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Effective rehearsing with the instrumental music ensemble: A case study

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EFFECTIVE REHEARSING WITH THE INSTRUMENTAL MUSIC ENSEMBLE: A CASE STUDY

by

DONALD SeCHEVERELL BUELL

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
CHAPTER	
I. INTRODUCTION	1
Research Issues	3
Initial Questions	4
Pilot Study	5
Results of the Pilot Study	7
Related Theories	10
Gestural and Verbal Communication	11
Nonverbal Communication	11
Verbal Communication	13
Strategy for Conceptual and Technical Instruction	13
Learning and Instruction	15
Instructional Modes and Learning Style	15
Dual Trace Theory	17
Purpose of the Study	19
Areas of Investigation	20
Procedures	20
Research Questions	21
II. REVIEW OF LITERATURE	23
Studies in Gestural and Verbal Communication	24
Nonverbal Communication	24
Behavioral/Experimental Research in Nonverbal Communication	26
Paralinguistic and Temporal Speech Characteristics	26
Facial Expression	27
Kinesics	28
Visual Behavior	30
Interaction Analysis	31
Verbal Communication	34

Studies in Conceptual Learning and Technical Development 36
Learning and Application 42
Learning Style 43
Sensory Modal Preference in Learners 45
Matching Teaching with Learning Style 47
Dual Trace Hypothesis 48

III. METHODOLOGY 52

Research Questions 53
Value of Qualitative Method to the Study ... 54
Related Educational Theory 55
Pilot Study 57
Initial Questions 57
Methodology 58
Results of the Pilot Study 61
Problems with the Pilot Study 65
Video-taping Procedures 66
Recorded Data 67
Pilot-study Summary 67
Data Sources and Collection 68
Description of Study Participants 68
Methods of Data Collection 70
Video-taping of Rehearsals and Concerts 70
Participant Interviews 72
Researcher Observations 74
Data Analysis Procedures 74
Analysis of Instruction 76
Analysis of Interviews 78
Analysis of Observations 79
Triangulation of Data 80

IV. ANALYSIS OF DATA 82

Analysis of Instruction 83
Part I - Rehearsal Characteristics 83
Comparisons with the Pilot Study 84
Symphonic Band Instruction 88
Symphonic Band Performance Issues 88
Instructional Changes Over Time 89
Teaching Behaviors 91
Teaching Strategies and Instructional Goals 93
Wind Ensemble Instruction 95
Wind Ensemble Performance Issues 96
Instructional Changes Over Time 97
Teaching Behaviors 98

Teaching Strategies and Instructional Goals 100
Part II - Related Research Questions 101
Analysis of Subject Interviews 104
Part I - Subject's Background, Perceptions, and Intentions 105
Subject's Background 105
Subject's Perceptions 108
Subject's Intentions 112
Part II - Related Research Questions 116
Analysis of Ensemble-Members' Interviews ... 128
Part I - Student Perceptions 128
Rehearsal Characteristics 128
Subject's Instruction 131
Part II - Related Research Questions 138
Analysis of Researcher's Observations 144
Part I - Rehearsal and Instructional Characteristics 144
Observed Rehearsal Characteristics 144
Observed Instructional Characteristics 147
Part II - Related Research Question 149

V. SUMMARY AND CONCLUSIONS 152

Summary 152
Methodology 152
Research Questions 154
Conclusions 160
Implications of the Study 160
Future Research 163

BIBLIOGRAPHY 167

APPENDICES 181

APPENDIX A. Pilot Study Data Form 181

APPENDIX B. Interview Questions (Subject) 182

APPENDIX C. Interview Questions (Ensemble Members) 185

APPENDIX D. Rehearsal Data Forms 186

LIST OF TABLES

Table		Page
1	Pilot Study Symphonic Band Instruction	62
2	Pilot Study Wind Ensemble Instruction	62
3	Pilot Study/Wind Ensemble Instructional Focus Comparison (Symphonic Band)	85
4	Pilot Study/Wind Ensemble Instructional Focus Comparison (Wind Ensemble)	85
5	Pilot Study/Case Study Instructional Methods Comparison	87
6	Symphonic Band Performance Issues	89
7	Instructional Changes Over Time (Symphonic Band)	90
8	Single-Element/Multi-Modal Instructional Patterns (Symphonic Band)	92
9	Wind Ensemble Performance Issues	96
10	Instructional Changes Over Time (Wind Ensemble)	98
11	Single-Element/Multi-Modal Instructional Patterns (Wind Ensemble)	99

LIST OF FIGURES

Figure		Page
1	Teaching Strategies Toward Conceptual Learning and Technical Development	15
2	Factors Influencing Learning and Performance in Large-Ensemble Instruction	17
3	Comparison of Dual-Tracing and Single-Element Instruction Toward Significant Musical Learning	18
4	Verbal/Nonverbal Instructional Technique Pairings (Pilot Study)	64
5	Original Video-Taping Schedule for Symphonic Band and Wind Ensemble Rehearsals	71
6	Revised Video-Taping Schedule for Symphonic Band Rehearsals	71
7	Triangulation of Data	75
8	Example of Instructional Event	84
9	Verbal/Nonverbal Instructional Technique Pairings (Case Study)	92
10	Teaching Strategies and Instructional Goals in Combination (Symphonic Band)	94
11	Teaching Strategies and Instructional Goals in Combination (Wind Ensemble)	100

EFFECTIVE REHEARSING WITH THE INSTRUMENTAL MUSIC ENSEMBLE: A CASE STUDY

Donald SeCheverell Buell
Under the supervision of Professor Gerald B. Olson
at the University of Wisconsin-Madison

This case study identified and examined factors contributing to success in effective teaching/conducting practice. The investigation focused on the symphonic band and conducted wind ensemble settings. Research questions centered on three broad theoretical areas: (a) the role of conducting, gesture, and verbal and nonverbal communication in effective teaching/conducting; (b) teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance; (c) the development of student understanding, retention, and transfer of learning in the instrumental ensemble experience. The study examined the relationship between successful teaching/conducting practice and elements of selected educational theory.

Data from analysis of video-taped instruction, subject interviews, ensemble-member interviews, and researcher observations was triangulated to corroborate factors which appeared to contribute to the subject's

teaching/conducting effectiveness. The purpose of the subject interviews was to determine why the instruction took the form that it did and how the subject's background and beliefs guided observed instructional behaviors. The purpose of the student interviews was to determine if, and to what degree, instruction was efficient. The nature of the students' learning, and its transferability, were also examined.

Effective instruction in this study was characterized by: (a) a varied, creative use of speaking, singing, and movement in different sensory-modal combinations; (b) a linking of specific teaching strategies to specific instructional goals; (c) an abundant use of multi-modal instruction. The teaching strategy of 'demonstration' aided conceptual understanding, and the strategy of 'marking critical features' was used primarily for performance readiness. Multi-modal instruction was a factor in generating instructional efficiency. Students learned quickly, retained what they had learned, and were able to transfer their learning to other musical settings.

It was concluded that effectiveness in teaching/ conducting was not the result of any single factor such as exceptional musicianship, conducting technique, or personality. It involved the establishment of positive learning environments, the appropriate linking of teaching

strategies to instructional goals, and the use of instructional behaviors sympathetic to individual differences in students. Continuous development of personal musicianship and thorough score-study were indicated to be requisites of effectiveness in teaching/conducting.

CHAPTER I

INTRODUCTION

One of the predominant means for teaching music is through the large-group ensemble. Conductors of bands, orchestras, and choirs know that to reach performance goals, musical understandings must be gained, and technical skills must be developed. Effective teaching to these ends is a critical issue because of the limitations of time. Instrumental ensemble conductors face numerous performance demands owing to public and institutional traditions. This factor generates a curricular pressure in that often there is insufficient rehearsal time to teach musical concepts and skills, and to prepare for performance.

Consequently, an instructor's efficiency and effectiveness as a teacher/conductor is an important determinant in the degree to which both immediate and broad objectives of music education can be achieved. This fact points to the need to focus research on teaching and learning in the conducted ensemble setting, particularly in the area of teacher effectiveness. Knowledge gained from these efforts can be applied directly to programs in music teacher preparation.

This study looked at three factors in effective

teaching in the large instrumental ensemble. First, it examined the role of conducting gesture, other movement, and verbal communication as they contributed to successful learning. Secondly, it examined the issue of teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance. Thirdly, it examined the development of student understanding, recall, and application resulting from effective teaching.

A useful means to study factors such as these is to investigate the relationship between pertinent educational theory and everyday practice. The approach herein was to look specifically at successful teaching, with the intent of identifying the reasons for its success. This involved observing how the factors that influence quality instruction and efficient learning operate in these settings. Knowledge gained from observation and analysis of successful conducting/teaching practice stands to help us understand why things happen, which, in turn, allows us to make appropriate decisions about strategy in teaching -- an important component of teacher preparation.

A significant part of the body of research in music education is the quantitative study aimed at verifying various educational theories through testing. While we value these efforts, certain research questions can be addressed most effectively through qualitative methods. This study did not test theory. Instead, it examined the

points raised above by means of a case study. Field research methods were employed, including a situational analysis of successful rehearsing. Theories that are useful for instruction, which were observed in rehearsals, were identified and labeled as part of the process of determining how they contributed to the overall success.

Information gained from this case study was aimed ultimately at the refinement of instruction in rehearsal technique. The research was designed to help us better understand and teach the requisites of conducting and gesture, verbal communication, and the efficient use of instructional time. Additionally, it was hoped that this investigation of teacher/conductor effectiveness could contribute generalizable information regarding the nature of teaching and learning in instrumental music in general.

Research Issues

The establishment of appropriate research questions for this project involved several stages. First, in an effort to identify specific kinds of issues to address, a set of broad questions regarding effective teaching was drafted. Secondly, a pilot study was initiated to address these questions. Finally, new and refined research questions were formulated from an analysis of the pilot study data.

Initial Questions

Research questions in studies involving qualitative measures often hinge on observable phenomenon existing in the setting being studied. As Krueger (1987, p. 73) points out, ". . . a predetermined hypothesis should be avoided . . ." when defining research problems and selecting methodology. It is important that the researcher remain open and sensitive to the ways in which subjects act and respond in their teaching/learning environments. This allows for the generation of new and perhaps unanticipated questions.

Accordingly, a set of relatively broad questions regarding observable rehearsal factors was generated to serve as a starting point for the study. These questions reflected the researcher's particular areas of interest and personal curiosity. They developed as a result of twenty years as a practicing teacher and conductor, from observing and speaking with other conductors and music educators, and from related readings. They were designed to identify phenomenon pertaining to teacher/conductor effectiveness which could be observed without disrupting the learning environment.

The initial questions were:

1) Are there observable conducting and teaching patterns which contribute to the effectiveness of instruction?

2) Are there observable teacher/conductor behavior differences associated with the dual functions of 'teaching' and 'preparation for performance?'

3) Are there observable teacher/conductor behaviors which change over time (i.e., from rehearsal to rehearsal, as performance events are imminent)?

4) Do the topics of instruction fall into identifiable categories and, if so, are there differences in the methods used to address each?

5) Are musical skills taught differently than musical concepts?

6) How do initial instruction and its reinforcement differ?

7) Are there observable relationships between verbal and nonverbal communication?

Pilot Study

A pilot study was initiated to gather data relevant to these initial questions and interests. It took the form of a single-person case study carried out over an eight-week period. Observation was used as the primary means for gathering data because it was the most effective way of capturing the variety of components characterizing effective teaching and successful learning. In addition to the phenomena identified in the original questions, other factors such as general teacher methodology, continuity, nature or 'tone' of presentation, interpersonal and social relations in the setting, and general room dynamics influence learning, and were considered relevant to the study.

An acknowledged effective teacher/conductor was identified and asked to participate in the pilot study. He agreed, and approved unrestricted video-taping of his regular rehearsal sessions. Two distinctly unique university ensembles normally conducted by the subject were used. This was done to provide a comparison in teaching behaviors and strategies used for relatively dissimilar instrumental groups, with different achievement levels. For a set of six contiguous rehearsals, a video camera was trained on the conductor from a vantage point behind and near the center of the respective groups. The camera was turned on at the beginning of each rehearsal, and stopped at the conclusion.

This procedure resulted in the capturing of virtually all instructional activity emanating from the podium. This included the conductor's singing and spoken words, as well as the playing of the ensemble. Additionally, data was gathered through the researcher's observations during the same rehearsals, and recorded as field notes.

As stated, the pilot study was designed to identify and consider certain elements of effective teaching. It was anticipated that the answers to the initial questions would be supplied through review and analysis of the video-tapes and field notes, and that new questions would arise. Although the researcher already held some beliefs and suspicions about several of the points in question,

the intent was to bring fresh eyes and ears to the setting.

Results of the Pilot Study

Initial viewings of the video-tapes revealed that instructional moments (i.e., those where the conductor stopped the groups and delivered instruction) centered around five musical topics. These topics were:

1) Precision (rhythmic and ensemble)
2) Phrasing and musical expression
3) Balance and blend
4) Articulation
5) Sound (intonation and tone)

As a starting point, data gathered from the two sets of rehearsals was compared. This was done to determine if there were noticeable consistencies in teaching manner, despite the substantial differences between the ensembles. This procedure revealed similarities between the groups in regard to the general instructional topics stated above. For example, the total amount of instruction directed to "balance and blend," was virtually the same for both ensembles. This was also true in the case of "precision," and "sound." On the other hand, the lesser-experienced

group received twice as much instruction dedicated to "articulation" as did the more-experienced group. Conversely, the more-experienced group received twice as much instruction relating to "phrasing and musical expression" as did the lesser-experienced group.

The between-group similarities in "balance and blend," "precision," and "sound" suggested the existence of an agenda for dealing with what were primarily technical issues. That is to say, this 'effective' conductor appeared to adhere, consciously or unconsciously, to a consistent pattern for the goal of performance, regardless of the different achievement levels between the ensembles. This phenomenon seemed, in part, to answer the initial question regarding observable patterns. However, more significant questions, such as why this occurred, and how it contributed to efficiency, needed to be considered.

The differences between the two sets of rehearsals appeared to reflect where the conductor felt more time was needed to pursue conceptual learning. The fact that this phenomenon existed as a pattern, combined with the fact that this teacher/conductor was noticeably effective in rehearsal, underscored the need for further qualitative study, particularly involving subject interviews.

Another interesting aspect of the pilot-study instruction was that instructional moments invariably were

characterized by two or three simultaneous behaviors. The predominant behaviors were speaking, singing, facial expression, and movement. Movement included conducting, other hand and arm gestures, head movement, and upper body movement. In addition, there were examples where the subject moved to a completely different space in the room to personalize a comment to a smaller section or an individual. Verbal communication was accompanied by conducting gesture or other forms of nonverbal communication in over ninety percent of the instructional moments. There were no examples where the subject only sang to the groups.

This pointed to the need to study more succinctly effective teaching which reflects particular theories of cognition, sensory-modal learning, and memory, as well as modes of instruction and communication. It was apparent through a growth in performance skills that students in both groups had high levels of conceptual retention. This indicated that the instruction was efficient.

Further analysis of the video-tapes of the lesser-experienced ensemble revealed a pronounced shift in instructional emphasis, over successive rehearsals, from "articulation" and "sound" to "precision." This phenomenon could have been attributed to a desire by the conductor to focus more intently on matters relating to

imminent performance. Clearly, as the number of available rehearsals diminished, goals associated with polished performance superceded, and less attention was directed to broad or generic musical issues. This phenomenon raised questions about an overall agenda for large-group instruction, and how the nature of effective teaching might be expected to change over time.

Each of the points mentioned in this summary bears a relationship to existing educational theory. We can look to these theories to improve our understanding, and to help formulate new and more significant research questions. The observed phenomena of a consistent agenda, efficient use of instructional time, and appropriate modes of instruction are concomitant with effective teaching. A brief discussion of theories relating to these factors follows.

Related Theories

This pilot study of an effective teacher/conductor uncovered several constantly present phenomenon which needed to be considered in the light of what research has revealed previously about teaching and learning in music.

Gestural and Verbal Communication

Theories of human communication are relevant to the analysis of effective teaching/conducting. It was evident that the subject of the pilot study communicated with the ensemble in an effective manner. It also was evident that the subject regularly used a variety of instructional means in doing so. Information was passed to the group in two ways -- through gesture (i.e., patterned conducting, other arm and hand movements, facial expression, and body movement), and through words and singing. In addition, the subject responded to the group in visual ways, particularly through facial expression. An interactive process in the rehearsal setting clearly was in operation.

Nonverbal Communication

Nonverbal communication conveys important information. Sometimes this information reinforces a simultaneous delivery of verbal information. At other times, it tempers or changes the meanings of spoken words. Nonverbally-presented information often is of an affective nature, especially in musical settings. These factors point to the need to investigate the role nonverbal communication plays in effective teaching/conducting.

Harper, Wiens, and Matarazzo (1978) provide a comprehensive survey of behavioral/experimental research in nonverbal communication. Studies fall into five areas:

(a) paralanguage and temporal characteristics of speech; (b) facial expressions; (c) kinesic behavior; (d) visual behavior; and (e) proxemics, or the use of space and distance. Some of this research relates to and explains observed conductor behaviors in the pilot study. For example, the subject occasionally made voice sounds which were not words or singing, such as percussive effects. This phenomenon is 'paralinguistic' in that it is not truly language. Additionally, the subject employed changes in his speaking voice to heighten the impact of his statements.

Overt facial expressions frequently accompanied regular conducting and other gesture in the pilot study. Research in this area by Mehrabian (1972) and Draughton (1973) points to the value of practicing and consciously applying facial expression to improve communication.

The term "kinesic" refers to all bodily movements which are communicative in nature. Again, the pilot-study subject regularly employed non-conducting movements which appeared to assist the ensemble in understanding musical concepts. Studies by Rosenfeld (1967), Mehrabian and Williams (1969), and London (1973) point to the value of kinesic behavior in increasing persuasiveness.

Research on visual behavior (Cranbach, 1971; Exline and Eldridge, 1967) has indicated that visual behavior also is a significant factor in nonverbal communication.

These studies underscore the importance of gaze from an instructor, and conclude that it increases overall teacher effectiveness.

Verbal Communication

Virtually all of the instruction in the pilot study had a verbal component. Of particular interest was the use of analogy by the subject. Studies of analogy and metaphor by Green and Galway (1986) and Ristad (1982) suggest that it is an effective technique in the facilitation of learning. However, a preponderance of evidence exists which indicates that less talking and more performance is the best approach in instrumental ensemble rehearsal. This study considered the verbal communication of the subject in the light of what research and theory have revealed about its relationship to teacher effectiveness.

Strategy for Conceptual and Technical Instruction

The existence of an agenda, reflected through immediate strategy, was apparent in all the rehearsals. The teaching approach revealed what the conductor felt should, and could, be done at any given moment. (In this case, 'should' pertains to the subject's perception of the needs of the musicians and the music, and 'could' relates to the subject's understanding of what the students knew,

and were capable of achieving.)

Contemporary studies by Rosenthal (1984), Madsen (1985), Cole (1985), and Wood, Bruner and Ross (1976) have explored conceptual models of applied instruction which appear to relate to the issue of teacher strategies in large-ensemble settings.

Some of these studies advance the theories of the late Russian psychologist, Lev Vygotsky. Vygotsky, in Thought and Language (1934), said that a "Zone of Proximal Development" exists between a student's existing capabilities, and the teacher's assigned expectations (Kennell, 1989). The pilot study indicated that a factor in the subject's effectiveness was the ability to set and adjust ideally the width of a similar 'zone' to maximize learning. In the large-ensemble setting, it appears that Vygotsky's teacher expectations are exemplified through the difficulty of the repertoire, and immediate, short-term performance goals.

Further, Kennell suggests that, consciously or not, teachers employ distinct strategies to move students across the Zone of Proximal Development, strategies which are determined by needs (i.e., technical development or conceptual understanding). While the video-tapes contain instances of behavioristic drill and practice for technique, most often these performance problems were turned into conceptual issues. Students were presented

with a 'concept of...' articulation, sound, and/or spacing. On most occasions, the teacher made a conceptual auditory, visual, kinesthetic evaluation, provided an appropriate model, and then proceeded to drill and practice. Figure 1 illustrates the means (strategies) that, using principles from Vygotsky, teacher/conductors might employ to move students across the Zone of Proximal Development.

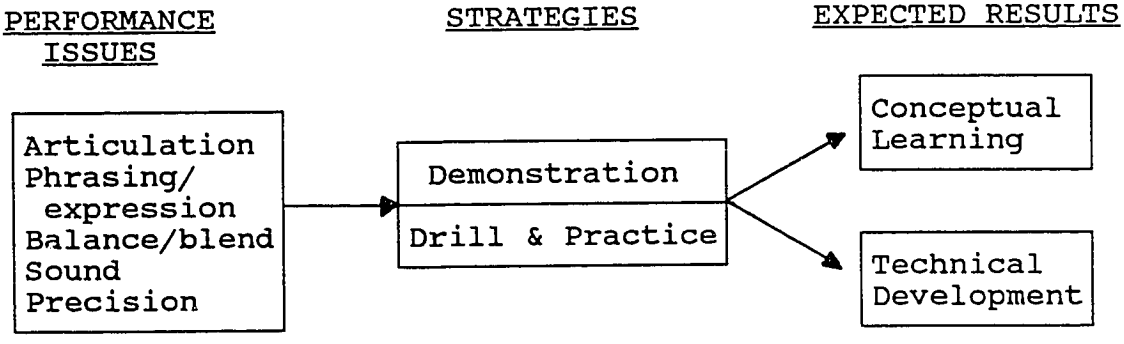


Figure 1
Teaching Strategies Toward
Conceptual Learning and Technical Development

More quantitative and qualitative investigation is in order in this area because it relates directly to the issues of teacher effectiveness and teacher preparation.

Learning and Instruction

Instructional Modes and Learning Style

Theories which relate modes of instruction and cognition are particularly relevant to phenomenon observed in the pilot study. We know a great deal about cognition

in general, and about perception and cognition in music. The profession has benefitted substantially from research which has explored how we gather and interpret information in music.

One of the components of cognition is cognitive style. An element of cognitive style is learning style. An awareness of learning style can play an important role in the effectiveness of a teacher's instruction. In music, learning style pertains to the sensory-modal means of interpreting and expressing knowledge, as well as emotions and meanings. This involves hearing, seeing, and movement (auditory, visual, and kinesthetic experiences).

A summary of related research by Doyle and Rutherford (1984) establishes that the matching of student learning styles with appropriate styles of teaching facilitates learning. Learning is more efficient if teachers are sensitive to, and teach to the differences in, learning style preferences and strengths in their students. It appeared that a contributing factor to the effectiveness in the teaching in the pilot study was the consistent use of all three sensory modes in the presentation and reinforcement of content.

Figure 2 illustrates how the independent variable of verbal and nonverbal "teacher behavior" and the intervening variable of "learning style preference" influence the means-to-ends process in the large-ensemble

setting. These factors unquestionably intercede, and temper the efficiency of teaching and learning.

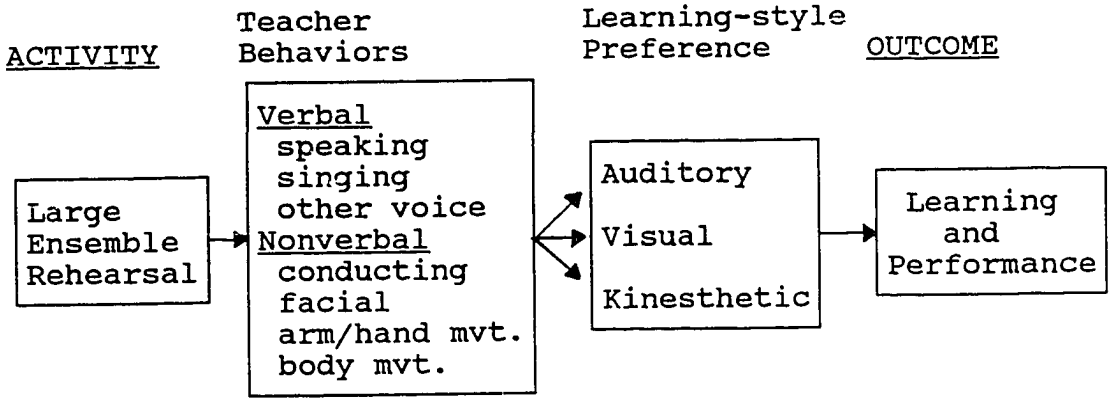


Figure 2
Factors Influencing Learning and Performance in Large-Ensemble Instruction

Dual Trace Theory

It was apparent that the subject was engaging in behavior that was powerful in the achievement of ends reflected by high quality performance. This was done in a very limited amount of time. From this, it can be concluded that the initial instruction was effective, that retention occurred, and that transfer of learning was in operation throughout the rehearsal period.

A factor contributing to retention appeared to be the mode of presentation. The subject invariably gave information in a dual or multi-modal means. This phenomenon is discussed in research relating to the "dual trace" hypothesis (Paivio, 1975; Boisen, 1979). Dual or

multi-modal tracing is a theory of getting at information that says when a trace or path of understanding is laid down, it is more effective to be traced in more than one sensory mode at a time. For example, if a teacher can sing and model (show), or say and model, the concept will be understood more quickly and remembered longer than if only one mode is utilized in the presentation of information. Figure 3 illustrates how dual tracing is theorized to generate a more efficient path to significant learning.

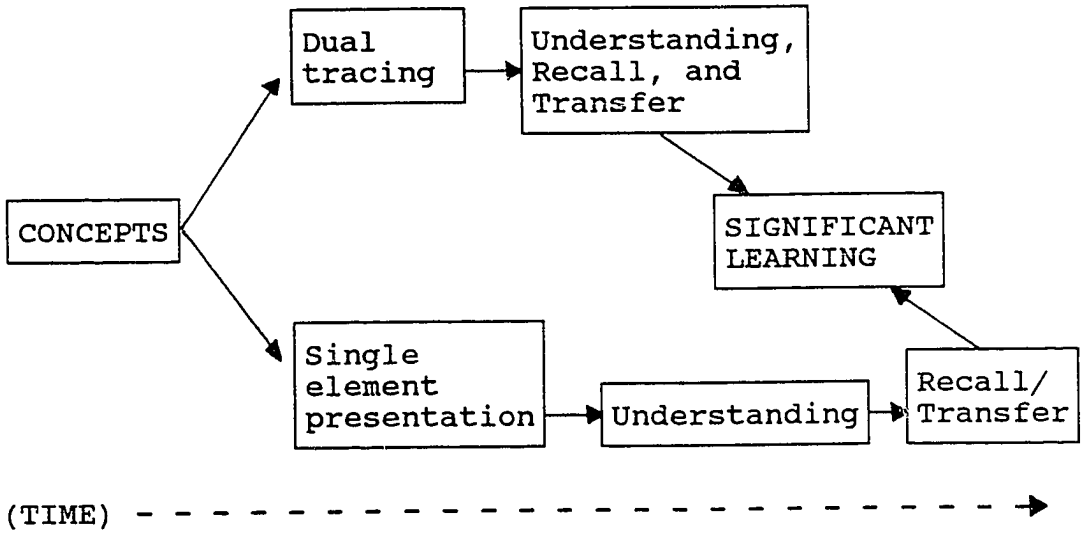


Figure 3
Comparison of Dual Tracing and Single-Element Instruction Toward Significant Musical Learning

There appears to be value in providing information this way. The benefits are that:

1) the information appeals to different types of learners in the ensemble because it is presented in different but simultaneous styles, and

2) according to the dual trace theory, the concept of "dual tracing" reinforces learning, and results in enhanced retention of musical concepts.

It can be conjectured that dual tracing, most likely unconsciously applied, was an important factor in the efficiency of the pilot study instruction.

All theories briefly mentioned here contributed, to some degree, to the effectiveness of this particular teacher/conductor. Despite the fact that the pilot study pointed to relationships between several theories and effective teaching practice, it did not provide answers to other critically important questions which sprung from the observations. Instead, this project demonstrated a need for more pointed research directly addressing the questions of "What is happening?" in effective teaching, "Why is it happening?" and "How does it affect learning?

Purpose of the Study

The pilot study looked at effective practice to identify contributing theories, as well as other influencing factors. It revealed several areas which were in need of more focused investigation.

Areas of Investigation

The purpose of this case study was to examine the following factors in effective teaching:

1) The role of conducting, gesture, and verbal and nonverbal communication in effective teaching/ conducting.

2) Teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance.

3) The development of student understanding, recall, and application in the large ensemble experience.

Each of these areas relates to the researcher's initial interest in effective teaching within the large ensemble setting.

Procedures

The pilot study revealed the existence of relevant data obtainable only through qualitative procedures, particularly through the interviewing of participants in effective teaching/learning settings. Accordingly, a similar, but expanded, case study of an acknowledged effective teacher/conductor was initiated to provide appropriate data to link successful practice with elements of existing educational theory.

The case study included a situational analysis of the

subject participating in regular rehearsal sessions of ensembles for which he was normally responsible. Raw data was gathered by audio- and video-taping these rehearsals. Additional data was gained through interviews of the subject and selected members of the ensembles, and through researcher observations. Data of a qualitative nature was extracted from these sources and subjected to analysis. All instances of instruction were isolated and studied.

Qualitative data was critical to the study because it allowed for a comparison of actions with statements made about beliefs and actions. Understanding how beliefs guided actions was of particular importance because of the relationship of this study to issues of music teacher preparation. Qualitative data is capable of revealing the intentions and assumptions of the participants and, accordingly, was used to clarify their meanings and interpretations.

Research Questions

The pilot study, and other research, have generated new research questions which guided this study. They are:

1) What specific teaching behaviors exist?
2) What factors influence strategy choice?
3) How does student or ensemble achievement level influence the immediate and overall rehearsal agenda?

4) How does teaching approach change over time?

5) What is important to teach immediately?

6) What learning will take care of itself?

7) On what basis does the effective teacher/conductor make decisions about the use of verbal versus nonverbal communication?

8) What must be attended to later, or given developmental time?

9) Do learners perceive, retain, and transfer information presented in a multi-modal fashion?

10) In what ways are existing theories manifested or apparent in this effective teaching setting?

11) What teaching behaviors and strategies are the result of an awareness of theory, observed principles, or learned behaviors?

Ultimately, the purpose of the study was to provide insight and generate understandings upon which decisions about teacher preparation can be made. Information gained from the study of a single effective teacher is only that, but it can stand as an example of a successful wedding of theory and practice, and it can serve as a basis for future investigation.

CHAPTER II

REVIEW OF LITERATURE

This review of literature focuses on writings pertaining to effective instruction in the instrumental ensemble rehearsal setting. The purpose of the review is to summarize and compare research findings, theoretical points of view, and other literature to provide insights specific to the constituent elements of effective teaching/conducting. This review is divided into three sections, each relating to one of the broad theoretical areas discussed in Chapter 1. These sections are:

1) Gestural and verbal communication in the conducted instrumental ensemble setting

2) Teaching strategies in conceptual learning and technical development

3) Learning and application resulting from effective rehearsal practice

Because the purpose of this study was to investigate effectiveness in teaching/conducting, emphasis was given to literature relating to theoretical, psychological and phenomenalogical research which has advanced the understanding of efficient teaching and learning.

Studies in Gestural and Verbal Communication

Conducting in an academic environment is a complex, interactive process which involves the provision of immediate musical leadership, the teaching of concepts, and the development of performance skills. The conductor must interpret the score, communicate his or her interpretation to the ensemble, and respond to the performance of the musicians. Conductors must employ whatever verbal and/or nonverbal means are deemed appropriate for immediate and long-term goals in musical performance and music education.

Nonverbal Communication

An important consideration in the study of teaching is that nonverbal behavior, a predominant instructional means in music, conveys a variety of types of information. In some cases, this information is redundant to that received through verbal channels, but often it is additional information which has impact on the verbal message, as well as the efficiency of transfer.

Greenfield (1984, p. 131), in a study of the teacher in learning activities, says that when "conceptual understanding of a problem is deficient, the expert may attempt to establish those concepts for the student

through some form of nonverbal communication." Nonverbal communication is a critical factor in music because of the affective nature of the medium in general. Conductors, like dancers, manifest the direct physical-anatomical relationship between movement and emotion as the art form is rehearsed and performed (Harper, Wiens, and Matarazzo, 1978, p. 119-164). Conductors give information nonverbally that is of an affective nature. At other times, they give information that is more factual. The mode of presentation has a direct impact on the effectiveness of the instructional process.

Most of the research in nonverbal communication falls into two main conceptual frameworks. One school of thought considers and investigates nonverbal communication as a stimulus-response phenomenon. These researchers have employed behavioral/experimental techniques in attempting to establish cause-and-effect relationships in nonverbal communication. Another school considers the most revealing and important dimension of nonverbal communication to be in the interactional processes occurring between people. This school views nonverbal communication in a larger, more holistic light in that they recognize other fields of interaction analysis in their research.

Behavioral/Experimental Research in Nonverbal Communication

Harper, Wiens, and Matarazzo's discussion of nonverbal communication outlines five basic areas of behavioral/experimental research: (a) paralanguage and temporal characteristics of speech, (b) facial expressions, (c) kinesic behavior of body movements, (d) visual behavior, and (e) proxemics (i.e., the use of space and distance).

Paralinguistic and Temporal Speech Characteristics

Nonlanguage sounds, such as sighing, moaning, and yelling are "paralinguistic" phenomenon. Conductors frequently use paralinguistics to demonstrate musical concepts to their players. As well, conductors employ variables such as pitch, tempo, and intensity with their speaking voice to enhance or clarify their point.

A number of researchers (Caldwell, 1980; Daellenbach, 1970; Heger, 1969; Pontious, 1983; Roshong, 1978; Thurman, 1977; Yarbrough, 1975) have carried out time and frequency research in this area. Yarbrough (1975) concluded that the varying of voice elements such as volume, speed, and pitch produces more on-task performance than unvarying voice patterns.

Attempts have been made to correlate speech patterns with emotional and attitudinal states. However, there remains a lack of conclusive information about its

effectiveness. This study investigated paralinguistic use, and attempted to determine how it contributed to the subject's effectiveness.

Facial Expression

Another focus of nonverbal research deals with facial expression. Harper, Wiens, and Matarazzo (1978, p. ix) suggest that it "may be the most important area of the body in nonverbal communication." Mehrabian (1972) found that the face was a significantly more effective variable in communicating attitudes than verbal or vocal characteristics. A study by Draughton (1973) suggests that the face improves the ability of clinicians to work with people, and that practicing duplicating expressions with a mirror is of value to this end.

Perhaps one of the most interesting or significant findings relating to music is that facial expressions of emotion are universal and not associated with culture. Ekman and Friesen (1969b) carried out research in this area which probably explains the success that 'foreign' guest conductors experience -- a common occurrence with major symphony orchestras, particularly in North America and Europe.

Kinesics

A third area of research in nonverbal communication deals with "kinesics," or body movements. Researchers in this area (Birdwhistell, 1970; Duncan, 1969) consider there to be linguistic-like relationships between all bodily movements, including facial expression and eye movements. They purport the existence of a nonverbal 'grammar,' determined by the context of movement. This grammar is revealed through the codification and study of small units of movement ("kines") which may range from one-fiftieth of a second to three seconds.

Other researchers consider kinesic behavior as movement in relation to other psychological variables, such as mood or personality characteristics. They believe that nonverbal movement behaviors and facial expressions either communicate something or indicate something. This communication may be conscious or unintentional.

Ekman and Friesen (1969b) developed a classification scheme for identifying various nonverbal kinesic behaviors based on their usage and origin. Behaviors are placed in the following categories:

1. Emblems: movements that are communicative substitutes for words
2. Illustrators: movements that accompany speech and accent, modify, punctuate, etc.
3. Regulators: movements that maintain or signal a change in listening/speaking role

4. Adaptors: self- or object-manipulations related to individual need or emotional state

5. Affect displays: facial expressions

Movements which are spacial, pictoral, and rhythmic are viewed as being extrinsic in that they stand for something else, or intrinsic in that they stand for itself. Musical examples of each of the five categories would be as follows:

1. Emblem -- a gesture known (shared) by conductor and players, such as a clenched fist indicating strength of sound or articulation

2. Illustrator -- a gesture showing the shape of a phrase

3. Regulator -- a gesture directing the players to listen to another section or idea

4. Adaptor -- a conductor closing his or her eyes in response to the music

5. Affect display -- a frown to illustrate musical intensity

It was noted in the pilot study that the subject frequently alternated between sitting on a conductor's stool and standing. Although no time-frequency data regarding this phenomenon was collected, it was the researcher's impression that the subject would stand when it was necessary to give information overtly. This behavior relates to research by Beigel (1952) who found that the standing position stimulates energy toward action and emotional expression. He reported that decisions come

faster and are more vigorous when standing.

Persuasiveness is a factor in effective teaching because it tempers students' attitudes toward learning and stimulates student engagement. A number of studies have found specific kinesic behaviors to increase persuasiveness. Rosenfeld (1967) found that smiling, head nodding, and forward leaning affect persuasiveness because they result in student approval. Mehrabian and Williams (1969) determined that increased facial activity and gesture increase perceived persuasiveness. Kinesic research by London (1973) indicates that confidence, expressed through posture, contributes to persuasiveness.

Visual Behavior

Eye contact, or interpersonal gaze, is a nonverbal phenomena which is significant to human interaction and communication. In most conducted ensemble settings, it is an understood requisite to successful rehearsal and performance. One of the functions of this study was to consider the role visual behavior plays in the effectiveness of the subject. A number of research subjects outside of music point to this phenomenon as being a contributor to teacher effectiveness.

A study with particular significance to music found a direct relationship between the amount of gaze by a speaker toward an audience, and the audience's perception

of the speaker. In this study, Beebe (1974) found that audiences viewed speakers as more skilled, informed, experienced, honest, and friendly when they received more gaze from the speaker. This finding has implications for conductors and musical ensemble members. Cranbach (1971) reports that visual behavior is important in signaling a readiness to communicate. According to Exline and Eldridge (1967), the perceived authenticity of a spoken message is influenced by eye contact. They found that more gaze results in a more favorable message.

Other studies indicating the importance of visual communication in establishing positive attitudes include Arygle and Ingham (1972), Kendon & Cook (1969), Rutter, Morley, and Graham (1972), and Mobbs (1968).

Interaction Analysis

An alternative research model in nonverbal communication is characterized by a interdisciplinary or holistic approach to problem solving. Unlike the cause-and-effect investigations of the behavioral/experimental school, studies in the "interactive analysis" paradigm consider human interactions as being more significant in the interpretation of human behaviors. This model is perhaps more suited to research pertaining to the conducted musical ensemble because of the inherent action-reaction characteristics of the rehearsal and the

performance processes. Conductor information, player response, and interpretation of the music are interactive elements which are always in a state of flux.

Speigel and Machotka (1974) proposed a theory as to how movement and gesture are perceived. They suggest that messages of the body are more like metaphors, and therefore specific coding and interpretation of them is of little value. Movement is considered to be independent of the inner state, not a representation of it. The most significant interaction is between the behavior and the viewer, and that the viewer is influenced by cultural and social experiences. Behaviors might be related to inner states, but other factors can intervene. In the ensemble setting, a conductor's nonverbal messages are both signals to the players, from whom a response is expected, and an evaluative reaction to the playing of the group. This interpretation speaks to the value of qualitative research, where observed behaviors can be compared to data obtained through the interview of participants who are expected to respond to nonverbal communication.

Scheflen (1982) points out that if research looks to only one person, or one person at a time, the interactions or co-actions will be missed. Scheflen's theory attempts to account for three levels of human interaction: (a) those influenced by social, cultural, and class factors; (b) those influenced by context, such as a rehearsal

environment; and (c) consciously altered interaction.

Chapple (1982) believes nonverbal interactive communication to be a product of impulses of the human body and the central nervous system. This view is in direct conflict with the stimulus-response school of thought. Chapple's research suggests the existence of a biological "rhythm" controlling behavior. "Relaxation oscillators," which are capable of shifting from one beat to the next, create this rhythm without external stimuli (Chapple, 1982, p. 40). The presence of another person(s) generates couplings or matchings of rhythms creating expectations and predictions. An example of this would be the way players in an ensemble become synchronized musically and emotionally with their instructor.

Olivia (1982) studied the synchrony of stress in speaking and gesture. As speech has rhythmical and metrical verbal stress, simultaneous information-giving gestures also have points of stress. This phenomenon of interdependent relationships is of particular interest in the study of music. A close look at effective teaching/ conducting behaviors may reveal relationships between the nature of the music, the concepts or skills being taught, and the visual component of the instruction. This information is of value to those who prepare music teachers.

Verbal Communication

The pilot study for this project revealed that most of the subject's instruction had an important verbal component. Research clearly has shown the transmission of cognitive information to be efficient and effective when appropriate verbal means are employed in the instruction process. For example, studies by Green and Galway (1986) and Ristad (1982) reveal that the use of analogies and metaphors is an effective technique commonly used by music teachers. As well, the general learning environment is most easily adjusted by verbal means -- the result being that more learning takes place.

Research focusing on ensemble rehearsal has indicated that less talking and more performing results in the most efficient use of rehearsal time (Bloomquist, 1973; Begian, 1968; Forsythe, 1977; Madsen, Wolfe, and Madsen, 1975). This speaks to the need and importance of carefully examining the nature of verbal communication which characterizes effective teaching/conducting practice. Grechesky (1985, p. 49) concludes, "The focus of any observation of an efficient, effective conductor must be on a balance between the quantity of performance time and the quality of verbal behavior that occurs during non-performance time."

A number of studies (Heger, 1969; Daellenbach, 1970; Yarbrough, 1975) have employed specific means for coding and examining verbal communication in teaching/learning environments. For example, Thurman (1977) constructed a time-frequency observation instrument which coded the following choral teaching/conducting behaviors:

1. Verbal communication
2. Statement references to musical elements of
    a. pitch
    b. time
    c. text/diction
    d. phrasing/dynamics
    e. tone color
    f. style
    g. vocal production
3. Demonstrations, verbal explanations, verbal imagery
4. Verbally expressed approval or disapproval feedback
5. Conducting and/or monitoring of rehearsal trials
6. Involvement with one voice, more than one but not all parts, or all parts; less than a phrase or more than a musical phrase.

Research and analysis of this nature, for the most part, has confirmed the long-held premise that positive reinforcement stimulates learning, and that direct, concise use of the language facilitates learning.

Of relevance to the investigation is a study of parent-child interaction by Bellinger (1979) which reveals that verbal directiveness of parents decreases as children

get older. The change-over-time phenomenon noted in this study might be explained by Bellinger's notion that conceptual assimilation reduces the need for verbal communication.

This researcher found no examples of research specifically focusing on verbal usage of acknowledged effective teacher/conductors, or effective teaching in general. The study provides summary statements regarding the subject's verbal communication.

Studies in Conceptual Learning and Technical Development

Teacher/conductors are faced with the dual challenge of teaching musical concepts, and developing the skills necessary for successful musical performance. Performance traditions and expectations, and the consequent nature of rehearsal, require that these ends be approached simultaneously. Conductors rarely have the luxury of being able to prepare for performance separately from carrying out fundamental instruction in music and large-group performance. It is in this regard that effectiveness substantially contributes to both requisites of successful music education.

Research focusing on this unique challenge is scarce. The best source of information regarding pertinent theories and practice exists in the repertory of writings

about conceptual learning and technical development in the individual. A number of studies have examined applied (private) music instruction in attempting to establish theoretical models. Some of these studies have produced findings which are particularly relevant to research in effective teaching/conducting in the instrumental ensemble setting.

Similar in nature to individual instruction, conducted ensemble teaching is characterized by an expert-novice, i.e., conductor-student, relationship of the participants. Various types of information, including interpretive/conceptual, theoretical (music), historical, as well as means of improving generic performance skills, are passed to ensemble members during the course of rehearsal. Madsen (1985) provides a description of this expert-novice relationship, and points out that the process of one-to-one instruction results in totally independent production and performance by the student, and the required musical growth to do so. There are comparable musical-growth outcomes from group instruction. Students acquire skills necessary for cooperative music-making, experience conceptual development in musical understanding, and learn about interpreting music.

Some of the research regarding teacher strategy is based on the notion of the "Zone of Proximal Development" advanced by Lev Vygotsky in Thought and Language.

Vygotsky's theory points to the existence of an area or region just beyond the student's current capabilities. Achievement in this 'zone' becomes accessible through the assistance of a teacher. The distance or width of this area is the distance between the students' level of development and the level of potential development as determined by the teacher. Important research focusing on teaching strategy has been concerned with how students are moved across Vygotsky's Zone of Proximal Development.

Effective teaching/conducting involves both conscious and subconscious strategies on the part of the instructor. Wood, Bruner, and Ross (1976) apply the term "scaffolding" in their description of teacher strategy. This term refers to the manner in which the teacher intervenes in bringing about learning. Their research identified six categories of teacher behaviors which serve as scaffolding strategies. Kennell (1989), in a study of scaffolding in applied music instruction, summarizes these strategies:

1. Recruitment. The tutor's first and obvious task is to enlist the problem solver's interest in and adherence to the requirements of the task.

2. Reduction in degrees of freedom. This involves simplifying the task by reducing the number of constituent acts required to each solution.

3. Direction maintenance. Learners lag and regress to other aims, given limits in their interests and capabilities. The tutor has the role of keeping them in pursuit of a particular objective. Partly it involves keeping the child "in the field" and partly a deployment of zest and sympathy to nurture motivation.

4. Marking critical features. A tutor by a variety of means marks or accentuates certain features of the task that are relevant. Marking provides information about the discrepancy between what the child has produced and what he or she would recognize as a correct production. The task is to interpret discrepancies.

5. Frustration control. There should be some such maxim as 'Problem solving should be less dangerous or stressful with a tutor than without.' Whether this is accomplished by 'face saving' for errors or by exploiting the learner's 'wish to please' or by other means, is of only minor importance. The major risk is in creating too much dependency on the tutor.

6. Demonstration. Demonstrating or 'modeling' solutions to a task, when closely observed, involves considerably more than simply performing in the presence of the tutee. It often involves an 'idealization' of the act to be performed and it may involve the completion or even explication of a solution already partially executed by the tutee. In this sense, the tutor is imitating in idealized form an attempted solution tried (or assumed to be tried) by the tutee in the expectation that the learner will then 'imitate' it back in a more appropriate form. (p. 27)

Bruner (1985) indicates that there is an order in which these strategies occur during the instructional process.

1) Recruitment (getting the attention of the learner)

2) Demonstrate (modeling the task or problem)

3) Reduce the degrees of freedom

4) Direction maintenance

5) Instruction (marking critical features and/or additional demonstration)

Wood, Wood, and Middleton (1978) suggest that teacher scaffolding strategies are not sequential, but are hierarchical. Various behaviors are used by the teacher depending on the degree of intervention or involvement deemed appropriate. Five levels of teacher intervention are identified. They are (from least involvement to greatest involvement):

1) General verbal encouragement
2) Specific verbal information
3) Selection (The instructor becomes physically involved with the problem situation.)
4) Prepared material (The teacher prepares material for the very minimum level student input.)
5) Demonstration (The teacher models desired behavior.)

The implications of these strategies for ensemble instruction are important. If research can identify parallel strategies or other similarities in the ensemble setting, analysis thereof may provide valuable information directly applicable to the development of a theoretical model for ensemble instruction. To be determined by research is whether effective ensemble instruction normally is characterized by a sequence of behaviors, or instruction which is responsive or interactive.

Noted in this writer's pilot study were instructional events where the subject used repetition as a means of developing skill, solving technical problems, and

reinforcing interpretive/conceptual ideas. Rogoff and Gardner (1984) explain that teacher behavior is sometimes characterized by instructional redundancy. According to their study, this strategy may continue until the skills or concepts are adequately assimilated by the student(s).

Kennell's study of applied instruction forwarded the notion that teacher behaviors or strategies reflect the nature of the task at hand. His study of teaching practice in applied university studios revealed that teacher approach is determined largely by whether concepts are to be taught, or performance skills developed. He applied three of Wood, Bruner, and Ross's six categories of expert behavior strategies to the applied instrumental setting (see p. 38). The strategies which Kennell centered on are "demonstration," "reducing degrees of freedom," and "marking critical features."

Kennell concluded that the demonstration strategy is used to advance a student's conceptual understanding of a problem. Reducing degrees of freedom is used to advance a student's skill mastery required to solve a problem. Marking critical features may be used for either the advancement of conceptual understanding or the development of skills. It is employed to get additional information about a student's skills and understandings or to highlight a student's existing skills or understandings. Additionally, Kennell concluded that task-associated

strategies account for, or contribute to, success in one-on-one instruction. Accordingly, it seems worth observing and analyzing similar or parallel behaviors in effective teaching/conducting practice.

Learning and Application

Learning is a change in a person's knowledge or behavior due to experience. Efficient learning in group settings happens when the means of instruction considers and/or allows for individual differences in students.

> The wide range of individual differences surely must mean that there is no single method for nurturing creativity; ideally the experiences we provide should be tailor-made, if not for individual students, at least for different types of students. We should remember that the same fire that melts the butter hardens the egg. (MacKinnon, 1978, p. 171)

A unique characteristic of the performing-ensemble 'classroom' has to do with end products. All students eventually author the same 'paper,' i.e., all members of the ensemble, ideally, come to a unified conceptual understanding of the music they perform -- and they perform it together. Complicating this issue is the

fact that music students do not enter the setting on an equal basis in terms of musical aptitude or learning characteristics. Effective teaching/conducting, in some manner, accounts for these differences. It is important that we understand in what ways students are different in determining how effective practice solves this dilemma.

Learning Style

A function of this investigation was to study the instructional style of an effective teacher/conductor to determine how information is presented to students. For teaching practice to be effective, it somehow must accommodate the individual differences in students inherent in any large group. To begin this review, the nature of learning style is considered.

Cognition is the act of knowing. The manner through which we come to know something is determined by our cognitive style. Kuchinskas (1979) defines cognitive style as the manner in which an individual acts, reacts, and adapts to the environment. More specifically cognitive style pertains to the modes individuals use to perceive, remember, and think, as well as the way in which they store, transform, and process information (Kogan, 1971). In recognizing the role teachers play in the learning process, elements of cognitive style need to be

examined for the purpose of determining the effect they have in learning environments. A number of attempts have been made to define one of the elements of cognitive style known as "learning style." These definitions have ranged from brief definitial statements to elaborate categorizations of learning style elements.

For example, Gregorc (1979a) views learning style as "consisting of distinctive behaviors which serve as indicators of how a person learns from and adapts to his environment. It also gives clues as to how a person's mind operates" (p. 234). Hunt (1979) says that learning style "describes a student in terms of those educational conditions under which he is most likely to learn. Learning style describes how a student learns, not what he has learned" (p. 27).

Dunn and Dunn (1979) provide an example of a highly categorized definition in that they identify 18 elements of learning style. These elements are organized into four major categories of stimuli; environmental, emotional, sociological, and physical. According to Dunn and Dunn, students respond to factors in each of these categories in ways which temper their learning. These 18 elements from four types of stimuli are: sound, light, temperature, design (environmental); motivation, persistence, responsibility, need for structure (emotional); working alone, working with another student, working with many

students, working with a team of students, working with an adult, working with some combination of adults and peers (sociological); perceptual strengths, intake, time of day, need for mobility (physical).

Sensory Modal Preference in Learners

Much learning style research has focused on the issue of perception, and is based on the notion of sensory channels or modalities. These modes are the ways in which individuals acquire information. Research most often is directed to sensory modalities involving visual, aural, and kinesthetic/tactile means of learning. Messick (1979) outlines these modalities as follows:

> Visual or iconic - interacting with the environment through figural or spatial thinking, the mind's eye
>
> Auditory or symbolic - interacting with the environment through verbal thinking, the mind's ear
>
> Kinesthetic/tactile or enactive - interacting with the environment through physical thinking, the mind's hand

The most efficient means of gathering information for an individual is considered to be a modality "strength" (Barbe et al., 1979). Sensory modal "preference" is the means preferred by an individual. A person's sensory modal preference is not necessarily their sensory modal

strength. Research by Dunn (1984, p. 13) revealed that student achievement was greater when modality preference was matched by equivalent teaching means.

It follows then that for effective teaching/ conducting to occur, where instruction is meaningful to all students, information must be presented in a variety of ways. Learning and performing music requires access into auditory, visual, kinesthetic and tactile sensory systems. In larger ensembles a variety of sensory modal preferences certainly are present. Olson (1980) states,

> If it is true that a student's approach to learning gravitates to a specific modal preference and remains stable unless altered by instruction, it seems clear that the teacher will have to change and vary instructional strategies if all students are to have an equal chance at success. (p. 26)

Dunn and Dunn reported that between 20 and 30 percent of students appear to be auditory, i.e., they learn and remember what they hear. Approximately 40 percent are visual, with the remaining percent being either tactual/kinesthetic, visual/tactual, or some combination of these four major senses. Further, Hyman and Rosoff (1984) say,

> Since most teachers do not have the necessary teaching styles to match their students' range of learning styles, we need to be able to educate teachers to adjust their current teaching styles so that they will match their students' learning styles. (p. 35)

Herein lies an important reason to study effective practice -- to ascertain how individual differences are either knowingly on unknowingly accommodated. Research has indicated that learning will be maximal when the appropriate form of instruction is matched to the individual student.

Matching Teaching with Learning Style

Research in learning styles has led to an interest in the benefits of 'matching' students to learning environments. A growing body of research has been examining the question of how matching affects cognitive outcomes, and student satisfaction with different types of educational processes. These studies were divided into two general types, those that propose to match students with teachers based on personality characteristics, and those that consider teaching strategies and their appropriateness for different types of students (Renzulli

and Smith, 1978).

Studies by James (1962), Pascal (1971), and Smith (1976) found that there was significant difference in student achievement and attitude toward subject matter when students were allowed to learn in their preferred mode of instruction. Thelen (1967) reported that in situations where teachers and students were matched, classes were more manageable, students received higher grades, and were generally more satisfied with classroom activities. On the other hand, McDonald (1972), in a study considering personality attributes, found that mutual attraction between students did not seem to affect classroom interaction patterns.

The relationship of these studies to effective teaching/conducting lies in the evidence that effective practice delivers instruction appropriate for all individuals in the ensemble. Joyce and Hodges (1966) report that teachers who can purposefully exhibit a wide range of teaching styles potentially are able to accomplish more than teachers whose repertoire are relatively limited.

Dual Trace Hypothesis

A positive outcome of effective teaching/conducting is the ability of students to remember and apply learned

concepts and skills in new situations. One of the primary modes of remembering involves an imaginal system known as "mental imagery." Memory imagery pertains to how things looked, sounded, felt, or tasted. Conversely, the "verbal-symbolic" mode, which also contributes to remembering, is concerned with what things resembled, what they sounded like, looked like, or felt like (Bower, 1972). According to Hilgard and Bower (1975),

> A word . . . that is imaged or a picture that is named has the advantage of having two, redundant copies of the memory trace laid down. The redundancy prolongs memory in comparison to abstract items, since the second, imaginal trace is likely to survive after the initial verbal trace has decayed. That is, not only are there two traces, but the one in the imaginal system seems more resistant to forgetting. (p. 589)

This notion is known as the "dual trace" hypothesis.

It can be surmised that if teaching/conducting is comparatively effective, the student attributes of remembering and appropriate application are in operation. Particularly in music, where finite concepts and skills must be applied numerous times in numerous settings, memory is of critical importance. 'Effectiveness' in

teaching relates to memory, and implies an efficiency which results in not having to teach the same things repeatedly.

Research has indicated that dual tracing contributes to the memory dimension of learning. Paivio (1975) offers an insightful discussion which has relevance to the use of language, i.e., verbal communication, in the conducted ensemble setting. Conductors frequently use words to convey conceptual information. About this, Paivio points out that language is characterized by a sequential word-following-word presentational format, while art symbols are perceived as gestalts. Reimer (1970) explains that art existing in time, which would include dance and expressive movement, even though spread out from beginning to end, is similarly a gestalt phenomenon. The expressive content is perceived at the completion of a phrase or a phrase-like gesture.

In considering ways in which a teacher/conductor aids the memory process, attention needs to be paid to the effect of dual tracing, where concepts are addressed simultaneously with sequentially-delivered words and gestalt gestures. It clearly appears as if the development of musicianship is aided by teaching approaches, such as dual tracing, which are in accord with natural memory processes (Olson, 1980, p. 26-27).

In the pilot study, the subject invariably presented conceptual information in a dual-traced fashion. Explanations of ideas were accompanied almost always by gestural representations. Both ensembles in the pilot study appeared to learn quickly, and remember musical concepts and specific performance details.

Chapter 2 of this study has reviewed literature related to effective instruction in the instrumental ensemble rehearsal setting. In this process, important constituent elements of effective practice have been identified and tied to three theoretical areas; gestural and verbal communication, teaching strategies in conceptual learning and technical development, and learning and application resulting from effective teaching/conducting. The research methodology designed to analyze effective teaching/conducting in the light of these three theoretical areas is outlined in Chapter 3.

CHAPTER III

METHODOLOGY

The purpose of this study was to identify and examine factors contributing to the success of effective teaching/conducting practice. The investigation focused specifically on the large instrumental ensemble and conducted chamber ensemble settings, and involved the analysis of effective practice by an acknowledged successful teacher/conductor. Specific research questions pertaining to effective teaching/conducting stemmed from three broad areas central to this investigation. These areas were:

1) The role of conducting, gesture, and verbal and nonverbal communication in effective teaching/conducting.

2) Teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance.

3) The development of student understanding, recall, and application in the large ensemble experience.

Ultimately, this study intended to provide information useful in the process of music teacher preparation.

Research Questions

Each of the broad areas listed above was examined by considering questions which involved existing theory, observable phenomenon, and the understandings, intentions, and consequent behaviors of the study's subject and student participants. The research questions designed to consider these broad areas were:

1) What specific teaching behaviors existed?

2) What factors influenced strategy choice?

3) How did student or ensemble achievement level influence the immediate and overall rehearsal agenda?

4) How did teaching approach change over time?

5) What was important to teach immediately?

6) What learning took care of itself?

7) What was attended to later, or given developmental time?

8) On what basis did the effective teacher/conductor make decisions about the use of verbal versus nonverbal communication?

9) Do learners perceive, retain, and transfer information presented in a multi-modal fashion?

10) In what ways were existing theories manifested or apparent in this effective teaching setting?

11) What teaching behaviors and strategies were the result of an awareness of theory, observed principles, or learned behaviors?

Value of Qualitative Method to the Study

Case study methodology is an effective means of examining the complexities of teacher/student interactions identified in this study. It is a methodology readily applicable to subject-matter involving "the dynamics of human, social, and organizational relations, behavior, and development" (Fisher, 1978, p. 265). The profession of music teacher preparation, in particular, stands to gain from case study because school music teachers regularly are involved in the "dynamics" referred to by Fisher.

Music education needs to go beyond considering empirically verifiable characteristics of good and bad teaching. Case study methodology, which typically employs observation and interview, can go beyond normative data in that it considers participants' backgrounds, reasoning, and interpretations. Such qualitative information is critical to the study of effective teaching/conducting because it can reveal why a subject is successful, and why certain teaching strategies are used.

The value of this study rests in the usefulness of its findings to programs in music teacher preparation. If teachers of teacher/conductors are able to analyze and discuss successful models, and provide examples, students are likely to development a more critical view of their own behaviors in similar settings. Case study can provide

a basis for more objective analysis of effective teaching so that the profession does not have to rely on 'anecdotal' models.

Related Educational Theory

The methodology of this study was chosen because the nature of the resulting data would be useful to a theoretical discussion and analysis of effective teaching/conducting. Each of the broad areas of investigation mentioned above involved knowledge gained from prior research and/or theories of learning which related to the specific research questions listed above. These questions provided data for discussion and analysis.

The research questions pertaining to verbal versus nonverbal communication, and how cognizant a teacher/conductor need be of theory, were considered in light of theories relating to instructional modes and learning style. Studies described in Chapter II indicated that matching student learning styles with appropriate styles of teaching facilitates learning. Learning is more efficient if teachers are sensitive to, and teach to the differences in, learning style preference in their students. In this study, summary data, gathered through observation and analysis of video-taped rehearsals, revealed the degree to which various modes of presentation

were employed. Subject and participant interviews were used to reveal why the subject used various modes and whether participants benefited from this approach.

Teacher-strategy research questions relate to the theories of Vygotsky (1934), Wood, Bruner and Ross (1976), and the research of Kennell (1989). These theories suggest that teacher strategies reflect the establishment and adjustment of a "zone" between present student ability and assigned expectations. Further, related research suggests that teachers employ distinct instructional behaviors depending on whether concepts are to be taught, or skills developed. In-depth interviews and an analysis of instruction provided qualitative data regarding these issues.

The research questions focusing on immediate versus long-term problem attention, and questions about student perception, retention, and transfer, relate to dual trace theory. Multi-modal or dual trace theory suggests that the path to student understanding, and subsequent recall and application, is more efficient if information is presented or traced in more than one sensory mode at a time. This study examined this phenomenon by comparing qualitative data, gathered through student interviews, with summary statistics obtained from analysis of video-taped rehearsals.

Pilot Study

The pilot study played an important role in determining and refining the procedures employed in the case study. The following detailed description of the pilot study explains how and why qualitative methods were used, and which procedures proved to be the most valuable.

Initial Questions

Effective teaching/conducting techniques can be taught if they are factors which are identifiable and describable, and are understood by the instructor. To begin the process of identifying and understanding effective practice, a set of broad questions regarding observable rehearsal factors was generated. These questions were designed to identify phenomenon pertaining to teacher effectiveness which could be observed without disrupting the subject, or the students, in their normal ensemble settings. The initial questions were:

1) Are there observable conducting and teaching patterns which contribute to the effectiveness of instruction?

2) Are there observable teacher/conductor behavior differences associated with the dual functions of 'teaching' and 'preparation for performance?'

3) Are there observable teacher/conductor behaviors which change over time (i.e., from rehearsal to rehearsal, as performance events are imminent)?

4) Do the topics of instruction fall into identifiable categories and, if so, are there differences in the methods used to address each?

5) Are musical skills taught differently than musical concepts?

6) How do initial instruction and its reinforcement differ?

7) Are there observable relationships between verbal and nonverbal communication?

Methodology

The pilot study was initiated to gather data relevant to these initial questions and interests. Two single-person case studies focusing on these issues were carried out over an eight-week period. Observation was used as the primary means for gathering data. In addition to the phenomenon identified in the questions listed above, other factors such as general teacher methodology, continuity, nature of presentation, interpersonal and social relations in the setting, and general room dynamics were presumed to influence learning, and considered relevant to this study.

An acknowledged effective choral teacher/conductor and an acknowledged effective instrumental teacher/ conductor agreed to participate in the pilot project. Both approved video-taping of their regular rehearsal sessions. A 40-member choir, comprised primarily of undergraduate students, and two university instrumental ensembles were video-taped. The instrumental ensembles

were a 70-member symphonic band, composed mostly of undergraduate music majors, and a wind ensemble, ranging from 6 to 18 members, most of whom were music graduate students. Two instrumental ensembles were studied to provide a comparison in teaching behaviors and strategies used for relatively dissimilar instrumental ensembles.

For a set of six 2-hour rehearsals of each group, a standard VHS video camera was trained on the respective teacher/conductors. It was positioned behind the instrumental groups, and to the side of the choir. The camera was turned on at the beginning of each rehearsal, and stopped at the conclusion. This procedure resulted in the capturing of all instructional activity emanating from the podium or teaching area. This included the conductors' singing and spoken words, as well as the performance of the groups. Additionally, data was gathered through researcher observations during the same rehearsals, and recorded in the form of field notes.

A preliminary review of all the video-tapes, in the order they were recorded, was carried out to see what observable phenomenon or behaviors were present in the rehearsals. In as much as the researcher did not wish to prejudice the experience, no particular findings were presumed or anticipated.

The initial viewing revealed that a significant difference existed between the choral and instrumental

rehearsals. It was noted that the majority of instruction was devoted to issues indigenous to the differences between the two genres. For example, matters relating to text received much of the attention of the choral instructor, whereas problems relating to articulation and instrumental blend were more often the focus of the instrumental conductor's instruction.

At this point, a decision was made to narrow the pilot study to one of the teacher/conductors. This was done because the data from the two types of groups was too dissimilar, making comparisons and conclusions difficult, and the study less practical. The instrumental subject was retained for the pilot study because of the researcher's particular preparation and experience in instrumental music and instrumental music education.

The initial review of the tapes revealed that verbalized instruction in the instrumental ensemble settings centered on the following musical topics:

1) Precision (rhythmic and ensemble)
2) Phrasing and musical expression
3) Balance and blend
4) Articulation
5) Sound (intonation and tone)

Consequently, a tabulation sheet was designed to record summary data about verbalized instruction, (see Appendix A), and the video-tapes were viewed again. The number of times each of the five musical topics were addressed was recorded. These figures were converted to percentages reflecting how much instruction was directed to each topic in the course of the video-taped rehearsals. For example, if five of a rehearsal's twenty instructional events were directed to articulation, a figure of twenty-five percent was recorded for that topic.

Additionally, the method of instruction for each event (i.e., spoken explanation or demonstration by singing) was recorded. Percentages for these totals also were calculated and recorded. One tabulation sheet was used for each rehearsal, and averages for each topic category were computed after the final video-taped rehearsal session for each of the two instrumental ensembles.

Results of the Pilot Study

The following tables indicate the percentage of instructional events and the instructional techniques directed to the five musical-topic categories.

Table 1
Pilot Study Symphonic Band Instruction

Symphonic Band	Percent of Instruction	Instructional Method explaining/singing	
Phrasing/expression	28%	30%	70%
Precision (rhy/ens)	21%	50%	50%
Articulation	20%	19%	81%
Balance/blend	17%	86%	14%
Sound (int/tone)	14%	95%	5%

Table 2
Pilot Study Wind Ensemble Instruction

Wind Ensemble	Percent of Instruction	Instructional Method explaining/singing	
Phrasing/expression	36%	26%	74%
Precision (rhy/ens)	22%	47%	53%
Articulation	10%	15%	85%
Balance/blend	19%	85%	15%
Sound (int/tone)	13%	95%	5%

An interesting feature of the pilot study data was that it revealed several striking similarities in instruction between the two ensembles. For example, the percentage of instruction directed to "balance and blend" was virtually the same for both groups. This also was true in the case of "precision" and "sound." On the other hand, the Symphonic Band received twice as much instruction directed to "articulation" as did the more experienced group. Conversely, the Wind Ensemble received

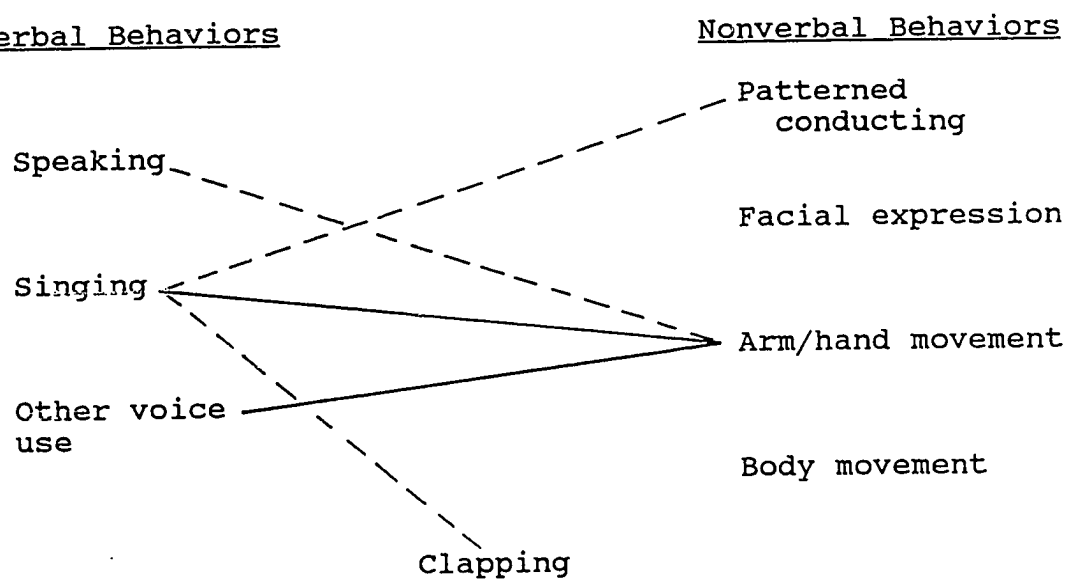
twice as much instruction in "phrasing and musical expression" as did the Symphonic Band. The similarities between the two sets of data suggest the existence of an agenda for dealing with what were primarily technical issues. That is to say, the subject adhered to a consistent pattern for the goal of performance readiness, regardless of the different levels of the two ensembles.

Equally significant were the strong similarities between the ensembles in figures which indicate the methods of instruction used (i.e., "explaining" versus "singing"). It appeared that, regardless of experience or achievement levels, concepts important to individual contributions were taught most often by demonstration. However, when a musical decision regarding overall ensemble effect had to be made, such as in the case of balance, the subject simply explained the goal.

The consistency of this data, between the ensembles and over time, indicated that the use of these instructional modes was characteristic of the subject, and could be regarded as a pattern. The individual interviews for the subsequent case study were intended to provide data regarding the effect these behaviors had on the efficiency of musical learning.

Another interesting aspect of the instruction, not reflected in Tables 1 and 2, was that most instructional moments were characterized by two or three simultaneous

presentation behaviors. The predominant behaviors were speaking, singing, other voice sounds, facial expression, and movement. Movement included conducting, other arm and hand gestures, and head and body movement. The following diagram indicates the predominant teaching behaviors, and the simultaneities of them which occurred most often during rehearsals. All connecting lines in the diagram indicate common pairings. Pairings indicated by solid lines occurred more frequently than those indicated by dotted lines.



("Clapping" is listed independently from verbal and nonverbal behaviors because it results in both visual and auditory information.)

Figure 4
Verbal/Nonverbal Instructional Technique Pairings (Pilot Study)

In addition to these behaviors, there were examples where the subject moved to a completely different space in the room to personalize a comment to a smaller section or an individual. Verbal communication was accompanied by conducting gesture or other forms of nonverbal communication in over ninety percent of the instructional moments. There were no examples where the subject only sang to the groups.

Further analysis of the video-tapes of the lesser-experienced ensemble revealed a pronounced shift in instructional emphasis, over successive rehearsals, from "articulation" and "sound" to "precision." This phenomenon could be attributed to a desire by the conductor to focus more intently on matters relating to imminent performance. As the number of available rehearsals diminished, goals associated with polished performance superceded other concerns, and attention was focused increasingly on musical details associated with interpretation.

Problems with the Pilot Study

A number of technical and conceptual problems existed in the pilot study which reduced its effectiveness. Consequently, several refinements were made to the methodology used in the case study. The problems fell

into two categories: (a) technical problems in the video-taping of rehearsals, and (b) reduced or missed data due to an inappropriately-conceived tabulation sheet.

Video-taping Procedures

The audio microphone built into the video camera was ineffective in capturing all of the subject's spoken comments and singing. The distance between the camera and subject (approximately 35 feet) resulted in a low audio signal, making it difficult to hear softly-delivered instruction during playback. Consequently, the case study employed a microphone placed directly in front of and close to the subject. This signal was transmitted directly to the camera.

Attempts to re-locate specific examples on the video-tapes was made difficult because neither counter-numbers nor clock-times could be printed on the tape during recording. The video camera employed in the case study had these capabilities. This feature greatly facilitated the review and subsequent study of the taped instruction.

Some data was lost in the pilot study because the subject occasionally moved off the podium during rehearsal. This was problematic because the camera needed to be focused closely on the subject to capture subtle gesture. An operator should have been present to control the camera direction manually.

Recorded Data

The number of times various types of instruction took place was noted and recorded, but the amount of time spent on each was not. Accordingly, some of the data in the pilot study was misleading. For example, if the subject spent a continuous hour of a two-hour rehearsal working on intonation, only one instance would have been recorded. In this instance, the data would not reflect appropriately the weight given to the topic. The case study captured both the number of instances of instruction directed to the different performance-issue areas and the amount of time devoted to each.

Additionally, the researcher did not anticipate the amount, or the importance, of the multi-modal instruction that took place during the pilot-study rehearsals. As a result, all instruction was classified as single types. The case study differentiated all instances of single-mode and multi-modal instruction.

Pilot-study Summary

The pilot study was important in identifying factors which appeared to contribute to effectiveness in teaching/conducting. These factors were:

1) the regular use of different modes of instruction in rehearsal;

2) the establishment of appropriate immediate and long-term goals, combined with the use of appropriate teaching strategies to reach those goals;

3) the presence of dual or multi-modal tracing in the instructional process.

The pilot study also helped determine appropriate research questions to investigate the role each of these factors plays in effective teaching/conducting. In addition, it revealed procedural problems and possibilities for future research efforts in this area.

Data Sources and Collection

Description of Study Participants

The pilot study subject was invited to serve as the subject for the case study. This allowed for between-semester comparisons of teaching/conducting behaviors, and a broader informational base for evaluation and analysis. The subject was an experienced wind performer at the professional level, and a university wind and conducting instructor with twelve years of teaching experience in the northeast and midwest United States. No information regarding relevant educational theory, research questions, or results of the pilot study were discussed with or given to the subject. However, the

subject was aware of all data-gathering procedures employed in the case study.

Two dissimilar instrumental ensembles, both normally conducted by the subject, were used: (a) a standard university symphonic band made up of undergraduate students, approximately 70% of whom were music majors; (b) a university wind ensemble composed of music majors, approximately half of whom were graduate students.

The use of two dissimilar ensembles allowed between-group comparisons of teaching strategies and behaviors, as well as ensemble or student responses. University-level ensembles were used in this study because the generally advanced level of performers allowed the subject to concentrate on larger musical issues rather than on the technical issues associated with instrumental performance.

The symphonic band and wind ensemble used in this case study perform standard repertoire typical of their genre, and give an average of three concerts in a fifteen-week semester. Each group rehearses two times per week, for a weekly total of four hours and fifteen minutes.

Methods of Data Collection

Video-taping of Rehearsals and Concerts

The subject of the study was video-taped carrying out normal rehearsals of a symphonic band and wind ensemble as they prepared for their initial performance of the semester. A standard VHS camera with remote microphoning capabilities and zoom lens was used. A directional microphone was placed near the subject to capture all verbal instruction as well as the playing of the ensembles.

The pilot study revealed that ample data could be obtained by video-taping periodically during the course of a concert preparation. A typical two-hour rehearsal provided numerous and varied examples of teaching/ conducting behaviors. The pilot study also revealed that the first rehearsal in preparation for a new concert was, for a majority of the students, a sight-reading experience. These rehearsals were atypical of the rest in that most of the time was spent on relatively basic musical matters. Less attention was given to interpretation or performance issues that were conceptual in nature. As a result of these factors, the following video-taping schedule was drafted to capture approximately 10 hours of regularly-scheduled rehearsal of each ensemble (see Figure 5).

Week	Rehearsal Number	Duration (in hours)
1	2	2
2	4	2
3	6	2
4	8	2
6	12	2
6	(CONCERT)	1.5

Figure 5
Original Video-Taping Schedule for
Symphonic Band and Wind Ensemble Rehearsals

Adjustments to this schedule had to be made due to changes in the Symphonic Band's rehearsal schedule after the semester had begun. Figure 6 indicates the Symphonic Band rehearsals which were video-taped for the case study.

Week	Rehearsal Number	Duration (in hours)
2	2	2
4	6	2
5	7	2
7	10	2
7	(CONCERT)	1.5

Figure 6
Revised Video-Taping Schedule
for Symphonic Band Rehearsals

This schedules allowed for comparisons between earlier and later rehearsals to determine factors which changed over time. Video-taping the subject during concerts allowed the study of gestural references made to

things which were taught in the rehearsals. In the concerts, conducting gestures appeared to serve simply as reminders to the students. This data helped in the assessment of student understanding and recall.

Participant Interviews

It was necessary to talk with participants about the rehearsal experience to determine relevant perceptions, understandings, intentions and perceived intentions. It was possible then to link this firsthand knowledge with data gathered through the analysis of instruction and researcher observations. This methodology allowed a closeness to data which greatly facilitated the development of categories or typologies, and the recognition of theoretically-explainable or theoretically-based behaviors and outcomes.

Subject Interviews: The subject participated in two 2-hour interviews during which only the researcher and subject were present. These interviews were audio-taped, with the knowledge and permission of the subject, and then transcribed. The interviews were in the nature of a discussion, and were guided by a list of predetermined, open-ended questions (see Appendix B). The researcher attempted to ascertain the subject's intentions, perceptions, and understandings regarding factors having

to do with effectiveness in teaching/conducting. This included discussions of the subject's background, philosophies, conscious methodology, performance and educational goals, and awareness and application of instructional and learning theory. During the interviews, the subject was shown selected examples of characteristic behaviors extracted from the video-tapes and was asked questions relating to them.

Ensemble-Member Interviews: Two members from each of the ensembles were interviewed to provide qualitative data representative of a student perspective. Students who demonstrated adequate verbal skills, interest in the rehearsal experience, and appropriate musical engagement during all of the recorded rehearsal sessions were invited to be interviewed. Each of the student interviewees was asked similar questions (see Appendix C). The questions were designed to determine student perceptions of the subject's teaching/conducting, and to examine the nature of the learning which resulted from the instruction. The interviewees were shown selected video-taped examples, and asked questions regarding characteristic teaching/ conducting behaviors of the subject. Some video-taped examples were shown to the interviewees without sound to determine their interpretations of various gestures.

Researcher Observations

Each of the video-taped rehearsals were observed by the researcher to gather additional data relevant to the study. Because the video-camera was positioned behind the students, and focused closely on the subject, most observable student behaviors could not be captured on tape. Consequently, the researcher viewed the rehearsal from a location behind the conductor and recorded pertinent information in the form of field notes. Attention was paid to:

1) general student attentiveness, including eye contact, movement, posture, marking music, talking, and musical engagement;

2) pre- and post-rehearsal activity, including punctuality of the subject and students, set-up and take-down time and efficiency, and general student demeanor before and after the rehearsals;

3) subject behaviors in other locations at the rehearsal site.

The researcher observations were recorded in the form of descriptive accounts. They provided important data regarding the overall rehearsal atmosphere and learning experience.

Data Analysis Procedures

Data from four sources, video-taped rehearsals (for analysis of instruction), subject interviews, ensemble-

member interviews, and researcher's observations was examined to identify factors contributing to the effectiveness of the teacher/conductor subject. This examination focused on observed phenomenon and interview comments relating to the three broad theoretical areas described earlier in this study (see p. 52). Information from each source is summarized, reported, and discussed in this text. The discussion includes comparisons or "triangulations" of data from the various sources. This procedure helped to underscore or negate factors which appeared to have impact in the pilot study, and provided insights into why this particular model was effective. The following diagram illustrates this triangulation process.

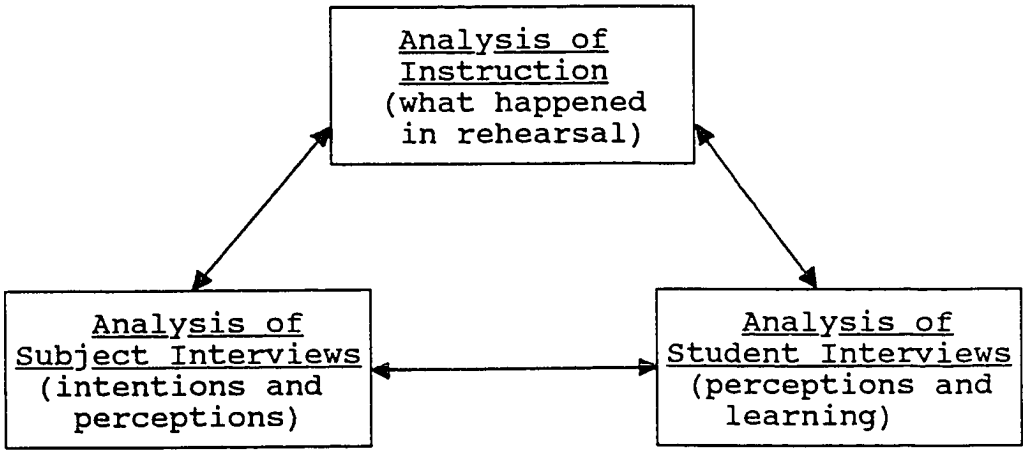


Figure 7
Triangulation of Data

Analysis of Instruction (video-tape analysis)

The video-taping procedure allowed an analysis of each instructional event during the rehearsals. Based on the pilot study and initial viewings of the video-tapes made for this study, categories were established for the subject's general behaviors and topics of instruction. Forms were drafted to: (a) record information about each instructional event (Instructional Events Form), (b) total and average data in the various behavioral categories (Analysis of Instruction Form), and (c) summarize the instruction for each rehearsal (Rehearsal Summary Form). A sample of each form is appended to this thesis (see Appendix D).

The following information was recorded for each instructional event:

Time (When in the rehearsal did the instruction happen?)

Duration (How long did the event last?)

Performance issues (What did the subject work on?)

Teacher behaviors (What verbal and/or nonverbal behaviors were observed? How were they used?)

Strategy and goal (What type of approach was used for what type of problem or desired outcome?)

Comments (additional information relevant to the analysis)

The number of times each performance issue was addressed, and the amount of time devoted to it, were totalled and averaged. This process revealed what the subject considered important or worth addressing, and the means which were employed on its behalf. Information about the modes of presentation also was summarized. This procedure revealed that three categories existed for general instructional outcomes. These categories were:

1) Conceptual understanding
2) Technical development
3) Performance readiness

Ten hours of recorded rehearsal of each ensemble provided ample data to validate the observed constructs. It also provided enough time to gather other qualitative information about the subject, students, and rehearsal atmospheres.

The information obtained through video-tape analysis revealed the priorities of the instructor, and nature of instruction resulting from them. The following research question could be answered directly as a result:

1) What specific teaching strategies existed?

Attention was also paid to elements which changed over time. Research questions relating to this phenomenon were:

4) How did teaching approach change over time?

5) What was important to teach immediately?

6) What learning took care of itself?

7) What was attended to later, or given developmental time to show improvement?

Analysis of Interviews

A transcribed version of each interview was reviewed to identify comments relevant to the research questions. Important statements, particularly those relating to educational theory, intentions, perceptions, perceived intentions, and learning transfer were coded and extracted. Some of these statements appear verbatim and/or summarized in Chapter IV.

This analysis revealed what the subject was intending to do, and what factors caused certain instructional behaviors to be used. The ensemble-member interviews also gave a clear sense of what the students were perceiving, and to what degree the subject was effective in bringing about learning, and assisting recall and application.

Information gained through interview was compared or triangulated with data obtained from the video-tape analysis. This allowed a qualitative evaluation of the

instruction in theoretical terms. The research questions addressed by this process were:

2) What factors influenced strategy choice?

3) How did student or ensemble achievement level influence the immediate and overall rehearsal agenda?

6) What learning took care of itself?

8) On what basis did the effective teacher/conductor make decisions about the use of verbal versus nonverbal communication?

9) Do learners perceive, retain, and transfer information presented in a multi-modal fashion?

10) In what ways were existing theories manifested or apparent in this effective teaching setting?

11) What teaching behaviors were the result of an awareness of theory, observed principles, or learned behaviors?

Analysis of Observations

Notes made during the observations were reviewed to determine the presence of observable patterns in student interactions and behaviors. Teacher-student interactions were studied to determine the presence of any other theoretical framework or factors appearing to have influence in the setting.

Triangulation of Data

The data-source triangulation involved the comparison of data relating to the same theory or phenomenon, but derived from different sources. The principle behind this analytical process is that diverse kinds of data leading to the same conclusion increases the validity of the conclusions.

The following comparisons were made as part of this triangulation process.

1) The subject's instructional intentions, revealed through interview, were compared to summary data gathered through analysis of the rehearsal video-tapes. This included figures indicating how much single-element instruction was delivered by conducting, speaking, singing/aural, and other gestures/movement and, how much multi-modal instruction was delivered by conducting plus singing/aural, speaking plus other gesture/ movement, and singing/aural plus other gesture/ movement.

2) The student respondent's perceptions and understandings, revealed through interview, were compared with the subject's intentions and summary data obtained from the video-tapes.

3) The researcher's conclusions about student recall and transfer, gathered through interviews, were compared with data reflecting teacher-strategy changes over time.

This case study attempted to establish cause and effect relationships existing in the instructional manner of the subject. It interpreted, explained, and produced

understandings of the factors contributing to the effectiveness of this particular teacher/conductor. It was not the intention of the researcher to make widely generalizable conclusions regarding the nature of effective practice. The purpose was to provide an analysis of effective practice which would be useful to those responsible for the preparation of music teachers.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this case study was to examine effective teaching/conducting practice, with the intent of identifying reasons for its success. In doing so, it looked at three factors in effective teaching in the large instrumental ensemble. First, it examined the role of gesture, other movement, and verbal communication as they contributed to successful learning. Secondly, it examined the issue of teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance. Thirdly, it examined the development of student understanding, recall, and application resulting from effective teaching.

Data for this study was derived from four sources: (a) an analysis of the subject's teaching/conducting behaviors (gathered through video-taping of rehearsals), (b) interviews with the subject, (c) interviews with selected ensemble members, and (d) researcher observations. This chapter provides an analysis of this data through discussion and summary of the subject's teaching/conducting behaviors ("Analysis of Instruction"), discussion of the subject's intentions and perceptions regarding rehearsing ("Analysis of Subject Interviews"),

discussion of ensemble members' observations and reactions to the subject's instruction ("Analysis of Ensemble-Members' Interviews"), discussion of the researcher's observations ("Analysis of Researcher's Observations"), and a comparison or triangulation of data from all of these sources.

Analysis of Instruction

Part I - Rehearsal Characteristics

Approximately ten hours of video-taped instruction were subjected to moment-by-moment analysis in order to classify the subject's teaching/conducting behaviors. Each time the subject stopped to instruct the ensembles, information about that particular instructional event was analyzed and recorded. In 585 minutes (9 hours, 45 minutes) of rehearsal, the subject stopped and delivered instruction 441 times. These instructional events lasted from a few seconds to several minutes. Most, however, were in the range of 10 to 20 seconds. These events provided information regarding what musical issues the subject felt needed to be addressed, and information about the means used to address them.

Most of the instructional events involved various combinations of speaking, singing, and movement. Figure 9

is an example of the order these behaviors might have taken during a typical instructional event.

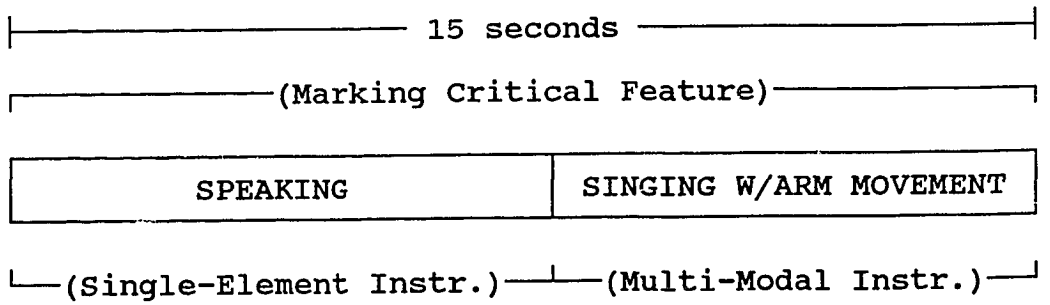


Figure 8
Example of Instructional Event

Comparisons with the Pilot Study

As in the pilot study, instruction delivered to two dissimilar groups, a symphonic band and a wind ensemble, centered around five musical topics. These topics were:

1) Precision (rhythmic and ensemble)
2) Phrasing and musical expression
3) Articulation
4) Balance and blend
5) Sound (intonation and tone)

A first step in the analysis of the subject's instruction was to total the number of instructional events in each of these areas for both ensembles and compute percentages representing the distribution of instruction. These figures are compared to those calculated from the pilot study's instruction in Table 3 (Symphonic Band) and Table 4 (Wind Ensemble).

Table 3
Pilot Study/Case Study Instructional Focus Comparison (Symphonic Band)

Symphonic Band	Pilot Study (Semester I)	Case Study (Semester II)	% of change
Precision (rhy/ens)	21% (2)	27% (1)	+6%
Articulation	20% (3)	24% (2)	+4%
Balance/blend	17% (4)	22% (3)	+5%
Phrasing/expression	28% (1)	19% (4)	-9%
Sound (int/tone)	14% (5)	8% (5)	-6%

Table 4
Pilot Study/Case Study Instructional Focus Comparison (Wind Ensemble)

Wind Ensemble	Pilot Study (Semester I)	Case Study (Semester II)	% of change
Precision (rhy/ens)	22% (2)	40% (1)	+18%
Phrasing/expression	36% (1)	26% (2)	-10%
Balance/blend	19% (3)	17% (3)	-2%
Articulation	10% (5)	15% (4)	+5%
Sound (int/tone)	13% (4)	2% (5)	-11%

These comparisons reveal consistencies in the subject's instructional focus between Semester I and Semester II, as well as several changes. In both semesters, and with both ensembles, a large percentage of instructional events were directed to issues of rhythmic and ensemble 'precision.' The subject also was consistent between semesters in directing the least amount of attention to 'sound,' such as intonation and tone quality.

The most pronounced between-semester change in the Symphonic Band instruction was the reduction of instructional events directed to 'phrasing/expression' and 'sound' in Semester II (phrasing/expression - 9% less, sound - 6% less). These shifts likely reflected either development by the players in these areas, which lessened the need for instruction, or a conscious agenda change by the subject for other reasons. In that musical phrasing and sound are often conceptual or generic issues, the results of effective teaching in these areas allows attention to be directed elsewhere.

A between-semester comparison of Wind Ensemble instruction revealed a reduction in instructional events directed to 'phrasing' similar to the one experienced by the Symphonic Band (10% less). Again, this relatively pronounced shift could be attributed to the effectiveness of the subject in teaching concepts of musical phrasing, or simply increasing student awareness of phrasing and expressive potential in music. Another similar shift was the reduction of instruction relating to 'sound' (11% less). Most of this time was redirected to 'precision' issues (18% more).

Other behaviors which remained consistent from Semester I to Semester II were equally significant characteristics of the subject's approach to teaching/ conducting. The pilot-study analysis generated data

indicating how much of the instruction included singing and how much was delivered through speaking only (see p. 62). In Semester I, the performance issues of 'articulation' and 'phrasing/expression', for both ensembles, received instruction frequently including singing. Conversely, the issues of 'balance/blend' and 'sound' most often were addressed by speaking only. This same relationship existed in Semester II with both ensembles. The following table reveals the between-semester consistency of the subject's approach to these performance issues.

Table 5
Pilot Study/Case Study Instructional Methods Comparison

Performance Issue	Method	Pilot Study (Semester I)	Case Study (Semester II)
Articulation	singing	83%	72%
Phrasing/expression	singing	72%	66%
Balance/blend	speaking	95%	82%
Sound (int/tone)	speaking	86%	77%

(Figures in Table 5 are averaged Symphonic Band and Wind Ensemble percentages.)

Although the figures in each performance-issue category declined in Semester II, they still represent noticeably consistent instructional behaviors on the part of the subject.

Symphonic Band Instruction

Four two-hour Symphonic Band rehearsals were video-taped to provide information about the subject's teaching/conducting behaviors in a large instrumental ensemble setting. A total of 290 minutes of rehearsal on Ingolf Dahl's multi-movement Sinfonietta were analyzed in detail. The stylistically-diverse nature of this piece provided a broad spectrum of musical issues and performance problems to be addressed by the conductor.

During the four video-taped rehearsals, the subject stopped and delivered instruction to the ensemble 227 times. Most of these instructional events ranged from 10 to 25 seconds, and occurred an average of 70 seconds apart. The rehearsal approach on this piece was consistent with work on other selections. Twenty-three percent of the rehearsal time was spent in some form of instruction, and the remaining time in uninterrupted rehearsal playing.

Symphonic Band Performance Issues

Table 6 indicates the amount of instruction delivered in the five performance-issue areas over the course of the four rehearsals. Two measures of instruction are presented: "percent of events" -- indicating the relative distribution of instructional events, and "percent of time" -- indicating the relative distribution of

instructional time devoted to the issues.

Table 6
Symphonic Band Performance Issues

Performance Issue	% of Instructional Events	% of Instructional Time
Precision (rhy/ens)	27%	30%
Balance/blend	22%	20%
Articulation	24%	18%
Phrasing/expression	19%	17%
Sound (int/tone)	8%	15%

The high level of agreement between "percent of instructional events" and "percent of instructional time" (average difference of 4%) indicates that either measure is a reasonably accurate reflection of the emphasis given to each performance issue during the rehearsals.

Instructional Changes Over Time

If, and to what degree, instruction in these areas changed over time also was an important issue in this study. An effort was made to determine whether effective teaching/conducting practice is characterized by consistency and stability, or by predictable and logical changes in behavior. The following table indicates the percent of time devoted to the performance issues for each of the four rehearsals of Sinfonietta.

Table 7
Instructional Changes Over Time
(Symphonic Band)

Performance Issue	Rehearsal No. 2	6	7	10
Precision (rhy/ens)	7%	31%	33%	49%
Balance/blend	15%	13%	27%	26%
Articulation	28%	18%	17%	10%
Phrasing/expression	20%	17%	14%	15%
Sound (int/tone)	30%	21%	9%	0%

Table 7 reveals several pronounced shifts in instructional focus which occurred over time. Issues relating to 'articulation' and 'sound' received less attention with each rehearsal while rhythmic and ensemble 'precision' received more. Although 'phrasing' and 'balance' also experienced some change, the variation did not appear to follow a pattern.

It should be noted that the figures in Table 7 represent only the percentages of events directed to the various performance issues in each of the rehearsals. They do not necessarily indicate that a great deal of time was spent in those areas. For example, the final rehearsals for both the Symphonic Band and Wind Ensemble had considerably less instructional time than earlier rehearsals. Therefore, the 49% figure for 'precision' in Table 7 cannot be taken to mean that more time was spent on precision than in any other rehearsal. It does

indicate, however, that this is where the subject felt there was more attention needed.

The shifts from issues which can be applied to performance in general to issues more closely related to performance readiness appeared to have been generated by the subject's concern over diminishing rehearsal time.

Teaching Behaviors

The pilot study clearly revealed a tendency for the subject to use certain instructional techniques depending on the particular performance issue being addressed. For example, attention to articulation often included some singing as part of the instruction. In general, the subject's Symphonic Band instruction was characterized by a constant and wide variety of behaviors involving the visual, auditory, and kinesthetic sensory modes, providing information suitable to various learning-style preferences and strengths in the ensemble.

Further, it was noticed that information was presented in a multi-modal fashion a majority of the time when certain performance issues were being taught. Accordingly, data was gathered as part of the case study to examine the use of single-element and multi-modal instruction inherent in the subject's rehearsal behaviors. Information regarding when (for which performance issue) and how often multi-modal instruction was used was

recorded. This data is summarized in Table 8.

Table 8
Single-Element/Multi-Modal
Instructional Patterns (Symphonic Band)

Performance Issue	Single-Element Instruction	Multi-Modal Instruction
Precision (rhy/ens)	59%	41%
Balance/blend	65%	35%
Articulation	38%	62%
Phrasing/expression	38%	62%
Sound (int/tone)	69%	31%

Single-element instruction was delivered most often as speaking, and occasionally as singing. The multi-modal instruction consisted of pairings of verbal with nonverbal behaviors. The most common pairings were almost identical to those observed in the pilot study, and are indicated in the following diagram.

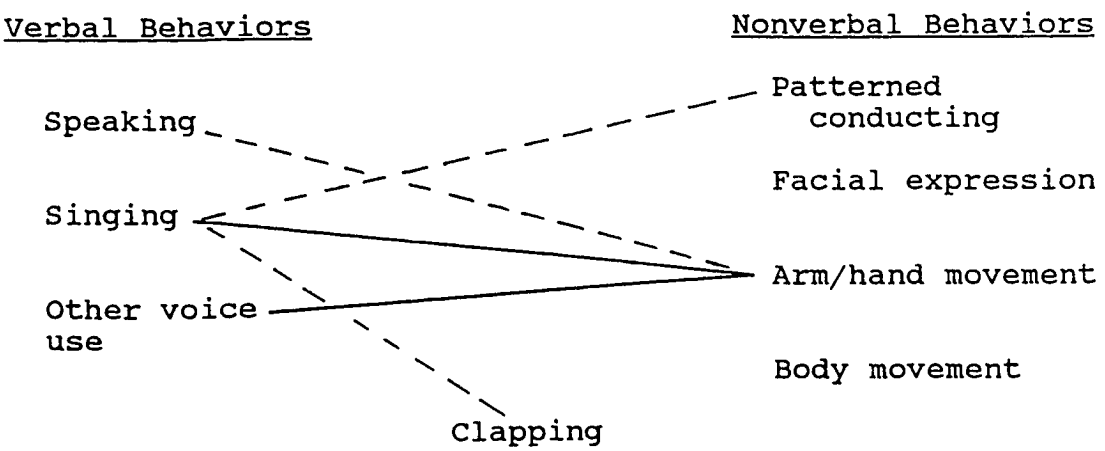


Figure 9
Verbal/Nonverbal Instructional
Technique Pairings (Case Study)

The most prevalent pairing was singing with arm and hand movement. This often was preceded or followed by spoken instruction. The performance issues which were dealt with primarily by speaking only were 'balance/blend' and 'sound.'

Teaching Strategies and Instructional Goals

Students in the Symphonic Band experienced both concert preparation, and general musical learning and technical development. It was apparent from the pilot study that the subject used different strategies for these different goals. To examine this phenomenon, subject behaviors were classified in accordance with three of the teacher-behavior categories identified by Wood, Bruner, and Ross (1976). These behavior categories were: (a) demonstration, (b) marking critical features, and (c) limiting degrees of freedom.

Of particular interest to this investigation was the relationship of these subject behaviors to the goals in music learning identified in Kennell's research on private instruction (Kennell, 1989), i.e., conceptual understanding, technical development, and performance readiness.

Kennell's research indicated that the demonstration strategy is used to advance students' conceptual understandings; reducing degrees of freedom is used

to advance students' skill mastery of problems; and marking critical features, which may involve verbal or nonverbal behavior, is used for either the advancement of conceptual understanding or the development of skills.

Data was obtained from the video-taped rehearsals regarding the subject's teaching strategies and instructional goals. The format of the following grid is designed to show the various combinations that these strategies and goals might take, and the frequency with which they occurred during the analyzed portions of the Symphonic Band rehearsals.

Teaching Strategies \ Instructional Goals	Conceptual Understanding	Technical Development	Performance Readiness	TOTAL
Demonstration	21%	0%	6%	27%
Marking Critical Features	1%	2%	68%	71%
Limiting Degrees/ Freedom	0%	1%	1%	2%
TOTAL	22%	3%	75%	

Figure 10
Teaching Strategies and Instructional Goals in Combination (Symphonic Band)

Several features of this data were notable. The subject concentrated very heavily on 'performance readiness' (total of 75%) through the strategy of marking critical features in the music. Of the 22% of instruction directed to 'conceptual understanding,' 95% was by 'demonstration.' Of the 75% of instruction directed to 'performance readiness,' 90% was by 'marking critical features.' It is also worth noting that drill and practice (i.e., limiting degrees of freedom), a commonly-employed technique by teacher/conductors, was used rarely in the pursuit of performance readiness.

Wind Ensemble Instruction

Five two-hour Wind Ensemble rehearsals were video-taped to provide information about the subject's teaching/conducting behaviors in smaller ensemble settings. A total of 295 minutes of rehearsal of three works (Scenes by Verne Reynolds, Brass Symphony by Jan Koetsier, and The Soldier's Tale by Igor Stravinsky) were analyzed in detail. The three works are unique from each other in instrumentation, ensemble size, and musical style. Accordingly, data was recorded and totalled separately for each of the three selections. The results, however, were nearly identical, making totals and averages for complete rehearsals, rather than individual works, a more practical and viable approach to data management and presentation.

The subject delivered instruction 214 times during the five video-taped rehearsals. Most of the instructional events lasted approximately 10 to 15 seconds and occurred an average of 80 seconds apart. Fifteen percent of the rehearsal time on the three pieces was spent on instruction, and the remaining time in uninterrupted playing. The Wind Ensemble's instructional events (on the average) were shorter than the Symphonic Band's, and the frequency of instruction also was less. These differences most likely reflected the fact that the players in the Wind Ensemble needed less instruction in most of the performance-issue areas.

Wind Ensemble Performance Issues

Table 9 indicates the amount of instruction delivered in each of the performance-issue areas during the five rehearsals.

Table 9
Wind Ensemble Performance Issues

Performance Issue	% of Instructional Events	% of Instructional Time
Precision (rhy/ens)	40%	42%
Phrasing/expression	26%	27%
Balance/blend	17%	14%
Articulation	15%	14%
Sound (int/tone)	2%	3%

As was the case in the Symphonic Band rehearsals, 'precision' received most of the subject's attention. However, a subtle between-group difference was observed regarding the subject's work on this issue. The approach in the Wind Ensemble rehearsals reflected the notion that precision stems from rhythmic understanding, while with the Symphonic Band, precision was approached more as a function of listening and emulation. In either case, the focus of precision work was on finite musical moments in the pieces.

'Phrasing' and 'expression' also were dealt with frequently in the Wind Ensemble rehearsals. It seemed that the contemporary nature of the music, and its unfamiliarity, presented conceptual problems for the ensemble members. The subject often would demonstrate phrasing both visually and aurally to the students.

The 'sound' issues of intonation and tone quality were dealt with only briefly. Problems did exist, however, but were simply pointed out during instructional events focusing on other issues.

Instructional Changes Over Time

Table 10 indicates the percentage of time devoted to the performance issues for each of the five rehearsals on the selected works.

Table 10
Instructional Changes Over Time
(Wind Ensemble)

Performance Issue	Rehearsal No. 2	4	6	8	12
Precision (rhy/ens)	41%	39%	35%	19%	75%
Phrasing/expression	24%	17%	42%	34%	19%
Balance/blend	11%	26%	4%	23%	6%
Articulation	24%	17%	17%	14%	0%
Sound (int/tone)	0%	1%	2%	10%	0%

In comparison with the Symphonic Band's rehearsals, Wind Ensemble rehearsals varied greatly from one to the next in regard to performance-issue emphasis. The only consistent change was in the reduction of instruction directed to 'articulation.' The most notable figure is that 75% of the instruction events in the final rehearsal before performance (rehearsal no. 12) went to 'precision.'

Teaching Behaviors

Table 11 reports the relationship between single-element and multi-modal instruction for each of the performance issues addressed in the Wind Ensemble rehearsals.

Table 11
Single-Element/Multi-Modal
Instructional Patterns (Wind Ensemble)

Performance Issue	Single-Element Instruction	Multi-Modal Instruction
Precision (rhy/ens)	25%	75%
Phrasing/expression	30%	70%
Balance/blend	88%	12%
Articulation	19%	81%
Sound (int/tone)	95%	5%

An interesting feature of the data collected to examine single-element and multi-modal instructional patterns lies in the percentage differences between the Symphonic Band and the Wind Ensemble. Invariably, the Wind Ensemble's figures are more dramatic, i.e., reflect a greater difference than the Symphonic Band's figures (see Table 8, p. 92). (The average difference for each issue with the Symphonic Band is 27%, while the average difference for the Wind Ensemble is 64%.) This phenomenon seemed to indicate that the subject felt the need both to speak about and to demonstrate musical concepts to the Symphonic Band.

The only case of a reversal of emphasis occurring between the ensembles was in 'precision,' where the Symphonic Band received 59% single-element instruction and 41% multi-modal instruction.

Teaching Strategies and Instructional Goals

The following grid reports the frequency of various combinations of teaching strategies and goals employed in analyzed portions of the Wind Ensemble rehearsals.

Teaching Strategies \ Instructional Goals	Conceptual Understanding	Technical Development	Performance Readiness	TOTAL
Demonstration	19%	0%	15%	34%
Marking Critical Features	1%	1%	63%	65%
Limiting Degrees/ Freedom	0%	0%	1%	1%
TOTAL	20%	1%	79%	

Figure 11
Teaching Strategies and Instructional Goals in Combination (Wind Ensemble)

Similar to Symphonic Band instruction, the subject concentrated most heavily on 'performance readiness' (79% total) through the strategy of 'marking critical features.' Of the 20% of instruction directed to 'conceptual understanding,' 95% was by 'demonstration.' Of the 79% of instruction directed to 'performance readiness,' 80% was by 'marking critical features.' The striking similarity of the figures in this grid with those calculated from the Symphonic Band data (see Figure 10,

p. 94) helped to confirm that these relationships represented characteristic behaviors of the subject.

Part II - Related Research Questions

1) What specific teaching behaviors existed?

To begin with, the subject's instruction was characterized by the prominent use of both verbal and nonverbal communication with the ensembles. An effective component of normal rehearsal behaviors was the interesting and varied movement used regularly in the course of instruction. This nonverbal behavior, which involved the hands, arms, body, and head, clearly and successfully facilitated the communication of conceptual ideas to the players.

Equally prominent characteristics of the instruction were the use of singing, and an economy in speaking. The subject would stop to instruct often, but mostly in short, highly-efficient episodes. The verbal and nonverbal information came frequently and with notable variety -- an approach likely to accommodate the variety of learning style preferences and strengths present in the ensembles.

Secondly, the subject tended to use movement, singing, and speaking in paired behaviors, i.e., in a dual trace or multi-modal fashion, for dealing with certain

performance issues. This manner of instruction was directed most often to 'phrasing and expression,' 'articulation,' and, in the case of the Wind Ensemble, 'precision' (rhythmic and ensemble). The most common pairings were speaking with arm and/or hand movement, singing with arm and/or hand movement, and facial expression with verbal and nonverbal behaviors.

Thirdly, the subject showed tendencies to employ several of the teaching strategies defined by Wood, Bruner, and Ross (1976) for certain broad instructional goals. For both the Symphonic Band and the Wind Ensemble, 'demonstration' and 'marking critical features' were the predominant teaching strategies. The subject used demonstration almost exclusively to aid the understanding of musical concepts, and marking critical features as the predominant means to approach performance readiness. Limiting degrees of freedom was employed rarely.

4) How did teaching approach change over time?

The most significant changes in teaching had to do with where instruction was focused. Relatively consistent linear shifts between several of the performance issues were noticed in both ensembles over the course of the rehearsals. In the Symphonic Band rehearsals, attention to issues relating to 'articulation' and 'sound' (tone and

intonation) was gradually replaced by attention to rhythmic and ensemble 'precision.' In the Wind Ensemble rehearsals, only 'articulation' experienced consistently less attention by the subject. These shifts represented a move away from more basic or generic musical issues to 'polishing' for final performance. The subject did not begin instruction on any of the pieces by concentrating on performance details.

5) What was important to teach immediately?
6) What learning took care of itself?

The first readings of all the works, for both ensembles, were at tempo, and were interrupted by the subject as infrequently as possible. Invariably, the first instructional events dealt with the style of the music. This approach seemed to indicate that the subject placed a high priority on the need for players to understand the music. Matters having to do with rhythmic accuracy, ensemble precision, and balance, particularly with the Symphonic Band, were left relatively unattended until later rehearsals. Both ensembles experienced an emphasis on articulation in the early stages. With one exception, intonation was dealt with briefly. Most often the subject simply would identify where a problem existed, then continue with other matters. Actual work or 'instruction' on articulation did not occur. The subject

highlighted the issue, then left it to be solved by the students.

7) What was attended to later, or given developmental time?

The final rehearsals for both groups were similar in that instructional events were short, relatively infrequent, aimed mostly at rhythmic subtlety and, in the case of the Symphonic Band, at balance between the wind sections. At this point, the issues were reflecting personal interpretation of the score, and indicating that the subject felt the players had reached a degree of execution which allowed shading and experimentation.

Two exceptions to this existed. One movement of a work not video-taped for analysis (Divertimento No. 2 by Robin Holloway) and one movement from Stravinsky's The Soldier's Tale remained rhythmically and technically problematic into the final rehearsal. Very little attention to refinement of rhythm and balance was observed here. For the most part, ensemble precision took care of itself in both ensembles.

Analysis of Subject Interviews

The purpose of interviewing the subject of the study was to gain insight into the teaching/conducting

behaviors observed in rehearsals. It was important to determine why the rehearsing and instructing took the form that it did.

This analysis is in two parts. Part I briefly summarizes the subject's background, and outlines his general perceptions and intentions regarding ensemble rehearsing and other related issues. Part II addresses specific research questions identified in Chapter I of the study. Information from this analysis, compared with information from the Analysis of Instruction, served to identify and substantiate factors which directly contributed to the effectiveness of the subject.

Part I - Subject's Background, Perceptions, and Intentions

The subject's background, and his perceptions of conducting, rehearsing, students, teaching and learning, and interpersonal communication helped to explain the rehearsal atmosphere, and observed rehearsal techniques and instructional behaviors. Knowing what was 'intended' by the subject's behaviors helped to define the meanings of his actions.

Subject's Background

Factors in the subject's background shed light on why he approached ensemble rehearsals as he did. To begin

with, it is worth noting that the subject's professional preparation did not include any special focus on ensemble conducting. Consequently, his first university-level conducting opportunities were not supported by the specific training and background traditionally experienced by successful conductors. His first conducting duties were assigned and, in a few instances, came unexpectedly. Initially, he questioned his own capabilities.

> No one had ever formally asked me . . . this was dreadful . . . I didn't know anything about (wind ensemble conducting). I never had a university group. The first thing I had to do was read a book about conducting. My undergraduate conducting was pretty spotty and lasted one semester. That was it.

The solution to the subject's dilemma was to ask for help. "I called up a couple of friends . . . and said, 'Name some tunes I ought to play in this situation.'" He also consulted other established professionals for initial guidance during this time.

An important factor in bringing about a career-focus change for the subject was the enjoyment he experienced in his new duties. "I discovered that I enjoyed that conducting thing . . . a whole lot more than I enjoyed studio teaching." Relevant to this study

are the reasons why he enjoyed the conducting experience. He explained,

> . . . you have an active participation in music-making rather than passive participation. You are actively involved with the group from the beginning through the performance. In studio teaching, you are not on stage when the studio performs, and you are not as much in control. If they choose the wrong tempo at the performance, you have to sit there and listen. You can't suddenly start whispering, 'Pass it on, that's <u>not</u> the tempo I teach!' So, you have a little more control. You are actively involved. That appealed to me.

The expressed feeling of enjoyment and the notion of active participation are important. The subject's history indicated that he came to teaching/conducting because he enjoyed it. Data obtained from the video-tapes, comments made by the student interviewees, and the researcher's observations confirmed the subject's active, positive engagement with music-making in his role as teacher/conductor, and the contribution this engagement made to his effectiveness.

Subject's Perceptions

When asked questions broadly relating to one's success as an ensemble conductor, the subject often framed his answers in issues of 'musicianship.' He placed great emphasis on this factor, and on having high musical standards. Quality music-making, at all levels, was attributed to musical and non-musical attributes of conductors and teachers, as well as hard work.

The subject was asked about experiences which influenced his views, and prepared him for his present position. He replied,

> When you perform with a lot of very good musicians or good conductors, you learn from them. You develop a sense of the comparison between their standard of evaluating musical performance and yours. Hopefully, there is a high yearn that keeps pushing your own up, because you learn to hear music differently as you come to appreciate other peoples' standards of what music should be like. This is a major problem that is really apparent in beginning conducting classes - it's that they conduct the groups, but they don't come with a set of standards of how music should be played, which is a lot more basic problem than even the score study. You always talk about score study giving you a blueprint against what should be

> prepared, what you hear, but the blueprint is based upon pre-learned standards of musical performance. And those standards are raised by association with good musicians, and with good teachers.

He perceived his "musical standards" to be an important element of his work on the podium, and that it was an 'acquired' attribute. He said,

> . . . I could recall after my first semester (graduate study). I went home for Christmas vacation and told a friend that there was a whole level of music-playing standards that I didn't know existed. I had to go through this training to hear what they were doing, the subtleties. . . . I worked with good musicians, good players, and listened to good performances and singers, and violinists. I think that had laid the groundwork. If that hadn't happened, I might still be in the dark about musical standards.

In discussing the development of his standards, the subject talked about his visits to rehearsals of professional orchestras. These experiences appeared to have stimulated and contributed to his skills in ensemble rehearsing.

> I did get fascinated with the fact that the orchestra always sounded terrific. They never sounded bad in rehearsal. Occasionally you could hear bad intonation, I could pick that out, but they'd fix that, they were good players. I got interested in what they would be rehearsing. Why would you rehearse this orchestra? It sounds so good already. . . . nobody was missing any notes that I could tell. They started together as a group, clean, tight, but (the conductor) is still rehearsing very diligently! I tried to get interested in that. . . .

When asked about other attributes viewed as being important, the subject again pointed to musicianship. ". . . you have to have iron-clad inner rhythm that can withstand battering from what you're hearing. Experience helps a lot with that. But you have to practice."

A personal attribute of the subject, admired by the ensemble members, became apparent during casual researcher-student conversations. The subject's willingness to admit to mistakes was highly regarded by the ensemble members. Accordingly, a comment made by the subject about non-musical attributes came as no surprise. "You have to be willing to fail in front of a lot of people. And if that bothers you, you'll never make it as a conductor because you'll develop ways of camouflaging

failure. And then you fool yourself . . ."

When the issue of 'rehearsing' became the focus, two themes emerged in the subject's responses: (a) addressing musical issues, and (b) the importance of personal feelings, particularly conductor enthusiasm.

> A good rehearsal is when you feel you have gotten to a lot of important musical issues, and the players feel like they have been <u>brought</u> to a lot of important musical issues, and that some way of dealing with those issues has been agreed on . . . and that they feel good about the progress of the rehearsal, and that <u>you</u> feel good about the progress of the rehearsal. . . . I want to have the ability in rehearsal to get right to the issue of the moment.

In discussing a conductor whose rehearsals he admired, the subject revealed a special awareness of rehearsal atmosphere, and its link to rehearsal success.

> . . . as opposed to most professional conductors who are very clinical in rehearsal, he was very enthusiastic. The rehearsal is always a performance for him, for them, for the music, and he had this momentum. The momentum of the rehearsal is spectacular. . . . You don't want to alienate

> players, you don't want to make them feel that they are unsuccessful . . . this worries me. I don't want people to feel that they are unsuccessful even when they know that they haven't played perfectly. . . . You don't know if you are snuffing out some of the enthusiasm for the project.

The comments above, in total, revealed that the subject perceived the ensemble experience as being important to the development of musicianship. He perceived his role to include the establishment of high standards of music-making, and the 'awareness' of specific musical issues. He perceived his behaviors as being a determining factor in the rehearsal atmosphere (i.e., learning environment).

Subject's Intentions

What the subject was intending to do in rehearsals was also an important consideration in this study. His intentions needed to be compared to what actually took place. This process revealed the relationship between the subject's philosophy, informally expressed in the interviews, and the manifestation of his philosophy, which was observed in the rehearsals.

Interview questions were designed to stimulate conversation about the specific nature of rehearsing to

determine what the subject thought 'rehearsing' should be, and what he intended his own rehearsals to be. Inquiry in this area focused on learning in the rehearsal setting. Frequent references were made by the subject to areas of skill development, particularly in 'listening' and 'problem-solving.' For example, when asked a question about things which could be learned in ensemble rehearsals, he responded,

> . . . developing your listening skills, developing your perception of musical values compared to what you already have or don't have, taste, rehearsal techniques -- if you're going to be a teacher, how to get at problems. If you are in a good rehearsal, and you are going to be a teacher, and if the problem is identified, or a characteristic of the problem is identified . . . why it is a problem? . . . If you set about solving the problem and reaching a better sound, and identify when that's happened, the clever among the group will have learned something directly.

Further, the subject was asked about the differences between learning in the ensemble setting in comparison with learning in a private lesson. He was asked what he felt is learned best through the ensemble experience.

> Intonation, rhythm, clarity of articulation, and the differences between ensemble playing and studio playing. A person can be a wonderful studio player and not be a very valuable member of an ensemble, which is sometimes a shock to a studio teacher -- that one of their players that they think is so hot is not very valuable in the ensemble. And the reason that they are not valuable is usually that they don't listen and cue into the style or the rhythm or pitch that is going on around them; they play in a capsule . . . it's like capsular playing. They are . . . in a bubble, and they play their part, perhaps reasonably well, given no external considerations.

Other comments revealed that the subject was aware of the 'process' in problem-solving and learning, and aware of the importance of it to some of the ensemble members, particularly students in music education. After a qualifying statement, "You don't presume to teach <u>all</u> the whys and the process of improving something . . .", he continued,

> With a university group or a high school group or junior high group, you want to give them the information that allows them to come to some of these decisions that you've come to, independent of you,

> in the future. Therefore, when they are conductors, or just playing along, they understand a little bit more of how you arrived at those decisions. . . . For (those in) music education, it's like a laboratory.

The interview process revealed that the subject perceived the major performance issues for both the Symphonic Band and the Wind Ensemble to be the same as those identified in the Analysis of Instruction section of this chapter (i.e., precision, phrasing/expression, articulation, balance/ blend, and sound).

The following comment regarding intonation was typical of others in that it revealed his intention to increase the 'awareness' of issues in the ensemble members.

> Obviously, you have to work on intonation. You can teach people a little bit about it in rehearsal, not a lot, but you can continually keep pushing their awareness toward intonation, so that they learn to listen to intonation as a part of performing.

The subject preceded this statement with, "I do most of my comments about musical standards . . . or style." The analysis of instruction corroborated this remark, but

did not show that the subject was inclined to "continually keep pushing" in this particular area. (Issues of 'sound,' which included intonation, received relatively little attention during rehearsals.)

These comments, plus others made in the interviews, indicated that the subject's intentions included the development of musical skills, and the demonstration of musical problem-solving.

Part II - Related Research Questions

2) What factors influenced strategy choice?

Wood, Bruner, and Ross (1976) identified teaching strategies in expert-novice relationships. Their research was based on Lev Vygotsky's notion of a Zone of Proximal Development, through which learners are moved by the setting of 'goals.' Research has indicated learning is facilitated by the proper setting of these goals, and the application of appropriate teaching strategies on their behalf (Kennell, 1989).

Observations of the rehearsals in this study indicated that the theory was in operation in the ensemble setting as well. Data gathered through the analysis of instruction (video-taped rehearsals) and participant interviews corroborated this, indicating that it was a

factor in the subject's effectiveness. The success of the subject appeared to be due, in part, to the consistent application of specific teaching strategies to specific instructional goals.

When asked if the setting of appropriate goals was important, the subject replied,

> Absolutely . . . appropriate goals, appropriate standards . . . what they can perceive, what they can deal with. . . . One of the great talents that conductors can have is an understanding of their groups, and not underestimate them, or reach so far beyond that they just can't achieve any of your goals . . . and become depressed. (If) you put them in a situation where they can't succeed, they won't succeed. If you put them in a situation where they succeed all the time, they won't succeed there, either. . . .

A discussion regarding instrumental ensembles in public schools followed. The subject clearly understood and valued this concept of appropriate strategy-goal relationships.

> I think that is why some people are so successful with really young groups. . . . That's why people can

> be successful where they are. . . . You can be very successful at (deleted) High School because you can relate to what those standards are, and what they (students) can perceive as better . . .

When specific strategies were discussed, the subject was questioned about the use of 'demonstration' (i.e., "showing" or "singing" a musical concept) as a means of communication. He talked about what he had observed other conductors doing when he visited rehearsals of professional orchestras.

> . . . it would make so much sense that (conductors) would do it. I personally think it's important. I don't think you can be a fabulous conductor and not 'show' style or motion when you conduct. . . . there are ways of making groups work and pieces work without all that, and I've seen it happen, but it has to be a reasonably inefficient way to do it.

No particularly strong views regarding other strategies were stated during the interviews. At one point, the subject did express a dislike for the "drill and practice" approach to problem-solving. This was corroborated in the analysis of instruction.

3) How did student or ensemble achievement level influence the immediate and overall rehearsal agenda?

The analysis of video-taped rehearsals revealed several differences in instruction between the Symphonic Band and the Wind Ensemble. Most notably, the Wind Ensemble received less total instruction in that instructional events were shorter, and were delivered less frequently. Differences in the distribution of instruction to the performance issues existed as well. Predictably, the Symphonic Band (comprised of less experienced players) received more instruction in 'sound' (intonation and tone) and 'articulation' than did the Wind Ensemble. No doubt, these skills and concepts were still developing in many of the players.

The subject was asked if he consciously approached his instruction differently with the two ensembles. He replied,

> No, you just reach different levels on the continuum towards the standards. I don't take a different standard to one group or another, consciously or subconsciously. I just realize that with one group I may reach and solve a problem, and with another issue I may perceive that I'm not going to get the problem solved, and I'm going to have to either find a way to camouflage the problem or ignore the problem.

Several changes in instruction were noted over the course of the rehearsals (see pp. 90, 98). A number of between-semester changes occurred as well. The reasons for these changes could not be attributed to a perceived need for different instruction. Apparently, the subject's closeness to the setting diminished his awareness of musical growth. Conversely, the ensemble members seemed aware of, and openly pleased with, their growth. About this the subject commented,

> . . . I perceive that individual players get better, and individual players don't get better, some players get worse. I don't hear that the band actually gets better. I think other people notice this more than I do because you don't notice daily that a dog grows, but you have a hunch it's getting bigger . . . so, maybe from the beginning to the end of the semester, the band changes its color, it becomes more of a sound that could be associated with high standards.

8) On what basis did the effective teacher/conductor make decisions about the use of verbal versus nonverbal communication?

Of particular interest in this study was 'why' certain teaching behaviors were used. Often this related to issues of teaching efficiency. It became apparent

through the interview process that the subject was aware of the importance of instructional efficiency.

On several occasions he displayed mild concern over the lack of rehearsal time remaining before performance. Rehearsals were noticeably fast-paced (i.e., efficient) at those times.

The subject was asked to talk about 'speaking' versus 'singing' and 'showing.' He was aware that he often followed or preceded spoken instruction with these behaviors. His comments about speaking were important.

> . . . singing is the most efficient. . . . That's the most efficient way to work . . . I have never tried never speaking to a group because I think there's a certain bonding issue that words develop with younger players, and college players, and that is important.

When it was pointed out that for some issues, such as 'balance,' he most often talked about the problems, he responded,

> Balancing color is very, very hard to develop in a large group. You almost have to go by rote. I'm not sure that there are any hand signals or sign signals or facial gestures or anything that are going to help

> that. General color of a group, yes, but not the balance. Balance is the hardest thing to teach in conducting, and it's one of the marks of someone who's truly come to grips with the piece . . .

When asked what he thought was the best way to deal with 'phrasing', he said,

> Singing. If you have an understanding of the principles of phrasing . . . there are certain principles that are repetitive. Unfortunately, players don't always pick up on those principles for one reason or another, so it is okay to talk a little bit about the principles, so they can transfer that to another performance later in life. But the most efficient way is to sing. I think you should describe the principle . . .

When asked about 'articulation,' he said, ". . . I guess you would use some words, still singing would help. Singing always helps." The subject's perception that he used a 'mixture' of speaking and singing was corroborated in the analysis of instruction.

6) What learning took care of itself?

The purpose of this question was to reveal what the subject decided not to teach, and why.

> Some (things) take care of themselves. . . . just play the piece, just play. (The ensemble) played a passage, 50% of the movement . . . and I said 'Let's go back to the beginning,' with no information, nothing like 'listen for this, watch for this,' just 'go back,' and it was better, not a little better -- it was a lot better. . . . the rhythms were better, the control of the pulse, they just needed to do some playing together to hear how the piece goes. Obviously they weren't ready for a lot of detailed information, they needed to be playing. I have tried this with the Ukrainian Folk Songs . . . I just said to the Symphonic Band, 'We are not going to discuss this piece very much, we are just going to play it and rehearse it.' I'm not sure it was very successful, but it was a piece that I chose not to do a lot of detailed rehearsing, just to play and give signals and say this, this, this, and play from the beginning. I do that a little more than some other conductors. . . .

When asked about specific topics he prefers not to deal with in rehearsal, he said,

> Technique, I really don't like to work with it. I would like to think that they can take care of it themselves. . . . sometimes just bad sound takes care of itself. If they just play long enough they'll start to listen. They get confident enough in the notes and the rhythm, and how the piece works, that they can deal with their own listening. . . .

He was then asked how he decides what not to teach in rehearsals.

> . . . I don't know how I decide that. The experience of not wasting time rehearsing things that are less important than some major issue. If the major issue is that the group sound is not at all defined and developed, you would work on first just the tutti sort of impression of the group, and you would not work on some finer details of nuance, and inner voices. You try to solve some of the larger tutti issues with the band . . .

11) What teaching behaviors were the result of an awareness of theory, observed principles, or learned behaviors?

This question was important in understanding the relationship of formal preparation, experience, and innate

musicianship to the success of the subject. It was of value to identify the way in which each contributed to his effectiveness as a teacher/conductor.

Some of the subject's instructional behaviors were learned, such as the use of dual tracing. Several times during the interview he referred to a workshop where certain tenets of conducting were discussed. The following was pointed out to him:

> (You) don't explain to a group. You (should) start talking with your hands, and you sing with it. Well, this made a lot of sense, and for a period of time I took notice of whether I did or not. . . . It made an impact when somebody said this makes so much sense - it seemed appropriate.

The experience of 'observing' also was important in the formation of teaching behaviors.

> I've noticed that most conductors do this. It makes a lot of sense . . . I've never seen any students in my conducting class who do this in large numbers, but experienced conductors, I've noticed that they tend to talk with their hands when describing sound to the groups they're working with. . . . It struck me that . . . when they (conductors) would ask for whatever

> it was that they were after, that they used hand and mime to support what they said. I don't think that they're making a conscious decision to do it. It's a natural thing to do, particularly for experienced conductors, because we're so used to doing it -- defining sound with our bodies and hands as well as rhythm.

Experience, and the need for efficiency, played a role in the subject's embracing 'singing' and 'gesture' as a means of teaching.

> I think that it's the 'efficiency' that's learned. The fact that it works teaches you that it's a good thing to do. . . . But words just don't cut it. You have to deal with all those things some way to get the sound, and if you just sing it, or even speak the rhythm . . . It might not be the best way to teach an elementary school group. Maybe they should have a technique of discussing the rhythm and how it's divided in the space of a beat, and then have different kids suggest how it should be played, things like that. I don't have that kind of time. I would rather just get over the problem, get it solved and get on because we do have to perform.

The subject was questioned further about whether, at this point in his career, he consciously applied multi-modal instruction to achieve certain ends. He replied, "No, I never make that conscious decision. Maybe it's a subconscious decision, or I just try different things."

The subject was asked if these behaviors could be taught. He quickly replied, "Yes, both could and should be taught." When asked if he had ever studied nonverbal communication, he answered that there had been a session on mime at a conducting workshop.

> . . . when I went, it was pointed out that I had a knack for it. . . . (The mime person) thought that I maybe had some acting training, because I seemed to be comfortable with character, in changing character on the podium, and changing character when I talk to the group . . . which is all acting relative to the musical experience.

The subject made no comments which suggested a familiarity with theories of learning or instruction. He concluded the interview by saying,

> . . . I don't really particularly like to rehearse, I like to play. . . . I enjoy hearing the group play as they begin to play better. I enjoy making music with

them and I don't always want to interrupt that.

Analysis of Ensemble-Members' Interviews

Selected Symphonic Band and Wind Ensemble members were interviewed to determine student perceptions of the subject's teaching/conducting, and to examine the nature of the learning that resulted from the rehearsal instruction. Students who were observed to be representative ensemble members, and who demonstrated adequate verbal skills, were invited to be interviewed.

Four students, one music education major and one applied major from each ensemble, were asked similar questions regarding their rehearsal experiences, the subject's instruction, and what they perceived about their own learning. In the following text, the two Symphonic Band interviewees are identified as SB-1 and SB-2, and the two Wind Ensemble members as WE-1 and WE-2. This classification reveals the distribution of the comments, and it allows for comparisons between the two ensembles.

Part I - Student Perceptions

Rehearsal Characteristics

The student interviews revealed that the subject's rehearsals were educational, musically stimulating, and

"enjoyable." There was a noticeable degree of enthusiasm expressed for 'rehearsing,' which is not always the case with music students. The following comments reflect some of that enthusiasm. It is important to note that the students feel the way they do mostly because of the quality of the experience.

"I think it's great. I value such a high calibre organization. . . . Players have the facility to do what the conductor wants and he's really good" (SB-1). "I think it's great. It's like nothing I've ever had before. I've never experienced anything like it" (WE-1). "You get stuff done. There's a lot of progress being made in rehearsals" (SB-2). "I always seem to enjoy myself when I'm in there. . . . rehearsals are professional, yet it's not so professional that you can't enjoy yourself while you're rehearsing" (WE-2).

The students' reaction to the repertoire also speaks to the issue of efficiency. If students are not exposed to appropriate musical issues, for their present levels of achievement and understanding, learning can be reduced or misdirected. The interviewees were asked how they felt about the music they had prepared for their performances. "There's a nice broad range of music from contemporary to baroque, . . ." (SB-2). ". . . usually there's always a real broad spectrum of the types of pieces we play in one program" (SB-1).

> You just find the things to appreciate, or after hearing it many times, you see connections that you didn't hear the first time. . . . And I respect his judgment . . . in the pieces that I don't like, there is something that I can learn (SB-2).

"There was a piece in (a previous organization experience) that we started - I gave it a chance. By the time we got into concert, it was like, 'I hate this piece.' But that doesn't happen in Wind Ensemble" (WE-1). "It was enjoyable. The music was good, it was fun to listen to and play at the same time" (WE-2).

The students also made interesting comments about the rehearsals as a 'learning experience.' They were asked first to talk about what they felt they had learned. Their responses centered around two general topics, performance issues and ensemble playing. The performance issues, for the most part, were the same as those identified in the analysis of data. The following comment was typical of the rest.

> "I really learned style. We learned about ensemble instruments, how to play with others . . . blending, to make it blend in so it doesn't sound like separate instruments. I don't listen as much as I wish I did, but the learning in band -- it helps a lot" (SB-1).

Subject's Instruction

The analysis of the subject's interviews revealed that musicianship, thorough score-study, and involvement with the music were highly valued. Comments made in the student interviews confirmed the subject's commitment to these ideals. For example, the following interviewee statements point to 'musicianship' as a recognized element in the subject's teaching/conducting. ". . . he's real good about the essence of the piece, what it is he's trying to get across, where lines should go. It's just his musicality in general, I guess" (WE-1).

> He knows what he wants. Expression - so many conductors don't know how to express music, they're just up there waving their arms. You can hear that in a lot of groups. They don't play musically. If a conductor doesn't know what he wants, the group doesn't know what they want. I don't think I've ever seen him (the subject) not know what he wants or get what he wants out of a group (WE-2).

Several comments were made which underscored the subject's commitment to score study. For example, "He knows every aspect of the piece, and he knows what he wants before he goes into rehearsal. If you were to go in, and you don't know what you want, you don't know

what to do" (SB-1). "His biggest strength is knowing what he wants. To him, music comes first, nothing else" (WE-2).

The subject's musical 'involvement' was described by a Symphonic Band member. "I always feel like he's part of the music. I don't feel like he's just leading the music, he is the music with us" (SB-1).

A further manifestation of the subject's involvement with the music was the dance-like movement which sometimes accompanied his conducting. The interviewees had noticed it, and referred to it in their interviews. "His whole body shows what he's doing. Often times he almost dances while he's conducting, he bounces, he gives cues with his elbow or with his eyebrows . . . it gives a style, it's a feeling, I guess" (SB-1).

> He is very dance-like. He's just in motion all the time. It seems that every part of his body that can be communicative is, so that he's using everything he can. I think that helps with the efficiency, too. He can explain something much quicker and then we can get on with it - get through more stuff (SB-2).

"I made the comment once that there's like a dancer trapped in (the subject's) body that's just aching to get out, and it's like it comes out through his arms! It's

just wonderful" (WE-1). "When you see this guy up there dancing around . . . you know exactly what he wants. It's almost like we're accompanying a dance, and it's real clear the feeling that he wants to come across. His whole body is into it" (WE-1).

> . . . and the one part where (the music) gets pretty wild, he's there, swaying back and forth, wiggling his butt, moving his body back and forth. It helps to relate that sort of party atmosphere that he wants. . . . I think the best conductors move to the music (WE-2).

Several comments were made by both the subject and students in regard to the 'feelings' that existed, or should exist, in rehearsal. The following student went beyond simply describing those feelings to indicate that they played a part in the subject's effectiveness. "I think he also coaxes it out of you, makes you laugh, makes you feel good, so you feel like giving more" (WE-2).

The issue central to this study, instructional effectiveness, was not overlooked by the interviewees. The following comments clearly indicate the degree to which, and the ways in which, the subject was effective in rehearsal.

> You get stuff done. He is polite, and he treats you like a musician with some skill and good ideas, but he is to the point. There's a lot of progress being made in rehearsals, and you can see why he's going over things. Efficiency, I guess (SB-2).

"He's just magical. . . . He's always very expressive. He's able to get the point across easily" (SB-1). "I've just never had (styles) spelled out so clearly as I have now - explained as well" (WE-1).

> It was a wonderful experience . . . a lot of it just has to do with how he rehearses us. He rehearses us so thoroughly that you can't help but know that piece. And as a musician, (it's) just his level, how he rehearses, and the issues he brings up and the things he works - an eye for detail, ear for detail. He's awakened me to thinking. . . . He's forced me to think and see the whole picture (WE-1).

"He seems to extract a lot of music out of people, more than any other conductor I've ever seen here . . . it's phenomenal" (WE-2). We're really learning the pieces. . . . It's wonderful" (WE-1).

The interviewees identified a number of other factors which they felt contributed to the subject's teaching/

conducting effectiveness. One of these factors was the instructional variety discussed the analysis of instruction. "He always sings a lot. If it's a rhythm, he sings it. And he usually sings and conducts, so that you see it and hear it" (SB-1).

> Sometimes he'll sing back the rhythm or the music, and put the stress with it - I mean he exaggerates a little bit so we can see the picture he has in his mind. And again, just his physical movements when he's explaining the desired sound . . . (SB-2).

> He uses his hands almost all of the time. They are hardly ever resting. I think it just works integrally with what he's saying, and it helps to create a total picture. The way his hands are shaped, are punctuating . . . these gestures are helping . . . just the movement, the speed, and the shape of his hands while he's talking (SB-2).

> . . . there's a couple spots in Soldier's Tale . . . all of a sudden he explained it to me a third way and that just made all the difference in the world. (He) gives you the same information maybe in a little different way (WE-1).

> I don't think a good conductor of a good group has to stay in a rigid pattern. . . . He's really good with facial expressions, his hands, his arm movements, and body gestures. . . . singing, gestures, actually telling the person what to do. Everything you would think a professional would do (WE-2).

> . . . just sing the part. Sing what you want. If the conductor doesn't sing what he wants, the student doesn't know what he wants. Because music you hear. He doesn't have the greatest singing voice, but the style that he wants, everything comes across. And if it doesn't come across, then he'll explain further, and not only reinforce it with singing, but he'll reinforce it with verbal comments . . . (WE-2).

About the subject's general conducting technique, one student commented,

> I also just really enjoy (the subject). I remember one of the first rehearsals that I was here, it just struck me how he conducts, and how it's almost like art to watch him conduct. I thought, 'How could you ever be bored in a rehearsal when you can just watch him, even when he's not working with your section?' I really am quite impressed with him (SB-2).

> I wouldn't hesitate to say I think he's a very fine conductor. He's easy to follow and very expressive. I guess that I find the sign language very easy to see regarding dynamics or balance, indicating one section over another. . . . the shape of his hands kind of tells you what kind of style he expects and the length of the notes . . . (SB-2).

Studies by Green and Galway (1986) and Ristad (1982) indicated that 'analogy' is an effective technique for the communication of ideas. One of the interviewees commented on the subject's use of analogy, and the impact it had on him.

> He has an amazing knack for analogies. He can pick out a visual image that seems so far from the matter at hand but it cinches it perfectly. I suppose it hits different people different ways, but it really works for me (SB-2).

Although not professing any knowledge about individual differences in students, the subject displayed what seemed to be an instinctive awareness of how students are different from each other in regard to motivation. One student said,

> He knows who to push and who not to, and when to lay back and just let people go on their own. That's good, because I work better with that than having somebody standing over (my) shoulder all the time. If he was that kind of a conductor, I wouldn't have gotten any of this stuff. I would have just crumbled, I think. That is enjoyable, letting me go through my pace (WE-1).

Each of the interviewees was asked to provide a summary comment on the subject's effectiveness as a teacher/conductor. All of the remarks were positive. One student concluded ". . . probably one of the best. I'd say he's probably the best I've ever played under. He was one of my role models for why I wanted to become a music teacher (WE-2).

Part II - Related Research Questions

7) What must be tended to later, or given developmental time?

It was reported in the analysis of instruction that matters having to do with rhythmic accuracy, ensemble precision, and balance, particularly with the Symphonic Band, were left relatively unattended until later rehearsals. This aspect of the instruction was noticed by

a Symphonic Band interviewee who had been invited to assist the Wind Ensemble with one selection. When asked if any differences between the rehearsals were detected, the student replied,

> I think that sometimes in Wind Ensemble he has a tendency to pinpoint certain areas, technical or musical, that need a little more attention that really get that group honed down to pure quality. In Symphonic Band, it seems that sometimes there are rough spots that should be attacked that sometimes go by (SB-2).

9) Did learners perceive, retain, and transfer information presented in a multi-modal fashion?

Comments made in the analysis of ensemble-members' interviews indicated that the students felt they learned through the experience, and that the learning was efficient. Two important questions needed to be addressed at this point: (a) Did the students remember what they learned?, and (b) Are they able to transfer that learning to other musical situations? Evidence that both 'remembering' and 'transferring' occurred was present in comments made by the interviewees.

Data from the analysis of instruction, and the ensemble-member interviews revealed that a substantial

portion of the rehearsal instruction was multi-modal in nature (i.e., dual tracing). It appeared that a relationship existed between the nature of the instruction and student retention and ability to transfer.

In regard to retention, each of the interviewees indicated that they were able to remember things dealt with in the rehearsals. One student stated,

> I think it helps because he'll do the same conducting when he sings at the same time, and when he goes back and doesn't sing, he'll conduct the same way. So it helps me visually because then I remember. It helps me more to hear it. But obviously during concert he's not going to sing it (SB-1).

Another student made a similar comment suggesting that remembering was assisted by the nature of the rehearsal instruction.

> I remember what he did. Did he do something funny to get that point across? That helps you to remember. Is there something that sticks out in your head about that particular rehearsal that he did to help get the idea across (WE-2).

The subject was aware that regardless of the students' abilities to remember, they still need reminders in performance. A number of interesting statements were made by the interviewees in regard to the subject's conducting and the role it plays in the memory process. For example, ". . .the visual contexts are just little reminders" (SB-1).

> One thing that hits me is that there are certain visual cues that he can use in a performance that will trigger, 'Ah, yes, this is the discussion we had a couple of weeks ago on this section' and I remember this or that, and it's a very quick, subtle motion that no one in the audience would even catch. It's just something to remind you of that section. . . . It's just a very good form of unspoken feedback that fuels the band . . . (SB-2).

"I kind of know what to look for, and I can kind of pick up if he's trying to look back and remind, and to cue the memory a little (SB-2). "When you see a gesture in performance, it's an old friend. It's like a security blanket, or just a reminder . . . (WE-1). ". . . he's jumping and wiggling, you can sort of remember the style that he wants" (WE-2).

Of great importance to the profession is whether students are able to transfer or apply what they learn in their ensemble experiences to other musical settings. If not, justifying required ensemble participation for music students becomes more difficult. This issue was addressed by the interviewees. Strong evidence existed that transfer was aided by the nature of the instruction in their ensemble rehearsals. For example, ". . . if he does the same thing . . . that sparks our mind" (SB-1).

> I know that I remember. If I go to another piece, maybe in a totally different setting, and I hear something similar to what we did in band, I do remember the way that we did it in band, and I can transfer that over (SB-1).

> Specific and general ideas that he has on shaping phrases and getting stuff across through the music, I guess his musicality is really taken away from rehearsal. I really take that away. Articulation, balance, line, there are so many I just can't rattle them off. When you're sitting in a brass quintet and you're all looking at each other and asking 'Why isn't this working?', you can just go through that and bring - you know, 'Maybe we're not doing this' (SB-2).

> I really find it useful. He really seems to work on shading and articulation, and stress on a certain grouping of notes, not even as large as a phrase sometimes, but sometimes in a phrase. And those are finer points that I hadn't known I could develop on my own before. But after being in band for a while, I recognized that more in my own music. And when I'm just coming along a straight phrase that sounds flat to me, I have some better ideas on how to make it have a little more depth. I know that I hear words ringing in my head from (the subject) (SB-2).

"I think that's what really carries over is the group playing, but other stuff carries over into individual playing, like solo playing, ensemble, with a pianist, or if you're just by yourself, musicality, style, phrasing. . . ." (WE-2).

Comments made by the interviewees indicated that multi-modal instruction was a factor in the success of student learning. The analysis of data, ensemble-member interviews, and researcher observations confirmed that it was a frequently-employed instructional behavior in the rehearsals. Consequently, it can be concluded that it was a factor contributing to the overall effectiveness of the subject.

Analysis of Researcher's Observations

The site for the Symphonic Band and the Wind Ensemble rehearsals was the same -- a stage in the hall where both groups normally performed in concert. Observations were made from different vantage points to capture as much information about ensemble-member involvement as was possible. Portions of rehearsals not video-taped for the study were observed without the subject's knowledge to determine whether the presence of the video-camera and researcher was tempering the instruction, or the nature of the rehearsal. No differences were observed.

Part I - Rehearsal and Instructional Characteristics

Observed Rehearsal Characteristics

The rehearsal atmospheres were positive and relatively free of tension. One of the interviewees commented, "The Wind Ensemble was very relaxed and just real conducive to learning, because you're so relaxed." Students entered and left the room without displaying any signs of negative attitudes. For the most part, they were on time, and would sit immediately upon entering the room to continue their individual warm-up, or practice excerpts from the ensemble music. Students did not engage in extensive conversation with their peers.

When rehearsals commenced, student attentiveness was noticeably keen. Extraneous talk between the ensemble members was observed rarely. On the few occasions where students did talk, the discussion appeared to be related to the music.

The subject frequently engaged in casual conversation with ensemble members before and after rehearsals. He appeared to enjoy the rehearsals, and the students seemed to admire his relaxed manner. It was the researcher's opinion that the subject was slightly more relaxed in the Wind Ensemble rehearsals than in Symphonic Band rehearsals.

The analysis of instruction reported that the subject stopped the ensembles frequently during rehearsals (an average of every 70 seconds in Symphonic Band rehearsals and every 80 seconds in Wind Ensemble rehearsals). This data surprised the researcher and the subject. When shown the figures, he remarked, "Do I really stop that much?"

This instructional frequency came as a surprise because it seemed that comparatively little stopping was occurring during rehearsals. This phenomenon might be attributed to the fact that stopping and restarting the ensembles was instantaneous. Most of the time the students would discontinue playing immediately when the conducting stopped, and they would anticipate the restarts. This indicated that they were paying close

attention to the subject while he was conducting and instructing.

It seemed that the instruction was effective and efficient because students learned quickly, and appeared to retain what they had learned. Rarely did the subject have to repeat instruction on an issue dealt with in earlier rehearsals.

Two unanticipated and interesting phenomena were noticed over the course of the study. Several rehearsals observed during the pilot study (Semester I) had to be held in a different location. The new site was a large rehearsal room which had dramatically different acoustics than the regular site. For those rehearsals, the subject concentrated more heavily on musical 'details.' Conversation with the subject revealed that he was unaware of the change in his instructional style. During the case study (Semester II), again, a rehearsal was held in the same alternate site. A similar change in instruction occurred as in the pilot study. This raises the question -- "Do acoustics influence how conductors rehearse?"

The other interesting observation was that the first of two rehearsals of each week, for both groups, often was slightly more "intense" than the second rehearsals. Again, the subject did not indicate that he consciously approached these rehearsals differently.

Observed Instructional Characteristics

Once the rehearsal began, the subject did very little 'extra' talking (i.e., discussion of matters other than the music). The only regularly-occurring exception to this had to do with performance details, such as upcoming performance times or logistical problems.

The researcher's observations corroborated comments made by the subject regarding rehearsal ideals. He had suggested in the interviews that a good rehearsal was one where "the players . . . have been brought to a lot of important musical issues," and that the players are not made to "feel that they are unsuccessful in the process."

The subject's approach was one of 'awareness heightening' in that he usually let the players know why an issue was being addressed or rehearsed. Frequently, he told the students that they were improving, or that something had been played well. 'Musicianship' was stressed constantly in the instruction.

It was observed that all the students in the ensembles were attentive, and collectively responsive to suggestion. This uniformity might be attributed to the diversity inherent in the subject's instructional manner. One student commented, "If we don't understand and we don't say anything, he knows, and he'll change. He'll present it in a different way" (SB-1). Information was presented through frequently-changing combinations of

visual and auditory behaviors. Quantitative data from the analysis of instruction confirmed this observation.

Movement and facial expression were predominant characteristics of the subject's teaching and conducting. Much of the movement was 'dance-like,' and was used in conjunction with, or as a substitution for, traditional conducting behaviors. The most commonly used facial expression was 'smiling.' In fact, most of the subject's facial expressions could have been classified as some type of smile. Two mildly-capricious students had done an informal classification of the subject's smiles. Some of the smile categories were: "That's great!"; "Not bad"; "Well, nice try"; and "What are you doing?"

Another observed characteristic of the subject's instruction was a noticeably consistent application of teaching strategies to instructional goals. This was particularly prevalent in two situations. First, when the subject was instructing in performance areas where the goals were more 'conceptual' in nature, he would demonstrate (i.e., sing or show). Secondly, when focusing on a specific performance detail, applicable only to a designated moment in the music, he would quickly 'mark' the feature (i.e., point it out). This observed phenomenon also was corroborated by the analysis of data.

It was observed that gestures used by the subject while conducting often closely resembled those used in the

course of instruction. There were instances where the subject's instruction consisted of only showing the ensemble a gesture, with no speaking. Subsequently, that same gesture would surface in the conducting. This appeared to be particularly helpful to the students. As stated earlier, the subject rarely had to repeat instruction.

The subject's conducting in the final performances appeared to be a slightly moderated version of that observed in the rehearsals. Gestures were similar, but reduced in size. Several students were asked to give their perceptions of the subject's concert conducting style. One student said "It's not really how he conducts, it's not the arm motion that's necessarily different, it's that body motion has been cut down on . . . it's not like he's conducting something entirely different and throwing us for a loop" (WE-1). Other comments were, "He usually scales everything down in the performance" (SB-1) and, "I think he's probably a little less dramatic" (SB-2).

Part II - Related Research Question

10) In what ways were existing theories manifested or apparent in this effective teaching setting?

Observations of the rehearsals revealed subject behaviors and interactions related to theories of

communication, learning, and instruction. Studies in the "interaction analysis" paradigm suggest that the rehearsal elements such as 'score interpretation,' 'communicative behaviors,' and 'player response' are interactive, and will always be in a state of flux. The subject did not resist this notion by allowing information to flow in one direction only. He was instantaneously responsive to what the students were doing. This appeared to contribute to his effectiveness.

It also seemed that theories pertaining to the nature and impact of paralinguistic phenomena (i.e., nonlanguage voice use) were valid in this setting, as well as theories relating to the value of eye contact and facial expression. Studies by Draughton (1973), Mehrabian (1972), and Rosenfeld (1967) have suggested that facial expression is a significant variable in the communication of attitudes. The observation process in this study allowed the researcher to see and hear the students' responses to this relatively subtle form of nonverbal communication and, as a result, conclude that it was a factor in the subject's effectiveness.

Other well-established teaching principles are that: (a) positive reinforcement stimulates learning; (b) direct, concise use of the language facilitates learning; and (c) analogy can be an effective teaching tool. All of these were observed to be true, and were corroborated in

the analysis of data and in the student interviews.

Observations also helped to confirm the previously-stated notions that teacher behaviors or strategies reflect the nature of the task at hand, and that dual tracing facilitates music learning and memory. Abundant examples of successful strategy/goal-linked teaching and multi-modal teaching were observed in the rehearsals.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

Methodology

The purpose of this study was to examine effective teaching/conducting practice, with the intent of identifying reasons for its success. The investigation focused specifically on the large instrumental ensemble and conducted chamber ensemble settings. Three broad theoretical areas were central to the study, and served as a focal point for related research questions. These areas were:

1) The role of conducting, gesture, and verbal and nonverbal communication in effective teaching/conducting.

2) Teaching to the simultaneous goals of conceptual understanding, technical development, and quality performance.

3) The development of student understanding, recall, and application in the large ensemble experience.

Qualitative methodology was chosen because it could provide data suited to the nature of the research questions. A case study of an acknowledged effective

teacher/conductor was designed and initiated to examine the relationship between successful practice and elements of existing educational theory.

The case study included an analysis of the subject's instruction in regular rehearsal sessions of two innately-different university ensembles -- a symphonic band and a wind ensemble. The analysis involved the identification and classification of the subject's instructional behaviors. This process revealed that instruction was centered around five performance-issue areas. They were: (a) precision (rhythmic and ensemble), (b) phrasing and musical expression, (c) balance and blend, (d) articulation, and (e) sound (intonation and tone). The analysis also revealed that the teaching strategy of 'demonstration' was linked to the instructional goal of 'conceptual understanding,' and that 'marking critical features' was linked to 'performance readiness.'

To investigate these factors, and to address other related issues, the subject and two members from each ensemble were interviewed. The purpose of the subject interviews was to determine why the instruction took the form that it did. Qualitative information obtained by this process revealed how the subject's background and beliefs guided his actions. The purpose of the student interviews was to determine if, and to what degree, the instruction was efficient. Additionally, the nature of

the students' learning, and its transferability, were examined.

Data from four sources, the analysis of instruction, subject interviews, ensemble-member interviews, and researcher observations, was triangulated to corroborate the factors which appeared to contribute to the subject's teaching/conducting effectiveness.

Research Questions

Questions were framed to guide the research, and to provide information about the three broad theoretical areas identified above. The following responses to those questions developed through the triangulation of data.

1) What specific teaching behaviors existed?

Most of the instruction took place in frequent, short, highly-efficient episodes. The instruction was characterized by a variety of verbal and nonverbal behaviors which frequently were paired, such as speaking with hand and arm movement, and singing with similar or other gestures. The paired behaviors were used most often when concepts relating to phrasing and expression, and articulation, were being addressed.

A high degree of consistency existed in the

application of teaching strategies to instructional goals. The most predominant behaviors were the use of 'demonstration' to aid conceptual understanding, and the use of 'marking critical features' to achieve performance readiness.

2) What factors influenced strategy choice?

Teaching strategy was influenced by immediate instructional goals. The subject of the study had a clear understanding of the musical potential of the two ensembles. Accordingly, the students were exposed to music well-suited to their needs and present levels of achievement. As a result, short-term instructional goals were achieved instantaneously when appropriate teaching strategies were used.

When concepts were taught, the strategy of 'demonstration' was used 95% of the time. When performance readiness was the topic, 'marking critical features' was used approximately 85% of the time.

3) How did student or ensemble achievement level influence the immediate or overall rehearsal agenda?

The subject reported that he did not consciously approach rehearsals of the Symphonic Band and Wind Ensemble differently. Differences in instruction did

exist, however. The Wind Ensemble, a more experienced group, received instruction less frequently and in shorter episodes than the Symphonic Band. The additional instruction received by the Symphonic Band was directed most often to issues of articulation and sound.

4) How did teaching approach change over time?

The focus of instruction in the Symphonic Band rehearsals shifted from performance issues of a more general nature to those associated with the refinement and precision needed for upcoming performance. The general instruction observed in the initial rehearsals centered mostly on different styles of articulation, and the quality of the ensemble sound. The instruction in the latter rehearsals, which was directed more to musical details and precision, focused mostly on the element of rhythmic precision.

In the Wind Ensemble rehearsals, consistent change was not apparent in the analysis of instruction, or the researcher's observations. Presumably, the higher levels of achievement in the ensemble meant that less basic instruction was needed for successful performance.

5) What was important to teach immediately?

The subject immediately began teaching the students in both the Symphonic Band and the Wind Ensemble about the style and essence of the music. To help capture these understandings, the works always were rehearsed at final tempos. Both groups began with emphasis being given to articulation which was either generic or specific to the piece. The Wind Ensemble, because of its advanced players, began work immediately on rhythmic precision. On the other hand, the Symphonic Band needed to develop and refine its sound.

6) What learning took care of itself?

The subject did not address problems resulting from an individual's or a section's lack of technical ability. Places in the music where individual improvement was required were identified, but not emphasized. Technical development did occur over time, however, especially in the Symphonic Band. Problems caused by student deficiencies gradually disappeared.

Intonation was another issue not receiving actual 'instruction.' Few specific approaches or ways to solve inherent tuning problems were discussed in the rehearsals. A number of instructional events did focus on particular places in the music where intonation problems were apparent. But in these instances, the subject spoke very

little, allowing the students to resolve the problems on their own.

7) What was attended to later, or given developmental time?

A number of issues relating to balance were not dealt with in the Symphonic Band until their final rehearsals. Instruction had more to do with interpretation than with problems of balance. The subject also allowed ensemble precision to develop over the course of the rehearsals. He rarely stopped either ensemble to deal with problems in this area. Further, he rarely mentioned that they even existed. It was clear that conscious decisions were made not to address ensemble precision.

8) On what basis did the effective teacher/conductor make decisions about the use of verbal versus nonverbal communication?

The subject's behavior choices were influenced mostly by his own experiences (i.e., discovering what was most efficient), and through the suggestions and observations of other teacher/conductors. No other evidence of study in this area was verbalized by the subject.

9) Did learners perceive, retain, and transfer information presented in a multi-modal fashion?

The study indicated that multi-modal instruction was highly effective in generating an efficient path to significant musical learning. Students in both the Symphonic Band and Wind Ensemble learned quickly because of it. Retention was evidenced by the fact that the conductor rarely had to repeat instruction. Interviewees indicated that they were able to transfer what they had learned to other musical settings.

10) In what ways were existing theories manifested or apparent in this effective teaching setting?

Theories of nonverbal communication which point to the impact and value of paralinguistics, facial expression, and eye contact were supported by the data in this study. Theories of verbal communication which suggest that positive reinforcement and the use of analogy contribute to effectiveness also were supported by data generated in this study.

Data from all sources advanced the theory that 'demonstration' is an effective means to aid conceptual understanding, and that 'marking critical features' is an efficient means to prepare for performance when students already understand the musical concepts.

The theory that dual tracing (i.e., multi-modal presentation) is an efficient means to significant musical learning also was supported by the data.

11) What teaching behaviors were the result of an awareness of theory, observed principles, or learned behaviors?

There was little evidence that the subject's instruction involved the conscious application of teaching principles to accommodate or apply any particular educational theory or principle. Some behaviors or techniques were acquired after the subject had brief exposure to them in conducting workshops. Most, however, resulted from the observation and study of other successful conductors, or from personal conducting experiences. The subject was concerned about efficiency in teaching, and readily changed approach if he felt it would expedite musical learning or performance readiness.

Conclusions

Implications of the Study

This study revealed that effective teaching/conducting practice is not the result of any single factor or instructional characteristic. It does not result, solely, from exceptional musicianship, extraordinary conducting technique, or strength of personality. It is not exemplified in stunning performance by an ensemble. Effective teaching/conducting is the result of a

combination of factors which together bring about musical learning which is significant, long-lasting, and meaningful to all students in the ensemble. These factors generate quality performance.

Effective teaching/conducting involves the establishment of positive atmospheres for learning. It also involves establishing appropriate goals for the development of musicianship. It requires instructional behaviors that are efficient in bringing about conceptual learning and technical development. It is exemplified through high quality ensemble performance and through high quality music-making by the students in other musical settings.

It was the researcher's observation that the members of the ensembles in this study were enthusiastic about their learning. They were able to concentrate, were ready to perform and, as a result, were highly productive. Students arrived at rehearsals with the expectation that communication and learning were going to be efficient, and the resulting experience valuable. The analysis of this effective teaching/conducting setting revealed why this was the case.

In short, the instruction was highly effective. It was characterized by a varied, creative use of speaking, singing, and movement in different sensory-modal combinations. Talking by the subject was never excessive

or irrelevant. The music being rehearsed was appropriate for the respective ensembles in that it posed conceptual and technical problems which were challenging, but not beyond the capabilities of the student. An affective (i.e., emotional) response to the music was plainly evident by the subject. This personal engagement provided an important model for the students because it related to one of the most fundamental goals of music-making -- expressive performance.

The study revealed that all of the constituent elements of effective teaching/conducting identified in the analyses are important. It revealed that continuous development and conveyance of personal musicianship are required for one to be effective in the role of teacher/conductor. The study also revealed the importance of 'observation' in the acquisition of teaching perspectives, the development of musicianship, and as a tool for improving our understanding of teaching and learning in music.

The study pointed to the importance of teacher/ conductors having a musical model of the score in their ears before they begin rehearsing. Effective practice can occur only if there is a musical or sound 'template,' against which student performance can be compared. The subject's emphatic comments regarding the importance of score study strongly supported this notion.

Gesture and other forms of verbal and nonverbal communication were shown to have significant impact on musical learning. The study clearly revealed that conducting, gesture, and other movement simply serve the manifestation of a conductor's musicianship. In addition to the understood function of showing meter and pulse, movement communicates musical ideas. Accordingly, additional forms and uses of movement should be considered and taught in the preparation of instrumental conductors.

Future Research

This case study of an effective teacher/conductor revealed several areas where more research is needed. To begin with, case studies of other effective teacher/conductors need to be initiated so that between-study comparisons can be made. Additional models might help to substantiate the factors examined in this study, and identify others which contribute to effectiveness in instrumental music instruction.

This research also revealed the importance of aural models of 'ensemble sound' being in the ears of teacher/conductors, against which student performance can be compared. Inexperienced teacher/conductors often do not have these aural models because they have spent little or no time in front of ensembles. Accordingly, ways for

prospective conductors to achieve aural models need to be investigated. It would be of value if research could determine the most efficient or practical means for the acquisition of skills in ensemble timbre acuity.

More qualitative research focusing on the area of gestural communication would help determine when and why expressive movements are appropriate and effective in teaching. The interviewees in this study knew that special gestures had special meanings. The question remains -- "Are there elements of gestural communication relating specifically to expression in music which can and should be taught?"

This study indicated that the research of Wood, Bruner, and Ross (1976) and Kennell (1989) was relevant to ensemble settings, in addition to private instruction. A more comprehensive investigation is needed to determine if the linking of teaching strategies with instructional goals was unique to this study, or whether it is inherent in all effective teaching/conducting practice. Additional questions regarding teaching strategies observed in this study need to be addressed. For example: Are these observed strategies similarly used by conductors of lesser experienced groups, such as high school or junior high conductors?; Do effective choir conductors employ similar or the same strategies?; What are the best ways to teach the appropriate use of goal-related teaching strategies?

It was noticed in this study that the subject's instructional focus changed when rehearsals were held in an alternate location. A noticeable acoustical difference existed between the two sites. It would be of value to know if room acoustics are a factor which influences how conductors rehearse their ensembles.

Finally, a slight difference in instructional tone was noticed between the first and second rehearsals of each week throughout the course of this study. First rehearsals appeared to be slightly more 'intense' or serious than the second. Although this observation was mostly subjective and not strongly supported by data, it was an interesting phenomenon, and is in need of further investigation.

This case study has revealed that musicianship is a critically-important requisite of successful teaching/conducting practice. Comments made by the study's subject resoundingly underscored this notion. This research also has indicated that 'effectiveness' in teaching/conducting is directly related to the efficiency of an instructor's communication. Accordingly, prospective music teachers need to be afforded practical experiences to develop and refine skills for the communication of their musicianship, and the communication of general musical concepts. As

well, they need to be afforded opportunities to develop critical listening skills, specifically in regard to the inherently-complex nature of ensemble sound.

Prospective teacher/conductors, and those who prepare them, stand to benefit from further investigation in these areas, and from the continued study of effective models in the profession.

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APPENDIX A

Pilot Study Data Form

Date_____

Cond_____

Ensemble_____

- -

	% of instr.	Method (%) explain	singing
Articulation			
Phrasing			
Balance/blend			
Intonation			
Precision (rhythmic)			
Tone quality			
Gen. musical express.			
Other (correct notes, etc.)			

- -

Comments

APPENDIX B

Interview Questions (Subject)

How did your move from being a performer to a conductor come about?

How have your professional experiences influenced or prepared you for your present conducting responsibilities?

When you were primarily a performer, what conductors did you admire? Why?

Since becoming primarily a conductor, who do you admire in the conducting field? Do you perceive them as being effective in what they do? In what ways?

Who has had influence indirectly on your approach to conducting and rehearsing? Who has had influence directly on your approach to conducting and rehearsing? Why? In what ways?

Considering just conducting technique, what experience(s) have had the most influence on you? Considering just rehearsal technique, what experience(s) have had the most influence on you?

What do you feel are the most important reasons for having performing groups at a university, and as part of music majors' education?

How is the role of a university instrumental conductor different from that of a professional instrumental conductor?

How is the role of a university conductor different from a high school instrumental conductor?

In general, what are you hoping to accomplish in Symphonic Band and Wind Ensemble?

Do you perceive your role as being different in rehearsing the Symphonic Band and Wind Ensemble?

What are the major differences between the two groups? Do these differences affect what you do?

What is considered when you choose repertoire for the two ensembles?

Are there differences between the 1st and 2nd semesters in working with the Symphonic Band and Wind Ensemble?

What do you perceive the general problems (or weaknesses) of the Symphonic Band to be? What do you perceive the general problems (or weaknesses) of the Wind Ensemble to be?

Do you find that some musical issues or problems take care of themselves through rehearsal?

What musical learning seems to transfer from 1st semester to 2nd semester?

When you stop the group and instruct, sometimes you sing to the group, sometimes you speak, sometimes you show things with your hands and arms. Why?

Have you ever studied or read about nonverbal communication?

Is it a conscious decision on your part to "show" students musical concepts? Is it a conscious decision on your part to sing to the students?

How are your individual students different as musicians? How are they different as learners of music?

As a private teacher, have you ever approached teaching students differently because of what you perceive about them?

If a section, or the ensemble in general, is having a problem with phrasing, what is the best way to solve the problem?

If a section, or the ensemble in general, is having a problem with articulation, what is the best way to solve the problem?

If a section, or the ensemble in general, is having a problem with balance, what is the best way to solve the problem?

If a section, or the ensemble in general, is having a problem with precision, what is the best way to solve the problem?

If a section, or the ensemble in general, is having a problem with sound, what is the best way to solve the problem?

How do you decide what not to teach?

What musical issues do you prefer to get to first?

What concepts or skills require developmental time?

Would you describe your instruction as being different between the Symphonic Band and the Wind Ensemble?

Do you consciously change your strategy or rehearsal agenda over time?

APPENDIX C

Interview Questions (Ensemble Members)

In which University ensembles do you play?

How do you feel about your ensemble experience?

How do you feel about the music your ensemble plays? Is it challenging? In what ways?

How do you feel about your ensemble rehearsals?

Do you learn things in the rehearsals? Are these things different from what you learn in your private lessons or other music classes?

How does this experience help you develop as a player? How does it help you develop as a musician?

Do you feel ready for a performance when the time arrives?

How do you find (the subject) as a conductor?

Have you played for other conductors who you felt were successful? Why do you feel they were successful?

When (the subject) stops the ensemble to instruct, do you understand what he is attempting to do or teach?

Do you find his ideas are presented clearly?

If you were to describe to a friend (the subject's) teaching and conducting behaviors, what would you say?

Are there particular things about (the subject's) conducting or instructing that help you understand what he is trying to communicate?

Do you see a relationship between how he instructs and how he conducts in performance?

(The subject) moves while conducting and instructing, would you agree? Why do you think he does this?

Does what you see help you understand things?

Do you think you remember things taught when you finally perform? Why?

Do you learn things that apply in other musical settings?

APPENDIX D

Rehearsal Data Forms

Rehearsal Data Forms Key

Performance Issues

art = articulation
phr = phrasing/musical expression
bln = blend/balance
snd = sound (tone/intonation)
pre = precision

Teacher Behaviors

Verbal Behaviors

spk = speaking
sng = singing
oth = other voice use

Nonverbal Behaviors

cnd = patterned conducting
fac = facial expression
arm = arm movement
hnd = hand movement
bod = body movement

CLP = clapping (verbal/nonverbal)

Strategies/Goals

dem = demonstration
mcf = marking critical features
ldf = limiting degrees of freedom
con = conceptual understanding
tec = technical development
per = performance readiness

Instructional Events Form

Ensemble_____ Reh. no._____

Date/time_____ Selection_____

- -

Time	Perf. Issue	Dur	Teacher Behaviors Verbal	Nonverbl	Strategy/ Goal		Comment

Analysis of Instruction Form

Ensemble_____ Reh. no._____

Date/time_____ Selection_____

- -

Rehearsal Summary

TTL_TIME (Minutes of rehearsal on selection) _____
NUM_STOPS (Number of stops during TTL_TIME) _____
NUM_EVENT (Number of instr. events during TTL_TIME) _____
INS_TIME (Total instr. time during TTL_TIME) _____
INS_FREQ (Instr. event freq.-TTL_TIME/NUM_EVENTS) _____
INS_LNGTH (Ave. lngth/instr. event-
INS_TIME/NUM_EVENTS) _____

- -

Teacher Beh	Performance Issue				
Verbal	art	phr	bal	snd	pre
spk					
sng					
oth					
Nonverbal					
cnd					
fac					
arm					
hnd					
bod					
spk/sng					
Multi-modl					
(vrb/nonvb)					
TTL_NUM/%					

Analysis of Instruction Form (cont')

Strategy/ Goal	Performance Issue art	phr	bal	snd	pre
dem/con					
dem/tec					
dem/per					
mcf/con					
mcf/tec					
mcf/per					
ldf/con					
ldf/tec					
ldf/per					
TTL_NUM/%					

Rehearsal Summary Form

Ensemble_____ Reh. no._____

Date/time_____ Selection_____

- -

Minutes of rehearsal on selection ..... _____

Number of stops during rehearsal segment ..... _____

Number of instructional events during rehearsal .. _____

Amount of instructional time during rehearsal .... _____

Average frequency of instructional events ..... _____

Average length of instructional events ..... _____

- -

	Instruction		Teacher Behaviors		Strategy			Goal		
Perf Issue	% of event	% of time	Multi-modal	Single elemnt	dem	mcf	ldf	con	tec	per
Art										
Phr/ex										
Bal/bl										
Snd/in										
Pre										

- -

Comments

VITA SHEET

Title of thesis: EFFECTIVE REHEARSING WITH THE INSTRUMENTAL MUSIC ENSEMBLE: A CASE STUDY

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