INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR
LILES, JACK NORMAN
A STUDY OF THE EFFECTIVENESS OF RHYTHMIC
DRILL MATERIALS WITH
STUDENT/CONDUCTOR-TEACHERS WHILE CONDUCTING A
LIVE ENSEMBLE FROM A FULL SCORE.

THE OHIO STATE UNIVERSITY, PH.D., 1978
A STUDY OF THE EFFECTIVENESS OF RHYTHMIC DRILL MATERIALS
WITH STUDENT/CONDUCTOR-TEACHERS WHILE CONDUCTING
A LIVE ENSEMBLE FROM A FULL SCORE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Jack Norman Liles, B.M., M.A.

** ** ** **

The Ohio State University
1978

Reading Committee: Approved By
A. Peter Costanza
David Meeker
Donald McGinnis

Adviser
School of Music
PLEASE NOTE:
Music examples have small and indistinct print. Filmed as received.

UNIVERSITY MICROFILMS
ACKNOWLEDGMENTS

The author wishes to express his thanks to Dr. Donald McGinnis and the students of the advanced conducting class of the Ohio State University for their assistance and cooperation in this study.

The author also appreciates the assistance provided by the members of his reading committee: Dr. David Meeker, and Dr. Donald McGinnis. A special thanks to Dr. A. Peter Costanza, my adviser, for his leadership and encouragement throughout my doctoral studies and the writing of this paper.
September 13, 1944 ........... Born - Kenton, Ohio
1967 ....................... B.M. in Music Ed., Western Michigan University, Kalamazoo, Michigan
1969 ....................... M.A. in Music Theory, The Ohio State University, Columbus, Ohio
1969-1973 ................. Director of Instrumental Music, Columbus, Ohio Public Schools
1973-1975 ................. Graduate Student, The Ohio State University, Columbus, Ohio
1975-1976 ................. Director of Instrumental Music, Kent, Ohio Public Schools
1976-1977 ................. Director of Instrumental Music, Columbus Whetstone High School, Columbus, Ohio
1977-1978 ................. Graduate Research Associate, The Ohio State University, Columbus, Ohio

FIELDS OF STUDY

Studies in Music Education. Dr. Henry L. Cady, Dr. Wayne Ramsey, and Dr. A. Peter Costanza

Studies in Music Theory. Dr. B. William Polland, Charles Vedder, Warner, and Gertrude Kuehefuhs

Studies in Conducting. Dr. Donald McGinnis and Evan Whallon
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS .................................. ii</td>
</tr>
<tr>
<td>VITA ............................................ iii</td>
</tr>
<tr>
<td>LIST OF TABLES .................................. vi</td>
</tr>
</tbody>
</table>

Chapter

I. INTRODUCTION .................................... 1
   Need for the Study ................................ 1
   Summary ........................................ 6
   Purpose of the Study ............................. 7
   Hypotheses ..................................... 8
   Sub-Hypotheses ................................ 8
   Definition of Terms ............................. 9
   Limitations ................................... 10

II. REVIEW OF RELATED LITERATURE AND RESEARCH ....... 11
   Conducting Curricula ............................ 12
   Related Research ................................ 17
   Curriculum ..................................... 17
   Conducting Technique ............................ 20
   Score Reading and Error Detection ............ 21
   Video Technology ............................... 24
   Summary ...................................... 29

III. PROCEDURES .................................... 31
   Subjects ....................................... 32
   Development of the Conducting Workbook ..... 32
   Pretest/Posttest Selection ..................... 36
   Pretest/Posttest Procedures .................... 37
   Data Collection ................................ 39

IV. PRESENTATION AND ANALYSIS OF DATA ................ 40
   Means, Ranges and Standard Deviations ....... 40
   t-Test ......................................... 40
   Pearson Correlation Coefficient .............. 42
   Observations .................................. 46
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Averages of Pretest/Posttest Scores</td>
<td>41</td>
</tr>
<tr>
<td>2. Pretest/Posttest Means, Standard Deviations Ranges, and t Value</td>
<td>41</td>
</tr>
<tr>
<td>3. Pretest Data, Inner-Judge Agreement</td>
<td>42</td>
</tr>
<tr>
<td>4. Posttest Data, Inner-Judge Agreement</td>
<td>43</td>
</tr>
<tr>
<td>5. Raw Data of Pretest/Posttest Scores</td>
<td>249</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Central to the preparation of future conductor-teachers of instrumental music is the development of a proficiency in baton technique. The development of this proficiency results in more efficient rehearsals, a better understanding between the conductor and the players, and a more musical interpretation of the composition being performed.

Perhaps more so than any other subject matter in our music teacher preparation, the art of conducting must be learned by doing. If the student/conductor-teacher is to effectively learn the techniques of conducting, he must regularly practice with live musicians. Many of our schools of music do not afford the student the practical experience of conducting regularly a live ensemble during his conducting training. Those that do offer such an opportunity have few available drill materials or exercises appropriate for the conducting class ensemble to play.

Need for the Study

The student/conductor-teacher must be concerned with baton technique as well as the development of musicianship.
The basic fundamentals or concepts of conducting a live ensemble must be stressed during the development of the baton technique. The student must be concerned with tone, rhythmic ensemble, intonation, balance and interpretation of the ensemble while developing the necessary technical skills.

Numerous conducting textbooks provide the student with lists of recordings or short printed musical examples to study; however, few texts provide drill material, representative of the actual literature the student/conductor-teacher will encounter in the field, which can readily be played in the conducting classrooms by a live ensemble.

There has been little research that specifically explored the use of drill materials, extracted from the band literature, which emphasized specific fundamental problems of conducting technique or musicianship. However, numerous music educators have expressed their views concerning the development of conducting techniques, for example, Green (1969) stressed that as conductors of young musicians, we should not only raise our own technical proficiency (baton work), but also raise our own overall musicianship (the understanding and interpretation of the score).

Green further stated:

We waste a great deal of rehearsal time through our own inefficiency. We enthusiastically drill music into mechanical lifelessness. Our
conducting hand cannot speak the language with sufficient musicianship.¹

Furthermore, Long (1971) stated that frequently our schools of music do not provide the conducting student the practical experience of conducting live musicians. He suggested the use of a small ensemble in the conducting class, although the literature available for such an ensemble is limited.

Concerning rhythmical accuracy and rhythmical ensemble, Long stated:

A high degree of rhythmic mastery exists on the part of the conductor. Without such mastery, the conductor is at the mercy of his orchestra or band. The conductor must be able to convey to his musicians through a very clear and precise baton technique the rhythmic concepts which are in his own mind. He must instill in his musicians the habit of relating rhythmically to other voices within the orchestra—the listening habit.²

In defining good conducting, Harris (1966) proposed that unless the conductor developed the skills necessary to convey and project musical ideas and to exercise control of his ensemble in a crystal clear manner, then he should not be classified as a good conductor. He stressed that skill in the technique of conducting is necessary for maximum

¹Elizabeth Green, "Band and Orchestra Technique and Musicianship," Instrumentalist (April 1969), 51-52.

concert and rehearsal efficiency.  

In addition, numerous music educators have expressed dissatisfaction concerning conducting curricula. Evenson (1955) reported that most college conducting courses are unrealistic in the quality and amount of the experience they provide the student. She reported:

More often than not they are perfunctory, routine courses of one or two semesters confined to learning conventional time signature beat patterns and conducting a pianist or a recording with little opportunity to prepare thoroughly a number of scores and conduct frequently a live group of players.

Likewise, Stehn (1946) added:

... in the conducting classes all previously gained knowledge will be summed up and synthesized, and, it is hoped, a technique will be acquired that will enable the future conductor to express himself with accuracy and compulsion when he conducts. In my opinion, colleges in general have been very lax about conducting classes. ...  

In contrast, Fisher (1967) was concerned with an evaluation of music teacher preparation at Oklahoma State University using opinions of recipients of Music Education degrees

---


in the years 1948-1967. An analysis of the opinions of those questioned found that course offerings in music teacher training should be more closely related to the needs of the public school music teacher, one of which was more adequate learning experiences be provided in the development of rehearsal and conducting techniques.6

In terms of evaluation, Lee (1965) conducted a study with the purpose of evaluating the undergraduate music education curriculum of teacher-training institutions selected by M.E.N.C. and N.A.S.M. as having made significant changes in their undergraduate music education curricula during the ten year period 1955-1965.

The recommendations related to conducting were 1) correlation of instrumental and choral conducting and performance practice with music history; and 2) more experience in conducting school literature as well as standard literature.7


Finally, Linder (1974) wrote that music teachers were having trouble trying to conduct new music.

Many teacher do not feel comfortable with $\frac{5}{8}$, $\frac{7}{8}$ regrouped, and frequent moves from $\frac{2}{4}$ to $\frac{6}{8}$ meters with eighth notes remaining constant. If the teacher lacks the required conducting skills, the learning process of his students will be hampered. Slow-paced rehearsals will occur because the conductor will be trying to figure out how to handle problems in the score. In many instances the musician in charge of the performing group is a better teacher than a conductor and his lack of understanding in handling the problem in the score can result in low ratings (contest) and discouragement of both him and his group.

Music educators have been concerned about the preparation of the student/conductor-teacher in our institutions of higher learning. Their concerns have been related to the methods and materials utilized in the conducting curricula.

Summary

The following list is a synthesis extracted from the literature of the concerns of music educators relating to the teaching of conducting:

1. Better technical proficiency will result in more efficient rehearsals and concerts

2. Raising the overall musician ship of the conductor will enchance his understanding and interpretation of the score

---

3. More experience regularly conducting an ensemble of live musicians

4. Need to master a high degree of rhythmical accuracy and baton technique

5. Integrating the conducting classes with music history, music theory, performance, and methods courses

6. More practical experience with rehearsal technique procedures

7. More experience conducting actual literature that the student will encounter in the public schools

8. More experience with new music, such as the avant garde, and literature employing irregular meter and frequent changes of meter

9. The development of appropriate materials which can be played by live musicians in the conducting classroom (These materials should stress the basic fundamentals of ensemble conducting and provide experience with the technical problems of conducting)

**Purpose of the Study**

The development of rhythmical accuracy and rhythmical ensemble by the student/conductor-teacher should be one of the major concerns in the conducting classroom and worthy of research. Until the student has developed a concept of rhythmical accuracy and rhythmical ensemble, he will be unable to develop this fundamental concept within his ensemble.
The purpose of this research was to prepare supple­
mental drill materials depicting varying degrees of rhythmvi-
cal problems, to develop these materials into a course of
study, and to evaluate the effectiveness of these materials
as a part of the preparation of student/conductor-teachers.

Questions

Questions to be answered concerning the effectiveness
of the drill materials are as follows:

1. Can materials be developed that effectively
stressed baton technical problems of a rhythm-
ical nature?

2. Will the drill materials be effective as an
integral part of established conducting
methods and materials?

3. Will the subjects baton technique improve
through exposure to the drill materials?

4. Is conducting from a full score an effective
means of developing baton technique of a
rhythmical nature?

Null Hypotheses

1. There will be no significant improvement between
the subjects pretest/posttest scores having com-
pleted the drill materials of a rhythmical nature.

2. There will be no significant agreement among the
five judges in the pretest/posttest scoring.

Sub-Hypotheses

1. It will be possible to develop drill materials
that effectively stress baton technical problems
of a rhythmical nature into a course of study.
2. It will be possible to integrate the drill materials with existing established conducting methods and materials.

3. Having the subject conduct from a full score will be an effective means of developing baton technical skills.

4. The student's performance of the pretest/posttest recorded on video tape will be an effective evaluative measure.

**Definition of Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student/Conductor-Teacher</td>
<td>For the purpose of this study the student/conductor-teacher refers to the student who is learning the skills of conducting, herein referred to as subject.</td>
</tr>
<tr>
<td>Drill Materials</td>
<td>The drill materials are numerous musical examples depicting varying degrees of rhythmical difficulty, representative of music played by public school bands.</td>
</tr>
<tr>
<td>Conducting Units</td>
<td>The individual conducting techniques are divided into separate units within the conducting workbook.</td>
</tr>
<tr>
<td>Rhythmical Accuracy</td>
<td>In this study rhythmical accuracy is the correct and precise playing of a single rhythmical line.</td>
</tr>
<tr>
<td>Rhythmical Ensemble</td>
<td>Rhythmical ensemble refers to the unity of rhythmical lines in the composition, as played by the live ensemble.</td>
</tr>
<tr>
<td>Baton Technique</td>
<td>Baton technique refers to the various technical skills in instrumental conducting.</td>
</tr>
<tr>
<td>Irregular Meter</td>
<td>Irregular meter refers to meters such as: ( \frac{5}{4}, \frac{7}{4}, \frac{9}{4}, \frac{5}{8} ), etc.</td>
</tr>
</tbody>
</table>
**Divided Meter**

Divided meter refers to the subdivision of beats by the conductor within a measure. For example, a measure of $\frac{4}{4}$ would be conducted in $\frac{8}{8}$.

**Limitations**

1. This study was limited to the development of drill materials that explore the fundamental concept of conducting rhythmical problems, which are presented in full score and played by a live ensemble.

2. This study was limited to the following baton techniques: common meter; compound meter; irregular meter; fermatas; divided meter; syncopation; changing meters and changing tempos.

3. The materials in this study were of a supplementary nature, thus designed to correlate with existing course content in the advanced conducting class.

4. The research study emphasized drill materials that could be played by a live instrumental ensemble and that provided specific examples representative of rhythmical problems the subject would encounter in the public schools, thus better preparing him for actual field experience.

5. All of the drill materials were extracted from recent band literature, extracted from the O.M.E.A. Band Contest List, 1977-1978.
6. One class period per week was devoted to the drill materials during the six week trial period.

7. The live ensemble for the course of study was composed of only eighteen students from the conducting class; however, a fairly well balanced ensemble resulted.
CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

The purpose of this chapter is to show the theoretical development of the study by surveying the literature related to conducting technique and curricula. This chapter will review the following related literature:

(1) Investigation and analysis of present conducting class curricula with recommendations for improvement.

(2) Specific instructional materials for the detection of pitch, harmonic and rhythmic errors in vocal and instrumental scores.

(3) Systematic observation and analysis of conducting gestures.

(4) Systematic observation and analysis of interaction in the classroom between conductor and ensemble.

(5) Competency-based approaches.

(6) Utilization of video technology for student/teacher feedback.

Conducting Curricula

In the investigation of conducting class curricula it was discovered that many music educators have voiced their opinions. For example, Masters (1946) expressed his views concerning music and conducting:
(1) Music is essentially rhythm.

(2) The phenomena of beat, rhythmic patterns, phrase and form in music are aspects of rhythm.

(3) Human beings tend to organize their experiences rhythmically.

(4) Rhythm is often perceived and expressed by kinesthesia.

(5) The conductor must have a valid technique for rhythmic imagery and also an ability to use movements in patterns and gestures to express the rhythm he sees and hears.¹

Moreover, Green (1961) stated that conducting has become established as a science, as well as an art. Although conducting a recording had some merit, she added that conductors would benefit more by consistently conducting a live ensemble.

Green proposed that a good situation for teaching conducting be as follows, classes where full scores were used in a practical and functional manner, and where orchestras, choruses, and bands were formed from membership of the classes in which students conducted each other in the assigned materials.

She proposed that our national music association turn its attention and support to research and improvement of the methodology and programming in the teaching of conducting.

Green is quoted as follows:

... conducting in some form is the pivot for all group work in music, whether the leader be a conscientious but little-skilled classroom teacher, or a band, orchestra, or chorus director whose rehearsal schedule fills much of the day. Obviously, the art of conducting is one of the most constantly used techniques of the school music instructor. It should therefore be given an adequate amount of serious attention in the pre-teaching curriculum.

Green listed the following as fundamentals of the technique of modern conducting:

1. The ability to perform readable beats in all types of time-beating patterns.
2. The ability to vary the contours of the time-beating gestures to produce the musical aspects of the composition.
3. The ability to "meld" gestures.
4. Independence of the left hand.
5. Ability to control entrances of players, and indicate changes of tempo.
6. Ability to show legato, staccato, and tenuto styles of conducting.
7. A secure handling of fermatas.
8. Conducting irregular meters.
9. Ability to conduct new or modern compositions.²

Consequently one can see that Masters and Green place a high emphasis on the rhythmical nature of music and conducting.

The statement that music education students are prepared to teach in their applied field, but inadequately prepared in conducting, was made by La Rosa (1962). He reported that conducting demands a musician who is expertly prepared in baton technique. For proper interpretation of the printed score, La Rosa stated that a person must be able to communicate to his group through adequate and appropriate conducting technique. It was suggested that the musical flaws in many high school performances stem from the lack of efficient conducting.

La Rosa proposed that music educators make conducting a more important part of the music education curriculum. The fact that many music educators have not established standards for conducting in their field and that not enough of them recognize it as one of the most important aspects of their teaching needs to be considered when studying the needs of prospective student conductors. He suggested that the conducting student look for difficult conducting executions such as fermatas, ritardandos, accelerandos, imitative entrances, etc., and find the clearest way of conducting them.  

---

The belief that composers and the public expect performers, and particularly conductors to possess not only technical competence to a high degree but also an understanding and knowledge of the music being performed was expressed by Wilson (1963).  

Concerning the communication between the conductor and ensemble Welke (1964) suggested that the conductor develop ease in the transition of meter changes found in much contemporary music. He maintained that the conductor must accomplish the following: rhythmical accuracy within the ensemble and a baton technique that does the communicating to the ensemble.  

In addition, Henderson (1964) stated that much can be done for the musicianship of young people by the conductors of school bands, orchestras and chorus. He maintained that the conductor recalls within his hands, what the students learned in the rehearsal, thus urging the students to even greater heights than they had reached before.  

---


Related Research

The following is a synthesis of research in the field of conducting from 1950 to the present. These research studies do not specifically relate to this study because they do not explore the development and evaluation of methods and materials used in teaching the fundamental techniques of conducting. This research is reported to show the boundaries of current studies in the field of conducting.

Curriculum

Ecker (1950) in a Master's thesis, made the following statements concerning conducting:

Conducting should not be taught without regard to the other aspects of musical maturity .... the conducting class is an excellent place to bring together and correlate the various other music "specialties" in the college curriculum.

Ecker attempted to show the fallacy of the mechanistic approach in teaching conducting to university or college students who are preparing to teach music in the public school. His approach was a developmental experience, one which should endeavor to clarify musical perceptions, musical feeling, and musical values. He reported that conducting should be concerned with the process of musical growth. He stated that a full score must be used, as the conductor cannot hope to create an image of the total musical
picture when he is using a condensation as a guide.\textsuperscript{7}

Concerning the problems of beginning conducting students Getchell's (1957) study determined the most common problems encountered by beginning conducting students and recommended remedial processes for correcting such problems.

Some of the more pertinent problems considered in the study were the use of too florid meter patterns as well as the lack of mental imagery in the execution of beat patterns, and problems related to the action of the wrist and of the elbow. He also noted faults in executing the preparatory beat and the attack, particularly when the entrance note occurs on the fractional part of a count. Other common faults discussed were related to executing holds and releases, and indicating changes in dynamic expression.\textsuperscript{8}

The development of principles to guide the establishment of collegiate programs for the preparation of public school music teachers for the secondary schools was proposed by Henry (1962). From a questionnaire given to teachers in the field and a jury of experts it was found that


instrumental and vocal rehearsal techniques were essential items in undergraduate music teacher preparation. 9

In light of this, a questionnaire was prepared and distributed by Matthews (1963) to school music conductors and a group of college conductors to establish standards for the teaching of conducting in colleges and universities. A general course of study was prepared from the findings of the questionnaire, which emphasized the conducting class should include more leading of actual groups. 10

In 1965 Labuta developed a theoretical basis upon which instrumental conducting courses in the college curriculum may be structured. The conclusion of the study was that a valid basis had been formulated upon which conducting courses at the college level could be structured, deriving from the nature of musical expression, the principles of musical learning, and the musical and societal needs of the person who conducts. 11

---


Wortman (1965) studied the basic philosophies of the student teaching program in music in certain small church-related, liberal arts colleges and proposed to determine the relationship of actual practices to these philosophies. One of the findings of this study stated that many students were weak in the areas of music methods and conducting skills in spite of course requirements. Wortman recommended that the music department personnel should investigate new approaches to the teaching of conducting which will improve the student's conducting skills.12

Conducting Technique

Concerning the techniques of conducting and the problems of contemporary musical techniques, Walters (1971) prepared a selected resource of literature materials. He recommended that conductors be concerned with the aesthetic aspects of the music.13

Furthermore, Tiede (1971) investigated the effects of the experience of students evaluating their conducting performance.


The conclusions of this study were:

1. Experience in evaluating unidentified performances did not have a significant effect on student conductor's critical perception of a performance they conducted.

2. Student conductor's evaluation of their performance was significantly higher than experienced conductor's evaluation.

3. In conducting school band rehearsals, student conductors appeared to demonstrate the greatest accuracy of perception with respect to problems of dynamics, the least accuracy of perception with respect to style, technical accuracy and tempo problems.

Score Reading and Error Detection

Numerous studies have investigated score reading ability and error detection in musical performance.

Hansen (1954) constructed a test in which a recording of a phrase or passage was used for comparison against the printed vocal score. Discrepancies were inserted in the recorded versions. The tested person was to mark chords in which errors occurred. Hansen's study was the basis of recent research in pitch and error detection.

---


Cook (1964) developed a workbook and accompanying tape to provide practical experience in developing score reading ability. The workbook contained the study of transpositions, score analysis and score study.16

Gonzo (1969), Shaw (1971), and Michels (1972) conducted studies concerned with the detection of pitch, and rhythmic errors in choral rehearsals while reading the score.17

These studies concluded: 1) that experience does not necessarily improve competency in pitch error detection, but graduate study and good grasp of music theory does; 2) that variables found to correlate significantly with an initial error detection ability were the number of years of private instrumental study, the number of years played in bands and/or orchestras, and mathematics scores on the SAT; 3) that pitch-error detection ability can be taught effectively to student choral conductors by programmed instruction utilizing visual-aural materials.

Skill in the detection and identification of pitch and rhythmic errors was studied by Sidnell (1969). He maintained that this skill was a necessary requisite for


teachers of instrumental music. Drill tapes were compiled from public school performances. Analysis of these performances resulted in a glossary of typical student errors.

Short excerpts were rerecorded in which only one pitch or rhythm error was allowed. Errors were programmed so that detection and identification were accomplished in four frames.

The result of the experimental application of these drills indicated that the programmed materials produced greater improvement in score reading skill than non-programmed materials.\(^\text{18}\)

Moreover, Dolbeer (1969) developed self-instructional materials for detecting pitch and rhythm errors in music performance. Errors were inserted into musical excerpts abstracted from band compositions and recorded for use in the self-instructional material.

It was concluded that the subjects showed an improvement in error-detection skill after completing the self-instructional materials. Subjects who had completed a formal conducting course, or who had participated in extensive applied instrumental study and band, or whose achievement level in music theory courses was relatively high

showed greater improvement in error detection than those subjects lacking this background.\textsuperscript{19}

Finally, Costanza (1971) developed and evaluated the effectiveness of a programmed course of study in score reading skills.

Musical excerpts arranged for a brass quartet or a clarinet quartet were assembled from Bach chorales, and music from the high school band literature. Errors of a melodic and harmonic nature were programmed in Costanza's Score Reading Test. He concluded that melodic and harmonic score reading skills can be effectively taught by programmed instruction and that his Score Reading Test was an effective instrument for measuring those score reading skills.\textsuperscript{20}

**Video Technology in Conducting**

King (1971), Yarbrough, Wapnick, and Kelly (1978) conducted studies utilizing video technology in the teaching of conducting.

King (1971) based his experiment upon the hypothesis that students who have their conducting recorded on video-


tape and who study the video tapes of their conducting privately, aided by a self-evaluation guide, acquire more conducting skill than students who do not have access to video tapes of their conducting.

The experiment was conducted at the University of Maryland with a beginning conducting class. Twenty students were in the control group and twenty students in the experimental group. A pretest and posttest was administered to each subject in the two groups by means of videotape recordings. The results of the experiment indicated that the experimental treatment did produce a significant difference between the mean scores of the two groups.21

Recently, Yarbrough, Wapnick, and Kelly compared the effect of traditional instructor feedback via videotape versus observation from feedback via videotape on the performance, verbalization, and attitude of beginning conductors.

Forty-seven junior and senior beginning conductors were studied at Syracuse University. A control group of seniors was videotaped twice while conducting. Subjects viewed their videotapes individually and discussed their conducting problems with an experienced conductor/teacher. The

21W. A. King, "The Effects of Videotape Feedback on the Achievement of Students in a Beginning Conducting Class" (Ph.D. dissertation, University of Maryland, 1971), Dissertation Abstracts, 32, 4987-A.
experimental group of seniors was videotaped twice while conducting; however, they not only viewed their videotapes individually, but also recorded their conducting behavior on observation forms. No instructor was present for the experimental group.

Both treatment groups were exposed to an independent study/laboratory course for their basic conducting study.

Three measures were used: (1) judges' ratings of student's conducting performances; (2) verbal content analysis of students' written critiques; (3) an instructional rating survey assessing students' attitudes towards instructor warmth, academic/intellectual content, and student work/input. Results indicated that students did equally well in both groups. The researchers suggest that systematic self-observation may be a viable alternative for teaching basic conducting skills. 22

Furthermore, Collings (1973) investigated the detection of pitch errors in musical performance by a brass quintet while reading the conductor's score. The problem of the study was to measure the subjects' existent skill in identifying errors of pitch in musical performance while

reading the score and to evaluate the effect of selected group training techniques designed to improve skill in identifying pitch errors in musical performance while reading the conductor's score.

Collings tested college juniors, seniors and doctoral students. The most significant finding of this study was the significant difference between pretest and posttest achievement values on the Score Reading Test of junior subjects. Although no one type of instruction technique was superior to the other, each technique significantly improved junior subject's skills in identifying errors of pitch as measured by the Score Reading Test.23

Thurman (1977) analyzed selected rehearsal behaviors of five choral conductors. Six subproblems were devised to determine, in terms of frequency and time the extent to which the following conductor behaviors were used in rehearsals: (1) verbal communication; (2) statement reference to seven elements of choral performance; (2) verbal explanation and verbal imagery; (4) verbally expressed approval and disapproval feedback; (5) conducting and/or monitoring of rehearsal traits; (6) involvement with one vocal part, but

23David Stuart Collings, "Development and Evaluation of Techniques to Improve Skill of Student Conductors in Detecting Errors of Pitch in Musical Performance while Reading Five-Part and Six-Part Conductor's Scores" (Ph.D. dissertation, University of Southern Mississippi, 1973), Dissertation Abstracts, 34, 4321-A.
not all: all vocal parts, less than a musical phrase; and a musical phrase or more.

Thurman videotaped five conductors and analyzed their rehearsal behavior. He concluded that conductors devoted approximately 35 percent to 40 percent of their rehearsal time to verbal communication. Phrasing, dynamics and time received the highest emphasis of all the musical elements. Verbal imagery was the most efficient rehearsal technique observed. The majority of the conductors observed used disapproval feedback consistently more than approval feedback. ②4

Finally, Lewis (1978) developed the Choral Conductor Observation System (CCOS) as a means to provide feedback for student choral conductors. Lewis stated that the use of nonverbal communication in conducting should dominate the rehearsal.

The subjects (N=42) were equally divided into a control group and an experimental group. The control group received feedback through the use of videotape equipment and instructor comments. The experimental group received the same plus the use of the CCOS. The CCOS Training Manual was given to students in the experimental group and the students

were trained to code their conducting. Lewis coded the tapes of both the experimental and control groups throughout the semester.

He reached the following conclusions: (1) basic conducting gestures can be identified and coded both quantitatively and qualitatively; (2) a relatively high coding proficiency level can be obtained by persons familiar with the system; (3) CCOS was highly rated as an additional feedback mechanism; (4) CCOS can provide a valid method of evaluation of conducting students. 25

Summary of Related Literature and Research

From the related literature it can be seen that music educators consider the teaching of conducting in our colleges and universities to be worthy of improvement through research. In 1961 Green concluded that the art and science of conducting is the pivot point for all group work in music and one of the most constantly used techniques of the school music instructor.

Consequently, music educators need to specify certain conducting competencies, develop methods and materials to

adequately teach and evaluate these competencies, and pro-
vide the student/conductor teacher with adequate time on the
podium conducting a live ensemble.

From a review of the research, one can conclude that
few research studies have explored the use of specific
materials to teach conducting techniques of a rhythmical
nature.

Consequently, this research study proposed to identify
specific conducting techniques, develop materials to be
used in the conducting classroom, and provide more experi-
ences for the student/conductor-teacher to conduct a live
ensemble.
CHAPTER III

PROCEDURES

This chapter describes the development of the conducting workbook technique units, the pretest/posttest instrument selection and procedures, the subjects used in the study, the procedures for implementing the drill materials, and data collection and analysis.

This research study was conducted at The Ohio State University in conjunction with the advanced instrumental conducting class, under the instruction of Dr. Donald McGinnis, conductor of the O.S.U. Symphonic Band.

The conducting curriculum at The Ohio State University is composed of a three quarter sequence; a beginning class, an intermediate class, and an advanced class.

The beginning class combines both vocal and instrumental music majors, and is designed as the initial experience in the basic fundamentals of conducting. At the intermediate level, students are separated into vocal and instrumental conducting classes. Students study more advanced conducting techniques and concentration on conducting either choral or instrumental literature with a live ensemble. The advanced class provides students with opportunities to conduct literature of varied difficulties, with a live ensemble.
The emphasis in this class is to bring together all the conducting techniques and make use of them with the literature that the student/conductor-teacher will encounter in the field.

Subjects

The advanced instrumental conducting class, instructed by Dr. Donald McGinnis at The Ohio State University, served as subjects for the study. Nineteen junior and senior school of music students participated in the study. All students had completed both the beginning and intermediate courses in conducting.

Development of the Conducting Workbook

The investigator, having worked closely with Dr. Donald McGinnis and the advanced conducting classes at The Ohio State University, developed a supplemental course of study based on conducting technical problems of a rhythmical nature.

After examining the current conducting textbooks and articles on conducting, the investigator developed a list of rhythmical baton techniques most frequently mentioned in these texts and articles. The conducting curriculum at The Ohio State University was analyzed to identify basic conducting techniques. Following is the list of techniques
included in the **Conducting Workbook**: (1) Simple Meter; (2) Compound Meter; (3) Irregular Meter; (4) Fermata; (5) Syncopation; (6) Divided Meter; (7) Changing Meter; (8) Changing Tempos.

Having identified the techniques to be included in the **Conducting Workbook** it was necessary to find multiple examples of each technique.

The musical examples to be used in this study were extracted from band literature listed in the 1977-78 Ohio Music Education Association Contest List. The examples were extracted from this list because it best represented the literature that most instrumental music teachers would encounter in the field.

The rhythmical examples presented were a supplement to the regular course content and closely correlated to regular class material.

The examples selected were submitted to a panel of four experienced conductors for validation of the following:

1. That the musical examples are indeed representative of literature which instrumental conductor-teachers encounter in the public schools.
2. That the rhythmical problems defined are examples that conductor-teachers regularly encounter in the public school band literature.
3. That the musical examples selected are indeed representative of the defined rhythmical problems.
The panel of judges unanimously agreed that the selected musical examples were indeed good examples of the eight conducting techniques, and were representative of the literature that perspective teachers might expect to encounter in the public schools.

It was necessary to establish an order in which to present the musical examples in the workbook. The investigator asked each of the judges to order the musical examples from least difficult to most difficult. After studying their recommendations, the author determined the order in which to present the conducting techniques and the sequence of musical examples to be included in each of the eight conducting units. Each conducting unit was to become increasingly more difficult. Within each unit the musical examples were ordered from least difficult to most difficult.

The content for the conducting units was as follows:

1. Each rhythmical example was presented in full score consisting of three to twenty-three measures in length.

2. Forty-one different examples were included in the conducting workbook. Several examples were provided for each conducting technique unit.

3. A simplified piano reduction and a rhythmical analysis accompanied each example.

4. Accompanying each example was a section entitled "Conducting Technique," which specified the conducting technique and the style in which the example was to be conducted.
(5) Accompanying each example was a section entitled "Rhythmic Study," which briefly identified the rhythmical problem and suggested conducting/rehearsal procedures for that example.

(6) Each example was to be played by a live ensemble and to be conducted by the subject from the full score example.

Each subject was provided a copy of the Conducting Workbook, see Appendix A. The investigator and the class instructor, Dr. Donald McGinnis, provided reinforcement during the class sessions through demonstration and through verbally commenting on each student's conducting. Class members verbally critiqued their peers conducting. Further reinforcement was provided through the use of video tape equipment, which was used during each class in which the author's workbook was used.

For the majority of the subjects, this was their first experience observing themselves conducting on videotape. The use of videotape equipment is very limited in the instrumental conducting classes at Ohio State and was used exclusively with the investigator's materials with the advanced conducting class. The use of this equipment proved to be an invaluable teaching aid for both students and the investigator.

After each session, the investigator met with students to view and critique their videotaped performance. The research study was conducted over an eight week period.
The schedule was as follows:

First Week: Pretest and introduction of Conducting Workbook.
Second Week: Simple Meter Unit.
Third Week: Compound Meter Unit.
Fourth Week: Irregular Meter Unit.
Fifth Week: Fermatas and Divided Meter Units.
Sixth Week: Syncopation Unit.
Seventh Week: Changing Meter and Changing Tempos Units.
Eighth Week: Posttest.

The advanced conducting class met three days each week.

One complete class period was devoted to the investigator's course of study each week. The other two class periods were devoted to the following: (1) preparing and conducting five scores of varying difficulty from the band literature; (2) outside readings of conducting textbooks and journal articles; and (3) lectures concerning conductors and conducting.

Pretest/Posttest Selection

"Prelude and Rondo" by David Holsinger was selected as the pretest/posttest instrument. The investigator selected this composition because it was listed on the O.M.E.A. 1977-78 Contest List, and because it contained examples of all the conducting techniques included in the workbook. A panel of five judges1 established content validity. Only a

---

1Dr. Paul Droste and Jon Woods, The Ohio State University School of Music, Dr. John Grashel, The University of Kansas School of Music, Jan Roshong, Ashland College School of Music, and Jeff Keller, graduate student at The Ohio State University.
portion of the composition was utilized as the pretest/posttest instrument, found in Appendix B.

**Pretest/Posttest Procedures**

An instrumental ensemble of thirty-five members was provided for the pretest/posttest sessions. The investigator discussed the composition to be conducted with the live ensemble, but did not conduct or rehearse the ensemble. The class met in a separate room and each student studied the score two minutes before conducting the example with the live ensemble. These students were instructed not to talk to the ensemble, but to communicate strictly through conducting. Each student conducted with a baton. The subject's performance of the pretest/posttest was recorded on videotape, which was to be evaluated by a panel of judges. After the completion of the Conducting Workbook, the same instrument was again administered to the class. All conditions for the posttest administration were as similar as possible to the pretest administration.

A panel of five judges\(^2\) scored each student's performance on both the pretest and posttest. All five judges have had public school and university band conducting

\(^2\)Dr. Paul Droste and Jon Woods, The Ohio State University School of Music; Dr. John Grashel, University of Kansas School of Music; Jan Poshong, Ashland College School of Music, and Jeff Keller, Graduate student at The Ohio State University.
experience. Four of the five judges have taught a conducting course at the university level.

The Conducting Evaluation Form, developed by the investigator was used as the instrument for evaluating the pretest/posttest performances, see Appendix C. The abilities utilized in this measure were extracted from selected articles and conducting textbooks. These fundamental abilities were most frequently mentioned by music educators as being essential abilities for effective conducting technique.

The judges were to observe each student's performance on the pretest/posttest instrument and score the abilities on a scale of one to five. One was the lowest possible score, and five was the highest attainable score for each ability. Fifteen abilities were listed on the instrument and thus the highest attainable score was seventy-five points.

The pretest/posttest video-taped performances were randomly ordered; therefore, the judges were not aware of whether they were scoring the pretest or the posttest performance. The investigator met with the five judges prior to the evaluating time and thoroughly explained the Conducting Evaluation Form and the scoring procedures.
Data Collection

The investigator administered the pretest/posttest to the advanced conducting class. A Sony Videocorder, model AV-3600, was used for recording both the pretest and post-test performances. Both tests were scored using the Conducting Evaluation Form by the panel of five judges. Both tests were hand scored and the student scores were transferred to IBM cards.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the findings of the research study. First, data obtained from the pretest/posttest was computed to determine if there was significant gain in the scores. Second, the pretest/posttest scores of the five judges were computed to see if there was significant agreement and consistency in their ratings of the subjects.

Null Hypothesis 1

There will be no significant improvement between the student/conductor-teacher's pretest/posttest scores, having completed the drill materials of a rhythmical nature.

Results

The pretest/posttest scores of the five judges were averaged to compile means and standard deviations, and ranges of the respective subjects. Table 1 presents the averaged pretest/posttest scores of the 19 subjects. (The raw scores for this data appears in Appendix D.)

A correlated t-test was then computed to determine if a significant difference did exist between the pretest/posttest gain scores. The .001 level of significance was
TABLE 1. Averages of pretest/posttest scores

<table>
<thead>
<tr>
<th>Number</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35.</td>
<td>53.</td>
</tr>
<tr>
<td>2</td>
<td>42.</td>
<td>50.</td>
</tr>
<tr>
<td>3</td>
<td>40.</td>
<td>51.</td>
</tr>
<tr>
<td>4</td>
<td>52.</td>
<td>55.</td>
</tr>
<tr>
<td>5</td>
<td>45.</td>
<td>56.</td>
</tr>
<tr>
<td>6</td>
<td>50.</td>
<td>52.</td>
</tr>
<tr>
<td>7</td>
<td>43.</td>
<td>47.</td>
</tr>
<tr>
<td>8</td>
<td>29.</td>
<td>45.</td>
</tr>
<tr>
<td>9</td>
<td>31.</td>
<td>56.</td>
</tr>
<tr>
<td>10</td>
<td>23.</td>
<td>42.</td>
</tr>
<tr>
<td>11</td>
<td>37.</td>
<td>48.</td>
</tr>
<tr>
<td>12</td>
<td>25.</td>
<td>36.</td>
</tr>
<tr>
<td>13</td>
<td>37.</td>
<td>46.</td>
</tr>
<tr>
<td>14</td>
<td>31.</td>
<td>41.</td>
</tr>
<tr>
<td>15</td>
<td>37.</td>
<td>47.</td>
</tr>
<tr>
<td>16</td>
<td>28.</td>
<td>37.</td>
</tr>
<tr>
<td>17</td>
<td>44.</td>
<td>55.</td>
</tr>
<tr>
<td>18</td>
<td>35.</td>
<td>51.</td>
</tr>
<tr>
<td>19</td>
<td>53.</td>
<td>60.</td>
</tr>
</tbody>
</table>

established as the criterion level. A $t$ value of 2.878 was
required for rejecting the hypothesis. Table 2 presents
the obtained results.

TABLE 2. Pretest/Posttest Means, Standard Deviations, $t$
Value

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>$t$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>19</td>
<td>37.6947</td>
<td>8.716</td>
<td>18</td>
<td>8.57</td>
<td>.001</td>
</tr>
<tr>
<td>Post</td>
<td>48.8842</td>
<td>6.672</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

A *t* value of 8.57 at the .001 significance level was obtained, thus the null hypothesis was rejected.

Null Hypothesis 2

There will be no significant agreement among the five judges in the pretest/posttest scoring.

Results

The Pearson Product Moment Correlation Coefficient was used to compute the agreement among the five judges. The .05 level of significance was established as the criterion level. Table 3 presents the obtained data from the pretest results. Table 4 presents the data from the posttest results. An *r* value of .444 was required for rejecting the null hypothesis.

**TABLE 3. Pretest data of Inner-Judge Agreement.*

<table>
<thead>
<tr>
<th></th>
<th>Judge 1</th>
<th>Judge 2</th>
<th>Judge 3</th>
<th>Judge 4</th>
<th>Judge 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge 1</td>
<td>1.000</td>
<td>0.667**</td>
<td>0.749**</td>
<td>0.782**</td>
<td>0.791**</td>
</tr>
<tr>
<td>Judge 2</td>
<td></td>
<td>1.000</td>
<td>0.739**</td>
<td>0.812**</td>
<td>0.762**</td>
</tr>
<tr>
<td>Judge 3</td>
<td></td>
<td></td>
<td>1.000</td>
<td>0.863**</td>
<td>0.892**</td>
</tr>
<tr>
<td>Judge 4</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>0.784**</td>
</tr>
<tr>
<td>Judge 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

**- .01.
TABLE 4. Posttest Data of Inner-Judge Agreement

<table>
<thead>
<tr>
<th></th>
<th>Judge 1</th>
<th>Judge 2</th>
<th>Judge 3</th>
<th>Judge 4</th>
<th>Judge 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge 1</td>
<td>1.000</td>
<td>0.368</td>
<td>0.603*</td>
<td>0.472*</td>
<td>0.590*</td>
</tr>
<tr>
<td>Judge 2</td>
<td>1.000</td>
<td>0.614**</td>
<td>0.603*</td>
<td>0.302</td>
<td></td>
</tr>
<tr>
<td>Judge 3</td>
<td>1.000</td>
<td>0.777**</td>
<td>0.481*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judge 4</td>
<td></td>
<td></td>
<td>1.000</td>
<td>0.721**</td>
<td></td>
</tr>
<tr>
<td>Judge 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

* = .05; ** = .01.

Discussion

Agreement of the five judges on the pretest ranged from .667 to .892, and from .368 to .777 on the posttest. The overall results were significant at the .05 level of confidence thus the hypothesis was rejected.

Sub-Hypothesis 1

It will be possible to develop drill materials that effectively stress baton technical problems of a rhythmical nature into a course of study.

Results

A panel of four judges1 examined the conducting workbook and unanimously agreed that the full score examples

1Dr. Paul Droste and Jon Woods, The Ohio State University School of Music, Dr. John Grashel, University of Kansas School of Music, and Jeff Keller, Graduate student at The Ohio State University.
were indeed (1) representative of the literature that instrumental conductor-teachers would encounter in the public schools, (2) that the rhythmical problems defined were examples that conductor-teachers regularly encountered in the public school band literature, and (3) that the full score musical examples selected were indeed representative of the defined rhythmical problems, thereby, establishing content validity.

Discussion

Because of the content validity established by the four experts, the sub-hypothesis was retained.

Sub-Hypotheses 2 and 3

It will be possible to integrate the drill materials with established conducting methods and materials.

Having the subject conduct from a full score will be an effective means for developing baton technique.

Results

These sub-hypotheses were retained, because of the results obtained from the t-test (Tables 1 and 2), and the results concerning the consistency and agreement among the five judges (Tables 3 and 4).
Discussion

The established conducting methods and materials for the advanced conducting class consisted of the following: (1) preparing and conducting five scores of varying difficulty from the band literature; (2) outside readings from conducting textbooks; and (3) lectures. The conducting workbook prepared by the investigator provided numerous supplementary examples of simple meter, compound meter, irregular meter, fermatas, divided meter, syncopation, changing meters and changing tempos, all of which were emphasized in the regular course content.

Sub-Hypothesis 4

The students' pretest/posttest performances recorded on videotape will be an effective evaluative measure.

Results

The pretest/posttest performances were recorded on videotape and provided the five judges with a means for viewing and listening while scoring the tests.

Discussion

The investigator found the videotape equipment to be an invaluable aid for the administration of the pretest/posttest. This method of recording the pretest/posttest performances permitted the judges to view the results at a
time other than the administration of the tests. In addition to the test situations, the investigator videotaped all sessions during which the conducting workbook was used, and later viewed the sessions with each student individually.

Observations

Having analyzed the results of the study, the investigator found that students had more trouble conducting certain examples than others. Subjects had the most problems conducting examples of fermatas, changing tempos, divided meters, and syncopation. In light of these observations, it would have been helpful to provide more varied examples of each of these units. Furthermore, the order of presentation might have been changed to the following: simple meter, compound meter, changing meter, irregular meter, syncopation, divided meter, fermatas, and changing tempos; thus the units would be sequenced from least difficult to most difficult.

More extensive use of the videotape equipment should be made in the conducting classroom. Students reported that it was helpful viewing their conducting on videotape. In addition, students could view their conducting at their convenience.
Furthermore, students reported that utilizing the workbook more than one day per week would be beneficial, because it gave students a choice to conduct at least two examples per class period.
CHAPTER V

SUMMARY AND CONCLUSIONS

Purpose of the Study

The purpose of this research study was to prepare supplemental drill materials depicting varying degrees of conducting rhythmical problems, to develop these materials into a course of study, and to evaluate the effectiveness of these materials as a part of the preparation of the subjects.

Limitations of the Study

1. This study was limited to the development of drill materials that explore the fundamental concept of conducting, rhythmical problems, which are presented in the full score and played by a live instrumental ensemble.

2. The materials in this study were of supplementary nature, thus designed to correlate with existing course content for the advanced conducting class.

3. The research study emphasized drill materials that could be played by a live instrumental ensemble, and that provided specific examples representative
of rhythmical problems the subject would encounter in the public schools.

4. All the musical examples used in the drill materials were extracted from the recent band literature, as listed in the O.M.E.A. Band Contest List, 1977-78.

5. One class period per week was devoted to the investigator's course of study for an eight week period.

6. The live ensemble for the course of study was composed of members of the advanced conducting class; therefore, a complete instrumentation was not available.

**Design of the Study**

The investigator developed a supplemental course of study which emphasized the teaching of conducting technical problems of a rhythmical nature. Secondly, the course of study was implemented with the advanced conducting class at The Ohio State University for an eight week trial period, which included a pretest/posttest administration. Thirdly, the test results were submitted to statistical analysis for evaluation purposes. Finally, conclusions and recommendations were determined based on the statistical findings of the study.
Subjects

The advanced instrumental conducting class at The Ohio State University served as subjects for the research study. Nineteen junior and senior school of music students participated in the study. The entire population had previously taken a beginning and intermediate course in conducting technique.

Content of Conducting Workbook

The Conducting Workbook developed by the investigator was designed to be a supplemental course of study. The workbook contained full score examples of the following units: (1) simple meter; (2) compound meter; (3) irregular meter; (4) fermatas; (5) syncopation; (6) divided meter; (7) changing meter; and (8) changing tempos.

The content of the Conducting Workbook was presented in the following manner:

1. Each rhythmical example was presented in full score consisting of three to twenty-three measures in length.

2. Forty-one different examples were included in the conducting workbook. Several examples were provided for each conducting technique unit.

3. A simplified piano reduction and a rhythmical analysis accompanied each example.
4. Accompanying each example was a section called Conducting Technique, which specified the conducting technique and the style in which the example was to be conducted.

5. Accompanying each example was a section called Rhythmic Study, which briefly identified the rhythmical problem and suggested conducting/rehearsal procedures for that example.

6. Each example was to be played by a live ensemble and to be conducted by the student/conductor-teacher from the full score example.

The schedule for the study was as follows:
First Week: Pretest and introduction of materials
Second Week: Simple meter unit
Third Week: Compound meter unit
Fourth Week: Irregular meter unit
Fifth Week: Fermatas and divided meter unit
Sixth Week: Syncopation unit
Seventh Week: Changing meter and changing tempos unit

Pretest/Posttest Instrument
"Prelude and Rondo" by David Holsinger was selected as the pretest/posttest instrument. The author selected this composition because it was listed in the O.M.E.A. Contest List, 1977-78, and because it contained examples of each of
the conducting techniques emphasized in the study. The pretest/posttest were administered the first and eighth weeks of the research study. The tests were recorded on video tape and were scored by a panel of five experts.

Data Analysis

The pretest/posttest results were submitted to the following statistical procedures:

2. A \( t \)-test was used to compute significance of pretest/posttest data.
3. The Pearson Correlation Coefficient was used to test for significant agreement among the five judges.

Results

Based on the above statistical procedures, the following results were determined:

1. There was significant improvement between the pretest/posttest scores (.001 level of confidence, \( t = 8.57 \)).
2. There was significant agreement among the five judges in the pretest/posttest scoring. Correlations of .667 to .892 on the pretest, and
correlations of .368 to .777 on the posttest were achieved (.05 and .01 level of significance).

Conclusions

The results of this study are the basis for the following conclusions:

1. Drill materials were developed that effectively stressed baton technical problems of a rhythmical nature into a course of study.

2. The established drill materials were integrated with existing conducting methods and materials.

3. Having the subject conduct from a full score was an effective means for developing and improving baton technique at the advanced conducting level.

4. Having a live ensemble composed of members of the conducting class provided the student/conductor-teacher an effective performance medium.

5. The use of videotape equipment was a valuable teaching aid and was an effective means of recording the pretest/posttest performances for evaluation.
Implications of the Research Study

1. The study suggests that student/conductor-teachers improve their conducting technique by studying and conducting from a full score.
2. It is valuable for the subject to study and conduct short full score examples of specific conducting technical problems.
3. The use of videotape equipment as a teaching and evaluative aid is an invaluable experience for the instructor and the student.
4. The student/conductor-teacher should regularly conduct a live ensemble.

Recommendations for Future Research

1. A study in which short examples of full score drill materials depicting specific baton technical problems should be used exclusively for one quarter or semester.
2. A study should involve a control group and an experimental group; one utilizing conventional conducting methods and materials; and one using the drill materials developed in this research study.
3. A study should utilize the drill materials developed in this study with an intermediate class of student conductors.
APPENDIX A

CONDUCTING WORKBOOK
This conducting workbook is intended to be used as supplemental instructional material for the advanced instrumental conducting course at the Ohio State University. The emphasis of this course of study is to better prepare the student/conductor-teacher to teach utilizing his conducting technique, rather than verbalizing his intent to the ensemble.

Included in this workbook are numerous full score musical examples extracted from the Ohio Music Education Association Band Contest Selection List, 1977-1978. The examples are representative of the band literature from the A, B, and C classifications and exemplify specific conducting technical problems. Each example concentrates on one specific conducting problem.

The student is to study each example thoroughly. In each example there are two inserts, a melodic-harmonic reduction in concert pitch, and a rhythmic reduction of the example. Follow the directions under Rhythmic Study in each exercise. It is recommended that the student play the melodic-harmonic reduction at the keyboard, before conducting the example.

It is intended that the live ensemble play their parts from the full score, which is correctly transposed for each instrument. In case of incomplete instrumentation of the
ensemble, it is possible for clarinets to play trumpet parts, flutes to play oboe parts, etc.

It is intended that each student proceed through the workbook in chronological order and carefully study each example before conducting the live ensemble from the full score.

Each student will be subjected to a pre-test and a post-test, which will consist of a portion of a composition for band. The student will conduct a live ensemble from a full score. The test will include conducting problems similar to those found in the course of study. Both the pre-test and the post-test will be video taped, and evaluated by a panel of judges to determine whether or not each student improved from having completed the course of study.

The course of study is intended to last six weeks. The schedule is as follows:

FIRST WEEK: SIMPLE METER
SECOND WEEK: COMPOUND METER
THIRD WEEK: IRREGULAR METER
FOURTH WEEK: FERMATAS AND DIVIDED METER
FIFTH WEEK: SYNCOPATION
SIXTH WEEK: CHANGING METERS AND CHANGING TEMPOS
CONTENTS

I. SIMPLE METER
II. COMPOUND METER
III. IRREGULAR METER
IV. FERMATAS
V. DIVIDED METER
VI. SYNCOPATION
VII. CHANGING METERS AND CHANGING TEMPOS
CONDUCTING TECHNIQUE

1. Simple Meter
2. Legato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: =60. Conduct this example with four pulses per measure. Practice conducting line 1, which is the melodic line, in a legato style.
2. Notice that rhythmically measure 17 begins with two rhythmic lines, expands to three lines at measure 25, and to four lines at measure 29, but ends with just one line, which is a rhythmic elongation of the melodic line.
3. Conduct ex. 1. Sing the melodic line as you conduct. Indicate the phrase endings as marked.
4. Now conduct the live ensemble from the full score.
CHESTER OVERTURE FOR BAND

Schuman
CONDUCTING TECHNIQUE

1. Simple Meter
2. Legato Style

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \frac{\text{♩}}{\text{♩}} = 72 \).
   This chorale is to be conducted in a legato style.
   There are four basic pulses per measure. Mentally
   subdivide 8th notes as you conduct the example.
2. Line 1 in each example is the theme. Practice
   conducting ex. 1 singing the melodic line.
3. Practice conducting the last three measures. The
   basic unit of subdivision should be 16th notes, to
   properly place the 16th note in measure 8.
4. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Simple Meter
2. Marcato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \frac{\text{octagon}}{\text{circle}} = 138 \)
   Conduct line 2 of this example. This is the rhythm of the melodic line. Conduct in a marcato style, three pulses per measure.

2. Study line 3 of ex. 2. Notice how the accented 8th notes line up with the major pulses of each measure. Practice conducting this line indicating the accents.

3. Conduct ex. 1 singing the melody as you conduct. Indicate the accented chords as you conduct.

4. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Simple Meter
2. Legato-staccato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: Allegro moderato. Conduct this example with three pulses per measure. Conduct line three of this example in a legato style. Now sing line 2 of ex. 1, the melody, as you conduct the example.

2. Lines 1 and 2 of ex. 2 combine to form the accompaniment. These two lines must sound as one rhythmic figure. Practice singing the rhythm of these two lines as you conduct the example. This figure must be played and conducted in a staccato style.

3. Your problem is to establish the staccato accompaniment, but conduct the legato theme.

4. Conduct the live ensemble from the full score.
allegro moderato  First Suite in Eb

ex. 1
CONDUCTING TECHNIQUE

1. Simple Meter
2. Staccato-legato style.

RHYTHMIC STUDY

1. Tempo: $j = 96$. Conduct this example with two pulses per measure. Carefully study line 1 of both ex. 1 and 2, the melody. Practice conducting these lines singing as you conduct. Notice the change of style from staccato to legato.
2. Practice conducting all four lines of ex. 2, mentally subdividing quarter notes as you conduct.
3. Practice conducting ex. 1 indicating style and dynamic inflections.
4. Conduct the live ensemble from the full score.
THREE AYRES FROM GLOUCESTER

1. THE JOLLY EARL OF CHOLMONDELEY

Allegretto (L.94)

Hugh M. Stuart
CONDUCTING TECHNIQUE

1. Simple Meter \( \frac{2}{2} \)
2. Marcato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \frac{4}{4} = 126 \). Conduct this example with two pulses per measure. Lines 1 and 2 are thematic material. Practice conducting each line separately, mentally subdividing 8th notes as you conduct.
2. Practice conducting ex. 2 several times, adding one line to your concentration on each repeat of the example. You should be able to concentrate on all five lines of ex. 2 before conducting ex. 1.
3. Conduct ex. 1 in the marcato style. Indicate space between all accented notes.
4. Subdivision to the 8th notes level will insure proper placement of the rhythmic figure \( \text{\texttt{\textbullet \textbullet \textbullet \textbullet \textbullet}} \) in measure one.
5. Conduct the live ensemble from the full score.
Quasi Caccia

C Piccolo
1st, 2nd, 3rd C Flutes
1st & 2nd Oboes
English Horn
1st & 2nd Bassoons
Eb Clarinet
1st Bb Clarinet
2nd & 3rd Bb Clarinets
B Alto Clarinet
Contrabass Clarinet
Bb Bass Clarinet
Contrabass Clarinet
F & 2nd Eb Alto Saxophones
Tenor Saxophone
Eb Baritone Saxophone
1st Bb Trumpet
2nd & 3rd Bb Trumpets
1st, 2nd, 3rd, 4th F Horns
1st, 2nd, 3rd Trombones
Baritones
Tuba and String Bass
Timpani

Percussion
Snare Drums
Bass Drum
CONDUCTING TECHNIQUE

1. Compound Meter \( \frac{6}{8} \)
2. Legato and staccato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( J. = \frac{144}{4} \)
   This example should be conducted with two pulses per measure.
2. The 8th note figure (\( \text{\textcopyright} \)) etc., must be played and conducted staccato. It is imperative that the 8th notes be played consistently, the same length and style.
3. Conduct ex. 2 subdividing 8th notes mentally throughout the example.
4. Study ex. 1 (line 2). This is the theme and is to be conducted in a legato style. You must establish the staccato style in the accompaniment, and then conduct the theme in a legato style.
5. Conduct ex. 1 and sing the melody.
6. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Compound Meter
2. Fermata
3. Accented-staccato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \cdot \cdot \cdot \) \( \text{==} 120 \)
   This example should be conducted with three pulses per measure.
2. There is only one rhythmic line to be played at a time. The figure is to be staccato and very separated. The first four measures is one phrase.
3. Notice that the accents frequently occur on pulse two.
4. A slight ritard should be initiated in measures 11-12. It is not necessary to subdivide these measures.
5. Now study ex. 1. Sing each line separately as you conduct the example.
6. Notice the dynamic changes between phrases.
7. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Compound Meter \( \frac{6}{4} \).
2. Quasi legato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \frac{\text{dotted}}{4} \cdot \text{tempo} = 108 \)
   Conduct this example with two pulses per measure
   \( \frac{\text{dotted}}{4} \cdot \text{tempo} = 108 \)

2. The most stress should occur on the first pulse of each measure, with less stress on the second pulse. The quarter notes should be played and conducted in a legato style.

3. Study line 2 of ex. 1 (the melodic line). Sing this line as you conduct the example.

4. Now conduct from the full score mentally pulsating quarter notes as you conduct.
CONDUCTING TECHNIQUE

1. Compound Meter $\frac{9}{4} (\frac{3}{2})$.
2. Accented style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: $\text{J} = 108$
   This example is to be conducted with three pulses per measure.
2. The rhythmic figure is international morse code for DEG, and should be thought of as dots and dashes.
3. First mark the three basic pulses in each measure.
   Then conduct the example subdividing mentally quarter notes. The metronome will be helpful in your study.
4. Sing the rhythmic figure with the metronome until you have mastered it. This figure is repeated in each measure.
5. Now conduct ex. 1, sustaining the tied dotted whole notes with the left hand, while indicating the style and pulse with the baton.
6. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Compound Meter $\frac{12}{8}$.
2. Legato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: $\text{♩}=126-132$
   This example should be conducted with four pulses per measure (♩♩♩♩).
2. As you conduct this example sing three eighth notes per dotted quarter.
3. Carefully study ex. 1. Notice the ties throughout the example. Be careful not to stress eighth note values heavier than quarter and dotted quarter values.
4. You need not sustain the pedal tone throughout the example, line 3 of ex. 2.
5. Conduct ex. 1 indicating the correct phrasing. Sing the melodic line.
6. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Irregular Meter $\frac{5}{4}$ Pattern.
2. Legato style.

RHYTHMIC STUDY

1. $\frac{5}{4} (3 + 2)$ Tempo: $\frac{\text{♩}}{\text{♩}} = 100$
2. Study example 2. Practice the $\frac{5}{4}$ pattern by conducting a pattern of three and a pattern of two in each measure.
3. Conduct this example in a legato style. Notice that lines 1 and 4 of ex. 2 interact rhythmically and melodically. Take care in your conducting to see that these lines connect both rhythmically and melodically.
4. Conduct ex. 1 singing each line separately. Measure 41 begins the melodic section. Conduct in a legato style paying particular attention to phrases.
5. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Irregular Meter $\frac{5}{4}$ (2+3).
2. Legato and Staccato style.

RHYTHMIC STUDY

1. Tempo: $\frac{4}{4} = 96$
   This example is provided for you to practice conducting an irregular meter $\frac{5}{4}$. Each measure is grouped into a 2 + 3 grouping. Practice conducting example 2, with a pattern of 2 + 3 pulses in each measure.
2. Notice that both the legato and staccato styles are scored. Practice conducting this example in both styles.
3. Conduct example 1. Conduct the legato style and concentrate on staccato measures. Now conduct the staccato style and concentrate on the legato measures.
4. Conduct the live ensemble from the full score. Your decision will be which style to conduct, staccato or legato?
CONDUCTING TECHNIQUE

1. Irregular Meter \( \frac{7}{4} \) Pattern.
2. Legato style.

RHYTHMIC STUDY

1. Tempo: Allegretto.
   The emphasis in this example is the \( \frac{7}{4} \) pattern \( \left( \frac{4}{4} + \frac{3}{4} \right) \). The tempo indication is allegretto.
2. Practice conducting ex. 2 in a legato style.
   Conduct a pattern of 4 and a pattern of 3 in each measure.
3. Notice that a continuous pattern of eighth notes occurs in each measure. These notes must connect and be played with the same intensity.
4. Study lines 1 and 2 of ex. 1. Notice that the eighth note pulse alternates between these two lines throughout the example. The composite sound should be of one instrument playing lines 1 and 2.
5. Practice singing these two lines as you conduct the example.
6. Conduct with the full score.
CONDUCTING TECHNIQUE

1. Fermatas.
2. 3 Pattern.
3. Marcato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \frac{\text{♩}}{\text{♩}} = 72-80 \). Conduct this example with three pulses per measure. Practice conducting each line separately. The fermata in measure 4 should be sustained and released with a breath release. As the new phrase begins the snare drum releases the roll. This example will provide somewhat of a coordination problem, therefore, it will be necessary to practice this example several times.

2. Examine measures 11-12. Sustain the tied dotted half note in measure 11 with the left hand. Continue to beat time with the baton until the downbeat of measure 12. Sustain the fermata with the right hand and indicate the decrescendo with the left hand. Release the fermata with a breath and begin the new phrase.

3. The preparatory beat to measure 13, which is the release of the fermata, must prepare the fpp.

4. Conduct ex. 1 several times singing the melodic line, before conducting the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Fermatas
2. ½ Pattern.
3. Legato style (hymn-like)

RHYTHMIC STUDY

1. Conduct ex. 2. Tempo: \( \frac{\text{2}}{\text{4}} \) \( \text{=100 poco animato} \). Conduct this example with four pulses per measure. Initiate a slight ritard in measure 2. Measure 3: indicate the first fermata with the left hand and continue to beat time to count 3 (the second fermata). Decrescendo. Release the fermata with the left hand, and give a preparatory beat in tempo for measure 4. The release and the preparatory beat should occur at the same time. Measure 9 should be conducted as measure 3, without the ritard and without the decrescendo.

2. Conduct ex. 1 several times singing the melodic line.
3. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Fermata
2. Tempo change
3. Legato style

RHYTHMIC STUDY

1. Study ex. 2. Tempo: Lento. Conduct two pulses per measure in measure one and two, and four pulses per measure in measure three. Conduct the first two measures (lento), indicate a phrase in measure 2 (after count 1), indicate the fermata, crescendo the chord to the down beat of measure 3. The preparatory beat to measure 3 should indicate the new tempo. The fermata should not release until the down beat of measure 3.

2. Practice ex. 1 several times singing the melodic line. Be careful to be perfectly clear with all hand movements.

3. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Fermata
2. \( \frac{4}{4} \) Pattern
3. Change of tempo
4. Legato style

RHYTHMIC STUDY

1. Study ex. 2. Tempo: Slowly. Conduct a pattern of four pulses per measure in this example. Study measure 66 carefully. Sustain the tied whole note with the left hand. Continue to indicate the rall. to count three and sustain the fermata. The half note fermata should release with a breath in the new tempo \( \frac{4}{4} = 126 \). The whole note fermata should release on the down beat of the new measure (67).

2. Practice ex. 2 several times. Notice that the entrances in measure 65 build from the bottom and enter on each count of the measure.

3. Conduct ex. 1 several times before conducting from the full score.
CONDUCTING TECHNIQUE

1. Fermatas
2. \( \frac{4}{4} \) Pattern
3. Cantabile, legato style

RHYTHMIC STUDY

1. Tempo: \( \frac{4}{4} = 100 \) cantabile. The primary emphasis in this example is the fermata. Conduct a pattern of four pulses in each measure. Study example 2, measure 6. Indicate the first fermata with the left hand, and continue to conduct to count three and sustain the chord. It is not necessary to indicate count four, since there is no rhythmic movement.

2. Practice conducting the entire example several times in the cantabile style.

3. Conduct example 1 indicating style and dynamic inflections. Indicate the release of tied notes throughout the example.

4. Conduct from the full score.
Dedicated Overture

J. S. Bach

ex. 1

Eliot Williams

ex. 2
CONDUCTING TECHNIQUE

1. Fermatas.
2. $\frac{4}{4}$ Pattern.
3. Legato style.

RHYTHMIC STUDY

1. Tempo: $\frac{4}{4} = 100$
   Study example 2, measure 8. Conduct four pulses in each measure of this example. Notice that the first fermata occurs on count one and the second on count three. Indicate the first fermata with the left hand and sustain that pitch. Conduct to count three with the right hand and sustain the chord. It is not necessary to indicate count four since there is no rhythmic movement.

2. Now conduct the entire example in a legato style. Indicate the decrescendo in measure eight.

3. Conduct example 1 singing the melodic line as you conduct. Indicate releases of tied notes.

4. Now conduct from the full score.
Dedicatory Overture

Williams

\[ j = 100 \]
CONDUCTING TECHNIQUE

1. Fermatas.
2. Slow 4\textsuperscript{th} Pattern
3. Accented style

RHYTHMIC STUDY

1. Tempo: Slow
   Study example 2, measures 4-5. Practice conducting lines 1, 2, and 3 individually. The fermatas occur on counts two and three. Indicate the fermata on count two with the left hand. Conduct the syncopation with the right hand and initiate the fermata on count three. Sustain the whole note (line four), and release the fermatas. The release should be a breath in tempo for count four of measure 5.
2. Practice conducting this example several times until the fermata measure is comfortable.
3. Now conduct example 1. Give proper length to the accented quarter notes. Remember the tempo is marked Slow.
4. Now conduct from the full score.
CONDUCTING TECHNIQUE

1. Subdivision \( \frac{4}{2} \)
2. Legato style
3. Fermata

RHYTHMIC STUDY

1. Tempo: \( \frac{4}{4} = 44, \frac{8}{8} = 88 \). The emphasis in this example is subdivision of the beat.
2. Study ex. 2. Conduct this example with the normal four or two pattern; however, pulsate twice on each beat, indicating each eighth note value.
3. In measure 2, you need not beat time on the half note, but gently pulsate with the baton and sustain the fermata with the left hand. Release the fermata, breathe, then continue with measure 3.
4. Indicate more stress on quarter note values than on eighth note values throughout the example.
5. Measure 5: The \( \frac{2}{4} \) becomes \( \frac{4}{3} \). Phrase as indicated in this measure.
6. Conduct ex. 1 and sing the melodic line as you conduct.
7. Conduct the live ensemble, maintaining a steady eighth note pulse.
CONDUCTING TECHNIQUE

1. Subdivision $\frac{3}{4}$ and $\frac{4}{4}$ Patterns (Lento)
2. Legato style.

RHYTHMIC STUDY

1. Tempo: $\frac{1}{4} = 58$
   Practice conducting example 2 subdividing the $\frac{3}{4}$ and $\frac{4}{4}$ patterns. Pulsate twice on each quarter note value, while conducting the regular three or four patterns.
2. This example is to be played and conducted in a legato style. Proper attention must be given to each 8th note value.
3. After you feel comfortable with the subdivision, repeat the example indicating the dynamic inflections.
4. Now conduct example one singing the melodic line as you conduct.
5. Conduct from the full score.
LENTO 4:58

C Pianoforte
C Fletto
Bb Oboe
E♭ Clarinet

1st B♭ Clarinet
2nd B♭ Clarinet
3rd B♭ Clarinet
4th B♭ Clarinet

1st B♭ Alto Saxophone
2nd B♭ Alto Saxophone
E♭ Tenor Saxophone
E♭ Baritone Saxophone

Baritone
Contrabass

1st B♭ Clarinet
2nd B♭ Clarinet
3rd & 4th B♭ Clarinet

1st & 2nd Bassoon
2nd & 3rd F Horn

1st & 2nd Trombone
3rd Trombone
Baritone

Bassoon

Perc. I
Perc. II
Timpani

Perc. III
CONDUCTING TECHNIQUE

1. Subdivision $\frac{4}{4}$ Pattern.
2. Legato style.

RHYTHMIC STORY

1. Tempo: $\frac{4}{4} \frac{\text{♩}}{\text{♩}} = 50 \quad \frac{8}{\text{♩}} = 100$
2. Practice conducting the subdivided four pattern. Pulsate twice on each quarter note value, while conducting the regular four pattern.
3. Examples 1 and 2. Study carefully measure one and three to insure proper cueing of entrances.
4. After conducting both examples in $\frac{8}{4}$, conduct from the full score first in $\frac{8}{8}$ and then in $\frac{4}{4}$. 
PRELUDE AND PARAGRAMS

ROBERT WASHB...
CONDUCTING TECHNIQUE

1. Subdivision $\frac{4}{4}$ Pattern
2. Accented Marcato style

RHYTHMIC STUDY

1. Tempo: $\frac{4}{4} \ \mathbf{J} = 56, \ \frac{8}{8} \ \mathbf{J} = 112$
2. Conduct the rhythmic example pulsating eighth notes throughout (four pattern, pulsate twice on each quarter note value).
3. Carefully study the rhythmic figure in measure 2. The six 32nd occur on one eighth note value.
4. Indicate space between the quarter notes and dotted half notes throughout the example. Proper placement of the 16th note in measure one is imperative. Subdivision is the key to proper note placement in this example.
5. Conduct example one singing both lines before conducting the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Syncopation
2. $\frac{4}{4}-\frac{2}{4}-\frac{3}{4}$ Patterns
3. Accented style

RHYTHMIC STUDY

1. Tempo: $J = 208+$. Conduct this example with two, three, or four pulses per measure (see meter changes). Study lines 1 and 2 of ex. 2 before conducting the example. Mark the basic pulse in each measure with a pencil. Set the metronome at $J = 100$ and conduct the example several times singing two eighth notes on each quarter note value. As you sing the syncopated rhythms stress the quarter notes and sing the eighth staccato.

2. Gradually increase the tempo until you have reached the proper tempo indication $J = 208+$.

3. Conduct ex. 1 singing the melodic line.

4. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Syncopation
2. ¾ Pattern
3. ¾ Legato style

RHYTHMIC STUDY

1. Tempo: $\text{♩}=58$ In this example, it is advisable to pulsate eighth notes as you conduct the ¾ pattern. This will make placement of each eighth note more exact, and enable you to stress such notes. The example is to be conducted in a legato style, thus all notes will receive full value.
2. Practice conducting example 1 with the metronome. Sing the melodic line as you conduct.
3. It is imperative that lines 1, 2, and 3 of ex. 2 all fit rhythmically together. The continuous 16th note figure (line 2) should make placement of other rhythms more exact.
4. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Syncopation
2. Pattern
3. Legato style

RHYTHMIC STUDY

1. Tempo: $\frac{\text{♩}}{\text{4}} = 72$. Conduct this example with four pulses per measure. Ex. 2. Notice that there are three one-measure rhythmic figures in this example (lines 1, 2 and 3). The style is legato.
2. Ex. 1. Sing the melodic line of this example (line 2). Conduct this example in a very legato style. Conduct the example again singing the repeated syncopated figure in each measure. All notes of the syncopated figure should receive full value.
3. Conduct from the full score. Strive for consistency in the syncopated line.
CONDUCTING TECHNIQUE

1. Overlapping rhythmic figures
2. Marcato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: \( \text{=152-153} \). Conduct this example with four pulses per measure. The emphasis in this example is connecting the overlapping 16th note rhythmic figures. The 16th notes in line 1 should meld with the 16th notes in line 2 as though played by one instrument. Line 1 must enter at the same point in the crescendo, measure 44.
2. You must indicate a heavy accent on each beat. Notice line 3 of ex. 2.
3. Conduct ex. 1 singing the combined rhythm of lines 1 and 2.
4. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Syncopation
2. Pattern
3. Marcato style

RHYTHMIC STUDY

1. Study ex. 2. Tempo $\frac{3}{4}$ =132. Conduct this example with four pulses per measure. Conduct each line separately at a slow tempo, before attempting the required tempo. It is imperative to clearly indicate each beat with an accent. A clear accented beat will be very helpful to the musicians. The gesture of syncopation is useful in measure 69 (beats 2-3).

2. Rhythmically this example utilizes rhythmic figures from the jazz idiom. The articulation markings must be closely observed. Conduct ex. 1 singing the rhythm as you conduct.

3. Notice that line 2 of ex. 1 continues the phrase beginning measure 68.

4. Watch for ties (measures 67-68), syncopated rhythms (measures 69-70), and changing rhythmic figures. Notice that there is silence on the down beat of (measures 72 and 75).

5. Practice conducting measures 77-80 several times. Notice how the rhythmic figures changes from line to line.

6. Conduct ex. 1 concentrating on connecting the rhythmic line as it changes from line to line.

7. Cueing the numerous entrances will require much study and practice. A marcato style of conducting is required.

8. Conduct the live ensemble from the full score.
**CONDUCTING TECHNIQUE**

1. Changing Meter: $\frac{4}{4} \rightarrow \frac{2}{4}$
2. Legato style—Accent style

**RHYTHMIC STUDY**

1. Study example 2. Set the metronome $\frac{1}{4} = 72$, and practice conducting stressing the legato quarter notes. Conduct patterns of two or four pulses per measure.
2. Conduct example 1 indicating style, phrasing, and dynamics.
3. Conduct from the full score.
VARIATION 7
Tempo primo, giustamente ( \( \frac{d}{2} \) )
CONDUCTING TECHNIQUE

1. Changing Meter: \( \frac{4}{4} - \frac{3}{4} - \frac{2}{4} \) Patterns
2. Marcato style.

RHYTHMIC STUDY

1. Set the metronome (\( \frac{\text{J}}{\text{J}} = 104 \)) and conduct example two several times practicing the change in pattern.
   Conduct patterns of two, three, or four pulses per measure. The quarter note must remain constant at all times.
2. This example requires a good marcato style to achieve proper separation between each note.
3. Conduct example one singing the melody and indicate the proper marcato style.
4. Conduct from the full score.
Allegro moderato ma con spirito (\( \dot{J} = 104 \))
CONDUCTING TECHNIQUE

1. Changing Meter $\frac{4}{4} - \frac{3}{4} - \frac{5}{4}$
2. Legato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: $\frac{\text{♩}}{\text{♩}} = 63$. Practice conducting the example with patterns of three, four or five pulses per measure. The quarter note value remains constant throughout the example.
2. Conduct ex. 1 in a legato style stressing quarter and eighth note values. Indicate the dynamic changes in your conducting.
3. The $\frac{5}{4}$ measure in measure 49 should consist of a pattern of two and three pulses.
4. Conduct from the full score.
Prelude and Rondo

Andante sempre poco rubato

\[
\begin{align*}
1 & \quad \frac{\text{Bar 1}}{} \\
2 & \quad \frac{\text{Bar 2}}{}
\end{align*}
\]
CONDUCTING TECHNIQUE

1. Change of Meter $3\quad 4\quad 4\quad 2$
2. Legato style

RHYTHMIC STUDY

1. Tempo: $\frac{\text{♩}}{\text{♩}}=66-76$. Conduct patterns of two, three or four pulses per measure. Practice conducting ex. 2 at first concentrating only on the change of meter. Now indicate the dynamic changes in your conducting.
2. Study measures 1-3 of ex. 2. How might you regroup these measures rhythmically? The dotted lines in ex. 2 suggest a possible regrouping. One should study such measures to properly stress the rhythmic figures.
3. Notice the counterpoint between lines 1 and 2 in ex. 1. Sing each of these lines separately as you conduct the example. These lines are of equal importance and you should reflect this in your conducting.
4. Conduct from the full score.
AMERSHAM Hymn Variants

Maestoso

ex. 1

ex. 2
AMBROSIAN HYMN VARIANTS

Performance time: 6'

Slowly $J = 66-76$

for band

DONALD H. WHITE
CONDUCTING TECHNIQUE

1. Changing Meter $\frac{3}{4}--\frac{4}{4}--\frac{2}{4}$ with steady tempo.
2. Legato style.

RHYTHMIC STUDY

1. Conduct example 2 ($\frac{3}{4} = 66-76$) with the quarter note remaining constant throughout the example. Conduct a pattern of two, three or four pulses per measure.
2. Conduct example 1 indicating a legato style and the dynamic changes. Pulsate 8th notes mentally as you conduct.
3. Conduct from the full score.
### Slowly; quietly

**Ambrosian Hymn Variants**

**White**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**Example 2**
~slowly~ \( \downarrow = 66-76 \)
CONDUCTING TECHNIQUE

1. Meter Change $\frac{5}{4}--\frac{4}{4}--\frac{3}{4}$.
2. Marcato style.

RHYTHMIC STUDY

1. Study ex. 2. Tempo: Allegro brilliante. Conduct patterns of three, four or five pulses per measure. Practice conducting the example. The $\frac{5}{4}$ measure should contain a pattern of 2 and a pattern of 3. The quarter note will remain constant throughout the example.
2. One should subdivide eighth notes mentally throughout the example. Each note should be heavily accented, thus your conducting should reflect a marcato style.
3. Practice conducting ex. 1 singing each line individually before conducting from the full score.
4. Conduct the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. Changing Meter $\frac{3}{4}--\frac{2}{4}--\frac{3}{4}$
2. Marcato style, legato style.

RHYTHMIC STUDY

1. Study ex. 2. Set the metronome $\frac{\text{\textdollar}}{=} 144$. Conduct a pattern of one, two, or three pulses per measure. Practice conducting the example. Mentally subdivide eighth notes as you conduct.
2. The quarter note value is constant throughout the example, thus, the eighth note will not change. One should conduct one pulse in each of the $\frac{3}{8}$ measures, subdividing three eighth notes in the correct tempo.
3. Conduct ex. 1 indicating the proper style. Notice the style change from measures 592-598, Legato, and measures 599-611, marcato.
4. Conduct from the full score.
Ex. 1
ex. 2
CONDUCTING TECHNIQUE

1. Changing Meter and Changing Tempo. $\frac{4}{4}$ and $\frac{5}{4}$ Patterns.
2. Tempo changes: $\frac{4}{4} == 92$, $\frac{4}{4} == 126$, $\frac{4}{4} == 84$.
3. Staccato and accented style.

RHYTHMIC STUDY

1. Tempo: $\frac{4}{4} = 92$. Practice conducting the $\frac{4}{4}$ pattern changing to $\frac{5}{4} (3+2)$, before conducting either example.
2. Use a metronome until you are comfortable with the changes in tempo. Changes from $\frac{4}{4} == 92$ to $\frac{4}{4} == 84$ are slight, but are indeed different.
3. Practice conducting example 2 several times before advancing to example 1. Master all the changes in meter, tempo, style and dynamics, before conducting the live ensemble from the full score.
CONDUCTING TECHNIQUE

1. \( \frac{3}{4} \) = \( \frac{2}{8} \) Patterns
2. Light staccato style

RHYTHMIC STUDY

1. Tempo: \( \frac{3}{4} = 160-168 \). The emphasis in this example is changing meters with the eighth note remaining constant. Conduct a pattern of one or two pulses per measure.
2. Study example two. Subdivide 8th notes mentally as you conduct the example, using the metronome.
3. A light staccato style should be indicated. Conduct one pulse in measure seven, and sixteen, keeping the 8th note constant.
4. Conduct example one singing the melodic line, and indicating the proper staccato style.
5. Conduct the live ensemble from the full score indicating style, accents, and dynamics.
CONDUCTING TECHNIQUE

1. Meter change $\frac{3}{4} = \frac{2}{4}$
2. Legato style
3. Syncopation

RHYTHMIC STUDY

1. Tempo: $\frac{3}{4} = 160$. Conduct a pattern of two or four pulses per measure. The emphasis in this example is the $\frac{3}{4} = \frac{2}{4}$ in the meter change $\frac{3}{4} = \frac{2}{4}$.
2. Study ex. 2. Set the metronome at the proper setting. Conduct the example. At measure 5 the quarter note is equal to the previous half note, $\frac{3}{4} = 160$.
3. Indicate the syncopated figure in measure 5. Notice that the style is legato, dolce; therefore, the syncopated figure will not be heavily accented. Indicate stress on the quarter note and less on the following eighth note.
4. Conduct example 1. Half notes and quarter notes should receive full value. $\frac{3}{4} \frac{3}{4}$ Your conducting should reflect this style.
5. Conduct from the full score.
CONDUCTING TECHNIQUE

1. Changing Meter \( \frac{3}{4} \) \( \rightarrow \) \( \frac{2}{4} \) Patterns.
2. Legato style
3. Conducting one pulse per measure \( \frac{3}{4} \) \( \rightarrow \) \( \frac{1}{4} \) \( \rightarrow \) \( \frac{1}{2} \) = 72.

RHYTHMIC STUDY

1. Study example 2 very carefully. Tempo: \( \frac{3}{4} \) \( \rightarrow \) \( \frac{1}{4} \) \( \rightarrow \) \( \frac{1}{2} \) = 72.
   Conduct one or two pulses per measure. The \( \frac{3}{4} \) measures should be conducted with one pulse per measure.
2. When you reach the \( \frac{2}{3} \) measure (6), the previous dotted half note pulse (\( \frac{1}{4} \) = 72) now becomes the pulse for the half note. Subdivision of quarter notes in both meters will make the transition much easier.
3. Conduct example 1 singing the melodic line, using the metronome.
4. Now conduct the live ensemble from the full score.
APPENDIX B

PRETEST/POSTTEST INSTRUMENT

"Prelude and Rondo" by David Holsinger
Presto

C Piano

1st & 2nd C Piano

1st & 2nd Oboes

E cl Cimbalos

2nd E cl Cimbalos

E cl Alto Clarinets

E cl Bass Clarinets

1st & 2nd Bassoons

1st & 2nd E cl Bassoons

F Horn

2nd & 3rd E cl Bassoons

1st & 2nd F Horns

3rd & 4th F Horns

Cor anglais

1st Trumpet

2nd & 3rd Trumpets

Tuba

Snare Drum

Timpani

Note: The image contains sheet music notation.
APPENDIX C

CONDUCTING EVALUATION FORM
"Prelude and Rondo" by David Holsinger is being used as the pretest/posttest measure in my dissertation research project. Please examine this composition from rehearsal number 178 to the end. Evaluate the student conductor's baton technique by rating the following categories on a scale of 1-5. One is the lowest possible score, and five is the highest possible score. Circle the numerical score in each category.

1 2 3 4 5.....The student's address to the ensemble and preparation to conduct the composition.

1 2 3 4 5.....Beat clarity and visibility.

1 2 3 4 5.....Eye contact with ensemble.

1 2 3 4 5.....Use of left hand.

1 2 3 4 5.....Intent of will (communicating general mood of comp. to ensemble).

1 2 3 4 5.....Ability to maintain steady tempo.

1 2 3 4 5.....Ability to conduct marcato style.

1 2 3 4 5.....Ability to conduct meter changes.

1 2 3 4 5.....Ability to cue entrances.

1 2 3 4 5.....Preparation and execution of fermatas.

1 2 3 4 5.....Rhythmic precision in changes from Presto-Maestoso-Presto-Allargando.

1 2 3 4 5.....Indication of dynamic changes.

1 2 3 4 5.....Syncopation gestures.

1 2 3 4 5.....Precision in conducting the $\frac{6}{4} - \frac{5}{4}$ (m. 212-213).

1 2 3 4 5.....Ability to accurately indicate rhythm content to achieve rhythmic ensemble.
APPENDIX D

RAW DATA OF PRETEST/POSTTEST SCORES
### TABLE 5. Raw Data of Pretest/Posttest Scores

<table>
<thead>
<tr>
<th>N.</th>
<th>Judge 1 Pre-</th>
<th>Judge 1 Post-</th>
<th>Judge 2 Pre-</th>
<th>Judge 2 Post-</th>
<th>Judge 3 Pre-</th>
<th>Judge 3 Post-</th>
<th>Judge 4 Pre-</th>
<th>Judge 4 Post-</th>
<th>Judge 5 Pre-</th>
<th>Judge 5 Post-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>50</td>
<td>38</td>
<td>50</td>
<td>40</td>
<td>55</td>
<td>33</td>
<td>56</td>
<td>26</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>58</td>
<td>49</td>
<td>54</td>
<td>39</td>
<td>42</td>
<td>41</td>
<td>41</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>3</td>
<td>44</td>
<td>58</td>
<td>44</td>
<td>59</td>
<td>39</td>
<td>48</td>
<td>45</td>
<td>46</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>54</td>
<td>74</td>
<td>49</td>
<td>52</td>
<td>63</td>
<td>50</td>
<td>50</td>
<td>48</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>5</td>
<td>36</td>
<td>56</td>
<td>48</td>
<td>58</td>
<td>58</td>
<td>60</td>
<td>45</td>
<td>56</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>45</td>
<td>57</td>
<td>52</td>
<td>56</td>
<td>63</td>
<td>55</td>
<td>53</td>
<td>48</td>
<td>35</td>
<td>46</td>
</tr>
<tr>
<td>7</td>
<td>43</td>
<td>50</td>
<td>49</td>
<td>54</td>
<td>45</td>
<td>46</td>
<td>42</td>
<td>40</td>
<td>35</td>
<td>46</td>
</tr>
<tr>
<td>8</td>
<td>25</td>
<td>46</td>
<td>30</td>
<td>45</td>
<td>33</td>
<td>40</td>
<td>33</td>
<td>48</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>9</td>
<td>39</td>
<td>71</td>
<td>33</td>
<td>50</td>
<td>31</td>
<td>56</td>
<td>32</td>
<td>52</td>
<td>21</td>
<td>52</td>
</tr>
<tr>
<td>10</td>
<td>23</td>
<td>43</td>
<td>25</td>
<td>46</td>
<td>25</td>
<td>35</td>
<td>35</td>
<td>39</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>11</td>
<td>46</td>
<td>55</td>
<td>33</td>
<td>47</td>
<td>41</td>
<td>35</td>
<td>36</td>
<td>48</td>
<td>30</td>
<td>56</td>
</tr>
<tr>
<td>12</td>
<td>22</td>
<td>35</td>
<td>39</td>
<td>42</td>
<td>20</td>
<td>34</td>
<td>30</td>
<td>32</td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>13</td>
<td>32</td>
<td>35</td>
<td>43</td>
<td>56</td>
<td>43</td>
<td>42</td>
<td>40</td>
<td>51</td>
<td>26</td>
<td>44</td>
</tr>
<tr>
<td>14</td>
<td>34</td>
<td>41</td>
<td>37</td>
<td>48</td>
<td>24</td>
<td>41</td>
<td>41</td>
<td>37</td>
<td>17</td>
<td>38</td>
</tr>
<tr>
<td>15</td>
<td>41</td>
<td>55</td>
<td>42</td>
<td>53</td>
<td>39</td>
<td>45</td>
<td>38</td>
<td>42</td>
<td>25</td>
<td>39</td>
</tr>
<tr>
<td>16</td>
<td>30</td>
<td>46</td>
<td>35</td>
<td>39</td>
<td>29</td>
<td>30</td>
<td>28</td>
<td>33</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>17</td>
<td>42</td>
<td>60</td>
<td>42</td>
<td>46</td>
<td>52</td>
<td>62</td>
<td>50</td>
<td>50</td>
<td>35</td>
<td>59</td>
</tr>
<tr>
<td>18</td>
<td>32</td>
<td>53</td>
<td>38</td>
<td>53</td>
<td>42</td>
<td>44</td>
<td>40</td>
<td>52</td>
<td>23</td>
<td>53</td>
</tr>
<tr>
<td>19</td>
<td>60</td>
<td>60</td>
<td>48</td>
<td>60</td>
<td>64</td>
<td>65</td>
<td>56</td>
<td>60</td>
<td>36</td>
<td>55</td>
</tr>
</tbody>
</table>


