The Effect of Accurate/Inaccurate Teacher Instruction, High/Low Teacher Delivery, and on-/Off-Task Student Behavior on Musicians' Evaluation of Teacher Effectiveness.

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THE EFFECT OF ACCURATE/INACCURATE TEACHER INSTRUCTION,
HIGH/LOW TEACHER DELIVERY, AND ON-/OFF-TASK STUDENT
BEHAVIOR ON MUSICIANS' EVALUATION OF TEACHER EFFECTIVENESS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Music

by
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M.M.E., Florida State University, 1991
December 1999
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ABSTRACT

The primary purpose of this investigation was to determine the effect of accurate/inaccurate teacher instruction, high/low teacher delivery and on-/off-task student behavior on musicians’ evaluations of teaching effectiveness. An additional purpose of this study was to determine whether differences in the musicians’ evaluative responses of teacher effectiveness would occur due to differences in their experience level.

Subjects (N = 168) were musicians and were grouped accordingly: (1) grades 6-8; (2) grades 9-12; (3) undergraduate; and (4) experienced teacher. The subjects viewed and evaluated a videotape of eight teaching segments for teacher effectiveness. The segments had been simulated by the investigator and seven upper-elementary music students in order to create the appearance of an elementary music classroom setting. Each segment had been executed by the students and teacher according to eight original scripted music lessons, each of which required the simulated class to act according to different combinations of the variables within the areas of accuracy of instruction, teacher delivery, and student behavior. Data were collected via an Effective Teaching Response Form, which required the subjects to rate each teaching segment for teacher effectiveness using a 10-point Likert scale and provide three comments as to why each rating was assigned for each segment.

Results indicated significant differences due to experience level and teaching segments. Additionally, a significant interaction was found among the four groups across teaching segments. Further examination of the subjects’ group mean ratings and
evaluative comments indicated that: (1) high and low teacher delivery affected the response ratings of the middle and high school students more than any other variables; (2) accuracy of instruction affected the response ratings of the experienced teachers more than any other group; (3) student attending behavior affected the response ratings of the middle school students more than any other group; (4) inaccurate instruction, low delivery, and off-task student behavior affected the response ratings of the undergraduates and experienced teachers more than did the variables of accurate instruction, high delivery, and on-task student behavior.
CHAPTER 1. INTRODUCTION

Teacher effectiveness is an area of study that has permeated the research community in both musical and non-musical environments. Teacher effectiveness in the global sense involves an array of teacher behaviors that are thought to positively affect the learning outcomes of students. In the interest of trying to determine what it is that good teachers do within the classroom setting for assessment purposes and teacher training purposes, the efforts of many researchers have resulted in a substantial body of extant research in the area of teacher effectiveness.

An Education USA Special Report published by The National School Public Relations Association (1981) described effective teaching based on results from numerous research studies conducted within the regular classroom setting. Research in the area of teacher effectiveness has provided a basis for authors to offer ideas and strategies regarding effective teaching in the form of books and overviews which target both educators (Biddle & Ellena, 1964; Brophy & Good, 1986; Ornstein, 1990) and music educators (Brand, 1985; Erbes, 1983; Grant & Drafal, 1991; Single, 1991).

With the evidence of a vast amount of available research in the area of teacher effectiveness, it seems axiomatic, at least within the education community, that effective teaching is considered to be an important area of investigation. If this is the case, the process of assessing teachers in terms of their teaching effectiveness appears necessary. Teacher assessment seems to be a ubiquitous activity taking place within the classrooms of schools across the nation, and handbooks of teacher evaluation which
provide perspectives and various models for teacher assessment have been written
(Andrews, 1988; Doyle, 1983; McGreal, 1983; Millman, 1981; Shinkfield &
Stufflebeam, 1995).

With the publication of the National Standards for Arts Education (1994), a
document that has established national student achievements in the areas of dance,
music, theatre and visual arts, music teachers now can be evaluated on their teaching
effectiveness based on whether or not their students are achieving specific content
standards suggested by a national organization of educators in the field of arts
education. If the optimal outcome of student learning within the music classroom,
which may include the achievement of national standards, is thought to be affected by
the efficacy of teacher behaviors, then the behaviors and characteristics exhibited by
effective teachers should be studied and assessed.

Through extensive research in the area of teacher effectiveness, effective
teachers have been observed and evaluated in regard to the teaching behaviors and
characteristics that they exhibit in the music classroom. In a summary of music teacher
effectiveness research by Brand (1985), it was suggested that numerous behaviors
characterize effective music teachers including, but not limited to: (1) demonstrating
accurate musicianship skills in the areas of error detection, correction, and
performance; (2) effectively managing the classroom; (3) demonstrating effective
pacing within the music rehearsal or classroom; and (4) demonstrating high energy or
enthusiasm.
The teacher behaviors involving accurate presentation of the subject matter, enthusiastic delivery, and effective management of the classroom environment are skills that are thought to contribute to the global attribute of teacher intensity. Teacher intensity is defined by Madsen and Geringer (1989) as "sustained control of student/teacher interaction evidenced by efficient, accurate presentation and correction of the subject matter with enthusiastic affect and effective pacing" (p. 90), and is an area of study that has been researched extensively by the music education community (Byo, 1990; Cassidy, 1990; Cassidy, 1993; Colwell, 1995; Madsen, 1990; Madsen & Geringer, 1989; Madsen, et al., 1992; Madsen, Standley, & Cassidy, 1989).

Perhaps due to an assumption that music teachers are knowledgeable about musical subject matter, there seems to be a lack of experimental music research investigating one of the components of teacher intensity, the demonstration of accurate instruction, although it has been suggested that this is a skill that effective teachers exhibit. However, in a study conducted by Naftulin, Ware, and Donnelly (1973), it was concluded that even when a teacher does not provide substantive and accurate information within a lecture, if the information is delivered with enthusiasm, then the teacher will be evaluated as an effective teacher by observers. The results of this study suggest that some teacher attributes, such as high delivery skills, may have a greater affect on the perceived efficacy of the teacher as compared to other teacher attributes, such as demonstrating accurate and substantive knowledge of the subject matter.

In addition to the research investigating teacher intensity which includes enthusiastic affect as part of its definition, other researchers have studied teacher
delivery in the form of teacher magnitude (Yarbrough, 1975), teacher affect (Sims, 1986), and teacher enthusiasm (Bettencourt, et al., 1983; Burts, et al., 1985; Collins, 1978; Mastin, 1963; McKinney, et al., 1984; McKinney et al., 1983; Ware & Williams, 1975; Ware & Williams, 1976). Effective delivery by the teacher is thought to increase student achievement (Mastin, 1963), student attitude or preference in regard to the teacher (Yarbrough, 1975), and student attentiveness or on-task behavior of the student (Sims, 1986; Yarbrough, 1975).

Student attentiveness or student on-/off-task behavior is another area that has been researched extensively. Researchers have investigated student attending behavior as a product of teacher behavior and as a product of classroom activities. Research has indicated that student learning is thought to suffer when off-task behavior exceeds 20% (Madsen, Becker, & Thomas, 1968). It has also been suggested that student off-task behavior decreases when teacher approval is high (Dorow, 1977; Hall, et al., 1968; Forsythe, 1975; Kuhn, 1975), and that students are more on-task when they are engaging in performance versus non-performance activities (Brendell, 1996; Madsen & Geringer, 1983; Murray, 1975; Spradling, 1985; Yarbrough & Price, 1981), suggesting that music may be intrinsically reinforcing.

Research has also suggested that experts are able to agree when making global assessments of a teacher's efficacy, however, experts will often evidence disparity in agreement when asked to identify the specific attributes that contribute to a teacher's effectiveness (Madsen, Standley, Byo, & Cassidy, 1992). These findings suggest that there is a "pool" of teacher behaviors that contribute to a teacher's efficacy, and that it
is perhaps difficult for assessors to agree upon which of these behaviors in isolation most greatly contribute to the effectiveness of the teacher.

In reviewing the teacher effectiveness literature, it seems that many researchers have made efforts to determine which specific teacher attributes positively affect the learning outcomes of students. In the area of teacher delivery, it seems that teachers who demonstrate more enthusiasm are perceived as being more effective. It also seems that effective teachers who manage their classrooms effectively, are better able to maintain student attentiveness. The demonstration of accurate presentation of instruction is also a teacher behavior that has been attributed to effective teaching, however, there is a lack of experimental research to support this idea. In an attempt to isolate the variables that may have the greatest effect on the evaluations of a teacher's effectiveness, the present study was conducted.

The purpose of this study was to investigate the effect of accurate/inaccurate teacher instruction, high/low teacher delivery, and on-/off-task student behavior on musicians' evaluations of teacher effectiveness. Additionally, this study was conducted to compare the evaluative ratings evidenced by four different groups of musicians in order to determine whether the experience level of the musicians affected their evaluations in terms of teacher effectiveness.
CHAPTER 2. REVIEW OF LITERATURE

2.1 Expert Versus Novice Teachers

A purpose for teacher assessment, one that seems prevalent within the education research community, is to identify behaviors that effective teachers exhibit in order to provide prospective teachers, novice teachers, and at-risk teachers an appropriate model by which to teach. In an attempt to determine what good teaching consists of, many researchers have examined expert teachers and novice teachers, and in many instances have made comparisons between the two. One who has focused his research efforts in examining the characteristics of expert teachers is David C. Berliner, stating:

"We ...(in reference to his colleagues) ... think we need to find and study expert and experienced teachers and compare those teachers with ordinary or novice teachers in order to search for more information about the tasks and teacher behaviors that our research community has revealed as important (1986, p.5).

Based on his research, Berliner made some general conclusions about the expert or experienced teacher as compared with the novice teacher. According to Berliner, expert teachers: (1) are more knowledgeable; (2) are able to categorize, analyze, and solve problems at a higher level; (3) are more sensitive to task demands; (4) are more opportunistic in their planning; and (5) use time more efficiently (1986). Assuming that these are some of the general characteristics of the expert teacher, it would seem that the specific behaviors executed by effective teachers are bountiful.

Perhaps one way to determine the aspects of effective teaching is by asking teachers' opinions of what skills are most important to be an effective teacher. In a descriptive study conducted by Teachout (1997), preservice and experienced music
teachers were given a list of forty teacher skills/behaviors and were asked to rate the level of importance for each skill on a 4-point Likert scale in terms of the following question: “What skills and behaviors are important to successful music teaching in the first three years of experience?” (p. 41). Interestingly, experienced teachers rated the following teacher skills/behaviors as being much more important for successful teaching in comparison to the preservice teachers: enthusiasm, maximized time on-task, and maintenance of student behavior. Preservice teachers, however, rated “Be creative, imaginative, and spontaneous” and “Display a high level of musicianship” as being more important to successful teaching in comparison to the experienced teachers (p. 41). Of the ten top-ranked items of both the experienced teachers and the preservice teachers, seven skills/behaviors were common to both groups: (1) maturity and self-control; (2) ability to motivate students; (3) possession of leadership skills; (4) ability to involve students in the learning process; (5) display of confidence; (6) organization skills; and (7) employment of a positive approach.

In a descriptive analysis by Goodstein (1987), which compared the leadership behaviors of successful high school band directors to a randomly selected group of high school band directors, it was suggested that the successful band directors, among many other things, had more students involved in the band program, had more freshman recruits, and had more students involved in solo and ensemble activities than did the high school band directors who were not identified a priori as being successful. Since secondary music classes are primarily elective courses, and it is usually a goal of the music teacher to maintain a high enrollment in order to maintain the music program,
Goodstein's findings suggest that successful music teachers are able to engage students to participate in their programs.

Additional research in the field of music has compared expert and novice teachers in the areas of conducting gestures and time use in regards to instruction. When comparing expert versus novice conductors, Byo and Austin (1994) found that experts were more expressive than the novices in the following areas: right arm/hand conducting gestures, body movement, and facial expressions. No significant differences were found between the experts and novices in regard to the frequency of eye-contact, however, results indicated that experts maintained eye-contact for longer periods of time. Experts also provided the ensemble with significantly more cues than did the novices.

Research has indicated a significant relationship between use of class time and student learning (Brophy & Good, 1986). In comparing the use of rehearsal time within instrumental music settings among expert, novice, and student teachers, Goolsby (1996) found that expert teachers spend less time engaged in verbal instruction as compared to novice teachers and student teachers. Goolsby (1997) again examined the verbal instruction of expert, novice, and student teachers, however, this study focused on the content of the verbal instruction as it related to music concepts. Findings indicated that the expert teachers evidenced the use of more specific positive feedback to students and spent more time emphasizing expressive playing by the ensemble than did the novice and student teachers. In an examination of beginning and experienced elementary music teachers in regard to time use and instruction, Wagner and Strul (1979) found
that the experienced teachers spent significantly less time engaged in verbal instruction than did both the intern and pre-intern teachers.

In terms of assessment, when comparing expert teachers to novice ones, it seems that there are indeed behaviors that expert teachers exhibit that novice teachers do not, and it also seems that there are behaviors that expert teachers exhibit perhaps more proficiently and with more sophistication than do novice teachers. However, while perhaps there are behaviors of expert teachers that can be observed and analyzed, Berliner notes that:

"...when evaluating expert teachers there is probably no formal evaluation system that can capture the wisdom about practice which they possess. They are contextually sensitive, are opportunistic in their teaching activities, and involve students in the learning process in different ways than do other teachers." (1991, p. 89).

This statement suggests the inherent problems in trying to determine the subtleties and complexities of certain teacher behaviors to in turn form a prescriptive plan based on expert teacher assessment by which to teach novice teachers how to become experts in their field. One of the problems of developing plans for teaching prospective and novice teachers how to teach effectively may indeed lie in the fact that the global attributes of a successful teacher encompass an array of numerous behaviors. These teacher behaviors, some of which are perhaps subtle, may be difficult to define behaviorally and may not be recognized or interpreted in the same way by observers who are assessing the teacher for effectiveness. This is a problem that has revealed itself within the research community when trying to achieve agreements among observers in specific versus global terms.
2.2 Global Versus Specific

Within the process of observing and evaluating teaching behaviors, whether it be in the form of self-evaluation or experts evaluating teachers, it seems that the evaluation of teaching episodes results in more reliable global agreement than specific agreement among observers. The behaviors attributed to effective teaching are numerous, and though observers might be able to generally identify a "good" teacher versus a "bad" teacher, there is often disparity among observers when asked to identify the specific attributes of effective teachers and ineffective teachers during a given observation.

Madsen, Standley, Byo, and Cassidy (1992) investigated intensity recognition training and the assessment of intensity as it related to teacher effectiveness in a music setting. Student teachers videotaped themselves teaching within a music classroom setting and were asked to self-assess their own teaching in terms of high versus low intensity and teacher effectiveness. Expert teachers also evaluated the student teacher videotapes in terms of teacher intensity and effectiveness. The results of this study indicated that both untrained and trained observers in intensity observation techniques could recognize high versus low teacher intensity, and that a relationship between intensity and teacher effectiveness was evident. However, though both the student teachers and expert teachers could recognize when effective versus non-effective teaching was being evidenced by the student teacher, there was great disparity among the experts' comments when asked to identify specific attributes, or teacher behaviors, associated with the intensity ratings they had assessed for each student teacher. These
findings suggest that perhaps an expert's assessment of a teacher's efficacy is a result of which specific teacher attributes the observer is most closely attending to at the time of observation.

Duke and Prickett (1987) also found global agreement but specific disparity of perceived events among observers when analyzing the written observations of subjects who were asked to evaluate ten aspects of a videotaped violin lesson and estimate the approval/disapproval feedback of the teacher. Even though the subjects were assigned to one of three treatment conditions where they either focused their attention on the student, the teacher, or both the student and the teacher, the within-group variability concerning the perception of events was high.

The ability to globally agree on behaviors or events, without being able to agree on the specificity of those behaviors or events through observation and evaluation, seems to transfer to the performance venue as well. Bumsed, Hinkle, and King (1985) and Bumsed and King (1987) studied judges' evaluations of music performances and determined that though there appeared to be a significant global agreement among the judges' ratings, the adjudicators were often disparate in their evaluations when assessing the specific musical elements of each performance. In this case, some of the disagreement may have occurred due to differences of each judge's conception of how well the specific musical elements were performed. However, perhaps some of the disagreement occurred because the judges were operating under different hierarchies in regard to which musical elements they most closely attended.
As evidenced by the research, it seems that the global versus specific issue in terms of agreement among observers when evaluating teacher effectiveness is an essential issue to consider if one is trying to ascertain what good teachers do. If one is interested in determining specific teacher attributes associated with effective teaching, lack of agreement among observers about perceived teacher effectiveness in specific terms, would seem to be more limiting for educators who are trying to prescribe ways to teach teachers how to be more effective. Perhaps, however, it is the “pool” of certain effective behaviors that make one teacher effective versus another, and the teaching of selected behaviors in isolation from one another would not result in greater efficacy. Whatever the case may be, it is evident that many researchers are devoting their time to investigating numerous specific teacher behaviors in terms of their relation to teacher effectiveness.

2.3 Direct Instruction/Teaching Cycles/Sequential Patterns

In order to teach concepts to students, musical or non-musical, the teacher must engage in some type of instruction process. The teacher behavior of instructing students is an area that has been extensively researched, particularly in regard to direct instruction, or teaching cycles. The extensive research that has been dedicated to teaching cycles suggests that this may be an important component of effective teaching. The direct instruction model incorporates three components of teacher-student interaction in a cyclical pattern: (1) the teacher presents a task to the student; (2) the student responds to the task through interaction with the teacher; and (3) the teacher
provides the student with immediate reinforcement/feedback related to the task (Becker, Engelmann, & Thomas, 1971).


A sequential pattern, or music teaching unit, is the three-step process of teacher task presentation, student response, and teacher reinforcement. Sequential patterns were initially investigated within music environments by Yarbrough and Price (1981) who conducted their research by examining the patterns of instruction used by band, orchestra, and choral directors, providing evidence that sequential patterns were present during rehearsals.

Research seems to indicate that teachers can be taught to increase their use of complete teaching cycles within their classrooms. A study conducted by Arnold (1995) suggested that choral and band teachers who were instructed in the use of complete teaching cycles, with time to practice them, subsequently evidenced a significant increase in not only the use of complete sequential patterns in rehearsals, but also in time spent in music activities. A study conducted by Yarbrough, Price, and Bowers (1991) indicated that teachers increased their use of sequential patterns when they were
exposed to positive research on the subject, and Flowers and Codding (1990) found that undergraduate students increased the percentage of time spent using complete teaching cycles when graduate music majors acted as mentors to the undergraduate students.

In terms of evaluating the effectiveness of utilizing sequential patterns as part of teacher instruction, studies have investigated complete teaching cycles in terms of their effect on student perceptions and performance. A study conducted by Price (1983) indicated that the use of sequential patterns, or complete teaching cycles, during band rehearsals positively affected the attentiveness, attitude and performance of students. Other studies have concluded that music lessons that contain complete teaching cycles are perceived by subjects as being more effective than lessons that do not contain sequential patterns (Jellison & Wolfe, 1987; Price & Yarbrough, 1989). A study conducted by Yarbrough and Hendel (1993) in which high school and elementary students observed and evaluated scripted music rehearsals, revealed that the subjects indicated a higher preference for sequential patterns that: (1) began with academic information as opposed to directions; (2) ended with approvals versus disapprovals; and (3) used specific as opposed to nonspecific reinforcement.

One of the more recent studies involving sequential patterns (Bowers, 1997) investigated the relationship between the use of sequential patterns and the overall teacher effectiveness of elementary education majors as they taught music lessons. Though no significant differences were found in effectiveness scores between the experimental groups that received training in sequential patterns versus the control
group, the experimental groups gave more specific feedback, spent more time in student response and less time in instruction than did the control group.

In regard to instruction, it seems that complete teaching cycles may be an effective way to teach, and they are still presently being investigated by researchers. In addition to the investigation of instructional models, teacher attributes inherent to the instruction process have been researched. One area of music research that has been researched extensively is that of intensity.

2.4 Teaching Intensity

Intensity of teaching is a concept defined by Madsen and Geringer (1989) as “sustained control of the student/teacher interaction as evidenced by efficient, accurate presentation and correction of the subject matter with enthusiastic affect and effective pacing.” (p. 90). Research studies in the area of intensity have indicated that intensity in teaching can be defined and taught, and that it can also be recognized by independent observers who have had no formal training in the concept of intensity (Byo, 1990; Cassidy, 1990; Madsen, Standley, & Cassidy, 1989; Standley & Madsen, 1987).

A study by Madsen, Standley, and Cassidy (1989) concluded that not only could independent observers untrained in the concept of intensity recognize high and low intensity contrasts with 82.7% accuracy, but that intensity could be taught to student teachers in music education who were able to successfully produce the alternating high/low contrasts in 15-second intervals that provided the videotaped episodes for observation by the independent observers.
A study conducted by Byo (1990) revealed similar findings within a conducting environment. Byo examined the abilities of students in an undergraduate beginning conducting class to demonstrate high and low intensity contrasts in their conducting gestures and found that not only were students able to successfully demonstrate intensity contrasts, but that independent observers could recognize the high/low intensity contrasts in 77% of the episodes. Johnson and Fredrickson (1995) also examined intensity within a conducting setting, but were interested in the effect differentiated feedback may have on the development of conducting intensity behaviors. The thrust of this study involved comparing three different forms of feedback — videotaped aural teaching comments, written aural teaching comments, and self-assessment — to determine if one mode of feedback would be more effective in helping students to develop intensity in their conducting. Results of this study indicated that subjects receiving the videotaped aural teaching comments evidenced the highest posttest intensity ratings, subjects receiving written aural teaching comments achieved the highest mean gain between the pretest and posttest, and subjects who assessed themselves exhibited the least improvement. These findings suggest that students who receive feedback from an external source on intensity are better able to increase their intensity behaviors.

The research on teacher intensity within a music environment has also been transferred to subjects with limited knowledge and experience involving musical subject matter. Cassidy (1990) conducted a study with preservice elementary education majors enrolled in a elementary music course; the experimental subjects received
training sessions on intensity whereas the control group did not. Results indicated no significant differences between the two groups in terms of increasing high intensity behaviors throughout the semester during videotaped teaching activities, however, a significant interaction between teaching task and treatment was evidenced. The experimental group that received training in intensity evidenced more accuracy and efficiency in their task presentations, suggesting that training in intensity may affect the overall effectiveness of one's teaching.

Several studies have investigated the relationship between teacher intensity and the global attribute of teacher effectiveness (Madsen, 1990; Madsen & Geringer, 1989; Madsen, et al., 1992; Wang & Sogin, 1997). In a study by Madsen and Geringer (1989), one panel of experts rated videotaped teachings of student teachers in terms of effectiveness and a second panel of experts rated the same videotaped teachings in terms of intensity using a Teacher Intensity Form developed by the researchers. After comparing the two panel of experts' evaluations, results indicated a strong positive relationship between intensity and teacher effectiveness.

A study by Madsen, Standley, Byo, and Cassidy (1992) also revealed a relationship between intensity and effectiveness ratings in addition to results which indicated that student teachers assessed themselves as having spent more time engaged in high intensity behaviors during teaching episodes (88%) than they may have in actuality been demonstrating according to the assessments of expert observers (72%). A more recent study by Wang and Sogin (1997) also found a high correlation between intensity and effectiveness assessments of observers when investigating the relationship
of classroom activity and teacher intensity and effectiveness. Although intensity is a concept that has been developed and defined to incorporate teacher attributes involving the accuracy of instruction, enthusiasm of the delivery, and effectiveness in managing the classroom, in a study conducted by Yarbrough and Madsen (1998), subjects were found to equate intensity with enthusiasm when no formal definition of intensity was presented.

By its operational definition, however, intensity encompasses an arena of teacher attributes, one of which includes the accurate presentation of the subject matter by the teacher. If accurate instruction has been incorporated within the definition of intensity, an area that has been readily investigated by music researchers, and if ways to teach subject matter, including teaching cycles, are being examined, then it would seem imperative that the subject matter that is presented to students be accurate. One would assume that effective teachers know their subject matter, and perhaps that is the reason for the lack of experimental research available regarding the accuracy of instruction.

2.5 Accuracy of Instruction

Within the field of music education, a summary of research has indicated that the teacher’s knowledge of the subject matter is a component that characterizes effective teaching (Brand, 1985). Research conducted within non-musical teaching environments has indicated that expert teachers are more knowledgeable in their field as compared to novices teachers (Berliner, 1986), suggesting that knowledge of the subject matter is a teacher attribute that contributes to effective teaching.
Through descriptive and evaluative means, research has evidenced that a teacher’s knowledge of the subject matter is perceived as a component of good teaching by advanced high school seniors and effective high school teachers (Collier, 1987), as well as by high school graduates, high school dropouts, and administrators (Adams, 1983). In a study by Olsen and Moore (1984), that investigated high school students’ and teachers’ responses regarding desirable teacher attributes, it was suggested that high school students appear to associate good teaching most highly with a teacher’s expertise of the academic subject matter. This study, however, suggested that the students also valued a teacher’s ability to deliver the subject matter with enthusiasm or excitement.

### 2.6 Accuracy of Instruction Versus Teaching Delivery

Though knowledge of the subject matter is a teacher attribute that has been identified as a component of effective teaching, converse to the latter study, there is research which indicates that it is the enthusiastic delivery of a teacher, and not the substance or accuracy of the academic subject matter being presented, that has the greatest affect on observers’ evaluations of good teaching.

Naftulin, Ware, and Donnelly (1973) conducted an experiment whereby an actor was trained by the researchers to present an extremely articulate, entertaining, charismatic, and humorous lecture, yet without substance or accuracy in regard to academic content. The actor presented his highly charismatic lecture to higher education professionals in the fields of education, administration, social work, psychology and psychiatry. The actor was introduced under the alias of Dr. Myron L. Fox and the attendees were falsely told that he was an expert in the application of
mathematics to human behavior. Following each of the lectures, the attendees (i.e. subjects) were asked to complete an evaluative questionnaire about the lecturer and results indicated significant favorable ratings of the lecturer. These findings suggest that even though the lecture lacked substantive academic content, the lecturer's delivery was so appealing that the delivery of the subject matter took precedence over the subject matter itself in terms of the subjects' evaluations.

A study by Weeks (1991) compared three components of teaching — academic expertise, effective delivery and classroom control — in order to determine secondary students' perceptions of music teacher effectiveness. Seventh and eleventh graders were asked to complete a questionnaire which consisted of nine statements describing teacher behavior in terms of their "best" teacher, as well as rank the three teaching components in terms of importance. Results indicated that both grade levels rated their "best" music teacher higher in effective delivery as compared to academic expertise or classroom management and also ranked effective delivery as the most important quality for a good teacher to possess.

Yarbrough and Madsen (1998) conducted a study investigating observers' evaluations of seven rehearsal excerpts that focused on a college choral conductor's teaching of two contrasting pieces to her choir across a semester. The subjects, university music majors, were asked to rate the teacher in terms of effectiveness within ten different categories using a ten-point scale and were also asked to write comments about what they observed. During the second excerpt, the conductor modeled incorrect rhythms; yet the subjects rated Excerpt 2 as the third highest of the seven observed
rehearsal segments. It was concluded that "students may 'forgive' inaccuracies in task presentations if the teacher has a satisfactory or pleasing style of teaching." (Yarbrough & Madsen, 1998, p. 478).

2.7 Teaching Delivery

Teacher delivery, unlike accuracy of instruction, is an area that has been investigated readily by many researchers. In addition to the intensity research that includes the enthusiastic delivery of the teacher as part of its definition, other forms of delivery have been defined by researchers in terms of enthusiasm, magnitude, and affect.

2.7.1 Teacher Enthusiasm

Much of the research involving teacher enthusiasm has attempted to investigate the effects of teacher enthusiasm at different levels. Collins (1978) developed a Peer Teaching Observation Instrument in order to measure enthusiasm across three levels -- high, medium, and low -- defining variables of enthusiasm as vocal delivery, eyes, gestures, body movement, facial expression, word selection, acceptance of ideas and feelings and overall energy level. His study revealed that preservice teachers were able to increase and maintain higher levels of enthusiasm after receiving behavioral training in enthusiasm based on Collins' descriptions. McKinney et al. (1983) using the instrument established by Collins, found that teachers who received training in enthusiasm across the three levels of high, medium, and low were able to accurately recognize the three different levels of enthusiasm when presented to them in a posttest.
Research studies that have investigated teacher enthusiasm and its effect on student achievement and student attitude have been conducted with a variety of age levels using different levels of teacher enthusiasm as treatments. Mastin (1963) conducted research with the intent of ascertaining whether student achievement increases when teachers presenting the information are enthusiastic versus when teachers are acting indifferently about the subject matter. Fifteen out of 20 high school classes demonstrated a higher mean score for the lessons taught by a teacher who had delivered the lessons with apparent enthusiasm as compared to the lessons that were taught with apparent indifference. Additionally, 67.91% of the pupils were found to prefer the enthusiastic teacher in comparison with the teacher who taught with indifference. Another early study conducted by Coats and Smidchens (1966) found that increased student achievement results when teachers use a "dynamic" teaching style in their delivery of the academic information.

The "Dr. Fox" studies are other examples of research that has provided the research community with experimental evidence regarding teacher enthusiasm in terms of information presentation and its effect on college students' achievement and attitude (Ware and Williams, 1975; Ware and Williams, 1976). The studies conducted by Ware and Williams revealed that regardless of whether lectures contain a substantial amount of academic information or little to no academic information, if the lectures are presented in an enthusiastic manner, subjects' ratings for both the low-information lecture and high-information will not differ significantly. However, the studies did indicate that students learned more information from the high-information lecture.
These findings may suggest that a high-information, high-enthusiastic presentation is optimal for increases in student achievement and preference and/or attitude.

Larkins and McKinney (1982) also examined the effects of teacher enthusiasm on student achievement in a set of two studies which investigated three levels of overt teacher enthusiasm on the achievement of seventh graders. In the first study, teachers rotated across a four day period in using the treatment conditions of the three levels of enthusiasm — high, normal, and low — such that each teacher taught each level of the treatment. Though no significant differences were found for student achievement between the groups receiving low enthusiasm and the groups receiving normal enthusiasm, the group means did reveal higher means for both of these groups in comparison to the group that received high enthusiasm.

The second study, which attempted to replicate the first, revealed different findings. Though again no significance was indicated across the means of the three groups, the means did indicate higher achievement on days two and three for both the high and normal groups in comparison to the groups that received low enthusiasm as treatment.

A study by Burts, McKinney, and Burts (1985) was unique in that it sought to determine the effect of teacher enthusiasm on the achievement of preschoolers. A group of 55 three- and four-year old subjects were assigned to one of three treatment conditions — high, medium, or low teacher enthusiasm. The subjects were pretested and then posttested on four social studies concepts after having received lessons on the subject matter over an 8-day period.
Results of this study indicated no significant differences in achievement among the three treatment groups. However, evidence via teacher reports revealed that students who received high enthusiasm from the teacher appeared to be “more attentive, more interested, and more responsive to teacher’s questions.” (p. 26). These findings suggest that although preschool students’ achievement may not increase due to high teacher delivery, they may exhibit more attentive and enthusiastic behaviors when taught by an enthusiastic teacher.

2.7.2 Magnitude and Affect

Specific to the area of music education, Yarbrough (1975) is the first to have investigated high and low styles of delivery in terms of defining and classifying overt teaching behaviors under the global term of teacher “magnitude.” Operational definitions of the following teacher behaviors - eye-contact, closeness, volume and modulation of the voice, facial expressions, and rehearsal pace - were constructed and utilized for both low and high magnitude conditions to investigate the effect of teaching delivery based on these overt behaviors on choral students’ attentiveness, attitude, and performance.

Evaluations of the conductor who taught a rehearsal under the high and low magnitude conditions, were evidenced via student self-reports, juries’ evaluations of the audiotaped musical performance, and behavioral observations of student on- and off-task. Results indicated that students preferred the high magnitude condition, that three out of four ensembles received their lowest performance ratings under the low
magnitude condition, and in regards to student attentiveness, student off-task was higher during the low magnitude condition.

In addition to Yarbrough's study (1975), student attending behavior was also found to be affected by teacher delivery in a study by Sims (1986), who investigated the effect of counterbalancing high/low teacher affect with passive/active student activities. Results of this study indicated that students who engaged in activity-based lessons under the high-affect condition were found to be the most attentive. These findings suggest that students will exhibit more on-task behavior when information is presented to them in an enthusiastic way. High attentiveness is a student behavior that teachers find not only desirable, but is a behavior that if engaged in, may increase students' learning.

2.8 Student Attentiveness

One of the measurable characteristics of effective teaching and a principal component of student learning is “on task” behavior of the student (Madsen, 1971). If student on-task behavior is a measurement of the teacher’s effectiveness, it would seem critical for optimal student learning outcomes that the most effective teachers would maintain a classroom where attentiveness was a high priority. Research in the field of music has provided evidence that student learning suffers when off-task behavior exceeds 20% (Madsen, Becker, & Thomas, 1968). The idea that student learning is affected by attending behavior has resulted in numerous studies investigating several different learning environments controlled by the teacher which are possibly associated with on- or off-task behavior within the classroom.
The rate of teacher approval versus disapproval and its effect on attending behavior is an area that has been investigated by several researchers. Research studies have revealed that teachers who maintain a higher rate of approval within the classroom in turn maintain a higher rate of student attentiveness (Hall, et al., 1968; Madsen, Becker, & Thomas, 1968). Subsequent research studies revealed that elementary students exhibited fewer off-task behaviors when teachers executed approval rates of at least 75% (Forsythe, 1975) or 80% (Kuhn, 1975).

The effectiveness of this high rate of approval appears to transfer to future behavior. Results of a study by Dorow (1977) indicated that students who had received high-approval from the teacher during music instruction across a five-day period, were significantly more on-task during a subsequent live concert than were the students who had been assigned to a high-disapproval treatment.

Within the music classroom, many types of activities are accomplished; some are high activity and some are more passive or transitional. Research indicates that some of these activities may inherently create on-taskness while others may need more careful structure from the teacher. Within both music and regular classroom settings, students appear to be most off-task during “getting ready” periods and least off-task when they are actively engaged in an activity (Forsythe, 1977). Forsythe also found that students were significantly least off-task within the music classes as compared to the regular classes, regardless of the amount of approval/disapproval given by the teacher. This finding suggests that the activity of engaging in music is intrinsically reinforcing to the student.
Madsen and Alley (1979) made a similar conclusion when students, despite low approval ratios from the teachers, were found to be least off-task in choral and instrumental groups as compared to the students who were in non-musical settings, general music settings, and clinical music settings. These findings further suggest that performance-based musical settings are more intrinsically rewarding than general music settings. Additional research suggests that students are more on-task during performance activities versus non-performance activities (Brendell, 1996; Madsen & Geringer, 1983; Murray, 1975; Spradling, 1985; Yarbrough and Price, 1981).

Other research has investigated classroom or performance activity and student attentiveness while referring to the activity as it specifically relates to time. Kostka (1984) investigated time use during the piano lessons of children and adults and found that time use differed according to the age of the student. The study also suggested that the younger children received more teacher approval, yet the adult students were more on-task. Witt (1986) also investigated the use of class time and student attentiveness, but in secondary orchestral and band rehearsals. The results of the study indicated that "getting ready" time was greater in the orchestral settings as compared to the band settings and that the orchestral students were almost 50% more off-task than the students who were participating in the band rehearsals. Similar to previous research (Forsythe, 1977), these results suggest that off-task student behavior may be a result of time spent "getting ready" by the teacher.

Spradling (1985) conducted a study with a college concert band in which he investigated the time-out from musical performance on the attentiveness and attitude of
the ensemble. Results of this investigation indicated that as frequency of instruction increased, the on-task behavior of the students decreased. Furthermore, the students also preferred the rehearsals that had fewer time-out periods, and similar to previous research (Forsythe, 1977; Madsen & Alley, 1979), students were more on-task when they were actively engaged in music making than they were when receiving instruction. In conclusion, a descriptive study by Mergendoller (1981) indicated that seventh grade students were most concerned with classroom management and discipline issues in regard to teacher behaviors above all other teaching behaviors or characteristics.

2.9 Need for the Study

In examining the extant literature on teaching effectiveness, it is evident that many researchers have made efforts to define effective teacher behaviors by means of observation and evaluation. Specifically, researchers have made attempts to define both global and specific attributes in regard to effective teaching by studying areas such as teacher instruction, teacher intensity, teacher delivery, and classroom management.

Some teacher effectiveness research has involved the observation and evaluation of teachers within real educational settings without attempts to control for teacher behaviors, and some research has tried to determine teacher effectiveness by attempting to isolate specific teaching components through experimental means. If one is to determine how specific teacher attributes affect observers' evaluations of a teacher's effectiveness, it seems that using experimental means to isolate specific teacher behaviors would be advantageous in attempting to determine specific aspects of effective teaching.
Though there is a body of experimental research which has investigated the effects of high/low teacher delivery in terms of teacher effectiveness, there is no experimental evidence to suggest how the variable of accuracy of instruction affects observers' ratings of teacher effectiveness. Additionally, much of the research involving student on-/off-task behavior has been conducted, not in terms of how the on-/off-task behavior of the students affect evaluators' ratings of the teacher, but rather according to how teacher behaviors affect the on-/off-task behavior of the students.

For these reasons, the present study has attempted to isolate the variables of accurate/inaccurate teacher instruction, high/low teacher delivery, and on-/off-task student behavior within an experimentally controlled environment for their effect on the teacher effectiveness evaluations of four groups of musicians varying in experience level.
CHAPTER 3. METHOD

3.1 Subjects

The subjects (N = 168) used in this study were experienced classroom music teachers currently involved in graduate studies (n = 42), undergraduate music majors (n = 42), students in grades 9-12 currently involved in classroom music instruction (n = 42), and students in grades 6-8 currently involved in classroom music instruction (n = 42). The experienced music teachers and the undergraduate music majors were obtained from a School of Music within a research category one state university in the southeast. The middle and high school students were obtained from music classes at two public schools in the southeast.

The subjects viewed and evaluated a stimulus videotape that was developed to isolate the independent variables that were used in this study. The middle and high school subjects completed the observations and evaluations during regularly scheduled class meetings. The graduate and undergraduate students, who were involved in music classes at the university, either completed the observations and evaluations during regularly scheduled class meetings or made individual appointments with the investigator to view and evaluate the stimulus tape at the university.

3.2 Independent Variables

The independent variables of this study were: (1) accurate/inaccurate teacher instruction; (2) high/low teacher delivery; (3) on-/off-task student behavior; and (4) experience level of the subjects. In order to define the variables within the areas of accuracy of instruction, delivery skills, and student behavior, operational definitions
were developed. The definitions pertaining to inaccurate/accurate teacher instruction were realized in terms of specific teacher behaviors (see Table 1).

Within the area of teacher delivery, high/low teacher behaviors were operationally defined using selected categories as based on: (1) Yarbrough's (1975) operational definitions of high and low magnitude teacher behaviors; and (2) Collins' (1978) Peer Teaching Observation Instrument (see Table 2).

### Table 1. Operational Definitions of Accuracy of Instruction

<table>
<thead>
<tr>
<th>Teacher Behavior</th>
<th>Accurate</th>
<th>Inaccurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singing</td>
<td>Sings pitches, rhythms, and text of song accurately. Sings in tune. Sings with high, light, heady tone quality.</td>
<td>Sings pitches and/or rhythms and/or text of song inaccurately while maintaining the basic contour of the melody. Sings out of tune. Sings with poor tone quality.</td>
</tr>
<tr>
<td>Verbal Academic Information</td>
<td>Verbal academic information is accurate.</td>
<td>Makes mistakes when giving verbal academic information.</td>
</tr>
<tr>
<td>Verbal Feedback in Response to Student Performance</td>
<td>Verbal feedback in response to student performance is accurate. Makes no approval errors.</td>
<td>Verbal feedback in response to student performance is not always accurate. Makes approval errors.</td>
</tr>
<tr>
<td>Gestures</td>
<td>Models gestures for the activity accurately.</td>
<td>Makes mistakes in modeling gestures for the activity.</td>
</tr>
<tr>
<td>Teacher Behavior</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Maintains with group and/or individuals throughout lesson.</td>
<td>Rarely looks at individuals or group. Primarily looks at floor, ceiling, watch and hands.</td>
</tr>
<tr>
<td>Gestures/Body Language</td>
<td>Maintains good posture, such as keeping weight evenly distributed on both feet, keeping chin up, looking “tall” without looking stiff. Frequently leans towards students. Makes engaging gestures with hands and arms.</td>
<td>Frequently exhibits poor posture such as slumping, putting weight on one foot, and hanging head downward. Remains stationary and never leans towards students. Sometimes brings hands up to face to look at watch or fingernails. Sometimes puts hands on hips, crosses arms in front of body, brushes imaginary lint off outfit.</td>
</tr>
<tr>
<td>Facial Expressions</td>
<td>Face expresses enthusiasm and approval by raising eyebrows, widening eyes and smiling.</td>
<td>Neutral mask majority of time and occasional frowning. Face expresses boredom and indifference. No raising of eyebrows and no smiling.</td>
</tr>
<tr>
<td>Over-all Energy Level</td>
<td>Exuberant. Maintains high degree of energy and vitality.</td>
<td>Lethargic, appears inactive, dull or sluggish.</td>
</tr>
</tbody>
</table>
Within the area of classroom management, only student on-/off-task was manipulated. The operational definitions in the area of classroom management apply only to student behaviors and not to teacher behaviors, and are defined operationally in terms of specific student on- and off-task behaviors (see Table 3).

### Table 3. Operational Definitions of Student Behavior

<table>
<thead>
<tr>
<th>Student On-Task</th>
<th>Student Off-Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% student on-task. Students are engaging in appropriate behaviors at all times including following directions, actively participating in the activity, sitting up and facing teacher at all times, and not talking unless called upon to answer a question.</td>
<td>Majority of students off-task. Majority of students are engaging in inappropriate behaviors throughout lesson including not following directions, not participating in the activity, turning to face other students instead of facing teacher, and talking while teacher is talking and/or when students are supposed to be actively participating in the activity.</td>
</tr>
</tbody>
</table>

### 3.3 Teaching Segments

For the purposes of this investigation, eight teaching segments were designed in order to manipulate the variables of accurate/inaccurate teacher instruction, high/low teacher delivery, and on-/off-task student behavior in such a way that all possible combinations of the variables would be presented. Each one of the eight teaching segments paralleled one of the eight scripts -- Teaching Segment 1 incorporated Script 1, and Teaching Segment 2 incorporated Script 2, etc. The eight teaching segments are listed in the order that was randomly selected and presented on the stimulus videotape (see Table 4).
Table 4. Eight Teaching Segments

<table>
<thead>
<tr>
<th>Segment</th>
<th>Variables</th>
<th>Accuracy of Instruction</th>
<th>Delivery</th>
<th>Student Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Inaccurate</td>
<td>Low</td>
<td>On-Task</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Accurate</td>
<td>High</td>
<td>Off-Task</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Accurate</td>
<td>High</td>
<td>On-Task</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Accurate</td>
<td>Low</td>
<td>Off-Task</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Inaccurate</td>
<td>Low</td>
<td>Off-Task</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Accurate</td>
<td>Low</td>
<td>On-Task</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Inaccurate</td>
<td>High</td>
<td>On-Task</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Inaccurate</td>
<td>High</td>
<td>Off-Task</td>
</tr>
</tbody>
</table>

3.4 Scripted Music Lessons

For the purposes of this study, the investigator created eight different scripted music lessons (see Appendix A) such that each individual lesson would be used in one of the eight teaching segments (i.e. Teaching Segment 1 incorporated Script 1, Teaching Segment 2 incorporated Script 2, etc.). The delivery behaviors of the teacher were not scripted into the steps of the eight music lessons, but were executed by the teacher according to which variables were to be exhibited in a particular teaching segment. The delivery behaviors were executed in an ad lib fashion based upon the
previously stated operational definitions that pertained to high and low teacher delivery.

By the same token, the student behaviors were not scripted either. The students executed either 100% on-task behaviors or executed the off-task behaviors in an ad lib fashion according to the teaching segment based on the previously stated operational definitions.

The purpose for executing the teacher delivery in an ad lib fashion based on pre-operational guidelines rather than scripting exactly when certain behaviors would take place, was to create an effect whereby the teacher would look as "real" and natural as possible in executing the high/low delivery behaviors. The investigator, who acted as teacher, felt that having to memorize exactly when a high or low delivery behavior, (looking at watch, for example), was to take place during the lesson, might impede in the overall effect that the investigator was trying to create. The investigator also felt that the students would look more "real" or natural during the off-task conditions if they approached the task in an ad lib fashion based on the pre-operational definitions and guidelines. Furthermore, the investigator felt that it would be extremely difficult, if not impossible, for the elementary students to memorize a variety of specific off-task behaviors to be executed at exact moments during the three lessons that required the execution of the off-task behaviors. For these reasons, only accurate and inaccurate teacher verbalizations in the area of instruction were actually scripted in each music concept lesson according to the variables that were to be presented in each teaching segment.
Each scripted music lesson was comprised of approximately 40 steps and encompassed the teaching of an elementary general musical concept through an originally composed song and movement. The music concept and the song/movement activity used to teach the music concept was different for each script.

Though teaching the same music concept and utilizing the same song/movement activity for each of the eight scripts perhaps would have functioned to provide more control of the academic content of the lesson across the eight scripts, it was thought that the subjects viewing and evaluating the 40-minute stimulus videotape would find it unbearable and monotonous to hear and see the exact same music lesson being taught eight times, which might perhaps affect their abilities to remain on-task to the stimulus videotape. For this reason, it was decided that each scripted music concept lesson would be different. Though each scripted music lesson taught a different elementary music concept and utilized a different song/movement activity, each script, regardless of the combination of the variables being presented, followed a similar outline in an attempt to control for variables such as frequency of student-teacher activity engagements, teacher instructions, student responses, and teacher feedback to student responses. More specifically, each script was designed based on the following model:

1. Teacher teaches originally composed song by rote.
2. Teacher asks students to listen for something in the song.
3. Teacher performs song alone.
4. Teacher asks individual student question regarding what class was asked to listen for.
(5) Teacher gives verbal academic approval as feedback to the student answer.

(6) Teacher defines musical concept.

(7) Teacher gives students a movement activity to perform with the teacher while teacher sings song alone.

(8) Teacher gives verbal academic approval as feedback to the group student response of the movement activity.

(9) Teacher and students sing the song and execute the movement activity together.

(10) Teacher gives verbal academic approval as feedback to the group student response of the musical activity.

(11) Teacher asks academic question of an individual student regarding taught music concept.

(12) Student responds according to script.

(13) Teacher gives verbal academic approval as feedback to the student answer.

(14) Teacher asks a different academic question of a different individual student regarding taught music concept.

(15) Student responds according to script.

(16) Teacher gives academic approval as feedback to the student answer.

3.5 The Music Concepts

Eight different music concepts were selected by the investigator to be incorporated into the eight scripted music lessons. With time constraints pending as determined by the investigator (each scripted music lesson could only be four to five
minutes long such that the composite stimulus videotape would not exceed a 45-minute regular classroom period for subject viewing), eight elementary music concepts were selected that could be presented within those time conditions.

Though the music concepts varied somewhat in level of difficulty, each was a music concept that could be taught at the upper elementary level. In addition, as previously discussed, each music concept was presented in a similar fashion based on an identical model for successive teaching. The seven upper elementary students who contributed to simulating the music classroom setting responded either accurately or inaccurately according to which set of variables was being incorporated into a particular lesson. The eight music concepts that were scripted into music lessons are listed in the order that was randomly selected and presented on the stimulus videotape (see Table 5).

Table 5. Music Concepts

<table>
<thead>
<tr>
<th>Script</th>
<th>Music Concept</th>
<th>Presentation of Music Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Teacher Demonstration</td>
</tr>
<tr>
<td>1</td>
<td>Tempo</td>
<td>Inaccurate: clapping</td>
</tr>
<tr>
<td></td>
<td></td>
<td>unsteady beats and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>incorrect rhythms;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>singing out of tune.</td>
</tr>
<tr>
<td>2</td>
<td>Piano and Forte</td>
<td>Accurate: correct</td>
</tr>
<tr>
<td></td>
<td></td>
<td>loud and soft singing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>voice; correct gestures;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>singing in tune.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accurate: correct gestures (palms up and out); no singing during rest; singing in tune.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Rest</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Accurate: correct modeling with hands to show notes moving up, down, and unisons; singing in tune.</th>
<th>Accurate: the shape of a melody.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Melodic Contour</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Inaccurate: clapping straight rhythms with no syncopation; singing out of tune.</th>
<th>Inaccurate: notes that fall on the strong beats of the music.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Syncopation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Accurate: correct singing of staccato; two-finger clapping is short and detached; singing in tune.</th>
<th>Accurate: short and detached notes in music.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Staccato</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Inaccurate: clapping two quarter notes; singing out of tune.</th>
<th>Inaccurate: the dot makes this note shorter (with teacher pointing to the note that precedes the dot).</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Dotted Rhythm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Inaccurate: singing two unison pitches and labeling them a skip; singing out of tune.</th>
<th>Inaccurate: a note that moves to the next note by step.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Skip</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.6 The Songs

Eight originally composed children's songs (see Appendix B) were composed by the investigator to use within the eight different scripted music lessons. Though each of the eight songs was different, the investigator attempted to control for the musical content variable of the songs by making the songs as similar in structure as possible. Each of the eight songs used an originally composed text that was age appropriate, and where the last word in lines 2 and 4 rhymed. Each song was composed with a time signature of 4/4 and each comprised four lines and eight measures. All of the songs were based primarily on a pentatonic scale, and the melodic contour of each song consisted of skips, steps and unisons. The songs were also composed, not entirely, but primarily, using quarter notes, eighth notes, half notes, and quarter rests.

3.7 Field Study

A field study, without subsequent subject evaluation of the videotape or analysis, was conducted prior to the present investigation. The purpose of conducting the field study was to provide experiential information to the investigator in terms of procedural aspects in the areas of videotaping and teaching the students the scripted music lessons. The students were obtained from a summer program at the Baton Rouge Center for Visual and Performing Arts, an elementary magnet school in East Baton Rouge Parish, Louisiana. Permission from the school’s principal, the summer program coordinator, the students’ parents, and the students themselves was attained prior to conducting the field study.
The investigator secured an isolated classroom at the school where she worked with the students for one hour each day over the period of a week during the regularly scheduled summer program. The investigator taught the students the first five scripted music lessons in order to help refine an efficient means by which to: (1) teach the material such that the students would be able to accurately execute the scripted lessons; and (2) coach the students in portraying a simulated music classroom that would look realistic to viewers in terms of the students' execution of on- and off-task behaviors.

The investigator also used the field study as a means by which to experiment with lighting, camera position, seating arrangements and teacher/student speaking and singing volume, in order to facilitate decision-making regarding video visual/audio issues prior to the conduction of the present investigation.

When the field study was completed, the investigator made subsequent plans to obtain a new group of elementary students who would participate in executing the eight scripted music lessons which would, in addition to the investigator acting as teacher, provide the actualized material for the stimulus videotape used in the present study.

3.8 Stimulus Videotape

3.8.1 Process of Selecting the Elementary Students

Prior to videotaping, seven upper-elementary school students, grades 3-5, were selected to participate in the production of the scripted music lessons to be videotaped. The teacher (i.e. investigator) and the students interacted according to the scripts and the operational definitions of the variables that were to be presented in each teaching segment, thus simulating a small general music classroom setting.
The students were obtained from an after-school program at the Baton Rouge Center for Visual and Performing Arts, an elementary magnet school in East Baton Rouge Parish, Louisiana; permission from Louisiana State University’s Human Subjects Committee, the East Baton Rouge Parish School Board, and the elementary school’s principal was attained prior to selecting the students. The students were selected by the investigator after consulting with and obtaining recommendations from the elementary school’s general music teacher and the after-school program coordinator who was in charge of the after-school program.

The music teacher and the after-school coordinator were consulted for their recommendations due to the potentially complicated nature of the student tasks that were involved. For the purposes of this study, the elementary students needed to: (1) learn the scripted music lessons (four of which required accurate musical demonstrations from the students); (2) memorize the musical material and short verbal academic responses; and (3) deliver the student on-/off-task behaviors in a style that would look “real” to subjects who would be viewing and evaluating the stimulus videotape, yet without becoming too loud such that the teacher would not be heard over the students on the videotape. In an attempt to insure the completion of a stimulus videotape that would accurately depict the variables to be executed within each of the teaching segments, the investigator presented the music teacher and the after-school coordinator with the following guidelines for student recommendation:

(1) Student is either in the third, fourth or fifth grade.

(2) Student is thought to be capable of staying on-task for an hour at a time.
(3) Student can match pitches well and sing in tune.

(4) Student is thought to be capable of following instructions easily and accurately.

(5) Student is thought to be capable of memorizing musical material quickly and accurately.

(6) Student is thought to be capable of memorizing short verbal responses quickly and accurately.

(7) Student is thought to be not shy nor inhibited in personality.

After the music teacher and after-school coordinator gave the investigator the names of the students whom they recommended for the project, the students were invited individually by the investigator to participate in the study. More specifically, the investigator invited the students to be “actors and actresses” in the making of a music video about an elementary music classroom that learns music from a teacher that sometimes teaches well and sometimes teaches poorly. The investigator also told the students that sometimes they would be asked to act well behaved in the video, and sometimes they would be asked to misbehave on purpose. If a student expressed interest in participating in the study, the investigator sent a letter (see Appendix C) home to the parents of the students describing the study and what the student would be doing. The students were told that they must return the attached consent form with their parent’s signature and their own signature in order to participate in the video.

Seven students that had been recommended to the investigator by the school’s music teacher and the after-school coordinator returned their signed consent forms
within a week. The investigator subsequently made arrangements to secure a contained
regular classroom at the Baton Rouge Center for Visual and Performing Arts to be used
every afternoon during the first hour of the regularly scheduled after-school program
until the completion of the videotaping. It took a total of seventeen hours across a two
and a half week period of time to obtain eight 4- to 5-minute video segments that the
investigator felt were usable for the present study.

3.8.2 Teaching/Rehearsing the Elementary Students

The teaching and rehearsing of the scripted music lessons took place in an
unoccupied contained classroom at the elementary school. All of the desks were
pushed to the side out of the camera’s view and seven chairs with no desktops were
brought into the room each day and stationed in two rows. A stationary Panasonic
video camera was placed every day on a tripod behind the chairs such that the students,
when seated, sat with their backs to the camera. The investigator, on the other hand,
faced the students such that she was facing the camera at all times when teaching.

The investigator devised a plan a priori to teach each scripted music lesson to
the students. The investigator was consistent in the execution of how each lesson was
taught in terms of successive steps to reach the desired learned effect for each particular
teaching segment. Each script was videotaped when it was evident to the investigator
that the students could: (1) execute the song/movement activity exactly as the
investigator had presented it; (2) execute their short verbal responses to the scripted
academic teacher questions from memory; and (3) execute on-task behaviors according
to the guidelines that the investigator presented or execute off-task behaviors in an ad
lib fashion that looked “real” and without getting so loud that the investigator’s teaching could not be heard.

The investigator taught the eight scripts to the elementary students across the two and a half week period. The four scripts that incorporated a set of variables that required the students to execute on-task behaviors were taught first. The investigator determined a priori that the execution of the off-task behaviors would be more difficult, though perhaps more fun, for the students to execute appropriately, and thus decided to teach the four scripted music lessons which required student execution of off-task behaviors last.

On the first day of rehearsal, the investigator explained to the students that they were helping to make a video about a music classroom. The students were told that on some days the investigator would be teaching them a song using a pretty singing voice, but on other days she would be teaching them a song and would be using an ugly singing voice. The investigator then demonstrated an accurate versus inaccurate singing voice to the students according to the previously stated Operational Definitions of Accuracy of Instruction in regards to Singing.

The instructor then told the students that on some days she would be teaching them correct academic information, but that on other days she would be teaching them wrong academic information. The investigator subsequently told the students that after the music lesson was learned the wrong way, and had been videotaped the way she wanted it to be, then she would make sure to give the students the correct information before they went home for the day.
The investigator told the students that on some days she would be teaching with a lot of enthusiasm and would look like she really loved to teach music, but that on other days she would be teaching with no enthusiasm and would look bored and tired, looking as if she did not want to be teaching them at all. The investigator then demonstrated some high versus low teacher behaviors according to the Operational Definitions of Delivery. The investigator lastly told the students that on some days they were going to be asked to be very well behaved, but on other days they were going to be asked to misbehave on purpose within guidelines.

After the initial previous explanations on the first day, the investigator proceeded to teach the first scripted music lesson to the students (Script 3). This scripted music lesson and the other three scripted music lessons requiring on-task behaviors from the students (Scripts 7, 6, and 1), which would follow, were presented by the investigator according to the following model:

1. The investigator coached the students in on-task behaviors according to the previously stated Operational Definitions of Student Behavior by telling them exactly how to act and having them practice it. After all of the students were able to execute 100% on-task behaviors as a group, the investigator would positively reinforce them for executing those behaviors and remind them again before videotaping of what they needed to do.

2. The investigator taught each song by rote, presenting it exactly as she wanted it to be executed by the students on the videotape (e.g., if the teaching segment was to incorporate a set of variables whereby the
instruction was to be inaccurate, the investigator would teach the song, and
the students would learn the song, inaccurately).

(3) The investigator chose three different students per scripted music lesson and
assigned them an "acting line" which was a verbal student response to a
teacher academic question. The investigator taught each student his/her
line (which was often a one- or two-word response) and had the student
practice reciting his/her line back to the investigator until it was
memorized. (e.g., the investigator would say, "(Student name), your line is
forte. Say forte." Student responds. "When you hear me ask the question,
What is the musical term that we learned today that means loud? ... What
are you going to say to me?" Student responds with "forte.")

(4) The investigator taught the movement activity to be used with the song,
presenting it exactly as she wanted it to be executed by the students on the
videotape. The students were told to follow the investigator no matter what
she did with her arms and hands. The investigator told the students this so
that they would make sure to follow during inaccurate segments as well as
during accurate ones, regardless of how the verbal instructions were
scripted in the lesson (e.g., within a teaching segment that required
inaccurate instruction, the teacher might ask the students during the lesson
to keep a steady beat by clapping their hands, but in actuality would need
the students to execute an unsteady beat along with the teacher to accurately
execute the inaccurate musical behaviors).

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(5) The investigator then presented the lesson in its entirety, step by step according to the script and according to the set of variables required for the teaching segment. The scripted music lesson was then rehearsed repeatedly until the students and investigator were able to execute the music lesson without error in accordance to the script and the variables which were to be executed within the teaching segment.

(6) When the students were able to execute the music lesson according to the script and according to the set of variables to be presented within the teaching segment without error, the investigator videotaped the teaching episode, and re-taped it if necessary until the teaching episode was determined to be usable as part of the final stimulus videotape.

The investigator followed steps 2-6 of the previous model when teaching scripted music lessons 2, 4, 5 and 8, but due to the student off-task condition as part of these three scripts, the investigator had to alter step #1 of the previous model to make it apply to coaching the students in appropriately executing off-task behaviors as opposed to on-task behaviors. The investigator did this by offering some ideas, or guidelines, for the students to use as a basis for ad libbing the off-task behaviors which they would exhibit. The investigator based her guidelines and suggestions for the off-task behaviors on the previously stated Operational Definitions of Student Behavior. The students were allowed to ad lib off-task behaviors, however, only after they had learned the song/movement activity and their “acting lines” in an on-task fashion. Once the lesson was learned, the students were then allowed to ad lib misbehaviors within the
presented teacher guidelines and the investigator either accepted, extinguished, or modified the students' ad libbed misbehaviors while coaching the students to look "real" and not fake as they executed them. The investigator also coached the students in executing a group volume that would allow the investigator to be heard over the students' voices considering that the students were closer to the video camera.

3.8.3 The Final Stimulus Videotape

Once the investigator obtained usable videotape of each of the eight scripted music lessons as executed by the investigator and the students, the raw footage was taken to a professional video production company. The investigator randomly selected one order of the eight music lessons (see Chapter 3, Table 4) and a master stimulus tape was edited professionally. Each scripted music lesson was designated as a "Teaching Segment" and lasted four to five minutes in duration resulting in a composite videotape that was approximately 45 minutes in duration due to the inclusion of: (1) an introductory two-minute scrolled text produced by means of a computer generated title-maker with a synchronized audio insert of a professional narration (i.e. voice-over) of instructions for the subjects to hear and read in order to understand how to use the Effective Teaching Response Form (Appendix D) in conjunction with viewing the stimulus tape; (2) eight 3-second edits of stationary blue screen with white lettering of the segment number that preceded each teaching segment to be viewed (i.e. "Segment 1," "Segment 2," etc.); and (3) eight 1-minute edits of red screen and white lettering that showed "Evaluate" during which subjects wrote evaluative responses in regard to the teacher's effectiveness.
Voice-overs were produced by a narrator (i.e. the editor) at the video production studio and were synchronized in conjunction with the initial instructions, as well as with the blue- and red-screened edited inserts, for the purposes of providing additional clarity for the subjects. The initial instructions presented on the stimulus videotape, which are detailed later in this chapter in their relationship to the dependent measure (i.e. subjects’ responses via the *Effective Teaching Response Form*), were narrated such that subjects were able to hear the instructions as they appeared in scripted scroll format on the screen.

The eight 3-second edits of blue screen that showed each segment number (e.g. “Segment 1”) prior to the teaching segment to be viewed were produced with a voice-over in which the subjects heard “Segment Number One” for example, as it was seen on the stimulus videotape. The eight 1-minute edits of red screen that showed “Evaluate” at the end of a teaching segment were produced with a voice-over in which the subjects heard the following: “Please circle a numerical rating for teaching segment number one,” (for example) “and write three short comments as to why you gave the teacher that rating. You have one minute.” Once the final stimulus videotape had been edited, four copies of the final stimulus videotape were made in order that subjects at different sites would be able to view the stimulus videotape at same times.

### 3.8.4 Validity of the Stimulus Videotape

The stimulus videotape was viewed and validated by three experts in order to confirm that the videotape demonstrated the eight teaching segments adequately with regard to the variables. The experts were given the stimulus tapes to view and a
Validity Response Form complete with instructions (see Appendix E) to use in conjunction with the videotape. Once the forms were completed by the experts and returned to the investigator, it was verified by the investigator that the experts agreed with 100% reliability that each of the eight teaching segments adequately demonstrated the set of variables required of each teaching episode.

3.9 Dependent Measure

A subject response form was created in order to collect responses of subjects’ evaluation of the videotape in terms of teacher effectiveness (see Appendix D). The Effective Teaching Response Form as it is presented in the Appendix was modified in terms of its layout so that it was presented to the subjects in pamphlet form. This was achieved by reducing the text and arranging it such that when copied, the standard papered copy was folded in half to form a pamphlet that was four pages in length.

The videotape provided the subjects with the instructions they needed in order to understand how to use the Effective Teaching Response Form. These instructions were scripted and produced onto the videotape by the professional editor, who additionally used an audio insert process to synchronize a narration, (i.e. voice-over), of the instructions which allowed the subjects to hear and see the information on the videotape with their response forms in front of them. The following instructions, as they actually appeared on the videotape, explain in detail how the Effective Teaching Response Form was used in conjunction with the stimulus tape:

Thank you for your participation in the following study. Everyone should have a response form in front of them at this time. Please look at page one of your response form now. At the top of this page you will see four different Level Categories: Grades 6-8; Grades 9-12; College Student;
and Other. Please place a check mark next to the Level Category that describes you. Please do this now.

If you have placed a check mark next to the College Student or Other Category, please circle the words Experienced Teacher ONLY if you meet the following condition:

You have had at least 4 months of consistent daily or weekly music teaching experience within a GROUP setting. (This includes student teaching/internships or any other music teaching experience with GROUPS of individuals either in a rehearsal or music classroom setting). If you meet this condition, please circle the words Experienced Teacher now. (Note: For the purposes of this study, if you have ONLY taught music privately on an individual basis, please DO NOT circle the words Experienced Teacher).

You are about to view a videotape of eight short music lessons being taught to an elementary music class. After each teaching segment is completed, you will have one minute to evaluate the teacher in terms of teaching effectiveness. When it is time to evaluate the teacher, please do two things: (1) please rate the effectiveness of the teacher by circling a number on a scale from one to ten on your response form. You will see that the number 1 represents the lowest response you can give for teacher effectiveness and the number 10 represents the highest response you can give for teacher effectiveness; (2) After you have circled a numerical rating for the teaching segment, please write 3 comments as to why you gave the teacher that rating.

### 3.10 Data Analysis

#### 3.10.1 Evaluative Ratings

The data were gathered via the Effective Teaching Response Form which required the subjects to rate the teacher in terms of effectiveness using a 10-point Likert Scale where “10” represented the highest response and “1” represented the lowest response one could give for the teacher’s effectiveness. This resulted in eight data points for each subject — one for each teaching segment. The subjects’ ratings were
organized by experience level across the eight teaching segments for subsequent statistical analysis.

3.10.2 Evaluative Written Comments

The Effective Teaching Response Form also required the subjects to provide three written comments as to why they gave the teacher a particular rating for each of the eight teaching segments. Written comments were coded by their content relating to one of four categories: (1) Accuracy of Instruction; (2) Delivery; (3) Classroom Management; and (4) Other. The coded comments were tallied, converted into percentages, and then organized by experience level across the eight teaching segments for subsequent descriptive analysis.

The four categories were operationally defined to provide the guidelines by which to categorize the written comments. Written comments that used descriptors such as “accurate, inaccurate, correct, incorrect, right, wrong, mistake, error,” to define the teacher’s singing, gestures, verbal academic information, or verbal feedback to a student response (i.e. academic approval) were coded within the category of Accuracy of Instruction. Written comments using descriptors such as “good, bad, pretty, ugly, poor, nice,” were coded within the category of Accuracy of Instruction only when used to describe the teacher’s singing voice.

Written comments that used descriptors separate from accuracy/inaccuracy in reference to the teacher’s eye-contact, speaking voice, gestures, body language, facial expressions, enthusiasm, and/or energy level were coded within the Delivery category.
Written comments that referred to how the teacher was feeling in relationship to what she looked like, for instance, “Teacher looks like she is having fun,” or “Teacher looks like she hates teaching music,” were also coded within the category of Delivery.

Written comments that referred to either the classroom management skills of the teacher or the on-/off-task behavior of the students were coded within the category of Classroom Management. Written comments that did not pertain to the specific areas of accuracy of instruction, delivery, and classroom management/student on-/off-task were coded within the Other category. The comments coded within the Other category predominantly pertained to either the task analysis or content of the music lesson such as “Good teaching sequence,” or were non-specific statements with regard to the teacher such as “Great teaching.”

3.10.3 Reliability of the Written Comments

Twenty percent of the written comments were randomly sampled with even distribution from each of the four experience groups’ response forms for the purpose of determining reliability. The trained reliability observer coded each comment within one of the four categories. Reliability between the reliability observer and the primary investigator, calculated using the formula agreements divided by agreements plus disagreements, resulted in 89.59% for the categorized written comments.
CHAPTER 4. RESULTS

The primary purpose of this study was to investigate the effects of accurate/inaccurate teacher instruction, high/low teacher delivery, and student on-/off-task behavior on musicians' evaluations of teacher effectiveness. An additional purpose of this study was to ascertain whether the musicians' evaluative response ratings would differ as an effect of their experience level.

Eight scripted music lessons were constructed in order to provide the means by which to execute variables within the areas of accuracy of instruction, delivery, and classroom management (i.e. student on-/off-task). The eight music lessons were taught to a group of elementary students and videotaped, resulting in a stimulus videotape of eight randomly ordered music teaching segments where each of the segments represented a type of teacher instruction (either accurate or inaccurate), a level of teacher delivery (either high or low), and a type of student behavior (either on-task or off-task) based on operational definitions of the variables.

The subjects (N = 168) were musicians of varying experience levels who were grouped accordingly: (1) grades 6-8 (n = 42); (2) grades 9-12 (n = 42); (3) undergraduate (n = 42); and (4) experienced teacher (n = 42). The subjects evaluated each of the eight segments in terms of teaching effectiveness using an Effective Teaching Response Form (see Appendix D) which required the subjects to assign a "teacher effectiveness rating" for each of the segments using a 10-point Likert scale and provide three comments as to why each particular rating was assigned for each segment.
In order to discuss the variables collectively when reporting the indications regarding the results of this study, the term "favorable" is sometimes used to describe accurate instruction, high delivery, and/or student on-task, and the term "unfavorable" is sometimes used to describe inaccurate instruction, low delivery, and/or student off-task.

4.1 Evaluative Ratings of Teacher Effectiveness

The subjects' ratings of teacher effectiveness were organized by experience level across the eight music teaching segments. A Two-Way ANOVA with Repeated Measures (experience level x teaching segment) was used to analyze these data. Results of this analysis are displayed in Table 6 and indicated a significant difference due to the main effect of experience level \[F(3,164) = 16.46, p < .0001\]. The overall means and standard deviations of the four experience groups are presented in Table 7. While none of the overall mean ratings by groups are high (means range from 4.73 to 3.63 out of 10), it is clear that as experience level increased the effectiveness ratings decreased.

There was also a significant difference due to the main effect of teaching segments \[F(7,1148) = 544.48, p < .0001\]. The overall means and standard deviations of the eight teaching segments are presented in Table 8. Clearly, Teaching Segment 3 (i.e. accurate instruction, high delivery, and student on-task) was rated highest overall by all groups \((M = 9.13 \text{ out of } 10)\). This is followed by the segments with two
Table 6. Two-Way ANOVA with Repeated Measures on Teacher Effectiveness Ratings

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Experience Level</td>
<td>3</td>
<td>243.75</td>
<td>81.25</td>
<td>16.46*</td>
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<tr>
<td>Residual</td>
<td>164</td>
<td>809.37</td>
<td>4.94</td>
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</tr>
<tr>
<td>Teaching Segment</td>
<td>7</td>
<td>8042.70</td>
<td>1148.96</td>
<td>544.48*</td>
</tr>
<tr>
<td>Segment x Group</td>
<td>21</td>
<td>435.48</td>
<td>20.74</td>
<td>9.83*</td>
</tr>
<tr>
<td>Residual</td>
<td>1148</td>
<td>2422.51</td>
<td>2.11</td>
<td></td>
</tr>
</tbody>
</table>

*p < .0001.

Table 7. Overall Mean Ratings and Standard Deviations for Groups

<table>
<thead>
<tr>
<th>Groups a</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
<th>Undergraduate</th>
<th>Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>4.73</td>
<td>4.50</td>
<td>4.01</td>
<td>3.63</td>
</tr>
<tr>
<td>SD</td>
<td>3.21</td>
<td>3.02</td>
<td>2.67</td>
<td>2.88</td>
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</table>

*a n = 42 for each group.
“favorable” variables (Segments 2, 6, 7), then those with one “favorable” variable (Segments 1, 4, 8). The lowest rated teaching segment overall entailed inaccurate instruction, low delivery, and student off-task behavior (Segment 5).

Table 8. Overall Means and Standard Deviations for Teaching Segments

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>M</td>
<td>2.01</td>
<td>4.90</td>
<td>9.13</td>
<td>1.88</td>
<td>1.44</td>
<td>3.98</td>
<td>6.46</td>
<td>3.97</td>
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<tr>
<td>SD</td>
<td>1.05</td>
<td>1.89</td>
<td>0.90</td>
<td>1.12</td>
<td>0.81</td>
<td>1.77</td>
<td>2.93</td>
<td>2.09</td>
</tr>
</tbody>
</table>

Note. l+ = Accurate Instruction  D+ = High Delivery  S+ = Student On-Task  
 l- = Inaccurate Instruction  D- = Low Delivery  S- = Student Off-Task

Additionally, a significant interaction was found among the four groups across teaching segments [F(21, 1148) = 9.83, p < .0001]. These data are presented in a graph of the mean evaluative response ratings for each of the eight teaching segments among the four experience groups in Figure 1, and in a table of the mean evaluative response ratings, standard deviations, and rank orderings for each of the eight teaching segments among the four experience groups in Table 9. Rank orderings of the means, from highest mean (1) to lowest mean (8), reflect the order in which each individual experience group rated each teaching segment in relation to the other seven teaching segments.
Figure 1. Group Mean Ratings by Teaching Segments
Table 9. Group Means, Standard Deviations, and Rank Orders of Teacher Effectiveness Ratings by Teaching Segments

<table>
<thead>
<tr>
<th>Teaching Segment</th>
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<tbody>
<tr>
<td></td>
<td>Grades 6-8</td>
</tr>
<tr>
<td>l (I-, D-, S+)</td>
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<tr>
<td>M</td>
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<td>SD</td>
<td>1.09</td>
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<td>Rank</td>
<td>6</td>
</tr>
<tr>
<td>2 (I+, D+, S-)</td>
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<tr>
<td>M</td>
<td>5.13</td>
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<tr>
<td>SD</td>
<td>2.07</td>
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<td>Rank</td>
<td>3</td>
</tr>
<tr>
<td>3 (I+, D+, S+)</td>
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<tr>
<td>M</td>
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<tr>
<td>4 (I+, D-, S-)</td>
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</tr>
<tr>
<td>M</td>
<td>1.87</td>
</tr>
<tr>
<td>SD</td>
<td>1.35</td>
</tr>
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<td>Rank</td>
<td>7</td>
</tr>
<tr>
<td>5 (I-, D-, S-)</td>
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</tr>
<tr>
<td>M</td>
<td>1.38</td>
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<td>SD</td>
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Table 9 (continued)

6 (I+, D-, S+)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
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<tr>
<td></td>
<td>4.48</td>
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<td></td>
<td>3.51</td>
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7 (I-, D+, S+)

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8 (I-, D+, S-)

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<td>2.76</td>
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Note. I+ = Accurate Instruction D+ = High Delivery S+ = Student On-Task
I- = Inaccurate Instruction D- = Low Delivery S- = Student Off-Task

^n = 42 for each group.

Figure 1 provides graphic illustration of the mean ratings presented in Table 9 that were evidenced by the four groups across the eight teaching segments. This graphic representation of the group means clearly shows fairly high congruence among the four groups for the first 5 teaching segments in terms of effectiveness ratings, with an apparent spread occurring for the last three teaching segments. The greatest disparity in mean group ratings occurs for Teaching Segment 7 where the instruction was inaccurate, the delivery was high, and the students were on-task. This visual illustration of the means for Teaching Segment 7 suggests an effect due to experience level, showing increased means as the experience levels decreased.
This finding suggests that the high delivery of the teacher and the on-task behavior of the students did not compensate for the inaccuracy of the instruction in terms of mean scores for the undergraduates, and particularly the experienced teachers, whereas the high school students, and particularly the middle school students, perceived high efficacy in the teacher despite inaccurate instruction — most likely due to the high delivery of the teacher and the orderly behavior of the students.

The illustrative lines show a decrease in ratings, among all four groups from Teaching Segment 7 to Teaching Segment 8 where the variables of inaccurate instruction and high delivery remained constant, but the variable of student behavior changed from on-task to off-task. However, there was a greater decrease in ratings between these two successively presented segments for the secondary students as compared to the undergraduates and experienced teachers, suggesting that the off-task behavior of the students may have affected the high school and middle school students' ratings more so than it did the two more experienced groups. However, the spread of mean ratings between the two secondary groups, the undergraduates, and the experienced teachers, further suggests that the high delivery affected the mean ratings of the middle and high school students more than it did the undergraduates and experienced teachers.

In examining the rankings of the eight conditions among the four groups (see Table 9), results indicated the highest mean response ratings among all four groups for Teaching Segment 3, and the lowest mean response ratings among all four groups for Teaching Segment 5. These findings suggest that all four experience groups evaluated
the teacher as: (1) most effective when accurate teacher instruction, high teacher delivery, and on-task student behaviors were demonstrated simultaneously within the music lesson; and (2) least effective when inaccurate teacher instruction, low teacher delivery, and off-task student behaviors were demonstrated simultaneously within the lesson.

In examining the rank orders of the means for each of the four groups (see Table 9), the greatest difference between subsequent rank mean ratings within and among groups was evidenced by the Experienced Teacher Group between Rank 1 (M = 9.02 for Segment 3) and Rank 2 (M = 4.50 for Segment 2). This finding suggests that the Experienced Teacher Group perceived relatively high efficacy in the teacher only when the instruction was accurate, the delivery was high, and the students were on-task. The greatest difference between subsequent rank mean ratings within the Undergraduate Group also occurred between Rank 1 (M = 8.64 for Segment 3) and Rank 2 (M = 5.30 for Segment 7), and although the difference between these two ranked means was not as great as compared to the Experienced Teacher Group, this finding indicated that the Undergraduate Group also perceived relatively high efficacy in the teacher only for Teaching Segment 3 where the instruction was accurate, the delivery was high, and the students were on-task.

Though the Grades 9-12 Group evidenced its highest ranked mean for Teaching Segment 3 (M = 9.38), it also evidenced a fairly high rating for Teaching Segment 7 (M = 7.59) which ranked second out of the eight segments for this group. Furthermore, the Grades 6-8 Group evidenced an even higher mean rating for Teaching Segment 7 (M =
8.62) which ranked second to Teaching Segment 3 (M = 9.49), this group’s highest ranked segment. These findings suggest that the high school students, and particularly the middle school students, evidenced relatively high evaluations of the teacher’s effectiveness even when the instruction given by the teacher was inaccurate as long as the teacher exhibited high delivery and the students were on-task.

Further examination of the means indicated that the Undergraduate Group and the Experienced Teacher Group evidenced higher mean response ratings for Teaching Segments 2, 6, and 7 where two of the variables within each condition were presented using either accurate teacher instruction, high teacher delivery and/or on-task student behavior, versus Teaching Segments 1, 4, and 8 where two of the variables within each condition were presented using either inaccurate teacher instruction, low teacher delivery, and/or off-task student behavior. These findings suggest that the undergraduates and the experienced teachers assigned higher teacher efficacy ratings when at least two of the three variables were represented as “favorable”, and lower efficacy ratings when at least two of the three variables were represented as “unfavorable”, regardless of which variables were presented as “favorable” or “unfavorable” within each of the eight teaching segments.

The Grades 6-8 Group and Grades 9-12 Group also assigned higher mean response ratings for Teaching Segments 2 and 7 where two “favorable” variables were presented versus Teaching Segments 1 and 4 where two “unfavorable” variables were presented. However, unlike the two higher experience groups, the Grades 6-8 Group and the Grades 9-12 Group each assigned a higher mean rating for Teaching Segment 8.
where the instruction was *inaccurate*, the delivery was *high*, and the students were *off-task*, as opposed to Teaching Segment 6 where the instruction was *accurate*, the delivery was *low*, and the students were *on-task*. Considering that delivery was isolated in Teaching Segment 8 as the only "favorable" variable of the three variables presented, and was isolated in Teaching Segment 6 as the only "unfavorable" variable, these findings suggest that it was the delivery of the teacher that may have had the greatest influence on the middle and high school students’ ratings of teacher effectiveness.

With further regard to the variable of delivery, the rank order of the means revealed that the Grades 6-8 Group and the Grades 9-12 Group evidenced its highest mean ratings for Conditions 3, 7, 2, and 8 where the teacher delivery was *high* and its lowest mean scores for Conditions 6, 1, 4, and 5 where the teacher delivery was *low*, regardless of whether the instruction given by the teacher was accurate or inaccurate or whether the student behavior was on-task or off-task. Comparatively, although the Undergraduate Group and the Experienced Teacher Group evidenced its three highest rank means for Teaching Segments 3, 7, and 2 where the delivery of the teacher was *high*, and its three lowest mean ratings for Teaching Segments 5, 1, and 4 where the variable of delivery was *low*, a higher mean rating for Segment 6 (i.e. *accurate instruction, low delivery, and student on-task*) was evidenced by both groups in comparison to Segment 8 (i.e. *inaccurate instruction, high delivery, and students off-task*). These findings suggest that the delivery of the teacher may have had a greater affect on the teacher effectiveness ratings evidenced by middle and high school students that it did on the undergraduates and experienced teachers.
The rank orders of the means also indicated differences among the four experience groups in regard to the variables of accuracy of instruction and student behavior. The Experienced Teacher Group evidenced its second highest mean rank for Teaching Segment 2 where the instruction was accurate, the delivery was high, and the students were off-task. Comparatively, the other three experience level groups evidenced their second highest mean rank for Teaching Segment 7 where the instruction was inaccurate, the delivery was high, and the students were on-task, suggesting that the accuracy of instruction may have affected the ratings of the experienced teachers more greatly in comparison to the three less experienced groups. However, the mean differences for the Undergraduate Group between Rank 2 (M = 5.30 for Segment 7) and Rank 3 (M = 5.07 for Segment 2), as well as for the Experienced Teacher Group between Rank 2 (M = 4.50 for Segment 2) and Rank 3 (M = 4.31 for Segment 7), were extremely slight.

In comparison, the Grades 6-8 Group evidenced its highest mean difference between Rank 2 (M = 8.62 for Segment 7/I-, D+, S+) and Rank 3 (M = 5.13 for Segment 2/I+, D+, S-), as did the Grades 9-12 Group between Rank 2 (M = 7.59 for Segment 7/I-, D+, S+) and Rank 3 (M = 4.90 for Segment 2/I+, D+, S-). Considering that the variable of delivery was high in both Teaching Segments 2 and 7, these findings suggest that the high school students and particularly the middle school students, perceived more efficacy in the teacher when the students were on-task regardless that the information being presented by the teacher was inaccurate.
The comparison of the means among all four groups between Teaching Segment 7 and Teaching Segment 8 where the variables of inaccurate instruction and high delivery stayed constant between the two segments, but the variable of student behavior changed from on-task in Segment 7 to off-task in Segment 8, suggests that the high school students and particularly the middle school students, were more affected by the on-/off-task behavior of the students than were the undergraduates and experienced teachers (see Table 9).

The rank orders of the means provided additional evidence to suggest that the experienced teachers perceived more efficacy in the teacher when the instruction was accurate regardless that the students were off-task. The Experienced Teacher Group evidenced a higher mean rating for Teaching Segment 4 (Rank 6) where the instruction was accurate, the delivery was low, and the students were off-task than it did for Teaching Segment 1 (Rank 7) where the information was inaccurate, the delivery was low, and the students were on-task. Comparatively, the other three groups evidenced higher ratings for Teaching Segment 1 (Rank 6) as opposed to Teaching Segment 4 (Rank 7). Considering that the variable of delivery was low in both Segments 1 and 4, these findings suggest that the three less experienced groups perceived more efficacy in the teacher when the students were on-task regardless that the instruction given by the teacher was inaccurate. However, the mean differences between Rank 6 and Rank 7 for all four groups were relatively slight.

With further regard to the variables of accuracy of instruction, though the secondary students, as evidenced by the means across the eight teaching segments,
seemed to be more affected by the delivery of the teacher, the Grades 6-8 Group and the Grades 9-12 Group did evidence higher mean ratings for the teacher in Teaching Segment 6 as opposed to Teaching Segment 1, where the variables of low delivery and student on-task stayed constant, but the variable of instruction was accurate in Segment 6 and inaccurate in Segment 1. This finding suggests that secondary school students will rate a teacher higher in terms of efficacy when the teacher delivers accurate information, if the variable of accuracy of instruction does not have to compete with the high delivery variable of the teacher influencing higher ratings, and the off-task variable of student behavior influencing lower ratings, in secondary students' evaluations.

4.2 Evaluative Written Comments of Teacher Effectiveness

The subjects' evaluative written comments, which were coded by their content and organized into four categories (i.e. Accuracy of Instruction, Delivery, Classroom Management, Other) and subsequently tallied and converted to percentages by experience across the eight teaching segments, were used to further determine how the variables affected the subjects' ratings of teacher effectiveness. Tables showing these data are presented for the Grades 6-8 Group (see Table 10), the Grades 9-12 Group (see Table 11), the Undergraduate Group (see Table 12), and the Experienced Teacher Group (see Table 13).
Table 10. Grades 6-8: Categorized Teacher Effectiveness Comments for Teaching Segments in Numbers and Percents

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<td>Instruction Delivery Classroom Management Other</td>
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1 (I-, D-, S+)
Number 19 92 3 14 128
Percent 14.84 71.88 2.34 10.94

2 (I+, D+, S-)
Number 5 32 71 16 124
Percent 4.69 25.80 57.26 12.90

3 (I+, D+, S+)
Number 18 32 44 30 124
Percent 14.52 25.80 35.48 24.19

4 (I+, D-, S-)
Number 9 45 64 11 129
Percent 6.98 34.88 49.61 8.53

69
Table 10 (continued)

5 (I-, D-, S-)

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7 (I-, D+, S+)

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8 (I-, D+, S-)

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Table 11. Grades 9-12: Categorized Teacher Effectiveness Comments for Teaching Segments in Numbers and Percents

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Table 12. Undergraduates: Categorized Teacher Effectiveness Comments for Teaching Segments in Numbers and Percents

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Table 13. Experienced Teachers: Categorized Teacher Effectiveness Comments for Teaching Segments in Numbers and Percents

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In examination of the overall percentage totals of the categorized comments for the eight conditions collectively (see Tables 10-13), very close overall percentage totals within the category of Delivery were evidenced by the Grades 6-8 Group (39.05 %) and the Grades 9-12 Group (39.72 %), while a slightly lower percentage total was evidenced by the Undergraduate Group (38.11 %), and an even lower percentage total was evidenced by the Experienced Teacher Group (33.56 %). Though these findings suggest that all four experience groups may have attended to the delivery of the teacher more than any other variable overall in terms of teacher effectiveness evaluation, these findings further indicate that the middle and high school students may have been more greatly affected by the delivery of the teacher in comparison to the experienced teachers.

Though the Undergraduate Group and Experienced Teacher Group evidenced more overall total comments within the category of Delivery, further examination of the written comments revealed that these two groups evidenced higher numbers of comments resulting in higher percentages for the variables that were “unfavorable” versus those that were “favorable” within each one of the eight conditions (see Tables 12 and 13). This finding further suggests that the ratings assigned by the undergraduates and the experienced teachers were affected more greatly by the variables that were “unfavorable” (i.e. inaccurate instruction, low delivery, and/or student off-task) versus those that were “favorable” (i.e. accurate instruction, high delivery, and/or student on-task). Though the undergraduates and experienced teachers evidenced their overall greatest percentage totals within the area of teacher delivery,
these findings suggest that it was the low teacher delivery and not the high teacher delivery that influenced their evaluations more greatly.

Though the Grades 9-12 Group and Grades 6-8 Group evidenced more written comments for the variables that were “unfavorable” versus those that were “favorable” for most of the conditions (see Tables 10 and 11), percentages within Teaching Segment 7 revealed that the Grades 9-12 Group evidenced comments at a percentage rate of 39.02% within the category of Delivery where the delivery was presented as high, or “favorable,” versus a percentage rate of 30.08% within the category of Accuracy of Instruction where the instruction was presented as inaccurate, or “unfavorable.”

With further regard to Teaching Segment 7, the Grades 6-8 Group evidenced higher percentages within the categories of Delivery (38.21%) when the delivery was high (i.e. “favorable”) and Classroom Management (26.83%) when the students were on task (i.e. “favorable”) as opposed to Accuracy of Instruction (19.51%) when the instruction was inaccurate, or “unfavorable.”

Collectively, these findings suggest that the ratings of the Grades 9-12 Group and the Grades 6-8 Group may have been affected by the high as well as the low delivery of the teacher, whereas the Undergraduate Group and the Experienced Teacher Group may have only been affected by the delivery of the teacher when it was presented as low. These findings also indicate, that at least in one instance (i.e. Segment 7), the middle school students may have been influenced more by the on-task behavior of the students -- a “favorable” variable -- in comparison to the inaccurate instruction.
Further examination of the overall percentage totals indicated that the Grades 6-8 Group and the Grades 9-12 Group each evidenced its second highest percentage of comments within the category of Classroom Management, whereas the Undergraduate Group and the Experienced Teacher Group each evidenced its second highest percentage within the category of Accuracy of Instruction.

Within the category of Classroom Management, the Grades 6-8 Group evidenced the highest total percentage of the four experience groups (36.19 %), while the Experienced Teacher Group evidenced the lowest total percentage among the groups (21.83 %). However, while the Grades 9-12 Group evidenced a percentage total of 29.64 %, the Undergraduate Group evidenced a percentage total of 22.52 % which was close to the Experienced Teacher Group. These findings suggest that the Grades 6-8 Group may have been affected by the on-/off-task student behavior more than any other group, particularly in comparison to the Undergraduate Group and the Experienced Teacher Group.

However, when comparing the percentages of Classroom Management comments within the Grades 6-8 Group, findings revealed that much higher percentages within the Classroom Management category were evidenced when the elementary students on the stimulus tape were off-task as opposed to on-task, suggesting that the variable of student off-task behavior influences middle school students’ evaluations more so than does the variable of student on-task behavior.

Within the category of Accuracy of Instruction, the Experienced Teacher Group (28.69 %) and the Undergraduate Group (24.06 %) evidenced relatively higher total
percentages as compared to the Grades 9-12 Group (14.82 %) and the Grades 6-8 Group (13.02 %). This finding suggests that the variable of accuracy of instruction may have affected the ratings of the Undergraduate Group, and particularly the Experienced Teacher Group, more greatly in comparison to the two less experienced groups.

However, as stated previously, the “unfavorable” variables as opposed to the “favorable” variables, regardless of within which area, seemed to have a greater effect on the Undergraduate and Experienced Teacher Groups’ ratings. Therefore, it seems that it was the teacher’s presentation of inaccurate instruction, and not the accurate instruction, that most greatly affected the ratings of the these two groups within the area of accuracy of instruction.
CHAPTER 5. DISCUSSION

The present study was designed for the purpose of determining the effects that accurate/inaccurate teacher instruction, high/low teacher delivery, and on-/off-task student behavior would have on the evaluations of teacher effectiveness. Additionally, the investigator sought to ascertain whether the experience level of the musician, who served as evaluator, would contribute to differences in the evaluative responses that might occur among the four groups.

Eight teaching segments, each of which utilized one of eight scripted elementary music lessons, simultaneously presented a type of teacher instruction (either accurate or inaccurate), a level of teacher delivery (either high or low), and a type of student behavior (either on-task or off-task) via a stimulus videotape which showed the investigator teaching the eight music lessons to a simulated elementary music class. Each of the videotaped teaching segments utilized a different combination of the variables under investigation in order to isolate each variable for its effect on the musicians' evaluations.

A summary of music research by Brand (1985) has suggested that a teacher's knowledge of the subject matter, high teacher delivery, and effective classroom management skills are favorable attributes that contribute to effective teaching. These areas were investigated in the present study specifically in regard to operationally defined variables of inaccurate/accurate teacher instruction, high/low teacher delivery, and on-/off-task student behavior. Different combinations of these variables were presented across the eight teaching segments, and though the effect of these variables

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on musicians' evaluations of teacher effectiveness are primarily discussed in their isolation, for the purposes of discussing the variables collectively, the investigator uses the descriptors "favorable" to represent the variables of accurate teacher instruction, high teacher delivery, and on-task student behavior, and "unfavorable" to represent and the variables of inaccurate teacher instruction, low teacher delivery, and off-task student behavior.

5.1 Teacher Effectiveness Evaluations

The most notable result of this study involved the variable of teacher delivery and its effect on the middle and high school students' ratings of teacher effectiveness. The mean ratings evidenced by the Grades 6-8 Group (M = 8.62) and the Grades 9-12 Group (M = 7.59) for Teaching Segment 7 which presented inaccurate instruction, high delivery, and student on-task behavior, suggest that middle school and high school students will rate a teacher relatively high despite inaccurate academic instruction so long as the teacher's delivery is high and the students are on-task. This finding replicates the results of other research that has suggested that both seventh grade students and eleventh grade students value the effective delivery of the teacher more than accuracy of instruction (Weeks, 1991), but contradicts research which has suggested that high school students value the academic expertise of the teacher above all other variables (Olsen & Moore, 1984).

The middle school and high school students also evidenced their four highest evaluative ratings for the teaching segments where the delivery of the teacher was high and their lowest evaluative ratings for the teaching segments where the delivery of the
teacher was low, regardless of whether the information presented by the teacher was accurate or inaccurate, or whether the students were on-task or off-task. This finding further suggests that the high/low delivery of the teacher has the greatest influence on secondary music students’ perceptions of effective teaching as compared to the accuracy of the teacher’s instruction and the social behaviors of the students.

These findings seem pertinent to the field of higher music education when considering the skills that are most important for prospective teachers to learn in order to be successful secondary music educators. If secondary students are most influenced by the teacher’s delivery in regard to teacher effectiveness, then it would seem imperative that the undergraduate music methods courses, which are designed to teach prospective teachers the necessary skills to be successful K-12 music educators, should encompass the teaching of high delivery skills to undergraduate music education students in addition to the skills that deal specifically with the academic content of the musical subject matter.

Results of the present study revealed a relevant, yet not surprising, finding in that Teaching Segment 3 where accurate instruction, high delivery, and on-task student behavior were presented simultaneously was rated highest by all groups, and Teaching Segment 5 where inaccurate instruction, low delivery, and off-task student behavior were presented simultaneously was rated lowest (see Table 8). However, more importantly, the group means revealed that the undergraduates and experienced teachers evidenced high efficacy ratings only for Teaching Segment 3, where accurate
instruction, high delivery, and on-task student behaviors were demonstrated simultaneously.

These findings compliment other research that has suggested that effective teaching encompasses an array of teacher behaviors (Brand, 1985), yet contradict the results of the “Dr. Fox” investigations which has suggested that adult subjects will evidence highly favorable ratings for a lecturer regardless of the substance of academic content as long as the lecturer exhibits an enthusiastic delivery style (Ware and Williams, 1975; Ware and Williams, 1976).

Though the present investigation sought to determine the effect of the operationally defined variables in isolation, the finding suggesting that undergraduates and experienced teachers will evidence low teacher effectiveness ratings for a teacher if unfavorable teacher attributes are perceived within even one of these three areas -- accuracy of instruction, delivery, classroom management -- seems relevant to the issues of music teacher preparation and teacher assessment. Based on these results, it seems important that beginning music teachers, who are evaluated for their teaching efficacy by music teacher mentors as well as administrators, should recognize that: (1) strengths in one or two teaching areas may not compensate for weaknesses in another; and (2) developing effective teaching skills within these three areas -- accuracy of instruction, delivery, and classroom management -- will most likely result in higher evaluations. However, Yarbrough and Madsen (1998) found that a teacher within a choral setting was still rated relatively high in efficacy even when rhythmic inaccuracies were present in the rehearsal.
Results of this study support the idea that undergraduates and experienced teachers are extremely critical in their evaluations of teacher effectiveness. As evidenced by lowest mean ratings for teaching segments which incorporated at least two “unfavorable” variables and more importantly by highest percentages in written comments for the “unfavorable” variables regardless of area – accuracy of instruction, delivery, classroom management – these findings suggest that undergraduates and experienced teachers focus their attention on “bad” teaching behaviors regardless of whether “good” teaching behaviors are being exhibited within the music classroom.

This finding further reinforces the idea that in order to be evaluated as an effective teacher within the classroom by an experienced teacher, one must exhibit effective teaching behaviors across a variety of areas without evidencing obvious weaknesses within any of the areas of accuracy of instruction, delivery, or classroom management. However, perhaps less egregious inaccuracies and a more subtle display of ineffective delivery and student off-task behavior (which may be a more realistic representation of teacher inefficacy than what was presented in the present study) would have yielded different findings.

The written comments served an important purpose in allowing the investigator to make more inferences concerning the ratings that were evidenced by the four experience groups. Percentages resulting from the tallied written comments which were categorized within the areas of accuracy of instruction, delivery, classroom management, and other, revealed that all four groups evidenced total overall highest
percentages within the category of Delivery, further suggesting that delivery is an important variable to consider in regard to effective teaching.

However, while the undergraduates and experienced teachers were mostly influenced by delivery only when it was low as evidenced by the relationship between their written comments and the mean ratings (see Tables 9, 12 and 13), the middle school students and high school students evidenced mean ratings across the eight teaching segments to suggest that secondary students are influenced by high teacher delivery as well as low delivery (see Table 9).

Further examination of the overall percentage totals in regard to the evaluative comments which were evidenced by the four experience groups indicated that the middle school and high school students evidenced more comments within the area of Classroom Management than they did for Accuracy of Instruction (see Tables 10 and 11). Of the four groups, the Grades 6-8 Group evidenced a much higher percentage (36.19%) of comments within the area of Classroom Management in comparison to the high school students (29.64%), and particularly in comparison to the undergraduates (22.52%) and the experienced teachers (21.83%). This finding compliments other research that has suggested that seventh grade students focus most highly on issues concerning classroom management and teacher discipline (Mergendoller, 1981).

However, it should be noted that the middle school students, as well as the high school students, wrote more comments about the classroom management skills of the teacher or the students’ attending behavior when the students were off-task as compared to when the students were on-task, suggesting that the off-task variable was more
influential. The mean scores evidenced by the secondary students support this as well, as evidenced by the healthy decrease in ratings for Segment 7 to Segment 8 (the last two presented teaching segments in the order) for both groups when the variables of inaccurate instruction and high delivery remained constant and the student behavior variable changed from on-task in Segment 7 to off-task in Segment 8 (see Figure 1).

Where most of the music research involving student attending behavior has investigated the effects of teacher behavior (Forsythe, 1975; Hall, et al. 1968; Kuhn, 1975) or classroom activity (Brendell, 1996; Forsythe, 1977; Madsen & Geringer, 1983; Yarbrough and Price, 1981) on the on-/off-task behavior of students, this study is unique in that the variable of on-/off-task student behavior was controlled within an experimental design that allowed the investigator to evaluate how subjects perceive efficacy in the teacher when the student attending behavior is on- or off-task.

The finding that secondary students, and particularly middle school students, perceive inefficacy in the teacher when the students are off-task strengthens the idea that not only do teachers desire control maintenance within the classroom environment, but that the students value this as well. It is interesting that the Experienced Teachers within this study exhibited the lowest percentage of comments among the four groups within the area of Classroom Management, for this contradicts other research that has suggested that experienced teachers value maximized on-task, and maintenance of student behavior as two of the most important skills/behaviors for a teacher to acquire his/her first three years of teaching (Teachout, 1997).
Whereas the secondary students evidenced their second highest overall percentage total for comments pertaining to classroom management issues, the undergraduates and experienced teachers their second highest overall percentage for comments pertaining to the accuracy of the teacher's instruction, with the Experienced Teacher Group exhibiting more comments within this area than any other group (28.69%).

This is not a surprising finding considering that the experienced teachers are assumed to be the most knowledgeable of the four groups, supporting research by Berliner (1986), and thus would be more attentive to the accuracy or inaccuracies of the teacher. The experienced teachers also evidenced their second highest mean ($M = 4.50$ out of 10), for Teaching Segment 2 where the instruction was accurate, the delivery was high, and the students were off-task. Though the mean rating was low, this finding further suggests that the experienced teachers perceived less ineffectiveness in the teacher when the teacher was presenting accurate subject matter, regardless that the students were off-task.

5.2 Problems in Rehearsal

It is important to address the problems that occurred while working with the elementary students during the teaching/rehearsals of the scripted music lessons, as it took the investigator one and a half weeks longer (an additional 12 hours of teaching/rehearsing) than the investigator had originally planned. The students were able to quickly learn and execute the musical activities for each scripted music lesson, and it was obvious that they did understand all the tasks at hand as they were presented...
to them. However, problems arose which made it very difficult to obtain eight teaching segments within an efficient amount of time.

In order to obtain a teaching segment that was usable, the entire 4-5-minute scripted music lesson had to be executed flawlessly from beginning to end as it was videotaped. If even one student made an obvious error, such as staring out the window for a few seconds during the on-task condition, or forgetting an "acting line" when it came time for an individual student to answer the question asked by the teacher, the investigator and the group had to start the music lesson over again from the beginning. If mistakes were made many times in a row requiring the group to start over repeatedly, the group momentum weakened and often it was necessary to "call it a day" without obtaining any usable material.

Students were better able to execute the scripted musical lessons without error when the students were required to execute on-task behaviors. When the students were asked to execute off-task behaviors, even though they executed off-task behaviors that looked very "real" with assistance from the investigator, the students would often become so absorbed in "acting" off-task, that they would become off-task in reality. This resulted in things such as: (1) students who were assigned to be participating in the musical activity at some level forgetting to participate such that no singing was taking place from the group; (2) students forgetting their "acting lines"; and (3) students becoming so loud that the investigator could not be heard giving instructions on the videotape (which was essential due to the fact that accuracy of instruction was an independent variable of the study). In essence, it was quite difficult to coach the
students to find a “middle of the road” approach to acting off-task, however, after quite a bit of practice the students were able to execute the misbehaviors appropriately as needed.

5.3 Order of the Teaching Segments

An apparent weakness in the present study was the lack of control for order effect in that the investigator selected only one random order of the eight teaching segments to be presented on the stimulus videotape which was evaluated by the subjects. The lack of control for order effect is a very important issue to consider when interpreting the results of the current study. The power of suggestion, or effect, that each previous segment may have had on the subjects’ evaluations of each segment that followed in succession must be considered. This is particularly important when interpreting the results of the greatest spread of mean ratings that occurred among the four groups within Conditions 7 and 8, which were presented as the last two conditions of the random order selected for the stimulus videotape (see Figure 1).

Particular to this study, for optimum control of order effect, over 40,000 orders of the eight teaching segments would have had to be presented. However, though optimum control for order effect would have presented an unrealistic design for the current study, providing several random orders of the eight conditions may have resulted in different mean ratings evidenced by the four groups in terms of teacher effectiveness evaluation. For this reason, control for order effect is highly recommended for future research involving replication of the current study, or similar
research involving the presentation of different teaching conditions in successive order for evaluation.

5.4 Future Implications

The most notable finding of this study suggests that of the three areas of investigation -- accuracy of instruction, teacher delivery, and student on-/off-task -- it is the teacher’s delivery that has the greatest affect on secondary music students’ evaluations of teacher effectiveness. This study also determined, that of four experience levels of musicians -- middle school, high school, undergraduates, and experienced teachers -- middle school students are more affected by the on-/off-task behaviors of the students, and experienced teachers are more affected by the accuracy of teacher instruction, in comparison with other experience levels when evaluating teachers for their teaching efficacy.

These findings, however, are specific to the design of this study, and future research has many possibilities. Future examinations might include: (1) using different simulated classroom/ensemble settings for the teaching segments; (2) isolating different specific behaviors of high/low delivery, different types of musical accurate/inaccurate instruction, and different types of on-/off-task behaviors of students; (3) incorporating teacher approvals and disapprovals as feedback to students’ social behaviors into the scripted music lessons; and (4) replicating the present study with several random orders of the teaching segments.

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REFERENCES


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APPENDIX A: SCRIPTED MUSIC LESSONS

Script 1

Song 1: “Tic Tac, Mic Mac”

Teaching Segment 1: Inaccurate Instruction, Low Delivery, On-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.
   Tic Tac, Mic Mac, where did you go?

Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.
   Where did you go? Where did you go?

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.
   Tic Tac, Mic Mac, where did you go?

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.
   Tell me, where did you go.

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”
Step 16: Teacher sings a incorrect “Ready, sing” cue on incorrect starting pitch of the song.

Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I would like for you to clap the steady beat of the song with me.”

Step 19: Teacher sings song alone while students and teacher clap the incorrect steady beat of the song.

Step 20: Teacher gives incorrect academic approval: “I like the way I heard all of you clapping the correct steady beat of the song.”

Step 21: Teacher defines musical concept incorrectly: “You already know how to clap a steady beat to a song. Within the steady beat of a song there are long sounds and there are short sounds. The musical word for the long and short sounds in music is called tempo.”

Step 22: Teacher gives instruction: “Everyone say tempo.”

Step 23: Students respond: “Tempo.”

Step 24: Teacher gives instruction: “This time I am going to sing the song alone again, and I am going to clap the tempo of the song by clapping all the short and long sounds. Listen and be able to tell me which word in our song has the longest sound. Watch and listen.”

Step 25: Teacher sings song alone incorrectly and with poor intonation while clapping the incorrect rhythm of the song.

Step 26: Teacher asks student question: “(Student name), what word had the longest sound in our song?”

Step 27: Teacher gives incorrect academic approval: “(Student name) said “Tic Tac, Mic Mac” and that is the correct answer. Good listening, (Student name).”

Step 28: Teacher gives instruction: “This time I would like for you to sing the song with me and show the tempo of our song by clapping all of the short and long sounds while we sing.”

Step 29: Teacher sings a “Ready, sing” cue on incorrect starting pitch of the song.”
Step 30: Teacher and students sing the song incorrectly and clap the incorrect rhythm of the song together.

Step 31: Teacher gives incorrect academic approval: “I like the way I heard you clapping the correct tempo of the song with your hands. I also like the way I heard you singing the correct pitches and rhythms to our song. Great job.”

Step 32: Teacher asks student question: “(Student name), what is the musical word we use to define the long and short sounds in music?”

Step 33: Student responds: “Tempo.”

Step 34: Teacher gives incorrect academic approval: “(Student name) said tempo and that is the correct answer. Good for you, (student name).”

Step 35: Teacher asks student question: “(Student name), did our song have mostly long sounds or short sounds in it?”

Step 36: Student responds: “Long sounds.”

Step 37: Teacher gives incorrect academic approval: “Excellent, (Student name) said long sounds and that is correct answer. Good job.”

Script 2

Song 2: “Catch the Wind”

Teaching Segment 2: Accurate Instruction, High Delivery, Off-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1 with correct dynamics while using smaller arm/hand motions when singing soft (piano) and using larger arm/hand motions when singing loud (forte).

*Catch the wind and put it over there.*

Step 3: Teacher points to students and a few students sing line 1 with correct dynamics while using the correct hand motions with teacher.

Step 4: Teacher points to self and sings line 2 with correct dynamics while using the correct hand motions.

*Put that wind back in the air.*
Step 5: Teacher points to students and a few students sing line 2 with correct dynamics while using the correct hand motions with teacher.

Step 6: Teacher points to self and sings line 3 with correct dynamics while using the correct hand motions.
  
  *Catch the wind and put it over there.*

Step 7: Teacher points to students and a few students sing line 3 with correct dynamics while using the correct hand motions with teacher.

Step 8: Teacher points to self and sings line 4 with correct dynamics while using the correct hand motions.
  
  *Way, way, over there.*

Step 9: Teacher points to students and a few students sing line 4 with correct dynamics while using the correct hand motions with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing with hand motions for 2 lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2 with correct dynamics while using the correct hand motions.

Step 12: Teacher points to students and a few students sing lines 1 & 2 with correct dynamics while using specific hand motions with teacher.

Step 13: Teacher points to self and sings lines 3 & 4 with correct dynamics while using the correct hand motions.

Step 14: Teacher points to students and a few students sing lines 3 & 4 with correct dynamics while the correct hand motions with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song and do the hand motions with me.”

Step 16: Teacher sings a “Ready, sing” cue on correct starting pitch of the song.

Step 17: Teacher and students sing whole song together with correct dynamics while using the correct hand motions.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I want you to listen and be able to tell me the words you hear me sing when I am singing softly and when I am using the smaller hand motions with my hands. Watch and listen.”
Step 19: Teacher sings song alone with correct dynamics while using the correct hand motions.

Step 20: Teacher asks student question: "(Student name), which words was I singing when saw me move my hands with the small gestures and you heard me sing with a soft singing voice?"

Step 21: Student responds: "Catch the wind and put it over there."

Step 22: Teacher gives correct academic approval: "(Student name) said 'catch the wind and put it over there' and that is correct because when I sang 'catch the wind and put it over' there I was using the smaller gestures with my hands and I was singing with a soft singing voice. Good listening, (student name)."

Step 23: Teacher defines musical terminology in association to previously learned musical concept: "You already know that sometimes in music we sing soft and sometimes we sing loud and you know that the musical word for the loudness and softness in music is called dynamics. But what you don't know yet is two new musical terms that we are going to learn today. One that means soft and one that means loud. The musical word for loud is called forte."

Step 24: Teacher gives instruction: "Everyone say forte."

Step 25: Students respond: "Forte."

Step 26: Teacher continues to give musical terminology: "Forte means loud, and the musical word for soft is called piano."

Step 27: Teacher gives instruction: "Everyone say piano."

Step 28: Students respond: "Piano."

Step 29: Teacher reviews new musical terminology: "And the word 'piano' looks and sounds like the musical instrument that we play, but it also has another meaning and that meaning is soft. Now you have two new musical words to describe soft and loud dynamics -- piano and forte."

Step 30: Teacher gives instruction: "I am going to sing the song alone again, and this time I just want you make the hand motions with me. When you hear me singing piano, or with a soft singing voice, I would like for you to make the smaller hand motions and when you hear me singing forte, or with a loud dynamic, I would like for you to make the larger gestures with your hands. Put your hands like this to get ready."
Step 31: Teacher sings song alone and a few students demonstrate correct hand motions with teacher.

Step 32: Teacher gives correct academic approval: “I really like the way some of you showed the correct hand motions by making smaller gestures when I was singing soft, or with a piano dynamic, and larger gestures when I was singing loud, or with a forte dynamic.”

Step 33: Teacher gives instruction: “Now I would like for you to sing the song and do the hand motions with me and this time I would like for you to try to sing with the with a piano and forte singing voice at the correct times.”

Step 34: Teacher and a few students sing the song with correct dynamics and demonstrate appropriate hand motions together.

Step 35: Teacher gives correct academic approval: “I really like the way I heard some of you singing with a soft singing voice when we were making the small gestures, and I like the way I heard some of you singing with a loud voice when we were using the larger gestures with our hands.”

Step 36: Teacher asks student question: “(Student name), what is the musical word that we learned today that means soft?”

Step 37: Student responds: “Piano.”

Step 38: Teacher gives correct academic approval: “(Student name) said piano and that is the correct answer. Good for you, (student name).”

Step 39: Teacher asks student question: “(Student name), what does forte mean?”

Step 40: Student responds: “Loud.”

Step 41: Teacher gives correct academic approval: “(Student name) said loud and that is correct because forte means loud. Great job, (student name).”

Script 3

Song 3: “Watch My Hands, Hear Me Sing”

Teaching Segment 3: Accurate Instruction, High Delivery, On-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

*Watch my hands. Hear me sing.*
Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.

\[ I \text{ have many smiles to bring.} \]

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.

\[ I \text{ feel great. I feel fine.} \]

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.

\[ \text{Show your smile and let it shine.} \]

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”

Step 16: Teacher sings a correct “Ready, sing” cue on starting pitch of the song.

Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I am going to do some things with my hands. I am going to clap the rhythm of the song, which you already know how to do, and sometimes I am going to put my hands like this.” (Teacher shows correct rest position with hands, i.e. arms out to the sides with palms up). “I would like for you to watch and listen and be able to tell me whether or not you hear me singing any sounds while my hands are like this. Watch and listen.” (Teacher shows correct rest position with hands).
Step 19: Teacher sings song alone correctly while clapping the correct rhythm and showing the correct rest position at the correct times. Teacher does not sing any notes while hands are in rest position.

Step 20: Teacher asks student question: "(Student name), you may have heard me singing some sounds before I put my hands like this, ..." (Teacher shows rest correct position with hands). "... and you may have heard me singing some sounds after I put my hands like this." (Teacher shows correct rest position with hands). "Did you hear me singing any sounds while my hands were like this?" (Teacher shows correct rest position with hands).

Step 21: Student responds: "No."

Step 22: Teacher gives correct academic approval: "(Student name) said no and that is the correct answer. I was not singing any sounds while my hands were like this." (Teacher shows correct rest position with hands).

Step 23: Teacher defines musical concept accurately: "When my hands were like this ..." (Teacher shows correct rest position with hands). "... I was showing a pause in the song. And in music, sometimes there are places in a song where there is a pause. The musical word for a pause in music is called a rest. And we can show a rest in music with our hands by placing our hands like this." (Teacher shows correct rest position with hands).

Step 24: Teacher gives instruction: "I would like everyone to show me how we can show a rest in music with our hands. Do that now, please."

Step 25: Students respond: Students show correct rest position with their hands.

Step 26: Teacher gives correct academic approval: "Great job. Put your hands down. I like the way everyone put their hands in the correct position to show a rest."

Step 27: Teacher gives instruction: "I am going to sing the song alone again, but this time I would like for you to use your hands while I sing. We are going to clap the rhythm and show the rests in our song by placing our hands like this." (Teacher shows correct rest position with hands). "Do not sing with me this time, just use your hands. Put your hands like this to get ready." (Teacher puts hands together in clap position).

Step 28: Teacher speaks a correct "Ready, begin" cue in the tempo of the song.

Step 29: Teacher sings song alone correctly and demonstrates correct clapping of the rhythms and correct placing of the hands to demonstrate the rests at the correct times while students demonstrate correct clapping of the rhythms and correct
placing of the hands to demonstrate the rests at the correct times almost flawlessly.

Step 30: Teacher gives correct academic approval: “I really like the way I heard most of you clapping the correct rhythm and I also like the way I saw most everyone showing the correct rest position with their hands at the correct times. That was a great job.”

Step 31: Teacher gives instruction: “Now this time, I would like for you to sing the song with me while we clap the rhythm and show the rests with our hands.”

Step 32: Teacher sings a “Ready, sing” cue on the starting pitch of the song.

Step 33: Teacher and students sing together while clapping the correct rhythms, and demonstrating the correct rest position with hands at the correct times.

Step 34: Teacher gives academic approval: “Super! I heard so many of you singing the correct pitches to the song and I love the way I saw most all of you, probably even all of you, showing the correct rest positions at the correct times with your hands!”

Step 35: Teacher asks student question: “(Student name), what is the musical word that we learned today that means a pause in the music?”

Step 36: Student responds: “Rest.”

Step 37: Teacher gives correct academic approval: “Good for you, (student name), rest is the correct answer.”

Step 38: Teacher asks student question: “(Student name), can you please show how to make a correct rest position with our hands? Please show us.”

Step 39: Student responds: Student shows correct rest position with hands.

Step 40: Teacher gives correct academic approval: “(Student name), excellent, you showed that rest beautifully by putting your hands like this.” (Teacher shows rest position with hands.)
Script 4

Song 4: "River, river"

Teaching Segment 4: Accurate Instruction, Low Delivery, Off-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

River, river carry.

Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.

Take me to my land.

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.

Boats are on the water.

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.

Oars are in my hand.

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”

Step 16: Teacher sings a “Ready, sing” cue on correct starting pitch of the song.
Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I am going to move my hands along with the song. I would like for you to watch and listen and be able to tell me which part of the song you see my hands moving downward and where you here my voice moving downward in the song. Watch and listen.”

Step 19: Teacher sings song alone correctly while moving hands to the correct melodic contour of the melody.

Step 20: Teacher asks student question: “(Student name), what part of the song did you hear my voice and see my hands move downward?”

Step 21: Student responds: “At the very end of the song.”

Step 22: Teacher gives correct academic approval: “At the very end of the song. Good watching and listening, (Student name) that is the correct answer.”

Step 23: Teacher defines musical concept: “As you already know, sometimes notes in music move up ...” (Teacher moves hand upward across a plane with palm facing downward). “... sometimes notes move down ...” (Teacher moves hand downward across a plane with palm facing downward) “... and sometimes notes stay the same.” (Teacher moves hand straight across a plane with palm facing downward). “In music, the movement of the notes create the shape to the melody. The musical word for the shape of a melody is called melodic contour.”

Step 24: Teacher gives instruction: “Everyone say melodic contour.”

Step 25: Students respond: “Melodic contour.”

Step 26: Teacher continues to define musical concept: “And we can show the melodic contour with our hand by moving it across the space in front of us. We can show notes moving upward by moving our hand like this across our plane.” (Teacher demonstrates correct motion with hands). “When we sing notes that move down, we move our hand downward.” (Teacher demonstrates correct motion with hands). And when we sing notes that stay the same, we can move our hand across our space like this. (Teacher demonstrates correct motion with hands).

Step 27: Teacher gives instruction: “I am going to sing the song alone again and this time I want you to listen to me sing the notes and move your hands exactly the same way I move mine.”
Step 28: Teacher sings song alone correctly and moves hands to demonstrate the correct melodic contour while a few students move hands correctly along with teacher.

Step 29: Teacher gives correct academic approval: “I like the way I saw some of you moving your hands to show the correct shape of the melody.”

Step 30: Teacher gives instruction: “This time I would like everyone to sing the song with me and move your hands with me to show the correct melodic contour of our song.”

Step 31: Teacher gives a “Ready, sing” cue on correct starting pitch of the song.

Step 32: Teacher and a few students sing the song together while showing the correct melodic contour with their hands.

Step 33: Teacher gives correct academic approval: “Great job some of you. I heard some of you singing the correct pitches of the song and I saw most of you moving your hands correctly to show the shape of our melody.”

Step 34: Teacher asks student question: “(Student name), what is the musical term that means the shape of the melody?”

Step 35: Student responds: “Melodic contour.”

Step 36: Teacher gives correct academic approval: “(Student name) said melodic contour and that’s the right answer. Good for you, (Student name).”

Step 37: Teacher asks student question: “(Student name), can you please use your hand to show us the correct melodic contour for notes that are moving up?”

Step 38: Student responds: Student moves hands correctly in an upward direction across the space in front of her.

Step 39: Teacher gives correct academic approval: “Excellent job, (student name), you demonstrated the melodic contour of pitches moving upward beautifully with your hand.”
Script 5

Song 5: "Get on Board Now"

Teaching Segment 5: *Inaccurate Instruction, Low Delivery, Off-Task Student Behavior*

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

*Train is leaving early.*

Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.

*Early in the morning.*

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.

*Get on board now.*

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.

*Only get one warning.*

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”

Step 16: Teacher sings a “Ready, sing” cue on incorrect starting pitch of the song.
Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I am going to clap a part of the song with my hands. Listen and be able to tell me which words I sing when you hear me clap.”

Step 19: Teacher sings song alone incorrectly and with poor intonation while clapping a non-syncopated rhythm while singing the words, “get on board now.”

Step 20: Teacher asks student question: “(Student name), which words did I sing when you heard me clapping?”

Step 21: Student responds: “Early in the morning.”

Step 22: Teacher gives incorrect academic approval: “(Student name) said ‘early in the morning’ and that is the correct answer. Good listening, (Student name).”

Step 23: Teacher defines musical concept inaccurately: “Sometimes in music we have a rhythm where the notes fall on the strong beats of the music. When notes fall on the strong beats of the music, we call that syncopation.”

Step 24: Teacher gives instruction: “Everyone say syncopation.”

Step 25: Students respond: “Syncopation.”

Step 26: Teacher gives instruction: “I would like everyone to clap this syncopated rhythm after me.” (Teacher claps a non-syncopated rhythm).

Step 27: Students respond: The few students echo-clap the non-syncopated rhythm.

Step 28: Teacher gives incorrect academic approval: “I heard all of you clapping the correct syncopation rhythm. Good job.”

Step 29: Teacher gives instruction: “I am going to sing the song alone again, but this time I would like for you to use your hands while I sing. We are going to clap the syncopated rhythm...” (Teacher claps the non-syncopated rhythm). “... when I sing ‘get on board now’ in our song. Put your hands like this to get ready.” (Teacher puts hands together in clap position).

Step 30: Teacher sings song alone incorrectly and a few students and teacher clap a non-syncopated rhythm when teacher sings the words “get on board now.”
Step 31: Teacher gives incorrect academic approval: “I really like the way I heard many of you clapping the correct syncopation at the correct time.”

Step 32: Teacher gives instruction: “Now I would like for you to sing the song with me and when we sing the words ‘get on board now’ I want you to clap the syncopated rhythm.” (Teacher claps a non-syncopated rhythm).

Step 33: Teacher sings a “Ready, sing” cue on incorrect starting pitch of the song.

Step 34: Teacher and the few students sing together while clapping the non-syncopated rhythm during “get on board now.”

Step 35: Teacher gives incorrect academic approval: “Terrific. I heard many of you singing the song correctly and I heard many of you clapping the correct syncopation when we sang the syncopated part of our song, ‘get on board now’.”

Step 36: Teacher asks student question: “(Student name), what do we call a musical pattern where the notes fall on the strong beats of the music?”

Step 37: Student responds: “Syncopation.”

Step 38: Teacher gives incorrect academic approval: “Excellent, (student name), syncopation is the right answer.”

Step 39: Teacher asks student to demonstrate: “(Student name), please clap the syncopation that we learned today.”

Step 40: Student responds: Student claps the non-syncopated rhythm.

Step 41: Teacher gives incorrect academic approval: “(Student name), good for you, you clapped the syncopation perfectly with your hands.”

Script 6

Song 6: “Tapping, tapping”

Teaching Segment 6: Accurate Instruction, Low Delivery, On-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

Tapping, tapping at my door.
Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.
   *I have heard that sound before.*

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.
   *Tapping, tapping once again.*

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.
   *Through the peep hole I see my friend.*

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: "Wait for me to sing two lines this time before you echo."

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: "This time, I would like for you to sing the whole song with me."

Step 16: Teacher gives a correct "Ready, sing" cue on starting pitch of the song.

Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: "This time I am going to sing the song alone and I am going to use a 2-finger clap to clap a part of the song. Please listen and be able to tell me which words I'm singing when you hear me clap my hands."

Step 19: Teacher sings song alone correctly while 2-finger clapping the words "Tapping, tapping" with the correct rhythm while singing.
Step 20: Teacher asks student question: "(Student name), which words did you hear me singing when I used the 2-finger clap with my hands?"

Step 21: Student responds: "Tapping, tapping."

Step 22: Teacher gives correct academic approval: "Good job, 'tapping, tapping' is the correct answer. Good listening, (student name)."

Step 23: Teacher defines musical concept accurately: "You already know how to use a smooth and connected sound with your voice, but when I was using the 2-finger clap with my hands I was using a short and disconnected sound. The short and disconnected sounds in music is called staccato."

Step 24: Teacher gives instruction: "Everyone say the word staccato."

Step 25: Students respond: "Staccato."

Step 26: Teacher gives instruction: "I am going to sing the song alone again, but this time I would like for you to use your hands while I sing. We are going to 2-finger clap the rhythm to the words "tapping, tapping" every time you hear me sing "tapping, tapping" in our song. Put your hands like this to get ready." (Teacher demonstrates 2-fingers in the palm of other hand). "And clap short, disconnected sounds with your hands when we get to the 'tapping, tapping' part."

Step 27: Teacher sings song alone and students and teacher 2-finger clap the correct rhythm when teacher sings the words "tapping, tapping."

Step 28: Teacher gives correct academic approval: "I really like the way I heard many of you clapping the "tapping, tapping" part of our song with a short and disconnected 2-finger clap to make a staccato sound. Excellent job."

Step 29: Teacher gives instruction: "Now I would like for you to sing the song with me and when we sing the words "tapping, tapping," I would like for you to clap a staccato sound using your 2-finger clap and I would like for you to try and sing a staccato sound with your voice."

Step 30: Teacher sings a "Ready, sing" cue on correct starting pitch of the song.

Step 31: Teacher and students sing together using a staccato voice (most students) when singing the words "tapping, tapping" and a legato voice while singing the rest of the song. Teacher and students clap the correct rhythm with 2 fingers while singing the words "tapping, tapping."
Step 32: Teacher gives correct academic approval: “I like the way I heard you using a short disconnected sound with your hands, and I heard some of you trying to sing staccato with your voice. Great job.”

Step 33: Teacher gives instruction: “Listen to me sing the first line of our song and be able to tell me if I am singing the “tapping, tapping” part staccato or legato.

Step 33: Teacher sings the first line of the song using a legato voice when singing the words “tapping, tapping.”

Step 34: Teacher asks student question: “(Student name), did you hear me using a legato voice or a staccato voice that time when I sang the words ‘tapping, tapping’?”

Step 35: Student responds: “Legato.”

Step 36: Teacher gives correct academic approval: “(Student name) name said legato, and that is correct. I changed the way I sang ‘tapping, tapping’ and sang it legato. Nice listening, (student name).”

Step 37: Teacher asks student question: “We learned the song today by singing the ‘tapping, tapping’ part with a short and disconnected sound. (Student name), what is the musical word that we learned today that means short and disconnected sounds in music?”

Step 38: Student responds: “Staccato.”

Step 39: Teacher gives correct academic approval: “(Student name) said staccato and that’s the right answer. Good job, (student name).”

Script 7

Song 7: “All the Birds”

Teaching Segment 7: Inaccurate Instruction, High Delivery, On-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

Did you hear? Did you see?

Step 3: Teacher points to students and students sing line 1 with teacher.
Step 4: Teacher points to self and sings line 2.

_All the birds fly from the tree?_

Step 5: Teacher points to students and students sing line 2 with teacher.

Step 6: Teacher points to self and sings line 3.

_Wings of red, wings of blue._

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.

_I wish I could follow you._

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this times before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”

Step 16: Teacher sings an incorrect “Ready, sing” cue on incorrect starting pitch of the song.

Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I am going to clap a part of the song with my hands. Listen and be able to tell me which words I sing when you hear me clap. Watch and listen.”

Step 19: Teacher sings song alone incorrectly with poor intonation while clapping the incorrect rhythm of 3 quarter notes while singing the words, “All the birds” as written.

Step 20: Teacher asks student question: “(Student name), which words was I singing when you heard me clap my hands?
Step 21: Student responds: “Birds fly.”

Step 22: Teacher gives incorrect academic approval: “(Student name) said ‘birds fly,’ and that is the correct answer. Good listening, (student name)!”

Step 23: Teacher defines musical concept inaccurately: “Sometimes in music we have a rhythm that looks like this.” (Teacher shows note card of a dotted quarter note followed by an eighth”). “When a note has a dot next to it, this dot …” (Teacher points to the dot). “…makes this note shorter …” (Teacher points to the dotted quarter note). “… and we call this a dotted rhythm in music.”

Step 24: Teacher gives instruction: “I would like everyone to listen to me clap this dotted rhythm and then I would like for you to clap the dotted rhythm back to me.” (Teacher claps incorrect rhythm of 3 quarter notes).

Step 25: Students respond: Students clap the incorrect rhythm of 3 quarter notes.

Step 26: Teacher gives incorrect academic approval: “Wonderful job! I love the way everyone clapped dotted rhythm perfectly.”

Step 27: Teacher gives instruction: “I am going to sing the song alone again, but this time I would like for you to use your hands while I sing. We are going to clap the dotted rhythm when I sing ‘All the birds’ in our song. Put your hands like this to get ready.” (Teacher puts hands together in clap position).

Step 28: Teacher sings song alone while students and teacher clap the incorrect rhythm of 3 quarter notes when teacher sings the words “All the birds” with incorrect pitches and while singing out of tune.

Step 29: Teacher gives incorrect academic approval: “I really like the way I heard all of you clapping that dotted rhythm perfectly. Excellent job.”

Step 30: Teacher gives instruction: “Now I would like for you to sing the song with me and when we sing the words ‘All the birds’ I want you to clap the dotted rhythm that we learned today with me.”

Step 31: Teacher sings a “Ready, sing” cue on incorrect starting pitch of the song.

Step 32: Teacher and students sing the song together incorrectly with poor intonation while clapping the incorrect rhythm of 3 quarter notes when singing the words “All the birds.”
Step 33: Teacher gives incorrect academic approval: “That was such a wonderful job! Not only did I hear most of you clapping the correct dotted rhythm with your hands when we sang “All the Birds,” but I also heard so many of you singing the correct pitches to our song with your voice!”

Step 34: Teacher asks student question: “(Student name),” ... (Teacher hold up visual of a dotted quarter note followed by an eighth), “... when we put a dot ...” (Teacher points to dot). “… next to a note ...” (Teacher points to dotted quarter note). “... does this dot ...” (Teacher points to dot again). “... make this note ...” (Teacher points to dotted quarter note again). “… shorter or does it make it longer?”

Step 35: Student responds: “Shorter.”

Step 36: Teacher gives incorrect academic approval: “Excellent, (student name), shorter is the correct answer!”

Step 37: Teacher asks student to demonstrate: “(Student name), can you please clap the dotted rhythm that we learned today?”

Step 38: Student responds: Student claps the incorrect rhythm of 3 quarter notes.

Step 39: Teacher gives incorrect academic approval: “Good for you, (Student name), you clapped that dotted rhythm perfectly!”

Script 8

Song 8: “Jasper Casper”

Teaching Segment 8: Inaccurate Instruction, High Delivery, Off-Task Student Behavior

Step 1: Teacher gives instruction: “Echo me.”

Step 2: Teacher points to self and sings line 1.

Up upon a mountain top.

Step 3: Teacher points to students and students sing line 1 with teacher.

Step 4: Teacher points to self and sings line 2.

Was a pot of gold.

Step 5: Teacher points to students and students sing line 2 with teacher.
Step 6: Teacher points to self and sings line 3.

_Jasper Casper picked it up._

Step 7: Teacher points to students and students sing line 3 with teacher.

Step 8: Teacher points to self and sings line 4.

_So it has been told._

Step 9: Teacher points to students and students sing line 4 with teacher.

Step 10: Teacher gives instruction: “Wait for me to sing two lines this time before you echo.”

Step 11: Teacher points to self and sings lines 1 & 2.

Step 12: Teacher points to students and students sing lines 1 & 2 with teacher.

Step 13: Teacher points to self and sings lines 3 & 4.

Step 14: Teacher points to students and students sing lines 3 & 4 with teacher.

Step 15: Teacher gives instruction: “This time, I would like for you to sing the whole song with me.”

Step 16: Teacher sings a “Ready, sing” cue on starting pitch of the song.

Step 17: Teacher and students sing whole song together.

Step 18: Teacher gives instruction: “This time I am going to sing the song alone and I am going to move my hand like this…” (teacher holds palm downward and moves hand from low to high indicating a leap) “… during a part of the song, I would like for you to watch and listen for what word I sing when you see me move my hand.”

Step 19: Teacher sings song alone incorrectly and with poor intonation and moves hand to show a skip in her voice, but while singing two unison pitches on “Casper” which is supposed to be a skip.

Step 20: Teacher asks student question: “(Student name), did you hear what word I was singing when I moved my hand?”

Step 21: Student responds: “Jasper.”
Step 22: Teacher gives inaccurate academic approval: "(Student name) said ‘Jasper’ and that is the correct answer. Good watching and listening."

Step 23: Teacher defines musical concept inaccurately: "When I moved my hands like this ..." (teacher holds palm downward and moves hand from low to high to indicate a leap) "... I was showing something in music called a skip. And a skip happens when we have two notes that are side by side and one of those notes moves to the next note by step — we call that a skip in the music."

Step 24: Teacher gives instruction: "I would like everyone to show me how we can show a skip in music with our hands. Do that now, please."

Step 25: Students respond: A few students show a skip incorrectly with their hands.

Step 26: Teacher gives correct academic approval: "I like the way most everyone put moved their hands correctly to show a skip."

Step 27: Teacher gives instruction: "I am going to sing the song alone again, but this time I would like for you to use your hands when you hear me sing the word ‘Casper’ to show the skip in our song."

Step 28: Teacher sings song alone incorrectly and with poor intonation and the teacher and a few students move their hands incorrectly when the teacher sings the word “Casper” as two unison out-of-tune pitches.

Step 30: Teacher gives incorrect academic approval: "I really like the way I saw everyone moving their hands correctly to the word ‘Casper’ to show the skip in our song. That was a great job."

Step 31: Teacher gives instruction: "Now I would like for you to sing the song with me and show the skip with your hands and sing the skip with your voice when we get to the word ‘Casper’ in our song."

Step 32: Teacher sings a “Ready, sing” cue on the incorrect starting pitch of the song.

Step 33: Teacher and a few students sing together while demonstrating incorrect pitches and poor intonation and showing a leap instead of a skip with their hands.

Step 34: Teacher gives academic approval: "Super! I like the way I saw you moving your hands correctly to show the skip when we sang ‘Casper’ and I like the way I heard all of you singing the skip correctly with your voice."

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Step 35: Teacher asks student question: “(Student name), what do we call it when we have two notes that are side by side and one of those notes moves to the next note by step?”

Step 36: Student responds: “Skip.”

Step 37: Teacher gives incorrect academic approval: “Good for you, (student name), skip is the correct answer.”

Step 38: Teacher asks student question: “(Student name), can you please show us how we show a skip with our hands?”

Step 39: Student responds: Student shows incorrect hand motion by moving hand in a straight line across the space in front of him.

Step 40: Teacher gives correct academic approval: “(Student name), excellent, you showed that skip perfectly with your hand.”
APPENDIX B: SONGS

Song 1. “Tic Tac, Mic Mac”

Tic tac, mic mac where did you go—? Where did you go—? Where did you go—?

Tic tac, mic mac where did you go—? Tell me, where did you go—?

Song 2. “Catch the Wind”

Catch the wind and put it over there. Put that wind back in the air.

Catch the wind and put it over there. Way, way, over there.

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Song 3. “Watch My Hands, Hear Me Sing”

Watch my hands. Hear me sing. I have many smiles to bring.

I feel great. I feel fine. Show your smile and let it shine.

Song 4. “River, river”

River, river carry. Take me to my land.

Boats are on the water. Oars are in my hand.
Song 5. “Get on Board Now”

Train is leaving early. Early in the morning.

Get on board now. Only get one warning.

Song 6. “Tapping, tapping”

Tapping tapping at my door. I have heard that sound before.

Tapping tapping once again. Through the peep hole I see my friend.
Song 7. “All the Birds”

Did you hear? Did you see? All the birds fly from the tree?

Wings of red, wings of blue. I wish I could follow you.

Song 8. “Jasper Casper”

Up up on a mountain top. Was a pot of gold.

Jasper Casper picked it up. So it has been told.
APPENDIX C: PARENT LETTER

Dear Parents:

My name is Katia Madsen and I am a graduate student at Louisiana State University. I would like to invite your child to participate in a music educational study during the after-school program at the Baton Rouge Center.

The purpose of the study is to help determine what makes a teacher an effective teacher. With your permission, I would like to teach some short music lessons to your child that will require him/her to sing and make appropriate movements that go along with each song. I will be teaching the lessons under different conditions. These different conditions will include the following: (1) sometimes I will teach the musical material accurately and sometimes I will not; (2) sometimes I will teach with enthusiasm and sometimes I will not; and (3) sometimes a few of the students will be asked to simulate minor misbehaviors and sometimes they will not. The minor misbehaviors that a few of the students will be asked to simulate will be things such as not participating, talking when the teacher is talking, and making appropriate gestures that are not the correct gestures that the teacher is asking them to do. Basically, the children will be asked to be “actresses” and “actors” during a simulated music classroom situation.

I am asking your permission to video-tape your child at the Baton Rouge Center as part of this study. The tapes will be used for educational purposes only and will not be distributed for any other reasons than to allow college students at Louisiana State University and Florida State University, as well as students at the Louisiana State Laboratory School, to view me teaching under the different teaching conditions in order to help ascertain what makes a teacher an effective teacher.

Rehearsing and videotaping will be conducted during selected after-school times on Tuesdays, Wednesdays, and Thursdays across a two-week period beginning the week of September 21st in order to make a 45-minute educational videotape. In no way will the rehearsing and videotaping conflict with scheduled field trips.

I have enjoyed five successful years of teaching experience in the public schools and I assure you that I will make this a fun and positive experience, with no potential risks to your child. In order for your child to participate in this study, you and your child will need to sign the attached consent form and return it to the music teacher, Mrs. Ludwig. If you do not wish your child to participate in the study, please respond by signing the non-consent portion of the form.
Parent/Guardian Consent:

"I have been fully informed of the above-described procedure and I give my permission for my child to participate and be videotaped in the study."

_________________________ __________
Parent/Guardian Signature Date

Child Consent:

"I have been fully informed of the above-described procedure and give my permission to participate and be videotaped in the study."

_________________________ __________
Child Signature Date

Non-Consent

"I have been fully informed of the above-described procedure and I do not wish for my child to participate in this study."

_________________________ __________
Parent/Guardian Signature Date
APPENDIX D: EFFECTIVE TEACHING RESPONSE FORM

Effective Teaching Response Form

Grades 6-8 ___ Grades 9-12 ___ College Student ___ Other ___

Experienced Teacher

Teaching Segment #1:

1 2 3 4 5 6 7 8 9 10

Least Effective (Bad Teaching) Most Effective (Good Teaching)

Comment #1: __________________________________________________________

______________________________________________________________

Comment #2: __________________________________________________________

______________________________________________________________

Comment #3: __________________________________________________________

______________________________________________________________

Note. Teaching Segments 2-8 are identical in format to Teaching Segment #1.
APPENDIX E: STIMULUS VIDEOTAPE VALIDITY FORM

You are about to view a videotape of eight short music lessons being taught to an elementary music class. Before you play the videotape, please read the following directions:

The purpose of viewing this videotape is for you to assess whether the teacher is exhibiting accurate or inaccurate instruction, high or low teacher delivery, and whether the majority of the students are on-task or off-task. You will need to make these assessments for each of the eight different teaching segments.

You will use a response form located on Page 2 of this handout in conjunction with the videotape in order to make your assessments. After you have viewed a teaching segment, you will refer to the section of the response form that is associated with the segment you just viewed. For example, after viewing teaching Segment #1, you will then refer to the section of your response form that reads Segment #1, and then respond in the following manner:

For each teaching segment on your response form, you will see two choices of variables to choose from next to each of the three following areas that you are assessing: Accuracy of Instruction, Delivery Skills, and Student Attending Behavior. After viewing a teaching segment, please circle ONE of the two choices that best describes your general assessment for each of the three areas.

When you are ready to begin viewing the videotape, please ignore or fast-forward through the scrolled black-and-white directions found at the beginning of the videotape until you see a blue screen that reads “Segment #1.” This is where you will begin. At the end of each segment, you will see a red screen that reads “Evaluate” which lasts for one minute in duration before the next teaching segment begins. If you need more than one minute to make your assessments, you may stop the videotape, or if you need less than one minute, you may fast forward through the “Evaluate” screen until you have reached the next teaching segment. You may also rewind the tape and view any teaching segment as many times as you need to make your assessments.

Thank you for your participation today. You may begin viewing the videotape when you are ready.
Segment #1:

Accuracy of Instruction: Accurate Inaccurate

Delivery Skills: High Low

Student Attending Behavior: On-task Off-task

*Note.* Segments 2-8 are identical in format to Segment #1.
VITA

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DOCTORAL EXAMINATION AND DISSERTATION REPORT

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Major Field: Music Education

Title of Dissertation: The Effect of Accurate/Inaccurate Teacher Instruction, High/Low Teacher Delivery, and On-/Off-Task Student Behavior on Musicians' Evaluation of Teacher Effectiveness

Approved:

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EXAMINING COMMITTEE:

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Date of Examination:

July 6, 1999