches in rehearsal? And of the overall rehearsal?

5. What relationship exists, if any, between the respective teacher/conductor problem-solving approaches and overall student enjoyment rating? Between these approaches and overall student benefit rating?

6. What relationship exists, if any, between the addressing of fundamental and expressive elements to the overall student enjoyment rating? Between these elements and overall student benefit rating?
7. What relationship exists, if any, between the addressing of pedagogical and other musical elements to the overall student enjoyment rating? Between these elements and overall student benefit rating?

8. What relationship exists, if any, between the addressing of all four musical element categories simultaneously and the overall student enjoyment rating? Between these elements and the overall student benefit rating?

DEFINITIONS

The data collection procedure in this study involved the observational method which requires observational definitions for the variables observed. The definitions provided observers also constitute the essential content of definitions for this report. Therefore, these observational definitions are provided here:

Musical Expression (interpretation) - any adjustment, elaboration, modification, clarification, or extension of fundamental musical elements, intended to effectively realize a musical equilibrium resulting in a more expressive (musical) rendering of the musical score.

I Categories of Conductor Behavior - specific conductor behaviors intended to reinforce or change an ensemble's fundamental, pedagogical or expressive responses.

1. Verbal Behavior - a conductor's oral attempt to reinforce or change some element of musical performance. (Fundamental, Pedagogical or Expressive)

2. Visual Expressive Gesture - a conductor's use of visual and picturesque gestures in order to reinforce or change some aspect of musical performance.

3. Demonstrations - a conductor's non-verbal attempt to reinforce or change some aspect of musical performance. (e.g. singing, clapping, humming, etc...)

II Rehearsal Elements (Fundamental) - the event or lack of which initiates a specific conductor category of conductor behavior, dealing with notated musical elements.
1. **Tone** - tone production is not optimum and not sufficiently characteristic of the instrument.

2. **Pitch** - an incorrect note or pitch reference point. (too high or too low - intonation)

3. **Rhythm** - the incorrect execution of any notated rhythmic figure.

4. **Tempo** - lack of synchronization with conductor, and/or other sections (e.g. rushing, dragging)

5. **Articulation** - incorrect rendering of notated alterations in note length or weight.


7. **Balance** - individuals or sections which are too loud or soft. (e.g. melody vs. accompaniment, or chordal weight)

8. **Phrasing** - breaking of expected or marked phrase lines.

**III Rehearsal Elements (Expressive)** - the conductor wishes to adjust, modify, or extend certain fundamental elements in order to better realize their musical contribution in the context of a composition.

1. **Tone** - conductor modifies tone quality.

2. **Pitch** - conductor adjusts pitch for a certain effect.

3. **Rhythm** - conductor seeks emphasis and predominance of certain rhythmic figures.

4. **Tempo** - conductor modifies tempo to stress character of the music.

5. **Articulation** - conductor adds weight and emphasis or otherwise adjusts note lengths.

6. **Dynamics** - conductor modifies and exaggerates notated dynamic markings.

7. **Balance** - conductor adjusts volume of pitch relations.

8. **Phrasing** - conductor adjusts or emphasizes the importance to the overall context of the composition.

**IV. Pedagogical Elements** - the event which initiates a specific conductor behavior to the proper methods of instrumental playing.

1. **Breath Support** - conductor isolates problems in air intake, projection, and utilization.
2. **Posture** - conductor isolates incorrect position of body, hands, or arms.


4. **Articulation** - conductor isolates incorrect execution of tongue. (e.g. wrong striking point)

5. **Tone Production** - conductor isolates incorrect air and tongue coordination for characteristic tone quality.

6. **Flexibility** - conductor isolates problems in slurring and trilling.

7. **Technique** - conductor isolates problems in fingering agility in moving passages.

**V Other Elements** - a description concerning either the structure, historical or genesis significance of the music.

1. **Form** - arrangements of sounds and the basic elements of music, such as rhythm, melody, harmony in relation to their overall relationship. (structure)

2. **Style** - an analysis of how the composer expresses himself in ways unique to himself and to his time.

3. **History** - an analysis of the composer's background and place in music history as well as an investigation of the genesis of the music.

4. **Culture** - an analysis of the naturalistic or ethnic influences in the structure of the music.

5. **Media** - an analysis of the implementation of recorded, electronic or visual communication in the structure of the music.

6. **Theory** - an analysis of the individual notes and their relationships to chords as well as chord relationships to structural elements in the music.

**VI Unable to Rate** - The conductor is beating time, and exhibits no effort to alter a musical behavior.

**Assumptions**

For the course of this study, the following assumptions were
made:

1. The observations were randomly selected from a series of chosen dates so that those rehearsals chosen are representative of typically normal behaviors found in the course of the school year. It is assumed that this indeed, served this purpose.

2. It is assumed that all student surveys were completed at the request of unbiased, impartial directions by the participating teacher/conductors.

3. A higher rated student enjoyment/benefit attitude about the rehearsal, is believed to provide a better "musical" learning environment.

LIMITATIONS

The specific purpose of this study was to observe, categorize and summarize selected instances of secondary instrumental teacher/conductors. Additionally the study was designed to investigate if relationships exist between by specific combinations of teacher/conductor problem-solving approaches, specifically addressed elements and student attitude. The following limitations were accepted in the study:

1. The study considered only band rehearsals. Although similar activities may occur in other music rehearsal ensembles, they were not investigated in this study.

2. Only high school ensembles were considered in this study.

3. Only music instruction instances were considered for evaluation.
CHAPTER II

LITERATURE REVIEW

The literature review for this study was directed toward several different areas. The most relevant to the current study were those investigations that focused upon instrumental rehearsal behavior of conductors. Also any conducting studies which dealt with musical analysis and/or the investigation of musical expression (aesthetics) were reviewed. These studies provided insight into approaches used to identify and foster expressive elements in band rehearsals and performance.

As the studies were reviewed, it became evident that no study was found which specifically dealt with the factors involved in the present study. Specifically, no study had attempted to categorize conductor music instruction into expressive and fundamental elements as defined in this study. Moreover, no study was found that examined the relationship between these operationally defined categories and student attitude.

The need for the present study was reinforced by conclusions stated in a study by Roberts (1969). He sought to develop a teaching instrument which was based on the recommendations of the 1967 Tanglewood Symposium. The instrument would "enable band directors to be exact in discussion of teaching activities and implications for band programs" (p. 57). Roberts reviewed existing literature in the
profession in order to develop a set of concepts that would contribute to the development of "musicality" during band rehearsals.

The concept proposed by Roberts included both cognitive and affective aspects of music education. The cognitive aspects included theory, literature and form while the affective mode included aesthetic sensitivity and musical tastes.

He concluded that:

a) graduates of high school band programs are not able to adequately demonstrate developed sensory abilities in music and

b) band directors do not teach concepts relative to form, aesthetic sensitivity and literature.

Clearly, Roberts’ findings confirm conventional wisdom which suggests the expressive aspect of music are not being taught adequately through instrumental rehearsals.

Musical Expression Studies

One study which focused upon a method for expediting musical expression instruction during rehearsals was conducted by Jelinik (1985). He began by reviewing studies and literature from four areas: textbooks, choral literature, orchestral literature and band literature. Moreover his literature review indicated that little research had been done concerning high school orchestral literature. He saw a need for "a procedure that would enlighten conductors and enable them to provide an aesthetic experience for the students."

The specific purpose of his study was to design an analytical system for high school orchestral literature. This analytical system would provide a resource basis for the conductor in anticipating and subsequently solving rehearsal and performance problems inherent in
the literature. Additionally this analysis was to aid the conductor in identifying and disseminating critical expressive elements in the performance of the literature.

Jelinik pointed out that the structural elements of music must be approached in a manner that goes beyond these mere categorizations. The expressive elements are tangible and approachable by the conductor in an objective manner. His study was formulated partly because his literature review yielded conclusions that more research is needed in areas of expressiveness/aesthetic instruction in ensembles.

Geyer (1982) conducted a similar study using high school band literature and students. The specific purpose was to develop an instrumental program designed to increase "aesthetic perception" through the use of a special procedure. Geyer's term "aesthetic" was similar to the term "expressive" used in the current study. Another purpose of his study was to develop a procedure for analyzing music that provided an opportunity to explore and experience the expressive qualities of music. He primarily justified a need for the study on the basis that, "since the performing ensemble is often the students' only musical experience, there is a need for a teaching procedure that exposes the student to the aesthetic qualities of the music" (p. 3).

Geyer's literature review focused upon three distinct areas. These were: a) aesthetic education, b) recent trends and movements in performance classes and c) related research in the area of musical analysis of band literature and aesthetic perception. His preliminary research revealed that little research had been done on factors contributing to the aesthetic experience.
Geyer conducted a survey of band directors to determine a list of six works that were judged to be of high aesthetic quality. He then formulated an analysis system involving structure, style and interpretation. This led to recommendations for rehearsal procedures which were "designed to increase comprehensive understanding of the particular work being studied and to assist further growth in aesthetic responses to music" (p. 7). Rehearsal procedures included the use of audio tape and in-depth discussion of the structural elements with the ensemble followed by immediate playing. He concluded that these procedures would be useful in helping students to respond to expressive elements in music.

Fox (1986) investigated the literature related to identifying rehearsal and conducting problems in contemporary wind literature. He consulted numerous dissertations, journals and books which dealt specifically with the rehearsal and performance of wind music. The purpose of his study was to identify and recognize all rehearsal and performance problems which were common to contemporary wind music. He attempted to develop a set of general "guidelines for the identification of conducting and rehearsal problems in contemporary music for wind band" (p. 42). A related purpose of the study was to descriptively use the new guidelines to analyze performance problems in five selected compositions. The compositions were selected from a larger selection of compositions. Reputable wind band conductors from around the country served as panelists and graded the suitability of each composition for advanced high school use. Each piece was evaluated using the above-mentioned guidelines and subsequent
performance, conducting and rehearsal concerns were addressed respectively.

Fox justified the need for his study on the premise that current music education methods and conducting courses do not present enough opportunity to study the performance, rehearsal and conducting problems inherent in contemporary wind music. Thus, his literature review examined both individual methods dealing with contemporary performance problems as well as research which investigated conducting and rehearsal problems.

In addition to the basic categorization of musical elements such as tone, rhythm, intonation, etc., Fox noted that references to the expressive contexts of these elements were made in the following methods throughout his literature review.

a) musical interpretation

b) interpretation of articulation

c) conducting interpretation

d) interpretations of phrasing and stylistic considerations

Although the scope of the Fox study may not be directly related to the present study, it did confirm that implementation of expressive elements in contemporary wind literature is objective and measurable.

More specifically, Fox assigned the following musical elements to the Interpretation category his "Guidelines for Identification"

Tempo

Dynamics

Phrasing

Tension and Release
Accents
Articulation
Balance
Cadences

Stylistic Considerations

Thus the basic musical elements can be addressed in a manner which enhances the conductor's attempt to realize a better "musical rendering" - expressively.

TEACHER/CONDUCTOR OBSERVATION STUDIES

One of the first systematic studies involving observation of conductors was conducted by Robert Erbes (1972). He developed an observational system for large musical organizations in response to the needs of improving the act of teaching and analyzing the teacher's action. Prior to Erbes the development of appropriate instruments for observing rehearsals had been limited. Two studies by Snapp (1967) and Whitehill (1967), which had modified the Flanders System of Interaction analysis, existed then.

Erbes conducted a pilot study to observe the effectiveness of these existing systems. He found that:

1) Flanders' system did not effectively describe the large amount of demonstration by the teacher occurring during rehearsal.

2) Flanders' system of coding procedures did not describe the verbal behaviors of the teacher

3) Snapp's system did not describe teacher talk when group was performing.
4) Snapp's system was limited in useability because of the large number of categories required to be reviewed by the observer.

Erbes' specific purpose was to design a method for recording behaviors common in all large group rehearsals. An additional purpose was to design a system, which unlike the others, was concise and simple to use.

Erbes designed his instrument posteriori. He began by observing a total of 30 rehearsals which included elementary, junior high and high school instrumental and vocal groups. Rehearsals were recorded and transcribed to provide necessary categories needed to identify the behaviors of conductors in this type of teaching situation.

Finally, after narrowing the number of observed rehearsals, Erbes developed an eleven category system that provided a complete record of various rehearsal behaviors, including interaction, silent periods, student performance, and a non-verbal dimension which included singing, whistling, clapping, tapping, or playing an instrument. These are common examples of teacher demonstration which Erbes' observation form allowed the observer to collect data.

Pontius (1982) conducted a study in which he sought to analyze and classify several rehearsal behaviors of successful band conductors. Pontius attempted to categorize all dimensions of teacher-conductor interaction. He found that because the environment of a music ensemble differs from that of other classrooms, a modified system of observation was necessary. The information which the system would yield might, consequently, improve the conductor's role as a teacher.

One of the questions Pontius attempted to answer included the following: "To what extent, in terms of time and frequency, is the
verbal communication of the conductor focused on the various elements of performance a) pitch, b) rhythm, c) articulation, d) phrasing/dynamics, e) tone quality, f) style, g) tone production and h) balance" (p. 69). Pontius did not distinguish between the fundamental and expressive contexts of the musical elements.

An additional question was "To what extent, in terms of time and frequency do the rehearsal techniques used by the conductors involve a) demonstration b) verbal explanation and c) verbal imagery."

Pontius selected five high school conductors for his study. Each conductor videotaped two rehearsals of his choice. Pontius' final conclusions found that 48% of the conductors' total verbal communication concerned the element of performance. The remaining 52% were procedural administration, and disciplinary statements. The elements given the greatest emphasis were phrasing/dynamics, with 26% of the reference and time. The conductors stressed style, articulation and tone production the least.

The conductors were videotaped a total of 300 minutes and 42 seconds and a total of 489 verbal interactions occurred during these rehearsals. The average of 48.8 interactions per 30 minutes of active rehearsal with a mean of 15.5 seconds for each verbal interactions.

Pontius' study shows that band conductors use verbal explanation more often than either verbal imagery or demonstration. Of the three types of techniques, 82.7% was devoted to verbal explanation. Pontius stresses that this shows that conductors feel that this is the most effective way of correcting performance problems. The conductors specifically relied heavily on verbal communication to solve rhythmic
and articulation problems.

Yarbrough and Price (1980) examined possible predictors of performer attentiveness in rehearsal activity. Their sample included secondary conductors of two choruses, three bands and an orchestra. Their rehearsals were videotaped and specific teacher behaviors were coded. Theses behaviors included approval/disapproval (academic and social), stops, eye contact, performance/non-performance activity and complete instruction units.

Through the use of regression analysis a strong relationship was found between off-task behavior and conductors' non-performance and teacher eye contact. Furthermore disapprovals, stops, complete and incompete teaching units had weak relationships to off-task behavior.

Thurman (1978) also examined the verbal behavior of 5 choral conductors in rehearsal. Using a sample consisting of 1 professional choir, 1 university choir, 2 high school choirs and 1 clinic choir, tape recordings and typescripts were made of these rehearsals.

Thurman found that 1) 35-40% of rehearsal time was used for verbal communication; 2) 50-60% of verbal communication was directed at one of the elements of choral performance; 3) conductors used more demonstration than verbal explanation or verbal imagery and 4) conductors were more disapproving than approving in their feedback.

Grechesky (1985) examined the teaching behaviors of randomly selected high school bands in Indiana. The specific purpose of the study was to observe, categorize and analyze the verbal and non-verbal behaviors of these conductors and to determine how these behaviors effected their bands' performance. The dependent variable
was an audio tape which was representative of each bands' performance. The bands were performing the same music selection. These tapes were ranked by a panel of experts from the most musical to the least musical.

Each band had the same amount of time for preparation. Rehearsals were videotaped and conductor actions were categorized. All audio tapes were evaluated by the same panel, of experts.

Through the use of correlation and regression analyses, eleven variables were identified as having an effect on rank. Grechesky's conclusions found that teacher/conductors' use of body movement; approving facial expressions; left hand; coordinated use of right hand; use of emblems and iconic behaviors all had a positive effect on their groups' musical performance. He stated that minimal time should be spent on talk and non-musical matters.

Roshong (1978) investigated conductor non-verbal behavior. He defined four basic duties of the conductor. These were a) starting ensemble, b) stopping ensemble, c) instructing while stopped and d) sustaining music.

The observational instrument he designed was divided into six categories. These included a) facial expression, b) conducting gestures, c) eye contact, d) body movement, e) vocal movement and f) silence. Each category had an intensity rating scale from one to five, to show seriousness of the categorized instance.

Roshong found that the categories most often marked were a) body movement-towards ensemble, b) eye-contact-looking at the music, c) facial expression-approval and d) conducting-right hand and arm
motion. Approval behavior accounted for 74% of total instances. The average intensity of the approval behavior was 2.5 (moderate intense). Roshong found the average intensity of disapproval expression at 3.6. No disapproval expression was recorded while the ensemble was sustaining music. The highest occurrence of disapproval was found during periods of instruction.

Roshong also found that facial approval was coupled with forward movement of the conductor during staring, stopping and sustaining the ensemble. Facial disapproval was grouped with movement away from the ensembles during instruction.

Carpenter (1986) designed a study to "describe both qualitative and quantitative aspects of secondary instrumental music teacher conductor patterns" (p. 7). Moreover, he sought to determine if there were specific verbal factors in verbal behaviors of these conductors that were predictive of overall rating of rehearsals by experts.

Carpenter justified the need for the study by stressing that although a number of descriptive studies dealing with rehearsals existed, none had addressed the possible relationship between specific types of rehearsal behaviors and the quality of that particular rehearsal.

Carpenter implemented two observational instruments in his study. The qualitative data were collected on a rehearsal Rating Scale (Form A). This scale was divided into four main sections: a) Personal Qualities, B) Procedure/Organization, C) Pedagogy and D) Error Detection. Each main category contained various sub-elements which measured various aspects under that specific category.
Of the fourteen randomly selected conductors, nine were high school directors. Each was observed from 1 to 5 times over nine weeks. Each observed rehearsal was audio-taped for a total of 56 rehearsals.

Three band experts were solicited to participate in the study. Each was to rate their respective portion of the 56 rehearsal tapes, after a suitable interobserver reliability coefficient was established. The Rehearsal Rating Scale was based on a Likert type rating scale with 5 possible ratings. (1 = low; 5 = high)

Under the category of pedagogy, the highest average rating for high school rehearsals were the sub-categories of Rhythm (3.0) and Interpretation (3.6). Under the Error Detection section the sub elements "identifies problems accurately (3.19)" and "offers appropriate solutions (3.11)" were the highest rated. It is noteworthy that the experts rated "spends adequate time on problem solving" (2.19) and "uses creative approaches to problem solving" (2.15) as the lowest.

The quantitative data was obtained on the Teacher-Conductor Verbal Behavior Classification (Form B). This classified the conductor verbal behavior with respect to the following:

a) type of feedback
b) musical element addressed
c) type of instruction administered

The tapes were also subjected to interobserver reliability checks under this observation form. The data revealed that, during rehearsal feedback was most often directed to musical behavior and the feedback was usually disapproving. Additionally, instrumental teachers were
more likely to be specific in disapproval and general in approval. Moreover, the musical elements which high school conductors were more likely to address were intonation, dynamics/expression and style/articulation.

In his attempt to investigate the possible existence of a relationship between these two observation forms, Carpenter performed a statistical multiple regression analysis. This function was performed in two ways. First, each sub-element in Form B was analyzed to see which was more predictive for a better overall rehearsal rating (Form A) within their respective main categories. The second analysis measured all sub-elements with all three main categories simultaneously. The results of the regression were as follows:

1) The verbalizations used for feedback purpose and the overall (higher) rehearsal rating which were significant were: a) specific disapproval to music behavior b) general disapproval to music behavior

2) The verbalization used for specific musical elements and the overall rehearsal rating which were significant were comments directed toward the following elements: a) style/articulation b) dynamics expression c) theory d) correct notes e) tone

Carpenter made the following conclusions which have direct implications for the course of the current study:

comments that dealt with the more expressive qualities in music were more predictive of a higher rated rehearsal than comments directed toward fundamental concepts and skills. (p.85)

A most crucial point to note in this study was that it appears from the regression data that “the types of initiating approaches for
conductors could not serve as predictors" for the overall rating of the rehearsals. This data accounted for only 5% of the observed variance. However, when the regression was performed using all sub-elements across the different categories, the section "use of questioning as an instructional technique" appeared as a predictor.

Several conclusions regarding secondary instrumental teachers were made from this study. It appears that teachers/conductors spend a great deal of time on elements which are not critical in contributing to better rehearsal "climate".

For example, even though comments to theory accounted for a mere .7% of the total, this variable appeared as a significant predictor in the regression. On the other hand, the use of verbal-technical direction is the most common method of changing musical behavior, yet it does not emerge as a significant predictor in the regression.

From the regression results, it appears that the type of verbalization approach to change a musical behavior is not as critical as the content of that verbalization. This led Carpenter to suggest that "merely repeating music with discriminating feedback may be a strategy for instructors that may be successful." He found that the musical elements which were significant in predicting a high rehearsal rating were references to style, articulation, dynamics/expression, tone, intonation, theory and correct notes. A cause for concern from the study was the poor rating of pedagogy in either data collecting form. This led to a conclusion that music educators need to strengthen this skill.

SUMMARY
Several conclusions can be drawn from the literature reviewed thus far. It is a universal feeling in the music education community, that there exists a definite need to present more than basic instrumental fundamentals in band rehearsals. The literature concludes the following:

1) Musical expression is essential and must be incorporated into rehearsal settings.

2) Musical expression is an objective and measurable element.

3) More research is needed to investigate the means in which teacher/conductors present expressive elements.

4) When "higher order" (expressive) elements have been measured, they have been shown to be a significant predictor of higher-rated rehearsals.

5) More research is needed to better understand all aspects of the teacher-learning process in music rehearsals.

Furthermore, the literature revealed that several studies have investigated the effects of verbal behavior in ensemble settings. Several isolated instances have studied the effect of non-verbal behavior to some extent. However, neither studied the effects of both verbal and non-verbal simultaneously as they appeared in their respective contexts during the course of band ensemble rehearsals. Additionally, recommendations to do so have been stated in the literature. The present study seeks to accomplish this stated recommendation.
CHAPTER III
METHODOLOGY

Population and Sample

In order to obtain a sample population for the study, letters were sent to music supervisors of school districts within the Greater New Orleans area. The supervisors were asked to provide a list of all faculty/staff members who taught senior high band in grades 9-12. Additionally a list was compiled of those independent school systems which include band instruction in the curriculum. The list of independent schools was included in the random selection process because the New Orleans area is comprised of many private and independent schools, most with very active band programs.

From the list provided by the music supervisors and the National Association of Independent Schools in New Orleans (N=57), twenty secondary instrumental teachers/conductors were randomly selected and asked to participate in the study. The first fourteen teachers/conductors which responded by return mail were included in the study. Since the subjects were randomly selected, a representative sample of various settings, teacher experience, and ensemble ability was found.

Each teacher/conductor was videotaped once during the months of January, February and March. The individual dates for taping were randomly selected from three choice dates presented by the researcher.
This helped to insure that all rehearsals observed remained as normal as possible. The observations consisted of a regular rehearsal setting of each conductor's most advanced symphonic group. The rehearsals ranged in length from the 35-minute lunch schedule to that of a regular class, 55-minute schedule.

**Equipment and Settings**

Approximately 15 hours of rehearsal time was videotaped and subsequently used for analyses. The equipment which was used to video record each rehearsal included a portable Betamax video recorder/camera SL-300. In order to improve the quality of the crucial audio portion of the taping, a microphone was placed underneath the conductors podium and an extension cord was used to reach the video-recorder. The microphone was a Sony-FV 30 II. The portable recorder was being operated by the researcher at the rear of the ensemble, where it was least intrusive.

All videotaping and recording took place in each bands regular rehearsal room. Efforts were made to maintain normal rehearsal settings and not to inform the ensemble of the specific nature of the study. The ensembles were told to proceed as usual. They were informed that the teacher/conductor was being observed.

No attempt was made to influence the nature of the rehearsal. Rather, an effort was made to obtain data on rehearsals which were representative of the regular school setting. This included such activities as preparation of music for concert competition, sight reading, and preparation for concert performances.
Conductor Observation Form (Form A)

The conductor observation Form (Form A, See Appendix A), used to analyze conductor behaviors in the study, was developed from a pre-existing form piloted during the investigator's masters thesis (Menchaca, 1985). That study involved the observation of four secondary and four college band conductors. The purpose of that study was to summarize the percentage of both problem-solving approaches and addressed musical elements. Furthermore, the study was designed to analyze fundamental and expressive musical elements in rehearsals.

The study concluded that teacher/conductor comments about certain elements could indeed be categorized in either a fundamental or expressive context. Not only was the context of the comment recorded, but the manner in which the conductor chose to change the behavior was also recorded.

For that study, event recording was used to collect data, and the form proved functional for this type of observation. A graduate student in music education at The Ohio State University helped conduct a reliability check by viewing approximately 30% of the tapes from the study. An overall reliability coefficient of 95.64% was obtained on the form.

The current study utilized the same form with slight modifications. This included the addition of another category (Other) which permitted the analysis of such factors as attention to theory, history, form and so forth. Additionally, the more refined and comprehensive technique interval recording was employed, in order to
obtain a more representative sample of each rehearsal.

The particular musical instruction instance was evaluated on two bases. First, the observer recorded the type of action which the teacher/conductor used in order to alter the musical behavior: a) verbal, b) visual gesture, and c) demonstration. Furthermore, either one of these three methods could be used while the ensemble was stopped or while the ensemble was playing.

The second basis for evaluation was to categorize the specific musical element which caused action by the conductor. A conductor's attention can be devoted to any one of several musical elements and these elements can be approached from a fundamental musical context or from an expressive musical context.

Additionally, a conductor can attend to a variety of pedagogical elements involved in the mechanics of performing. And finally, a conductor might include other elements in the rehearsal. If a conductor's action did not apply to any specific element on the form, or if no unique purpose is perceived by the conductor's action other than time-beating, then the "unable to rate" category was recorded. It must be noted that any administrative or social issues addressed by the conductor was also recorded under the "unable to rate" section.

**Student Attitude Scale - Form B**

One of the purposes of the study was to measure the rating of the overall enjoyment and benefit of the rehearsals as perceived by the students. It was of interest to find out how the students felt about the musical effectiveness of their rehearsals. The attitude survey was constructed by the researcher for the purpose of the study. No attempt
was made to validate the instrument, yet its usefulness seems inherent in its simplicity. The form requested that students rate their enjoyment of the rehearsal approaches and the benefit to learning. (See Appendix B)

The survey was based on a point system (Likert type rating scale; 1 = low, 5 = high). Therefore quantifiable data could be collected when measuring the qualitative student attitudes. The survey consisted of questions regarding the perceived enjoyment and benefit, of three types of conductor problem-solving approaches.

In the instructions to the students it was made clear that a central response (3) was not to be regarded as neutral but rather a central or medium response to the item. Furthermore, the students' attitudes were measured for each of the three problem-solving approaches, in two contexts. 1) The first measured how they liked the approach/approaches. 2) The second measured how much they felt they learned for the approach/approaches.

In addition to these six individual questions, the final two questions on the survey dealt with the overall feeling toward the rehearsal as perceived by the student. Again, in order to obtain data from two different contexts, benefit and enjoyment, two separate questions were implemented. The questions asked whether students felt the overall rehearsal was enjoyable and whether it was beneficial.

Means for the following categories were derived from the survey.

1) **How well did the student like each respective problem/solving approach.** (verbal, visual, demonstration)

2) **How well did the students learn through each respective problem/solving approach.** (Verbal,
3) How enjoyable did they find the rehearsal overall?
4) How beneficial did they find the rehearsal overall?

Reliability Check (Form B)

Several versions of the survey were pilot tested through the researchers own classes in New Orleans. Originally, several additional questions had been included (e.g. Fundamentals, Expressions and Instrumental Fundamentals) for evaluation. This first version of the survey was given to a secondary ensemble. Even though all questionnaires were completed, the researcher felt that the form could be simplified for clarity. Additionally, easier comprehension was needed for a cross-section of secondary-aged band members. After consultation with several active university music education researchers and several band directors in the New Orleans area, it was agreed to simplify the form. The musical element portion was eliminated to conserve time but the two rehearsal summary questions at the end were included. However, the wording was changed in order to better reflect communication for the specific sampled population.

The final version, which appears in the Appendix B, was piloted in the researchers band program as well as with a colleague within the New Orleans area. It was agreed that the revised version was more clear and concise.

Data Analysis Procedure

Form A

The process of interval recording, which involves sampling behavioral events in specific time intervals, was utilized for data
collecting in the study. After the initial videotaping of each rehearsal, the researcher overdubbed the words "observe" and "record" respectively, onto track two of each videotape. Ten seconds of real-time followed the initial command to "observe". Subsequently the word "record" was heard. A five-second interval after the "record" command allowed the observer to classify and record the evaluation onto Form A. The process continued as described until the entire rehearsal was completed. Because the Sony Betamax videorecorder was not stereo-capable, it was necessary to feed the original videotapes through a stereo-capable mixer in order to create both the stereo mode and the availability of track two for the dubs. The signal was then passed through the mixer Realistic Stereo Mixing Console 32-1200 B to a second Sony Super Betamax videotape recorder SL-300. The microphone used to overdub the on signal was a Sony-FV 30II and standard microphone cable. High grade Kodak videotape L-750 was used for both initial and second generation recording. It was noted that neither audio or visual signals were significantly diminished during the dubbing process.

Each critical instance was recorded on observation Form A. When each videotaped rehearsal was concluded, the total number of observation forms, for each respective rehearsal, were counted in order to obtain the number representing the total evaluated instances for that rehearsal. Each form was then individually reviewed in order to derive both the type of conductor action initiated and the musical element(s) attended during each instance.

Using the total number of instances per rehearsal as 100%, the
percentage of each type of conductor action used to change any musical element, was obtained. Additionally the percentage of stops attended to fundamental, expressive and pedagogical elements and their respective sub-element was obtained.

Quantitative Observer

The rehearsal videotapes were equally divided between two observers to determine inter-observer agreement. The tapes were divided by random selection. The two observers categorized the selected teacher/conductor problem-solving methods and the respective musical elements addressed during each rehearsal. The two judges who served as reliability observers for this study were doctoral students in instrumental music education at The Ohio State University. One judge had a total of eleven years teaching experience at both the high school and college level. The other judge had taught band for fourteen years at both the junior high and senior high level.

The observers collaborated for reliability checks on rehearsals, or 35.7% of all data for Form A. The observers viewed one rehearsal tape together to insure proper reliability checks on the data. This was to insure that all evaluated instances were congruent with each other. The remaining tapes were viewed separately.

Form B - Survey (Student Attitude Scale)

At the end of each videotaped rehearsal the observed teacher/conductor was asked to allow at least ten minutes so that the entire band could complete the student survey. Each teacher/conductor explained that the survey should be filled out truthfully and anonymously. The attitude scale was administered to each band member.
All surveys were then collected by the researcher. Questions were answered by the students' band director.

Means and standard deviations were derived for all eight questions on the form. Thus both an individual class number and a composite score for all combined cases were derived.

**Multiple Regression Analysis**

In order to obtain statistical data concerning any relationship that may exist between Form A (quantitative) and Form B (qualitative), a multiple linear stepwise regression was performed on the data.

The regression was performed utilizing SPSS statistical program. It was prepared on a Zenith keyboard and monitor using the VAX editing system.
CHAPTER IV
PRESENTATION OF THE DATA

The purpose of the study was to observe, categorize and summarize musical instruction behaviors of secondary band conductors. Furthermore, the study was designed to investigate the possibility of an existing relationship between specific conductor behaviors, selected elements and student attitudes during rehearsal.

The results are presented in the following order: 1) Inter-Observer Agreement Level; 2) Results of the Conductor Observation Form A; 3) Results of the Student Attitude Scale Form B and 4) Results of the multiple regression analysis.

Inter-Observer Agreement Level

Inter-observer agreement levels were calculated for the data gathered on the Conductor Observation Form A by the two reliability judges. Agreement checks were conducted on 5 of the 14 rehearsal videotapes or approximately 35.7% of the total data. These 5 tapes were randomly selected.

The inter-observer agreement coefficients were calculated for each sub-part of each major category of the form. Calculations were obtained between the two judges using the following formula:

\[
\text{Agreements} / \text{Agreements and Disagreements}
\]
As this coefficient was derived for each sub-part of a category, all coefficients within each section of the form were averaged. Thus, a total reliability rating was calculated for each major section of the form - a) Conductor Action; b) Conductor Cause of Action (Music Element Addressed) and c) Unable to Rate. Subsequently, all three of these scores were averaged together to derive a total reliability coefficient for the entire observation form. Table 1 illustrates these reliability scores.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Reliability Coefficients - Form A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>By Category and Overall</td>
</tr>
<tr>
<td>N = 5 Conductors</td>
<td></td>
</tr>
<tr>
<td>________</td>
<td>________</td>
</tr>
<tr>
<td>Conductor Action</td>
<td>86.45%</td>
</tr>
<tr>
<td>Total Form Reliability</td>
<td>93.96%</td>
</tr>
</tbody>
</table>

Results of the Conductor Observation Form A

The results are reported in correspondence with the original research questions.

1. What percentage of conductor problem-solving actions is devoted to the respective problem-solving approaches - a) Verbal Behavior, b) Visual-Expressive Gestures and c) Demonstration.

The total number of evaluated musical instruction instances across all fourteen rehearsals ranged from 126 to 211. This is due to the fact that the entire length of rehearsal time varied from school to school. The following table summarizes the total percentage, all conductors
inclusive, of types of conductor problem-solving approaches (conductor actions).

Table 2
Summaries of Average % of Conductor Action
N=14 Conductors

<table>
<thead>
<tr>
<th></th>
<th>Ens. Stopped</th>
<th>Ens. Playing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Behavior</td>
<td>25.32%</td>
<td>2.43%</td>
</tr>
<tr>
<td>Visual-Expressive Gesture</td>
<td>.47%</td>
<td>12.43%</td>
</tr>
<tr>
<td>Demonstration</td>
<td>4.47%</td>
<td>.31%</td>
</tr>
<tr>
<td>Unable to Rate (time-beating)</td>
<td>56.05%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>101.47%</td>
</tr>
</tbody>
</table>

It must be noted that the sum of these percentages exceeds 100% because in some instances, the conductors utilized two types of actions simultaneously.

The data clearly shows that mere time-beating, scored on the form as "unable to rate", was most often used. When specific music behaviors were attempted to be altered, the conductors most often used verbal means while the ensemble was stopped. Next in percent, was the category visual-expressive gestures - ensemble playing.

2. What percentage of the conductor problem-solving actions is devoted to the respective rehearsal elements categories - a) fundamental, b) Expressive, c) Pedagogical and d) Other?

The following table summarizes the results of the analysis of these categories.
Table 3
Form B
Cause of Conductor Action % Summary
N=14 Conductors

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental Musical Elements</td>
<td>84.26%</td>
</tr>
<tr>
<td>Expressive Musical Elements</td>
<td>8.99%</td>
</tr>
<tr>
<td>Pedagogical Elements</td>
<td>9.60%</td>
</tr>
<tr>
<td>Other Musical Elements</td>
<td>.40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>102.25%</strong></td>
</tr>
</tbody>
</table>

Table 3 clearly indicates that the teacher/conductors spent, by far the majority of teaching time on fundamental musical elements. Expressive and pedagogical elements shared a similar amount of conductor attention. Again it must be noted that the total percentage exceeds 100% because the conductors, at times, addressed multiple elements.

3) What percentage of rehearsal elements, which caused conductor action, is devoted to the respective sub-parts of the above category? Table 4 summarizes the results of the sub-parts of each category on the form.
Table 4
Form B
Cause of Conductor Action Sub-Element % Summary
N=14 Conductors

<table>
<thead>
<tr>
<th>Fundamental</th>
<th>Expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone</td>
<td>.72</td>
</tr>
<tr>
<td>Pitch</td>
<td>15.25</td>
</tr>
<tr>
<td>Rhythm</td>
<td>12.43</td>
</tr>
<tr>
<td>Tempo</td>
<td>14.52</td>
</tr>
<tr>
<td>Artic.</td>
<td>11.60</td>
</tr>
<tr>
<td>Dynamics</td>
<td>24.77</td>
</tr>
<tr>
<td>Balance</td>
<td>1.87</td>
</tr>
<tr>
<td>Phrasing</td>
<td>3.10</td>
</tr>
<tr>
<td>Tone</td>
<td>.07</td>
</tr>
<tr>
<td>Pitch</td>
<td>0</td>
</tr>
<tr>
<td>Rhythm</td>
<td>.07</td>
</tr>
<tr>
<td>Tempo</td>
<td>.13</td>
</tr>
<tr>
<td>Artic.</td>
<td>.75</td>
</tr>
<tr>
<td>Dynamics</td>
<td>4.47</td>
</tr>
<tr>
<td>Balance</td>
<td>0</td>
</tr>
<tr>
<td>Phrasing</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Pedagogical Other

| Breath Support     | .49 |
| Posture            | 0   |
| Embouchure         | .83 |
| Articulation       | .44 |
| Tone               | .22 |
| Flexibility        | 0   |
| Technique          | 7.62|
| Culture            | 0   |
| Media              | 0   |
| Theory             | .17 |
| Style              | .23 |
| History            | 0   |
| Form               | 0   |

From Table 4 it can be seen that dynamics is the most dominant element addressed in both fundamental and expressive categories. Most other categories shared a similar amount of conductor attention, with tone, balance, and phrasing receiving little focus from the conductor. It is notable that few elements were dealt with in an expressive fashion.

Results of the Student Attitude Scale Form A

4. What are student attitude ratings concerning enjoyment and benefit of various conductor approaches in rehearsal? And of the overall rehearsal?

Table 5 illustrates the answers to these questions. In addition, means scores and standard deviations are reported for each individual
questionnaire item.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likes Verbal</td>
<td>3.83</td>
<td>.422</td>
</tr>
<tr>
<td>Likes Visual-Gestures</td>
<td>3.95</td>
<td>.545</td>
</tr>
<tr>
<td>Likes Demonstration</td>
<td>3.49</td>
<td>.336</td>
</tr>
<tr>
<td>Learns with Verbal</td>
<td>3.86</td>
<td>.413</td>
</tr>
<tr>
<td>Learns with Visual-Gestures</td>
<td>3.99</td>
<td>.354</td>
</tr>
<tr>
<td>Learns with Demonstration</td>
<td>4.25</td>
<td>.329</td>
</tr>
<tr>
<td>Overall Rehearsal Enjoyable</td>
<td>3.52</td>
<td>.482</td>
</tr>
<tr>
<td>Overall Rehearsal Helpful</td>
<td>3.76</td>
<td>.603</td>
</tr>
</tbody>
</table>

It should be noted that while demonstration appeared to be the conductor approach liked the least, it was rated as the best learning method by the students. Other categories verbal and gestures—were rated fairly close under each, like and learn, categories.

The individual mean matrix for each of the fourteen rehearsals can be seen in Appendix I of this report.

Results of the Multiple Linear Regression

In order to obtain statistical data concerning the possible existence of a relationship between conductor problem-solving
approaches (actions), addressed elements (cause of action) and student attitude, multiple linear regressions were performed on the data.

The individual questions on Form B (Attitude Scale) were entered separately, as the dependent variables against the separate categories of Form A (Conductor Observation Form). The purpose was to investigate the possible relationship between respective conductor problem-solving approaches, elements addressed and a higher student rating on the questionnaire.

5. What relationship exists, if any, between the respective teacher/conductor problem-solving approaches and overall student enjoyment? Between these approaches and overall student benefit?

From Table 7 it can be seen that problem-solving approaches account for only 11% of the observed variance in overall student enjoyment rating. Even the two predictor variables that accounted for the most variance were not significant. Additionally, Table 8 indicates that when trying to predict student benefit, 14% of the total observed variance could be accounted for by these same problem-solving approaches. Again, neither of these rated predictors was found to be statistically significant.
### Table 7
Conductor Problem-Solving Approaches of Overall Student Enjoyment Rating
N = 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal/Ensemble Stopped</td>
<td>.06</td>
<td>.06</td>
<td>.2584(ns)</td>
</tr>
<tr>
<td>Visual Gesture/Playing</td>
<td>.11</td>
<td>.05</td>
<td>.3558(ns)</td>
</tr>
</tbody>
</table>

### Table 8
Conductor Problem-Solving Approaches of Overall Student Benefit Rating
N = 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Gesture/Ensemble Playing</td>
<td>.07</td>
<td>.07</td>
<td>.2684(ns)</td>
</tr>
<tr>
<td>Dem./Ensemble Stopped</td>
<td>.10</td>
<td>.03</td>
<td>.4659(ns)</td>
</tr>
<tr>
<td>Dem./Ensemble Playing</td>
<td>.14</td>
<td>.04</td>
<td>.3826(ns)</td>
</tr>
</tbody>
</table>

6. What relationship exists, if any, between the addressing of both Fundamental and Expressive musical elements and overall student enjoyment? Between these elements and overall student benefit?

Tables 9 and 10 report those Fundamental and Expressive factors which accounted for the most variance in predicting student enjoyment and benefit.
Table 9
Fundamental and Expressive Musical Element Predictors of Overall Student Enjoyment Rating
N = 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive/Dynamics</td>
<td>.17</td>
<td>.17</td>
<td>.053</td>
</tr>
<tr>
<td>Expressive/Phrasing</td>
<td>.28</td>
<td>.11</td>
<td>.1446(ns)</td>
</tr>
<tr>
<td>Expressive/Tone</td>
<td>.38</td>
<td>.10</td>
<td>.1423(ns)</td>
</tr>
<tr>
<td>Fundamental/Tone</td>
<td>.45</td>
<td>.07</td>
<td>.1831(ns)</td>
</tr>
</tbody>
</table>

As can be seen in Table 9, addressing dynamics expressively was predictive of a higher rating. It is noteworthy that although only one of the predictors is statistically significant, the three highest rated variables in this stepwise regression dealt with expressive factors. Additionally a total of 38% of the total variance was accounted for by these predictor variables.

Table 10
Significant Fundamental and Expressive Musical Element Predictors of Overall Student Benefit Rating
N = 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental/Pitch</td>
<td>.382</td>
<td>.382</td>
<td>.0048</td>
</tr>
<tr>
<td>Fundamental/Balance</td>
<td>.590</td>
<td>.208</td>
<td>.0116</td>
</tr>
<tr>
<td>Expressive/Phrasing</td>
<td>.688</td>
<td>.180</td>
<td>.0465</td>
</tr>
</tbody>
</table>

From Table 10, it can be seen that both Fundamental and Expressive elements were predictive of a higher student musical benefit rating. Additionally, these elements accounted for 68% of the total observed
variance. All variables in Table 10 were statistically significant.

7. What relationship exists, if any, between the addressing of both Pedagogical and Other Elements to the overall student enjoyment rating? Between these elements and the overall student benefit rating?

Tables 11 and 12 illustrate both significant and non-significant predictors of overall student enjoyment and benefit rating.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ped/Technique</td>
<td>.252</td>
<td>.252</td>
<td>.0284</td>
</tr>
<tr>
<td>Ped/Embouchure</td>
<td>.287</td>
<td>.035</td>
<td>.3892(ns)</td>
</tr>
<tr>
<td>Other/Style</td>
<td>.348</td>
<td>.061</td>
<td>.2522(ns)</td>
</tr>
</tbody>
</table>

It is noteworthy that this dependent variables (student enjoyment) was computed against the combined Pedagogical and Other Elements, separate from the Expressive and Fundamental categories. Although not significant, it is notable that a reference to composer style, seems to be related to a higher enjoyment rating. These combined elements accounted for a total of 35% of the observed variance in this category.

From Table 12 it can be seen that Pedagogical Elements and Other Elements were not significant predictors of overall student benefit. However, of the predictable Pedagogical Elements it seems that
Technique was the most important. It accounted for about 9% of the variance. It is also noteworthy that, although not significant, attention devoted to music theory was found to be a predictor. All elements combined accounted for approximately 26% of the total observed variance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>P&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ped/Technique</td>
<td>.086</td>
<td>.086</td>
<td>.2225(ns)</td>
</tr>
<tr>
<td>Ped/Articulation</td>
<td>.195</td>
<td>.109</td>
<td>.1602(ns)</td>
</tr>
<tr>
<td>Ped/Embouchure</td>
<td>.218</td>
<td>.023</td>
<td>.5117(ns)</td>
</tr>
<tr>
<td>Other/Theory</td>
<td>.256</td>
<td>.038</td>
<td>.4165(ns)</td>
</tr>
</tbody>
</table>

In addition to the regression reported above, a regression was performed on the data, which compared the same dependent variables against all four categories simultaneously. The data from this regression shows that there were significant predictors for both dependent variables (enjoyment/benefit) from three of the four "Cause of Action" categories.

From Table 13, it can be seen that 47% of the total variance was accounted for with regard to student enjoyment.
Table 13
Significant Musical Element Predictors of Overall Student Enjoyment Rating
$N = 14$

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ped/Technique</td>
<td>.252</td>
<td>.252</td>
<td>.0284</td>
</tr>
<tr>
<td>Fund/Articulation</td>
<td>.472</td>
<td>.220</td>
<td>.0200</td>
</tr>
</tbody>
</table>

Table 14 illustrates the significant predictors of overall student benefit rating. Approximately 69% of the total observed variance was accounted for. It is interesting to note that Expressive/Phrasing was a significant predictor of benefit, adding almost 10% of the variance.

Table 14
Significant Musical Element Predictors of Overall Student Benefit Rating
$N = 14$

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Change</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund/Pitch</td>
<td>.382</td>
<td>.382</td>
<td>.0048</td>
</tr>
<tr>
<td>Fund/Balance</td>
<td>.590</td>
<td>.208</td>
<td>.0116</td>
</tr>
<tr>
<td>Expressive/Phrasing</td>
<td>.688</td>
<td>.096</td>
<td>.0465</td>
</tr>
</tbody>
</table>
CHAPTER V,
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

Purpose

The purpose of the study was to observe, categorize and summarize musical instruction behaviors of secondary school band conductors and to determine any potential relationship between these behaviors and the attitudes of their students. Musical rehearsals involve a complex educational process as conductors endeavor to teach musical knowledge and skills while preparing public performances. In the current study, only music instructional events were analyzed. Those clerical and administrative aspects of school teaching, as well as the management of social behavior, were not included in the study.

Much of what a conductor does is solve musical problems. In order to do this, several common approaches are used in rehearsals. These were broadly categorized in the present study as the following conductor's actions: (1) verbal behavior, (2) visual expressive gesture (conducting), and (3) demonstration. Therefore a specific purpose of the study was to summarize ways by which conductors solve problems through these approaches.

Another purpose was to examine what rehearsal elements caused the subsequent conductor action. Numerous dimensions of musical behaviors of students can lead to action. In the present study, these causes
were initially categorized into the following: (1) Fundamental Elements, 2) Expressive Elements, 3) Pedagogical Elements, and (4) Other Elements. These broad categories were divided further into sub-parts including musical elements (expressive or fundamental), pedagogical aspects (e.g., breath support, posture), and other (e.g., theory, style, form). Thus an array of instructional aspects of conductor behavior could be analyzed.

Another major purpose of the study was to determine what relationship, if any, exists between various conductor behaviors and the attitude of students in their ensembles. Therefore an attitude survey of students was conducted. In addition to the regression analysis, descriptive analyses of the student attitude data were also provided.

**Methodology**

Fourteen band conductors within the Greater New Orleans area agreed to participate in the study. A total of fourteen regular band rehearsals were videotaped and prepared for data evaluation. All conductors chose their most advanced musical ensemble for taping.

Two forms were used to gather data for the study. The Conductor Observation Form (Form A) descriptively summarized two aspects of teacher/conductor behavior. For each musical instruction instance, both the problem-solving approach and the musical element addressed were recorded.

Two expert instrumental conductors served as reliability judges, using Form A. A total inter-observer agreement level of 93.96% was achieved for this instrument. Reliability was calculated on 35.7% of
the total data (5 of the total 14 tapes).

The second form used for the study was the Student Attitude Scale, (Form B). This survey was administered to the students immediately following the videotaped rehearsal. Students were instructed to answer honestly, each survey question based on that particular rehearsal. The questions dealt with aspects of student enjoyment and student benefit with respect to the evaluated rehearsal. Two rehearsal summary questions were included at the end. The data consisted of Likert-type ratings (1=low, 5=high) for each question.

A multiple linear stepwise regression was performed on the data from both forms. The quantitative items of Form A were entered as the independent (predictive) variables for the respective dependent (criterion) variables on Form B. The specific purpose of the regressions were to investigate the existence of any significant predictors for the individual criterion variables (enjoyment/benefit). Each dependent variable was administered against each musical element category separately. A final regression was computed using all possible rehearsal elements (cause of conductor action) predictors simultaneously.

**Summary of Results**

The following results are reported in correspondence with the stated research questions.

1. What percentage of conductor problem-solving actions is devoted to the respective problem-solving approaches: a) Verbal Behavior, b) Visual-Expressive Gestures and c) Demonstration? While the ensemble is stopped or playing?

The average percentage of conductor problem-solving approaches
was as follows: Verbal Behavior While Ensemble Stopped 25.32%; Verbal While Playing 2.43%; Visual Expressive Gesture While Ensemble Stopped, .47%; Visual Expressive While Playing, 12.43%; Demonstration While Ensemble Stopped, 4.47%; Demonstration While Playing .31%; Additionally, time-beating with no other perceptible purpose accounted for 56.05% of the total evaluation instances.

2. What percentage of rehearsal elements which cause conductor action is devoted to the respective rehearsal element categories? a) Fundamental b) Expressive c) Pedagogical and d) Others

The total percentages of musical instruction was distributed as follows: Fundamental Elements 84.26%; Expressive Elements 8.99%; Pedagogical Elements, 9.60% and Other Elements .40%.

4. What are student attitude ratings, concerning enjoyment and benefit of various conductor approaches in rehearsal. And of the overall rehearsal?

Based on a 1-5 Likert scale, the mean student enjoyment ratings (N=589) of each approach is as follows:

- Verbal 3.83
- Visual Gesture 3.95
- Demonstration 3.49

The mean student benefit rating (N=589) of each approach is as follows:

- Verbal 3.83
- Visual Gesture 3.99
- Demonstration 4.25

The overall rehearsal enjoyment rating (N=589) is 3.52; S.D.=.413.

The overall rehearsal benefit rating (N=589) is 3.76; S.D.=.603.

5. What relationship exists, if any, between the respective problem-solving approaches and overall student enjoyment? Between problem-solving approaches and overall student benefit?

In answering the following questions, it must be noted that only
variables which accounted for 2% or more of the total variance were reported. The level of significance used in this study was p<.05.

Using both the conductor problem-solving approaches and time-beating (unable to rate) categories as independent variables for student enjoyment, the regression reveals that none of these items are significant predictors. Verbal Ensemble Stopped and Visual-Expressive Gestures were rated the highest variables. They accounted for 11% of the total variance.

Using the same predictor variables for student benefit criterion, only 14% of the variance was accounted for. The highest rated variables were Visual-Gestures/Ensemble Playing; Demonstration/Ensemble Stopped and Demonstration/Ensemble Playing. Neither of these variables was found to be significant.

6. What relationship exists, if any, between the addressing of both fundamental and expressive musical elements and overall student enjoyment? Between these elements and overall student benefit?

Attention focused on fundamental and expressive musical elements accounted for 45% of the variance when predicting overall student enjoyment. It is noteworthy that, while not significant, 38% of the variance was devoted to expressive elements. These were the highest rated predictors yet only 8.99% of the total conductor's actions were directed towards these elements.

Significant predictors of higher student benefit ratings were found. These accounted for 68% of the total variance. The highest rated of these variables were Fundamental/Pitch, Fundamental/Balance and Expressive/Phrasing. Again, it should be pointed out that although minimal references were made to Expressive/Phrasing (3.5%)
throughout the sample, this musical element evolved as a significant predictor of a higher student benefit rating.

7. What relationship exists, if any, between the addressing of Pedagogical and Other Elements to overall student enjoyment? Between these elements and overall student benefit?

Comments and actions dealing with Pedagogy and Other Elements accounted for 35% of the total variance when predicting higher student enjoyment. Of the highest rated variables, Pedagogical/Technique was the only one found to be significant. Also found as important predictive variables were Pedagogical/Embouchure and Style.

26% of the total variance was accounted for in predicting higher student benefit from Pedagogical and Other Elements. Although none was statistically significant, Pedagogical/Technique, Pedagogical/Articulation, Pedagogical/Articulation and Music Theory were found to be important predictive variables. Even though few references were made to theory and style they were still important predictors.

8. What relationship exists, if any, between the addressing of all four main Musical Elements and overall student enjoyment? Between these elements and overall student benefit?

An additional regression which compared the respective criterion variables (enjoyment/benefit) against all rehearsal elements simultaneously was performed. The results showed the existence of significant predictors. The significant predictors were Pedagogical/Technique and Fundamental/Articulation, and these accounted for 47% of the total variance.

The data also showed significant predictor variables for student benefit. These variables accounted for 68% of the variance. The most
important predictors were Fundamental/Pitch, Fundamental/Balance and Expressive/Phrasing. Again it must be noted that even though only small percentages of attention were focused to expressive elements, Expressive/Phrasing was a highly significant predictor.

Discussion

From the reported data, several observations can be made. Primarily, when conductors wish to solve a specific musical problem, they do so most often by verbal behavior. The next most used approach to alter musical behavior is visual-gestures while the ensemble is playing. The data also reveal that teacher/conductors tend to emphasize the fundamentals of performance when solving musical problems. Every element was dealt with fundamentally far more than expressively.

This is somewhat surprising, because the sample included a cross-section of both conductor experience and ensemble ability. It would seem that more attention to expressive elements would be more common than actually found. Emphasis upon expressiveness is obviously desirable at all levels of music education, regardless of performance ability. On the other hand, it is not surprising that much time in rehearsals must be devoted to the basics of performance. What this indicates, however, is that conductors spend a great deal of time on the "lower order" mechanics of music - pitch, rhythm, tempo, articulation, dynamics and so forth. "Higher order" skills such as balance and phrasing are not often addressed.

It is also interesting to note that teacher/conductors devote little
rehearsal time to pedagogical approaches to problem solving. Even posture received no attention. The only aspect that received notable pedagogical attention was Technique (e.g. fingerling agility) and it was only 7.62%. It appears that conductors are not teaching students how to solve problems through pedagogical approaches, but tend to point out what problems need to be solved. Moreover, other factors such as theory, style, form, etc... receive virtually no rehearsal attention compared with other factors.

It is worthy to mention that the students rated visual-expressive gestures higher than verbal explanations in both the enjoyment and benefit categories. What is also noticeable is that the students rated learning through demonstration as the highest of all 8 individual questions. It seems that students prefer modeling as an effective approach.

From the regression analyses, it is possible to make some observations. It is evident from the data that conductor problem-solving approaches are neither significant or high predictors of student enjoyment/benefit ratings. This confirms previous research conclusions which indicate that the means of conductor problem-solving approaches is not as important as the musical objective of that action. This view is strengthened by the remainder of the regression data.

Although the percent of conductor attention to Expressive Elements was low, Expressive/Dynamics, Expressive/Phrasing are highly significant predictor variables of student enjoyment. Subsequently, Expressive/Phrasing is a significant predictor of student benefit.
This suggests that instrumental conductors should teach "higher order" musical elements, such as phrasing in order to help students feel they are learning about the music. It seems that an expressive approach may provide a more stimulating model for the students.

Of the Pedagogical and Other Elements, Pedagogical/Technique and Embouchure were high predictors of both enjoyment and benefit ratings. This suggests that students feel they are enjoying and learning when the conductor draws attention to techniques which, in turn, results in their succeeding. Increased technique, a pedagogical aspect, may even lead to increased expressiveness which students desire.

Moreover, students are likely to rate the rehearsal as more enjoyable/beneficial if a conductor addresses the composer style or theoretical issues of the music. This also suggests the student's desires to be exposed to "higher order" musical elements.

Conclusions

1. Teacher/Conductors use verbal instruction most often when solving musical behavior problems. However, no approach analyzed appeared a significant predictor of student enjoyment/benefit.

2. Teacher/Conductors address Fundamental Elements more often than any other type of rehearsal element.

3. Teacher/Conductors address Fundamental/Pitch, Rhythm, Tempo, Articulation and Dynamics most often. Of these Pitch and Balance are significant predictors of student attitude (enjoyment/benefit).

4. Teacher/conductors do not address Expressive Elements, Pedagogical Elements and Other Elements often. However, when they do, these are significant predictors of higher enjoyment/benefit ratings.
5. Relationships do exist between the musical elements addressed in rehearsals and overall student enjoyment/benefit ratings by students.

6. Teacher/conductor attention to Expressive/Phrasing is a significant predictor of higher student/enjoyment benefit.

7. Teacher/conductor attention to Expressive/Dynamics is a significant predictor of higher student enjoyment.

8. Teacher/conductor attention to Pedagogical/Technique and Embouchure are predictors of higher student enjoyment/benefit.

9. Teacher/conductor attention to Style and Theory were predictors of higher student enjoyment/benefit.

10. Students seem to respond to "higher order" musical element presentation in rehearsals (Expressive and Other) with higher attitudes (enjoyment/benefit).

11. It is possible to train observers on the use of the Conductor Observation Form and implement in various conducting settings.

**Recommendations for Future Research**

1. Experimental manipulation of the selected elements in a controlled rehearsal setting may determine specific effects on student attitude.

2. Experimental manipulation of the musical elements implemented with pretests and posttests may yield more concrete data about their effects on pedagogy and instrumental technique.

3. The study should be replicated using different samples (age level and geographical)

4. Given the saturation of recent music education observation
studies, a meta-analysis study should be performed on related projects in order to derive commonalities and construct experimental models.

5. The study should be replicated using different performing mediums (e.g. orchestra, chorus etc.)

6. The study should be replicated using professional ensembles as the sample.

7. Experimental studies should be conducted using the specific elements found to be significant predictors in this study.

8. Similar models should be conducted in order to investigate the real-time duration effects on student attitude.
REFERENCES


APPENDIX A

Conductor Observation Form (Form A)
<table>
<thead>
<tr>
<th>Rehearsal Stop #</th>
<th>Observer Tape Counter #</th>
</tr>
</thead>
</table>

**Conductor Action**

- Verbal/Stops Ensemble
- Visual Expressive Gesture/Stops Ensemble
- Demonstration/Stops Ensemble
- Verbal/Ensemble Playing
- Visual Expressive Gesture/Ensemble Playing
- Demonstration/Ensemble Playing

**Cause of Action**

<table>
<thead>
<tr>
<th>Fundamental Musical Element</th>
<th>Expression Element</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tone</td>
</tr>
<tr>
<td></td>
<td>Pitch</td>
</tr>
<tr>
<td></td>
<td>Rhythm</td>
</tr>
<tr>
<td></td>
<td>Tempo</td>
</tr>
<tr>
<td></td>
<td>Articulation</td>
</tr>
<tr>
<td></td>
<td>Dynamics</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
</tr>
<tr>
<td></td>
<td>Phrasing</td>
</tr>
</tbody>
</table>

**Pedagogical Element**

- Breath Support
- Posture
- Embouchure
- Articulation
- Tone Production
- Flexibility
- Technique

**Other Elements**

- Culture
- Media
- Theory
- Style
- History
- Form

Unable to rate
N/A
APPENDIX B

Student Attitude Scale (Form B)
Answer the following questions about your band director's teaching style by circling the appropriate response.

(1=low; 5=high)

<table>
<thead>
<tr>
<th>I like when my band director:</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talks about the Music</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Conducts the music</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Demonstrates (sings, claps etc..)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

| I learn more when my band director: | |
|-------------------------------------|---|---|---|---|---|
| Talks about the music               | 1 2 3 4 5 | |
| Conducts the music                  | 1 2 3 4 5 | |
| Demonstrates (sings, claps, etc..)  | 1 2 3 4 5 | |

<table>
<thead>
<tr>
<th>I found today's rehearsal:</th>
<th>boring</th>
<th>exciting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I found today's rehearsal:</th>
<th>not helpful</th>
<th>really helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>at all</td>
<td>helpful</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

Instruction to Observers
Instruction to Observers

1. Re-familiarize yourself with the definitions.
2. Watch the videotape; Listen for the "observe" command.
3. Evaluate the teachers' approach and the element he/she addressed.
4. Use only a check-mark for all recording.
5. If you are unsure of the evaluation, press the "pause" control.
6. Use your best judgments for all evaluations.
7. Use "unable to rate" for all time-beating instances.
APPENDIX D

Instruction to Students
Instructions to Students for Attitude Scale Form B

(Read by the respective band conductor)

1. Please answer the following questions truthfully.

2. Do not sign your name.

3. Base your responses on today's rehearsal only.

4. Circle the response which best reflects your feelings about each teaching style.

5. Five is high; One is low; Three is medium.
APPENDIX E

Response from School Districts
September 14, 1987

Mr. Louis Menchaca, Band Director
Isadore Newman School
1903 Jefferson Avenue
New Orleans, LA 70115-5699

Dear Mr. Menchaca:

Enclosed is the list of secondary band directors that you requested. Please be reminded that observation requires the approval of both the school principal and band director.

Good luck to you in the pursuit of your doctorate. Please let me know if I can be of further assistance to you.

Sincerely,

Frank W. Merrick
Coordinator
Secondary Instrumental Music Programs

FM/ML
Enc. 1
Dear Participant:

My name is Louis Menchaca. I am the director of bands at Isidore Newman School in New Orleans. I am currently enrolled in the Ph.D. music education program at The Ohio State University and I am currently working on my dissertation. The research area involves the observation and subsequent categorization of secondary instrumental music directors’ behaviors during band rehearsals.

The evaluated portion of the observation will include only the music instruction portion of the rehearsal. In order to identify and isolate these critical instances, it will be necessary to videotape one rehearsal at a randomly chosen date.

At the conclusion of the rehearsal, a brief questionnaire needs to be distributed to the students and immediately collected.

I must reassure you that the anonymity of all participants will be maintained. All videotapes will be restricted to viewing by the researcher and two reliability observers.

Thus, the entire project entails minimal intrusion into your daily rehearsal routine. The aim of the project is to observe rehearsals which are as "normal" as possible. The only "outside" task is the distribution and collection of the questionnaires. However, this should take no longer than five minutes.

I would greatly appreciate your help concerning this project. Hopefully positive implications can be derived from this scholarly work which can contribute to the music education profession.

Your name has been randomly selected from a list of public and private secondary instrumental teachers. Please fill out the enclosed information section return to the enclosed address.

Thank you for your cooperation regarding this matter of personal importance.

Sincerely,

Louis A. Menchaca
APPENDIX F

Letter to Band Conductors
November 10, 1947
New Orleans

Dear

My name is Louis Menchaca. I am the director of bands at Isidore Newman School. I am conducting a research study dealing with the observation of secondary instrumental ensembles. Your school has been randomly selected from a population of public and private secondary schools. Enclosed is a blind copy of the letter which has been sent to the respective band conductors.

I would like to formally advise you of the evolving situation. The band director will return an information sheet stating his/her intent to participate in the study. Subsequently, arrangements for the one-time observation will be finalized between the teacher and myself. If there is a problem concerning this, please do not hesitate to contact me at:

Wk 899-5641 Newman School
Rm 734-7542

Thank you for your time and cooperation.

Sincerely,

Louis A. Menchaca
Director of Bands
Newman School
APPENDIX G

Letter to Principals/Headmasters
Sept. 28, 1987

Dear Participant:

My name is Louis Menchaca. I am the director of bands at Isidore Newman School in New Orleans. I am currently enrolled in the Ph.D. music education program at the Ohio State University and I am currently working on my dissertation. The research area involves the observation and subsequent categorization of secondary instrumental music directors' behaviors during band rehearsals.

The evaluated portion of the observation will include only the music instruction portion of the rehearsal. In order to identify and isolate these critical instances, it will be necessary to videotape one rehearsal at a randomly chosen date.

At the conclusion of the rehearsal, a brief four questionnaire needs to be distributed to the students and immediately collected.

I must reassure you that the anonymity of all participants will be maintained. All videotapes will be restricted to viewing by the researcher and two reliability observers.

Thus, the entire project entails minimal intrusion into your daily rehearsal routine. The aim of the project is to observe rehearsals which are as "normal" as possible. The only "outside" task is the distribution and collection of the questionnaires. However, this should take no longer than five minutes.

I would greatly appreciate your help concerning this project. Hopefully positive implications can be derived from this scholarship which can contribute to the music education profession.

Your name has been randomly selected from a list of public and private secondary instrumental teachers. Please fill out the enclosed information section return to the enclosed address.

Thank you for your cooperation regarding this matter of personal importance.

Sincerely,

Louis A. Menchaca
APPENDIX H

Class Summary of Student Attitude Scale - Form B
### APPENDIX H

Survey Analysis Form B by Class

<table>
<thead>
<tr>
<th>Class</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likes/Verbal</td>
<td>4.06</td>
<td>4.35</td>
<td>3.76</td>
<td>4.32</td>
<td>4.47</td>
<td>3.60</td>
<td>3.00</td>
</tr>
<tr>
<td>Likes/Visual</td>
<td>3.98</td>
<td>4.05</td>
<td>4.27</td>
<td>4.45</td>
<td>4.71</td>
<td>4.17</td>
<td>3.68</td>
</tr>
<tr>
<td>Likes/Dem.</td>
<td>4.23</td>
<td>4.09</td>
<td>3.88</td>
<td>4.20</td>
<td>4.76</td>
<td>3.66</td>
<td>3.63</td>
</tr>
<tr>
<td>Learns/Verbal</td>
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### APPENDIX H (continued)

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