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An Analysis Of Student Teachers' Instruction In A Beginning Band Setting

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ABSTRACT

This study investigated the teaching behaviors of student teachers in a beginning band setting and identified their instructional targets to compare the data between the participants from two different conditions, the on-podium condition and the off-podium condition. Previous research of expert and experienced teachers in a beginning band setting suggests those teachers were mobile during instruction, were proactive in managing transition periods, remained off the podium for greater durations while providing instruction, used modeling frequently, and provided specific directives toward goal attainment. The purpose of this investigation was to determine whether student teachers more closely exhibit the instructional strategies of expert teachers if they are encouraged to become more mobile in the classroom.

The participants were nine student teachers from regional, state, and flagship universities in the Southeastern United States. Each participant was observed and video recorded over two separate 20-minute segments: 20 minutes in the on-podium condition and 20 minutes in the off-podium condition. Unique to this study was that student teachers were asked to remain off the podium for a specific amount of time so that an equal comparison could be made of instruction between the two conditions in a beginning band setting.

In comparison between the two conditions, there were 34 single-performance-trial rehearsal frames and 2 multiple-performance-trial rehearsal frames in the on-podium condition, while there were 26 single-performance-trial rehearsal frames and 4 multiple-performance-trial

rehearsal frames in the off-podium condition. Analysis of the multiple-performance-trial rehearsal frames from the off-podium condition revealed traits similar to that of experts, including more teacher talk and full ensemble performance of less duration. Additionally, there were more episodes of performance approximation, and the mean duration of student behavior decreased from an average of 24.25 seconds in the on-podium condition to an average of 9.5 seconds in the off-podium condition.

There was evidence to suggest that instruction improved in the off-podium condition. It is suggested that in their college courses, student teachers must be taught to remain off of the podium when providing instruction to beginning band students. Specific growth elements and recommendations are included in the study.

DEDICATION PAGE

I dedicate this dissertation to God, who sustains me through the most challenging, yet rewarding times of my life, and to my children, Christian and Kelsey, for their inspiration in helping me finish this project. It is my hope that its completion and the ultimate degree will inspire them to have big dreams and to follow through until those dreams are realized.

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CHAPTER 1

INTRODUCTION

Field experience in music education has been a fundamental component of music teacher training for well over a century. These experiences allow prospective music teachers exposure to situations commonly encountered in music classrooms thereby preparing them for the role of public school music teachers. Field experiences, in many music teacher training programs, are divided into two segments: student teaching, which prepares the teacher trainee by emulating a professional in a public school setting; and early field experience, which precedes the student teaching experience by encompassing observation, planning, and participation in instructional activities to promote success during the student teaching experience (Morrissey, 2003).

The student teaching experience is the culminating endeavor in music teacher training programs that were established many years ago to merge theory with practice. Preservice teachers are placed with a cooperating teacher, a professional teacher at the elementary or secondary level, to mentor the student teacher for the challenges that lie ahead. The definition is consistent with Rideout and Feldman (2002) who defined student teaching as "a specified time period when music education students are placed in an elementary or secondary school setting to work with a music teacher who helps them create and implement lesson plans, assess student learning, and master the administrative tasks that accompany being a music teacher" (p. 874). In

other words, the student teacher accepts the responsibilities of the teacher-role by performing work similar to that of a public school teacher.

Extant research suggests that student teachers may not emulate the behaviors of experts in similar instructional settings. This investigation will identify the instructional targets of student teachers, describe their teaching behaviors in achieving their desired objectives, and compare the data collected from observations of the student teacher from two specific conditions: the on-podium condition and off-podium condition. The results of the study will be compared with extant research on experts in an identical setting to promote improvements to instrumental music teacher training. Comparing student teacher behaviors both on and off the podium may reveal that one approach is more suitable for beginning band instruction.

Student teaching is a valued practice in the preparation of teachers; and while there has been research (Guyton & McIntyre, 1990; Waxman & Walberg, 1986; Tabachnick, 1980; Becher & Ade, 1982) and other commentary (Verrastro & Leglar, 1992; Cutietta, 2007) examining field experiences and their capability to serve their intended function, many of the findings are incongruent. Verrastro and Leglar (1992) suggests that the dissimilar results are based on "an insubstantial theoretical and empirical base" (p. 684). Guyton and McIntyre (1990) contend that field experiences simply evolved from an earlier apprenticeship model with little to no research to support their inclusion in teacher training. Extant research into music student teaching is limited, thereby preventing serious reform or even the discussion of such restructuring.

The teaching profession has undergone much development over the past century; the No Child Left Behind Act (2001) and Goals 2000 and the Educate America Act (1994) are among numerous initiatives in the twentieth and twenty-first centuries. Holistically, with the extent of transformation that has taken place over the last century in education, why has the practice of

student teaching remained unexamined? Abundant research is needed to question its function, bring to light its successes and failures, and launch open discussion as to whether it serves its intended function. Descriptive studies such as the current investigation may provide the foundation for future correlational and experimental studies that are to follow. By examining the behaviors of student teachers, the findings may suggest practical alternatives for music teacher training.

Procedures for music teacher training are governed, often collectively, by music and music education faculty, various education committees, Schools of Education, and state departments of education at many teacher-training institutions. Panels of educators and department leaders often decide the program requirements; courses, electives, observation procedures, and other courses thought to be necessary for effective music teacher training (Forsythe, Kinney, & Braun, 2007).

Many departments of music are accredited by the National Association of Schools of Music (NASM), an organization that provides a handbook to members outlining requirements for continued accreditation and other criteria necessary for a comprehensive music department. One standard taken from the NASM handbook reads "Institutions should encourage observation and teaching experiences prior to formal admission to the teacher education program; ideally, such opportunities should be provided in actual school situations" (NASM Handbook, p. 102). Most university departments of education are also members of another accrediting agency for teacher preparation, the National Council for Accreditation of Teacher Education (NCATE). The standards that all schools accredited by the agency must follow are known as NCATE Unit Standards, Conceptual Framework. Standard three reads, "the unit and its school partners design, implement, and evaluate field experiences and clinical practice so that teacher candidates and

other school professionals develop and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn (NCATE Standards, p. 12). While NCATE offers guidelines and rubrics to help administer the field experiences, these standards are vague, and are left to committees, departments, faculty, institutions, and/or state requirements to determine that which is best within their geographic location. The lack of continuity across the nation in regard to student teaching is a concern and should open the door for serious discussion of future practices.

Regardless of the path that best prepares future music teachers, it is accepted practice at all teacher training institutes to provide at minimum, a twelve-week period to which each teacher trainee participates in an authentic practice of teaching. The experience allows student teachers to connect theories of teaching and learning with professional practice. Numerous studies, however, are needed to suggest that an alignment of theory and practice has taken place. This study, conversely, identifies instructional targets and examines the behaviors of student teachers, subsequently placing those behaviors into categories so they may be examined and discussed. Such an investigation is necessary to evaluate student teaching, as it pertains to producing effective teachers, and to examine the extent to which their behaviors are aligned with the best practices of experts in the field.

To understand effective teachers and their instructional approaches in the classroom, it is necessary to explore the common characteristics among effective or expert teachers. What is expert teaching, and what are the differences between expert and novice teachers? The criteria used to judge a teacher's effectiveness is based, in part, on guidelines determined by state agencies and/or accreditation agencies, but are often left to a local school or district for implementation. The criteria used in one school may be different than the criteria used in another

school. With the lack of uniformity regarding teacher evaluation, one must agree that identifying expertise must be equally confounding. David Berliner, a Professor of Educational Psychology at the University of Arizona, and a researcher in the area of teaching effectiveness, argues that there is imprecision on what classifies someone as an expert. “In one state, a criterion is community activities, including church work. In another state they told us a criterion is ‘really loving children’. Now, these are not bad things – you want community involvement and love of kids – but most of us would hesitate to say those are sufficient conditions for expertise” (Brandt, 1986, p. 5).

Grant and Drafall (1991) compiled the findings of effective teaching research since 1980, and noted the following congruencies in their findings: “teachers are knowledgeable in content and teaching strategy, knowledgeable about their students and their instructional needs, communicate expectations to their students, and act thoughtful and reflective about teaching” (p. 33). Brophy and Good (1986) identified two commonalities in teacher effectiveness: learning outcomes are influenced by the amount of time students are engaged in a learning task, and students learn more when instruction builds upon previous student knowledge and is subsequently reinforced throughout the lesson.

As student teachers develop the ability to accurately discern the characteristics of effective teachers, might they utilize that knowledge to become effective teachers? In the *American Educator,* Bruer (1993) points out that “learning is the process by which novices become experts” (p. 39). An advantage of expert-novice study is its ability to identify instructional approaches and other pedagogical knowledge of experts as compared to those of novice teachers. This project, by describing the instructional behaviors of student teachers, may ascertain new pathways to becoming effective teachers.

Studies by Goolsby (1996, 1997, & 1999) produced findings sufficient to suggest a direction for novice teachers to become experts by comparing the behaviors of experts, novice, and student teachers in an instrumental setting. In the first study, he examined the use of time in instrumental rehearsals and found that expert teachers talked more frequently and for shorter durations than did novice teachers, and that novice teachers spent more time talking. The second study examined verbal instruction and suggested that expert teachers stopped more frequently than did novice teachers and often addressed multiple performance targets simultaneously. The research also found that expert teachers asked fewer, and less vague questions than did novice teachers. The third and final study in the series compared expert and novice teachers rehearsing identical band compositions and found that experts spent a greater amount of time rehearsing than did novice teachers, the experts addressed more rehearsal targets, and the novice teachers started and stopped more often without providing feedback.

Given the amount of pedagogical and theoretical training that is provided to preservice teachers, what might prevent them from applying that knowledge during their student teaching practicum? One theory is that while novice teachers have textbook knowledge, they may lack the ability to connect theory to practice (Dreyfus & Dreyfus, 1986). Dewey (1904) discussed the relationship of theory to practice in education over a century ago; much of which holds true today. Dewey argued that student teaching may promote enhanced technical facility but may not improve theoretical understanding. He insists, "(Theory) cannot be adequately secured when one is doing the actual work of the profession" …. "In theory they approximate ordinary conditions. As a matter of fact, the 'best interests of the children' are so safeguarded and supervised that the situation approaches learning to swim without going too near the water" (p. 11). In short, according to Dewey, student teachers are monitored closely and are not provided true ownership

of the classroom. Unless student teachers are given the responsibility to teach and manage students with less control from the cooperating and/or supervising teacher, they may not truly benefit from the activity as it is intended.

When do novice teachers transition to expert status? Waymire (2011) suggests it could be related to when novice teachers develop the ability to "adapt to the constantly changing social and academic/music-learning environment" (p. 4). The idea is supported by Cavitt (1998) who said that the one consistency among expert teachers "is the spontaneous decision-making process that teachers undergo to determine the next proposed solution" (p. 12).

Novice teachers may not share the same beliefs as to which characteristics describe expert teachers. Davis (2006) sought the opinion of music education students and student teachers on skills associated with successful music teaching and found both groups believed personal skills to be the most important, followed by teaching and musical skills. Similarly, Sogin and Wang (2002) investigated music teachers' perceptions of expertise in music teaching and revealed that flexibility was the highest rated principle for effective teaching. Prickett and Duke (1992) point out that, "perceptions and evaluations of teaching have been affected by factors that are extraneous to the events that are actually being observed" (p. 47). Preservice teachers recognize moments that they consider great teaching based on their perceptions, yet those moments may not be effective teaching at all. Until student teachers understand and are capable of recognizing the behaviors associated with effective teaching, they certainly would not be able to emulate those behaviors.

Madsen, Standley, Byo and Cassidy (1992) compared assessments of teaching effectiveness between experts and student teachers and found that 37% of the components of effective teaching were agreed upon between the groups, while 30% were disagreed upon. The

incongruence between the groups as noted in the research suggests that student teachers may not be capable of identifying the components of effective teaching, nor the instructional targets that are frequently identified by experts. This idea is further supported by the previous discussion on novice teachers and their inability to transfer theory to practice. Undergraduate music teacher training may provide the theoretical and pedagogical knowledge necessary to teach, yet novice teachers may fail to make the connections with application in actual teaching.

If student teachers are to become experts, extant research should serve as a guide in achieving the goal. Waymire (2011) suggests that:

> Expert is perhaps the ultimate descriptor of best teaching, no single archetype in music education exists. It is the search for examples and descriptors of best practice, however that continually increases music education's awareness of what teacher behaviors best benefit our music students and those preparing to be knowledgeable, practiced, intuitive music teachers. (p. 7)

Studies that articulate the behaviors and instructional targets of expert teachers are available. Worthy (2006) observed three expert conductors in an instrumental rehearsal and found that experts address multiple instructional targets simultaneously and distribute time equally between student performance and teacher talk and/or modeling. Another study by Thompson (2006) examined the instructional targets of experts in beginning bands, as well as the teacher and student behaviors while working toward achieving their instructional goals. He found students engaged in activities throughout the lessons; teachers were mobile during instruction and were proactive in managing transition periods. The author also found that experts remain off the podium for greater durations while providing instruction in beginning band, use modeling frequently, and provide specific directives toward goal attainment. A similar study by Nicholson (2009), who compared experienced teachers with novice teachers in a beginning band setting, found that novice teachers remain on the podium during instruction of beginning band,

use less modeling, and spend greater amounts of time engaged in general conversation with less specific directives.

In order to understand the characteristics of effective teaching and its application to preservice teacher training, it is necessary to determine the behaviors and instructional targets employed by student teachers. How do student teachers manage their classrooms in a beginning band setting? Can similarities be drawn between the instructional approaches of experts with that of student teachers? Do student teachers address many of the same instructional targets?

The Thompson (2006) and Nicholson (2009) studies provide the foundation for this study. It has been noted that expert teachers in beginning band settings spend more time off the podium while novice teachers remain on the podium when delivering instruction. The purpose of this investigation was to determine whether student teachers more closely exhibit the instructional strategies employed by expert teachers if they are encouraged to become more mobile in the classroom. Instructional targets and specific teacher and student behaviors were examined to yield the results.

A participant pool from various colleges and universities in the Southeastern United States was selected for this study while considering multiple factors to ensure diversity among participants. Data collection included field notes taken during live observation and further analysis of video recordings of the observations.

Video analysis included the identification and categorization of instructional targets, and the frequency and duration measures of specific teacher and student behaviors. As a supplement to field notes, this type of analysis provides a somewhat objective measure of the student teachers' instruction. Rehearsal frame analysis allows the researcher to isolate segments of instruction where specific aspects of student performance are targeted by the teacher for

improvement. Rehearsal frames begin when the teacher explicitly or implicitly identifies an instructional target that is followed by isolated or decontextualized performances of the musical segment and may include verbal instruction, modeling, approximations and repetitions. A rehearsal frame concludes with a recontextualized performance of the musical segment.

Comparing the instructional targets and the teaching behaviors of student teachers and performance behaviors of beginning band students under two conditions is the focus of this study. Instructional targets, as well as the teacher and student behaviors are defined in Tables 1 and 2 in Chapter 3. This study attempts to examine the effects of one simple variable to determine if the condition has any immediate effect on the instructional practices of student teachers in beginning band classes. The hypothesis is that placing student teachers in closer proximity to their students rather than delivering instruction from a conductor's podium will have a positive effect on their instruction and evaluation of student performance behaviors. The study is divided into five chapters that include an extensive review of literature in Chapter 2, where research is presented on student teaching both in and outside of music education. Chapter 3 provides the methodology for the study, which includes a description of the procedures, definitions of terms used throughout the investigation, and information on the participants and settings that were observed. Chapter 4 presents the results of the study utilizing field notes and data collected from systematic behavioral observation. Chapter 5 provides a thorough discussion of the data, summarizes the study and provides recommendations for the future. The research questions used for the study are as follows:

1. What are the instructional targets of student teachers in beginning band settings?
2. Are there similarities in the distribution of instructional targets between the student teacher on the podium and the same student teacher off the podium?

3. Are the distributions of instructional targets observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?
4. What are the frequency and durational measures of specific student and teacher behaviors observed in selected rehearsal frames?
5. Are the frequencies and durations of teacher and student behaviors similar between the student teacher on the podium and the same student teacher off the podium?
6. Are the frequencies and durations of teacher and student behaviors observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?

CHAPTER 2

REVIEW OF LITERATURE

The goal of music teacher training is to develop capable and proficient music teachers. To achieve that goal, strategies employed by experts are put to use in music teacher training. This chapter brings to light many of the associations common to expert teaching in an instrumental rehearsal, including: characteristics of effective rehearsals, pedagogy, time use in rehearsals, and sequence of instruction. An examination of those areas should provide a sound basis for what to expect when observing student teachers in an instrumental setting.

Student teachers, conversely, may not emulate those behaviors exhibited by expert teachers. Thus, a review of extant research as it pertains to student teachers is discussed, including: the evolution of music student teaching, student teaching in education, and student teaching specific to music education. Additionally, rehearsal frame analysis is discussed as it has been used extensively in music education research to capture specific instructional targets and teacher and student behaviors in a rehearsal or lesson setting.

Although many early educators agreed on the importance of music training for students and methods training for music teachers, it was not until 1884 when Julia Ettie Crane joined the faculty of the State Normal School of New York, that specific music teacher training at the college level was employed. Crane's venture subsequently led to the founding of the Crane Normal Institute of Music and the beginning of supervised student teaching in music.

Crane's approach combined the best practices derived from the early singing schools, early music conventions, Normal schools, and music conservatories. Her approach was the amalgamation of the many approaches that preceded Crane's work, promoting both the active listening of music to nourish one's soul with the training in music theory and performance to develop a sense of total musicianship. The curriculum was designed in such a way as to produce practitioners of music, those ready to perform who are more than capable of teaching. It included knowledge of theory, sight-singing and other pedagogy, methods of teaching, observation of teaching, teaching regular classes, and teaching special classes (Crane, 1894). An article by Crane (1894) describes field experience as a part of music teacher training:

> The school is furnished with books and charts from all the best systems published. These are examined, students being required to criticize them from their own standpoint gained in the study of psychology and pedagogy. After thorough work along the lines indicated, observations of the teaching of others gives an opportunity for more practical application of the principles studied. Then comes the most important part of each pupil's training, when he is given a class in the model school, of which he has entire charge and to which he must teach music according to the system with which he is now supposed to be familiar. This class he is allowed to teach for twenty minutes every day during a term of ten weeks, when he is removed to another grade for wider experience. (p. 227)

As music teacher training continued to evolve into the twentieth century, the best practices as they pertain to student teaching have been evolving as well. Given the importance of student teaching, it is necessary to discuss contemporary issues as they continue to unfold.

Many in the music education profession might recall a number of opportunities to practice classroom management, improve communication, or teach students a new fingering on their wind instrument while student teaching, however, as Dewey (1904) suggests, those instances pertain to technical proficiency. Teachers must modify their procedures as needed, often instantaneously, utilizing numerous pedagogical and instructional theories that are derived from many years of experience working with students. This is a problem for student teachers because they lack the experience necessary to emulate effective teachers, who creatively balance the theory of practice with actuality. Dewey (1904) explains this dilemma best in the following scenario:

> The student who prepares a number of more or less set lessons; who then has those lesson plans criticized; who then has his actual teaching criticized from the standpoint of success in carrying out the prearranged plans, is in a totally different attitude from the teacher who has to build up and modify his teaching plans as he goes along from experience gained in contact with pupils.
>
> There is a technique of teaching, just as there is a technique of piano-playing. The technique, if it is to be educationally effective, is dependent upon principles. But it is possible for a student to acquire outward form of method without capacity to put it to genuinely educative use. (p. 12)

That which Dewey has described is a dilemma that holds true in today's music education programs. Student teachers are provided current theoretical concepts and best practices that are to be applied in the classroom. Furthermore, they have been afforded the pedagogical knowledge necessary to teach music technique. It is the expectation that student teachers apply that knowledge in the classroom during their student teaching practicum. Whether or not student teachers effectively apply the knowledge has not been corroborated through empirical research.

Wubbels (1992) argues that preservice teachers fail to make connections between theory and practice because education preparation programs fail to influence student teacher preconceptions. The study suggests that student teachers view student teaching through world images, their belief system as they view it, and apply those beliefs to teaching whether or not theory suggests otherwise. In short, instruction in theory alone may not overcome their beliefs, thus student teachers may fail to see theory as a valid method of instruction; one that has been time-tested. Graber (1995) found that one individual may have more influence on a preservice student than their courses or experiences. Indeed, preconceptions of student teachers are a fact of teacher training that must be changed if student teachers are to learn to utilize time-tested methods that are believed to be effective for student mastery of the material.

A study by Tillema (2000) contends that student reflection may alter belief systems in that student beliefs are a product of their own experiences. If teacher-trainees are required to use effective methods in a teaching episode and then reflect on their delivery of those methods, it may transfer preconceived notions to experience by grounding their beliefs in teaching practice. Bolin (1988) completed a case study on one student to determine how student teachers acquire conceptions of teaching and to allow them to think about their role as teachers. The findings suggest that a reflective journal may be highly effective in assisting students in becoming more purposeful with their teaching. In a study by Nettle (1998), a survey was provided to student teachers before and after an episode of teaching to help determine their beliefs toward teaching. The study concluded that changes in student teachers' beliefs toward teaching had an association with the beliefs of supervising teachers.

Other studies that investigate the teaching practices of student teachers include that by Housner and Griffey (1985), who examined decision making processes of experienced and student teachers in physical education and found that experienced teachers utilized many strategies to manage student performance while student teachers directed their focus to students' interest in activities. In other words, it could be suggested that student teachers were more interested in their students enjoying the activity than whether or not they are learning essential skills.

Westerman (1990) compared expert and novice teachers' decision making and found that experts devote attention to lessons from a student perspective and adapt lessons to student needs while novice teachers developed lessons based on specific objectives with little to no thought toward student needs. The findings of this study are aligned with an earlier discussion of John Dewey's belief that novice teachers fail to connect theory with practice. The Westerman study suggests that novice teachers plan their lessons carefully with clear objectives, but there is little to no evidence to suggest that novice teachers enact those theories effectively.

While many studies have examined student teachers' abilities to merge theoretical concepts into their teaching practices, the extent to which student teachers transfer theoretical knowledge to practice teaching has yet to be shown.

CHARACTERISTICS OF EFFECTIVE TEACHING

Expert teachers employ a broad knowledge-base when delivering instruction; acquired not only from their college preparation but from years of on-the-job training. There are many facets of instruction that must be explained to prepare future teachers for their careers, and

research that clearly articulates those areas is needed to design curriculum that best meet the needs of students combined with training associated with the real-world aspects of teaching.

Porter & Brophy (1988) authored an article to report a synthesis of findings on research related to aspects of good teaching in education. The authors compiled a list of the traits of effective teaching from research on the topic spanning ten years. The findings suggest that professionals (p. 75):

1. are clear about their instructional goals;
2. are knowledgeable about their content and the strategies for teaching it;
3. communicate to their students what is expected of them, and why;
4. make expert use of existing instructional materials in order to devote more time to practices that enrich and clarify the content;
5. are knowledgeable about their students, adapting instruction to their needs and anticipating misconceptions in their existing knowledge;
6. teach student metacognitive strategies and give them opportunities to master them;
7. address higher, as well as lower-level cognitive objectives;
8. monitor students' understanding by offering regular appropriate feedback;
9. integrate their instruction with that in other subject areas;
10. accept responsibility for student outcomes;
11. are thoughtful and reflective about their practice.

The traits expressed relate well with the more recent findings of Polk (2006), who describe traits of effective teachers as demonstrating professionalism, effective communication skills, good personality, and effective modeling of the content. Additionally, these traits seem to relate well with studies (Brand, 1985; Rohwer & Henry, 2004; and Hendel, 1995) which describe

traits of effective music teachers. Although these reported findings were not about student teachers, Porter and Brophy (1988) acknowledge such information's importance to teacher education by providing the following commentary:

> The development of a knowledge base to inform teacher education and teaching practice will make the profession more multifaceted rather than simplifying it, just as the development of a medical knowledge base has increased the complexity of medical practice. In fact, as the relevant knowledge base develops, the major challenges facing education as a profession will revolve around developing preservice and inservice professional education programs that are effective in enabling practitioners to learn about and keep abreast of the developments in the field. (p. 83)

Leinhardt and Greeno (1986) examined the cognitive skills of expert teachers to determine the method(s) used to achieve teaching success, and compared those findings with that of novice teachers. The authors believe that expert teachers approach their instruction with a series of organized actions, which are derived from experience and knowledge, and are often applied with flexibility. These actions are combined with a comprehensive organizational plan, one involving routine assessment, instant modification of their lesson dependent upon student success, and dictated by the teacher's knowledge. The authors further suggest that their actions are decided implicitly, rather than explicitly, essentially characterizing a carefully instituted plan to help students reach success. How do the actions of experts compare with that of novice teachers? In the study, novice teachers did not enact a routine; each day was unique, lacking a continuity that is essential to promoting understanding. Novice teachers may create lessons in vivid detail for a single class, but simply lack the knowledge and experience to view learning and understanding as an accomplishment that is best achieved over time. Expert teachers understand this and are able to make adjustments as needed to maintain consistent effort to achieve a larger goal, one that requires patience and time.

Bergee (2005) compared novice, intermediate, and expert orchestral conductors by asking each conductor to verbalize his or her thought processes while conducting. Expert teachers were found to be more confident throughout, and have a clear and obvious ability to command the situation. Novice teachers, on the other hand, were less confident and appeared to be overwhelmed. The ability to immediately reflect on one's activities may be based on John Dewey's (1934) principle of "knowing-in-action" where professionals interact in the moment; a consolidation of immediate improvement while engaged in an act. Each of these studies suggests that experts are able to reflect on or recall from past experiences that allow them to instantaneously modify instruction to ensure optimal learning is taking place.

Understanding the qualities and attributes of effective teaching is an excellent beginning, but to fully exploit their potential with training preservice teachers, an understanding of the instructional approaches, thoughts and beliefs, and the influences on student teachers must be explored.

STUDENT TEACHERS IN MUSIC EDUCATION

Paul, et al. (2001) examined the positive or negative correlations between fastidious authentic-context learning activities during undergraduate instrumental music teacher training and the initial teaching performance of student teachers during their student teaching practicum. Essentially, this research tests the efficacy of four specific authentic-context learning activities on the actual teaching performance of a student teacher. The data for this study was collected by videotaping the subjects' instructional presentations in a large-group ensemble rehearsal. The video-recordings were evaluated by three independent judges using the Survey of Teaching

Effectiveness developed by Donald L. Hamann at the University of Arizona. The survey consists of two weighted categories; lesson delivery skills (40%) and planning and presentation of lesson (60%). The mean score from the judges ratings were subsequently compared to the number of authentic-context learning activities the subject had participated in during his/her undergraduate training. The study suggests there were significant relationships between three of the activities and the subjects' teaching performance, including the number of early field experiences, the number of peer-teaching episodes, and the number of times the subjects watched videos of peer-teaching episodes. There was no significant relationship between teaching performance and the number of times the subjects had watched a videotape of their teaching with an instructor. The study concluded that subjects with high participation in authentic learning activities did score higher on the survey than those with medium and low-level participation.

Schmidt (1994) sought to determine influences on music student teachers' perceptions and practices by examining four student teachers' perceptions of good versus poor teaching. The findings suggest that student teachers lacking a role model to emulate, derived many of their teaching behaviors from their own experiences. Furthermore, student teachers searched for role models who were comparable to their own beliefs, and sought to find their own identity as teachers that allowed them to be themselves. The author noted the influence of identity as oneself was of greater influence than one's identity as a teacher during the student teaching experience. In short, student teachers may perceive being themselves as more important than being a teacher, and thus felt restrained when having to adapt to the preexisting rules and procedures of their cooperating teacher. This study implies that unless student teachers are given an opportunity to be themselves, they are merely going through the motions to complete the experience with

success. Unless they are given free reign in the classroom, which is unlikely, then student teachers may not acquire the knowledge that student teaching is presumed to provide.

Burrack (2001) examined the instructional thought development of student teachers in instrumental music using reflection and video self-assessment. The findings suggest that student teachers acknowledged and understood their choices and were able to relate them with past experiences and education. In addition, the process of metacognitive examinations may have enhanced student teachers' instructional thought and subsequent interaction in the classroom.

Butler (2001) investigated the relationship among preservice teachers' conceptions of teaching effectiveness, microteaching experiences, and teaching performance. Subjects (N = 15) created concept maps, which are graphics to organize or represent knowledge, on teacher effectiveness. Upon evaluating the concept maps, the subjects completed two microteaching lessons that were analyzed, and created additional concept maps for comparison to the original. The study found that preservice teachers understand effective teaching and describe an effective teacher as knowledgeable, having varied personal characteristics, and utilizing specific teaching behaviors. The findings suggest a connection between their thinking and effective teaching.

Studies that investigate strategies to assist novice teachers in becoming effective teachers in various domains of music education (Alley, 1980; Arnold, 1995; Duke and Madsen, 1991; Bowers, 1997; Brand, 1977; Brittin, 2005; Montemayor & Moss, 2009, and Stegman, 2007) are well documented. Brittin (2005) examined preservice teachers' lesson plans for beginning instrumentalists and found that preservice teachers are not succinct when writing down thoughts on planning for a lesson, and that preservice teachers should take the time to write out each teaching step to produce a perceived value in each step. Montemayor and Moss (2009) tested the effects of recorded models on novice teachers' verbalizations, evaluations, and conducting. The

results indicate that recorded models had no effect on preservice teachers' verbalizations and conducting, however, some influence was noted on preservice teachers' evaluations as they appear to be more critical of performances after being subjected to a recorded model. Stegman (2007) examined the dialogue between student teachers and their cooperating teachers and found that student teachers' reflection practices are deeper and involve more consideration when guided by their cooperating teachers.

Lethco (1999) investigated the effect of self-evaluation, teacher observation, and performance-based instructional approaches on teacher behaviors and student responses. The subjects (N = 44) were divided equally among preservice instrumental music teachers and beginning band students. The methodology involved dividing the preservice teachers into three groups, each being trained in either self-evaluation activities, observations of experienced music teachers, or a performance-based instructional approach. After four weeks of treatment, the preservice teachers taught two lessons each to the beginning band participants. The lessons were video-recorded and were analyzed using the behavioral evaluation software program Scribe. The findings suggest the self-evaluation group were engaged in performance activity for greater durations than the other groups, and across all treatment groups, student subjects were likely to respond correctly when the preservice teachers used content-rich verbalizations over merely providing directions. Additionally, the author noted that subjects' attitudes toward treatment across all groups were positive. This study focused on testing the effects of procedures that are used extensively in numerous areas of music instruction and music teacher training. While this study is important and advantageous to music teacher training, it further indicates the need for research into the teaching behaviors and instructional targets of student teachers in a beginning band class.

Teachout (1997) analyzed and compared the responses of preservice and experienced teachers to determine which skills and behaviors they deem most important in the first three years of teaching. In the study, preservice (n=35) and experienced teachers (n=35) rated teacher skills and behaviors from a list using a likert-type scale. Upon analyzing the ratings and placing them in categories that include teaching, personal, and musical, the results found that both preservice and experienced teachers rated teaching and personal skills as more important in the first three years of teaching than musical skills.

Schmidt (1998) used observations and interviews to determine what student teachers (N=4) in instrumental music considered to be good teaching. The information compiled from the student teachers indicate that previous encounters with their parents, peers, teachers, cooperating teachers, and other students yielded their perceptions of what they consider to be good teaching. The study further suggested that while students are influenced by their music education courses when preparing to student teach, each participant may interpret the information learned from their courses differently based on their prior experiences. The author noted that information gathered qualitatively in a music class is beneficial in showing the processes and issues of music teachers developing good teaching skills.

Stegman (2001) sought to determine the influence of reflection on instruction and other instructional decisions of student teachers (n=6) in a choral classroom. The study indicated strong needs to promote reflection as part of the learning process for student teachers. Guided questioning by cooperating teachers or university supervisors to stimulate reflection of particular areas of instruction will help the student teacher process what occurred and perhaps the best methods for improvement in the future. Additionally, reflection was suggested as a possible

bridge between personal knowledge and theoretical knowledge, which may be used for further development of the student teacher.

Fant (1996) sought to determine a relationship between early field experience and student teaching. In the study, the music student teachers' (N=40) performance was rated by two teacher effectiveness forms and compared with student teachers' early field experiences. The results suggest that early field experience with feedback and micro-teaching relate positively to their student teaching experience, while early field experiences without feedback has a negative relationship on their student teaching performance.

Studies which may have implications, but lack a definitive connection to the current investigation include one by Wink (1970), who examined predictions of effectiveness in student teaching; Coleman, (1999) examined specific teaching behaviors and thought processes of student teachers, and Krueger (1985), who examined the influence of a hidden curriculum on the perspective of student teachers; Brand (1982) investigated the effect of cooperating teachers on the classroom management beliefs of students; Rideout & Feldman (2002) provide a synthesis of research findings in student teaching; Colwell & Richardson (2002) compiled and edited a book on teaching and learning in music education; Teachout (2001) examined their perception of the traits of effective teachers; Legette (1997) focused on improving the act of student teaching by reviewing the literature pertaining to student teaching; Bergee (1992) constructed a scale to investigate the rehearsal effectiveness of student teachers; Asmus (1986) examined the causes of success and failure in student teaching; and Beynon (1998), who sought to explore the emerging identity of student teachers as they become professionals. As previously noted, these studies have not been discussed in detail, yet each may have implications to the current study. While the focus may be dissimilar, and will not determine why student teachers utilize certain strategies

over another, the current study focused on the first step of determining the behavior of student teachers in beginning band.

The instructional processes utilized by student teachers are complicated and it is the intent of the current study to provide knowledge that may assist with improving the student teaching experience. While understanding the intent behind specific student teacher behaviors, sound pedagogy is also important. Do student teachers employ the best practices of experts who work with instrumentalists? Quality performances begin with effective technique, thus a discussion of pedagogy as it relates to its use by experts is warranted.

PEDAGOGY

While extant research on the behaviors of experts in beginning band is limited, numerous authors have published articles to suggest effective pedagogical techniques that may be used with beginners. Burrack (2001) suggests that "learning to teach and becoming a teacher are complex development processes. Within the student teaching experience, student teachers engage in the process of making sense of the situations they encounter" (p. 11). The use of effective instrumental pedagogy is one of the methods to which teachers must develop.

According to Ramsey (2001), "the most important time in the development of good band students and programs is the first year of instruction" (p. 16). The musical development should be focused on the technical training necessary to perform music, the development of music skills, the ability to discriminate efficiently when making musical choices in music, and motivation to continue as a musician throughout their lives. Ramsey continues by providing effective methods

to achieving those goals, and this information provides pedagogical suggestions of all that must be accomplished when teaching beginning instrumental music.

Berliner (1986) discussed, in part, how routine procedures are used among experts and how they may help beginning teachers become more like expert teachers. The author noted that experts understand the best time to impart pedagogical and other knowledge to students through the use of procedures. Students at the primary and middle grades work best when procedures are clearly defined, thus suggesting that student teachers who work with beginning band should incorporate simple instructional procedures, not only to help students perform, but to allow the student teacher an opportunity to assess their own performance and make determinations that will solidify their understandings, and as the author pointed out, it may also assist cooperating teachers in guiding their student teachers.

Hilliard (2001) focused on breathing exercises as it pertains to the development of a quality tone on a band instrument. The author suggests that directors of instrumental ensembles reinforce proper breathing technique with students as it not only influences tone, but may influence other aspects of performance skill. Winkle (1999) emphasized the importance of correct posture to producing a quality tone on the clarinet, and argued that proper posture should be taught early, if not first, when teaching beginning clarinetists. Worthy (2002) indicated three fundamentals of performance ability that should be addressed with beginners: posture, embouchure, and breathing. The author goes on to note that these fundamentals must be mastered, and each has a lasting impact on future development. Pearson (2001) contends that before beginners play on their instrument, they should develop a steady pulse. The author suggests that rhythm instruction is a necessary first-step in beginning band instruction as many of the problems students face are often related to rhythmic accuracy.

Blocher (2002) said that if teachers "decide that students as accomplished learners should be able to play 'in tune,' appropriate to their level of performance, then our teaching techniques in our rehearsals will need to include opportunities for students to become aware of what playing in tune means" (p. 6). The preceding statement can be applied to many areas of band instruction. If students are to become effective performers, then teachers must clearly delineate a path to achieving their stated goals. Pedagogical suggestions such as those presented shed light on that discussion. Student teachers, when preparing to teach, should seek pedagogical literature that will support their existing knowledge, and then test it through practice to determine which works best for them.

While the preceding articles are good references for pedagogical awareness as it pertains to beginning band instruction, researchers who examine pedagogical technique and other instructional practices provide sound knowledge through quantifiable data that promote quality instruction and better efficiency when teaching beginners. A study by Enloe (2011) investigated the clarinet embouchure preferences of band directors. The study examined the *Q* formation of embouchure compared with the *smile* formation. Randomly selected band directors across the United States were provided recordings of long-tones, scales, and solo-literature performed by students in a college-level woodwind methods course who were taught a lesson using both embouchure formations. The directors were asked to select the method they felt produced the best overall tone. The directors approved the *Q* formation of embouchure as an effective way to produce quality tone on the clarinet.

Sehmann (2000) investigated the effects of breath management instruction on elementary brass players. The subjects were 61 brass students from five elementary schools who were divided into two groups; a control and an experimental group. The results suggest breath

management instruction is more effective than traditional instruction when used as a method of improving performance.

An area of pedagogy that has not been discussed, and is paramount to instrumental instruction, is conducting. Cofer (1998) investigated the effects of gesture instruction on seventh-grade wind instrumentalists and found the instruction to be effective toward the recognition of conducting gestures. Kelly (1997) examined conducting instruction on beginning band students and found significant improvement in rhythm reading and the ability to shape phrases. When student teachers are attempting to find their niche for effective instructional techniques, these studies will provide a baseline on which to begin.

Thompson (2006) found expert teachers of beginning band to be mobile during instruction, providing one-on-one or sectional instruction. Thompson's findings suggest limited conducting would have taken place. This finding is critical to the current study in that experts of beginning band are mobile during instruction, which is congruent with Nicholson (2009) and other studies that have been discussed. Student teachers, on the other hand, tend to remain less mobile during instruction and remain on the podium throughout instruction, that was revealed by the current author in a pilot of the current study, and congruent with the findings of novice teachers who remain on the podium during instruction (Nicholson, 2009). In the pilot study, the student teacher was video recorded on the podium followed by the student teacher being asked to remain off the podium for a specific amount of time so that instruction could be recorded. It was determined that more instruction had taken place and classroom management had improved when the student teacher was off the podium. Central to the current study is recording the student teacher off the podium while providing instruction to beginning band students and comparing

their behaviors with instruction by the same student teacher on the podium, where they may prefer to remain.

Pedagogical studies certainly provide preservice teachers with much needed information that must be used throughout rehearsals. Studies focusing on when to implement strategies and the amount of time each are used are necessary.

TIME USE IN REHEARSALS

The allocation of time in an instrumental rehearsal is important to functional and productive rehearsals, and studies which focus on effective time management in instrumental rehearsals are indispensable to achieving one's goals, whether short-term or long-term. Many studies that have been previously discussed have examined the time-use of experts in rehearsal (Worthy, 2006; Goolsby 1996, 1997, & 1999; Thompson 2006; Nicholson, 2009; Blocher, Greenwood, & Shellahamer. 1997; and Brophy & Good, 1986), and their findings focused on the behaviors of experts as it pertains to the use of time in rehearsals. Dorfman (2010) sought to determine a relationship between the proportions of time-use of preservice teachers engaged in specific pedagogical behaviors with perceptions of their effectiveness. Time-use is critical to developing patterns of effective practice, especially for student teachers who must learn the best methods to segment their time so that optimal learning is taking place.

Yarbrough & Price (1981) examined instructional time as it pertains to student performance and attentiveness. The study revealed strong relationships between off-task behaviors and individual teachers, non-performance time, and whether the teacher provided sufficient eye contact with students. Buell (1990) examined time-use in effective rehearsals and

found enhanced rehearsal effectiveness when students are engaged in performance for greater durations in rehearsal.

Kotchenruther (1998) examined the rehearsal time of twelve middle school string ensemble teachers and found those directors to prioritize fundamentals, address physical aspects of playing, and acknowledge interpretive or expressive elements of the works being performed. Those areas were suggested to be the approach used by those directors to prioritize rehearsal time. Arthur (2002) investigated rehearsal time of experienced directors in beginning and advanced choirs to determine the role of pacing as it pertains to effective teaching. The results suggest that the director changed pace as needed within the rehearsal and students were engaged in performance for greater durations. The author further explained that pacing, whether slow or fast, is an integral part to effective instruction in the classroom.

Other studies investigate the use of class time as it pertains to student attentiveness (Kostka, 1984; Witt, 1986; Yarbrough & Price, 1981). Witt's (1986) investigation in secondary instrumental rehearsals categorized the use of time into performance, teaching, or getting ready, and found that student off-task behavior was much lower during performance activities; 3.4% during performance and 17.8% during non-performance tasks. This study seems to support previous research suggesting off-task behavior could be predicted according to the amount of time spent in non-performance tasks (Yarbrough & Price, 1981) and by Price (1983) who found college students more attentive during performance tasks.

Kelly (2003) examined time-use of music education student teachers' verbal and non-verbal behaviors in middle and high school choral and instrumental rehearsals. The subjects (N=112) recorded their instruction while interning in a school setting. The investigator randomly selected an equal number of videos from each of the three examined rehearsals, and used a

Continuous Response Digital Interface (CRDI) device to collect the data. The results were categorized into instructional behaviors, rehearsal behaviors, and non-instructional behaviors, and subsequently sub-categorized into more discrete verbal and non-verbal behaviors. The findings suggest that student teachers spent more time using non-verbal rehearsal behavior, which includes conducting, and that student teachers in a middle school setting spent more time using instructional behaviors not associated with performance.

The use of class time in instrumental rehearsals seemingly works hand-in-hand with the sequencing of instruction. While research has suggested that more time has been spent in performance related activities, such findings do not indicate whether or not an effective sequence of events has taken place. Investigations that focus on patterns of instruction delineate the paths that place effective teaching and learning into a sequence that can be easily conveyed to novice teachers.

SEQUENTIAL PATTERNS OF INSTRUCTION

Studies by Yarbrough and Price (1989), Price (1992), Maclin (1993), Arnold (1995), Hendel (1995), Bowers (1997), and Yarbrough & Hendel (1993) investigate sequential patterns of instruction. Yarborough and Price (1989) describe sequence of instruction as teacher presentation of task, followed by student performance, and continues with reinforcement. The description was derived from an earlier investigation by Becker, Engelmann, and Thomas (1971) who described the model as a recurring pattern that is used extensively in effective teaching practices.

Yarborough and Price (1989) examined the sequential patterns of instruction in rehearsal. Seventy-nine rehearsals were viewed to determine the amount of time devoted to specific tasks and the sequencing of those tasks. The examination also analyzed student responses and reinforcement of learning. The study found directors providing musical information one-fourth of the rehearsal time, musical directives for approximately the same amount of time, and half the time was devoted to performance. The authors suggest that when musical directives were presented, it was in the format of counting-off, or describing a mistake with little to no musical information to follow. When musical information did follow, the subsequent instructions to begin playing at a certain measure diverted student attention off of the musical information rendering it difficult to remember. Such findings suggest that a cycle or pattern of instruction would be useful, especially for those preparing to teach. Those who follow a specific pattern of instruction should deviate from the pattern as little as possible.

Maclin (1993) performed a study on early childhood education majors. The study used three experimental groups including: task analysis group, who performed a task analysis prior to instruction; a group instructed to write two task analyses of material unrelated to teaching; and a non-task analysis group. Each group was required to perform their task prior to providing instruction. The results indicated significant increases in sequential patterns of instruction for the task analysis group which was shown to have spent more time in performance.

The results of these studies are congruent in that each has shown instructional patterns to be an effective method of instruction at various levels. When examining the instructional sequence, many studies have focused on the behaviors of teachers as it pertains to presentation of tasks. Such studies provide future teachers specific behaviors that have been tested in research and deemed effective practice in teaching and learning.

While the sequencing of instruction is important to understanding the best instructional approaches in an instrumental ensemble, further analysis is needed to capture the instructional targets within each rehearsal. Rehearsal frame analysis focuses the observer's attention to segments of a rehearsal or lesson when specific instructional targets are being addressed. Rehearsal frame analysis allows the researcher to measure specific teacher and student behaviors within the rehearsal or lesson, at the moments when teaching and learning are optimal.

REHEARSAL FRAMES

A number of studies have used rehearsal frame analysis to identify instructional targets within a rehearsal setting (Cavitt, 2004; Napoles, 2006; Nicholson, 2009; Thompson, 2006; Worthy & Thompson, 2009; and Worthy 2003, 2006). There are many actions and/or behaviors taking place simultaneously during a rehearsal making it difficult to ascertain individual behaviors that are directly related to instruction. In fact, Duke (1999) discussed the complexity of observing teaching episodes, and contends that "even in 'simple,' one-on-one settings, there is a daunting effusion of variables, all of which interact in complicated ways….to observe any moment of teaching is to observe a plethora of circumstances and behaviors" (p. 18). Duke further contends that "describing instruction in this way makes clear the relationship between changes in students' behavior and all observable aspects of teaching with which these changes are associated" (p. 19). Rehearsal frame analysis as depicted by Duke, is a unit of analysis that focuses on instructional targets.

Napoles (2006) used rehearsal frame analysis to compare type of teacher talk and student attentiveness. The participants of the study were 20 male and female directors of middle through

university-level band, chorus, and orchestra ensembles. The purpose of the study was to examine verbal behaviors on the attentiveness of students. To accomplish the stated goal, video and audio recordings of each rehearsal were viewed and analyzed multiple times to record variables that included 10 types of teacher talk divided into subcategories. Duration of teacher-talk was compared to students' off-task behaviors. The results of the study found a negative relationship between the times teachers spent talking with student attentiveness. These findings imply that the more teachers talk, the less they are likely to accomplish in the rehearsal or classroom setting. This is important for novice and student teachers, who have been observed spending more time talking than more experienced teachers as reported in research (Goolsby 1996, 1997, 1999).

Cavitt (1998) observed ten expert band directors from both middle and high schools over a span of four rehearsals. The video observations identified 332 rehearsal frames, which were subsequently analyzed to yield the results. The findings revealed teachers engaged in teacher talk for 52% of the rehearsal, while students were engaged in performance 39% of the rehearsal. Further analysis revealed the specific teacher behaviors used to address the instructional targets that were identified.

A study by Worthy (2003) observed an expert conductor rehearsing an identical composition with an intercollegiate honor band and a high school band. Similar to the Cavitt (1998) study, rehearsal frames were identified and analyzed. The categories of rehearsal frames were articulation, dynamics, editorial, intonation/tone, pitch accuracy, rhythm accuracy, tempo, unidentified, other, and multiple. The behaviors that were analyzed were conductor verbalizations, conductor modeling, student verbalizations, and student performances. The findings indicate that the conductor more frequently addressed multiple targets with the college group and single targets with the high school group, and the conductor was found to move at a

faster pace with the high school ensemble versus a slower pace with the college ensemble. Worthy (2006) observed conductors of intercollegiate honor bands, and analyzed the rehearsals using instructional targets from the previous study. The results found that multiple targets were frequently addressed simultaneously with each conductor, and conductor verbalizations were specific with expectations fully explained. The study also determined the duration of behaviors and found the conductors engaged in teacher talk 46% and conductor modeling 6% of the time. Students were engaged in full ensemble play 29%, section play 11%, individual performance was 1%, and student talk was less than 1% of performance time.

Cavitt (2004) performed a study using rehearsal frames that focused on intonation. The study found that teacher feedback statements focused on changing student behaviors were utilized frequently, and most of the errors noted were corrected using out-of-context practice, which refers to errors that were corrected separately from the piece being performed. Waymire (2011) used rehearsal frame analysis to identify instructional targets and teacher behaviors in high school band rehearsals. Many of the targets and behaviors discussed in previous research were used in the study. A study by Murray (2011) also used rehearsal frame analysis to reveal the instructional targets and teacher behaviors of three conductors of high school band while preparing for performance. A similarity among all of the studies was the use of Simple Computer Recording Interface for Behavioral Evaluation (Scribe). Scribe 4.2 is a computer software program designed by Duke and Stammen (2011) to record the frequency and duration of specified behaviors. The software is used by simply clicking on the mouse while a specified behavior is occurring; the software subsequently records the information for future analysis.

Upon synthesizing these studies' findings, certain targets became apparent. Teacher talk, student verbalizations, and student performance were behaviors identified and measured in each

of the previous studies. Common findings include the amount of time spent in teacher talk versus the amount of time spent in student performance. Both the Cavitt (2004) and Worthy (2006) studies indicate that more time was spent in teacher talk (52% and 46% respectively) than in student performance (39% and 29% respectively). These instructional behaviors and measures were central to the current study as they appear to represent the best practices in instrumental music instruction, and were used for comparison with observations of student teachers in instrumental music.

STUDIES AND METHODOLOGIES MOST RELATED TO THE RESEARCHER'S QUESTIONS: INSTRUCTIONAL TARGETS AND TEACHING BEHAVIORS OF STUDENT TEACHERS IN A BEGINNING BAND SETTING

There have been a number of studies discussed which relate to the current study (Bergee, 2005; Goolsby 1996, 1997, & 1999; Leinhardt and Greeno, 1986; Lethco, 2009; and Madsen, Standley, Byo and Cassidy, 1992) in that, to some degree, they examine the behaviors of novice and/or student teachers, or discuss the behaviors of novice teachers. Studies that compare the behaviors of novices with those of experts are essential to delineating a path for novices to gain expertise. The current study focuses on the behaviors and instructional targets of student teachers under two controlled conditions in a beginning band class. It is hoped that such information will assist student teachers in becoming more effective teachers at an earlier stage of development.

In the broader realm of education, Berliner (2001) pointed to a study by Westerman (1991) who found student teachers allowing teachable moments to escape them by ignoring important student comments. The study noted that student teachers were merely focused on getting through their lesson plan at all costs; which in this case would be student understanding.

Westerman's study implies that student teachers may ignore instructional targets that do not comply with their planned agenda, yet ensemble rehearsals are dynamic environments where flexibility is warranted. Berliner also pointed to a study by Allen (1994) who suggested that experts adjust their lessons to identify and focus on problem areas within the lesson, while novices stick to the plan regardless of the events that are unfolding. Contrary to constructivist learning where knowledge is constructed through personal experiences of the learner rather than acquired, Berliner suggests that deliberate practice may be needed to promote effective teaching with novice teachers.

Studies that promote effective teaching through the examination of instructional targets and teaching behaviors in an instrumental rehearsal were included in this review of literature. Such studies provide the necessary methodologies and procedures to effectively measure student teacher behavior. These studies include one previously discussed by Cavitt (1998) who investigated the instructional targets and teacher behaviors of 10 band directors equally divided between middle and high school bands. The instructional target categories were intonation/tone, articulation, rhythm, multiple targets, dynamics, tempo, pitch accuracy, unidentified targets, and technical facility. The behaviors were labeled teacher talk, teacher modeling, student performance, full ensemble performance, section performance, individual performance, performance approximation, student talk, and marking music.

The instructional targets identified in a study by Worthy (2003), which was also previously discussed, included articulation, dynamics, editorial, intonation/tone, pitch accuracy, rhythm accuracy, tempo, unidentified, other, and multiple. The teaching behaviors identified and analyzed were conductor verbalizations, conductor modeling, student verbalizations, and student performances.

Nicholson (2009), whose methodology was modeled after Worthy (2003 & 2006) and Cavitt (1998 & 2004), investigated and compared the instructional targets and teaching behaviors between three experts and three novice teachers in a beginning band setting. The subjects (N = 6) were videotaped during four consecutive rehearsals, and similar to previously discussed research, the researcher used rehearsal frame analysis and Scribe software to yield the results. Field notes, gathered from live observation, were used to further corroborate the findings. The results, determined by comparing 463 minutes of novice teacher rehearsals with 478 minutes of expert rehearsals, found that novice teachers remained stationary and conducted often, while experts were mobile and rarely conducted their beginning ensembles. Additionally, duration and frequency counts were taken to measure the amount of time spent talking versus engaged in performance or instruction. The results indicate that experienced teachers engaged in teacher-talk more often than novice teachers, yet the mean number of seconds for each talking episode was less, suggesting that experienced teachers move at a more rapid pace. Experienced teachers engaged in modeling, full ensemble performance, and section performance more often than novice teachers; however, novice teachers produced a higher frequency of individual student performance. It should be noted that expert teachers, when modeling, used an instrument either closely associated with that of the student or the exact instrument, while the novice teacher either clapped, sang, or used their own primary instrument for modeling. Another point of interest in the Nicholson study is that less rehearsal frames were identified for novice teachers than experienced teachers. This suggests that experienced teachers invested more instructional time locating and addressing errors during the instructional segment.

The Nicholson study implies that instruction in beginning band may not require conducting. Students are at the developmental stage when fundamentals must be addressed and

repeated often for them to progress to a point where conducting might influence performance. This is important to the current investigation because, as noted from the Nicholson study, novice teachers conducted more often in a beginning band setting than did experienced teachers. The current study employed a similar methodology by comparing the instructional targets, and teacher and student behaviors of nine student teachers in a beginning band setting, both on and off the podium.

A study by Thompson (2006) applied a similar methodology from the Worthy (2003 & 2006) and Cavitt (1998 & 2004) studies to examine experts in a beginning band setting. The subjects (N = 3) were videotaped for three consecutive rehearsals. Rehearsal frame analysis was used to identify the rehearsal targets and rehearsal behaviors. Scribe was used to analyze the videotaped observations, with duration and frequency of events the focus of analysis. The findings suggest that experts in beginning band engage in teacher talk frequently, for long amounts of time, and verbalizations were usually classified as directives and feedback, while analysis of instructional targets revealed pitch accuracy, multiple targets, and posture/instrument carriage as the frequent target across all rehearsal frames.

The author of the study noted that rehearsal frame analysis may not be well suited for observation analysis of beginning band classes. Of the six hours of rehearsal recordings, only 25 rehearsal frames were identified in the study. The low number of rehearsal frames for the Thompson study was not congruent with other studies (Worthy, 2006; Cavitt, 2004) that have a higher number of rehearsal frames to which targets could be identified. Perhaps it could be inferred that working with beginning band students merely requires more time spent on individual targets, thus substantially more recorded observation may yield different results. Also important to the study was the number of concurrent targets identified by the author. Upon

analyzing the data, it was discovered that experts in beginning band often addressed multiple targets while stopping to focus on a single target. The operative definition used by Thompson to address multiple targets was that the teacher must spend an equal amount of time on each target within a specified rehearsal frame. Because the teacher addressed multiple targets but did not spend an equal amount of time on each target, Thompson created a "concurrent targets" category to account for this style of the instruction. While concurrent targets became a central theme of the Thompson study, it was not identified in the Nicholson (2009) study, which compared experts with novice teachers in beginning band.

The Nicholson (2009) and Thompson (2006) studies pointed out specific findings of the behaviors of experts and novice teachers in a beginning band setting, including that experts remained off the podium engaged with students as opposed to conducting the ensemble for great durations. Applying their methodologies to the current study, which included rehearsal frame analysis using Scribe software and field notes, provided much needed insight into the teaching behaviors and instructional targets of student teachers.

CHAPTER 3

METHOD

The purpose of this study is to identify the instructional targets, teaching behaviors of student teachers, and student behaviors from two distinct conditions, the on-podium condition and the off-podium condition, in a beginning band setting. As previously noted in research by Thompson (2006), experts remain off the podium for greater durations while providing instruction in beginning band, use modeling frequently, and provide specific directives toward goal attainment, while Nicholson (2009) found that novice teachers remain on the podium during instruction of beginning band, use less modeling, and spend greater amounts of time engaged in general conversation with less specific directives. A central theme of those studies is that expert teachers in beginning band settings are mobile during instruction, while novice teachers are stationary on the podium and spend large portions of time conducting the ensembles. The purpose of this investigation is to determine whether student teachers more closely exhibit the instructional strategies of expert teachers if they are encouraged to become more mobile in the classroom.

SUBJECTS

The Institutional Review Board of the University of Mississippi, which maintains and governs procedures dealing with human subjects for the purposes of research, reviewed this study for approval. The researcher provided both the research purpose and procedures for their review. Additionally, the board requires that human subjects must voluntarily participate in the study. Upon board approval, permissions were gathered from the participants as well as other supervisory persons who work closely with the students as deemed necessary by the board. Other rules and regulations, as stated by the Institutional Review Board were followed to the fullest extent. Each participant of this study was coded using letters (A, B, C, etc.) to ensure anonymity.

Professors of instrumental music education at various colleges and universities were contacted to develop a potential pool of candidates the researcher may invite to participate (see Appendix A). A total of 19 invitations to participate were sent to student teachers, whose names were collected from professors of instrumental music education at various universities. From the 19 invitations, 9 student teachers agreed to participate. The participants (N=9) were student teachers selected from regional, state, and flagship universities in the Southeastern United States. Upon subjects' agreement to participate in the study, the researcher interviewed each participant via email questionnaire (see Appendix C) to help select male and female participants, and to determine whether participants had similar knowledge of teaching from early field experiences. Any potential subjects who did not satisfy the requirements for the study, as determined by the questionnaire, were not utilized. The researcher made every attempt to select subjects with diverse backgrounds so that the results of this study may be generalized to a larger population.

Interviews of student teachers took place via emailed questionnaire prior to the selection of participants. The following specific questions were used in the electronic questionnaire to determine student teacher participants:

1. What is your age?
2. What is your sex?
3. Is this your first student teaching practicum? If not, please explain.
4. Prior to enrolling in student teaching, approximately how many hours have you engaged in teacher observations of a music class?
5. Prior to enrolling in student teaching, approximately how many hours have you engaged in teaching activities such as micro-teaching segments, summer marching band staff (full group or sectional), or other activities where you were allowed to teach students or peers.
6. Please provide the number of students in your beginning band class.
7. Are the band classes distributed by section, other groupings, or homogenous classes?
8. How many days per week do the students have band class, and how many minutes are each period?

Upon receiving the completed questionnaire from the participants, the researcher analyzed its content to select male and female participants, and to determine whether participants had similar knowledge of teaching from early field experiences. The participants averaged in age from 22 to 24. There were 7 male and 2 female student teachers participating in the study. This was the first student teaching practicum for all of the participants, and an average of 60 hours of teaching observations were reported by the participants. The participants reported an average of 140 hours of experience working with band students prior to the observations; such as summer band camps, private instruction, etc.

Once the participants were selected, the researcher sent confirmation emails to both the student teacher and the cooperating teacher (see Appendix D and E) to inform them of any procedures, expectations, and expected dates and times of the researcher's arrival. It was the intent of the researcher to make the student teacher participant as comfortable as possible with the observations. It was imperative to make the cooperating and student teacher aware of the procedures involved, and request that he/she not inform the beginning band students of the researcher's visit as it may affect validity of the observations.

SETTING

The subjects for this study (*N*=9) were student teachers working with 6th grade students in beginning band classes. All of the classes were heterogeneous (mixed families of instruments), although some of the classes were divided into sections for rehearsal outside of this investigation. The size of beginning band classes ranged from 19 to 85 students, and each of the classes ranged from 30 minutes to 55 minutes per day. Eight of the middle schools were in a separate building from the high school, while in one of the schools, students were bused from an elementary school to a high school for band instruction. The school settings included 5 suburban schools in close proximity to a large urban city and 4 schools in rural mid-size and small communities.

All participants were video recorded during one (1) 10-minute teaching episode in the on-podium condition and one (1) 10-minute teaching episode in the off-podium condition for two consecutive classes (40 minutes per subject; 360 minutes total). Recording both on and off the podium during one rehearsal was done to ensure similar lesson content. Recording on and off the

podium an additional day during rehearsal allowed the researcher to draw comparisons between the two rehearsal segments and ensure that many of the events that were recorded were not an anomaly, but was common to everyday rehearsal practices at their respective school. Conditions that might have influenced instruction were documented in the field notes.

OBSERVATION PROCEDURES

A video camera was mounted on a tripod and positioned prior to rehearsal so that the student teacher was in view on the camera. During the off podium condition, the camera was maneuvered to maintain visibility of the student teacher. Additionally, the camera was positioned in a manner as to avoid the recording of students. Video recording began at the moment the student teacher assumed the teacher role whether on or off the podium. To control for order effects, each participant began on the podium for the first recording and began off the podium for the second recording. To avoid disrupting instruction, the researcher signaled the participant when the first 10 minutes of recording had lapsed, at which point the participant moved to the alternate position. Field notes were taken to generate a record of activities taking place extraneous to instruction, or behaviors exhibited before, after, or during the rehearsal.

Events in the classroom that were not related to the student teacher, such as announcements made by the director, instruction provided by the director, or any other activity not lead by the student teacher were not included in the analysis. It was decided prior to the observations not to include warm-up activities in the recordings due to the limited number of potential rehearsal frames. The video recording did not include announcements or other managerial activities. The researcher ensured that each recording was of sufficient duration to

allow 10 complete minutes of instruction for analysis. Observation segments of 10-minute duration were selected due to the limited amount of instruction delivered by student teachers.

VIDEO ANALYSIS

The software program Scribe 4 (Duke & Stammen, 2011), was used during the video analysis of the instructional episodes. The program was designed for use in observation research and is available at the Center of Music Learning at the University of Texas at Austin website. Scribe 4 allows the user to easily input observations and presents results in a chronological record of event timings and summary tables that provide frequency and duration data collected during the observation interval. While watching the video recordings, I clicked on-screen buttons that were labeled with specific behavioral categories. The program summarized frequency and duration data, including rate, proportion of time, and standard deviation for the behaviors and target categories that are defined in Table 1 and 2.

The recordings were viewed multiple times to achieve a complete analysis of the instruction that took place. The first viewing resulted in a running record of all teacher and student behaviors that occurred within each 10 minute segment. The subsequent viewing of teacher and student behaviors then identified rehearsal frames where specific instructional targets were addressed. Using previous research that analyzed rehearsal frames as a guide (Cavitt 1998, 2004; Worthy 2003, 2006), it was decided that rehearsal frames involving target identification followed by two or more student performance trials would be included for further analysis.

The rehearsal frames were then analyzed to determine the duration and frequency of specified behaviors. Duke (1999), states the “organizing principle for each rehearsal frame is the

target – the proximal goal toward which the instruction efforts are directed, and not the teacher behaviors and instructional strategies employed" (p. 22). Teacher and Student behaviors were placed into categories used from previous research (Cavitt, 2004; Worthy 2003, 2006; Thompson, 2006; Nicholson, 2009; Waymire, 2011). The primary behavioral categories (see Tables 1 & 2) were Teacher Talk and Modeling; however, subordinate groupings were used to place verbal behaviors into more distinct categories that include directive, information, positive feedback, negative feedback, questions, off-task, positive modeling, and negative modeling. Student behaviors were analyzed and placed into discrete categories that include full ensemble performance, section performance, individual performance, performance approximations, student talk, or marking music. Upon identifying and analyzing the rehearsal frames, the instructional targets were placed into categories, including Air/Breathing, Articulation, Dynamics, Embouchure, Intonation/Tone, Multiple Targets, Other, Pitch Accuracy, Posture/Instrument Carriage, Rhythm Accuracy, Technical Facility, Tempo and Unidentified Target. Duration and frequency data of teacher/student behaviors, rehearsal frames, and instructional targets were used for comparison with that of expert, experienced, and novice teachers in beginning band settings. Targets or behaviors related to student achievement were not a part of this investigation. All data was reported by target category as part of the results.

Table 1

Verbal Behavioral Definitions for Each of the Observational Categories.

Teacher Talk: Includes all student teacher verbalizations, with the exception of those defined as modeling.

> Directives: Statements or phrases from the student teacher directed to the student or students that identify and request an action that may include performance trials, marking music, or any verbalization that direct students to perform a task.
>
> Information: Verbalization from the student teacher that conveys information but does not require the student(s) to perform a specific action.
>
> Positive Feedback: General or specific verbal evaluations of student performance.
>
> Negative Feedback: General or specific negative verbal evaluation of student performance.
>
> Questions: Any questions posed by the student teacher that does or does not require a student response. May pertain to on-task or off-task behaviors.
>
> Off-task: Student teacher verbalizations made that address off-task student behavior.

Modeling: Student teacher verbally or physically demonstrates any aspect of the composition or physical facility required to perform the music or performance approximation.

> Positive Modeling: Student teacher verbally or physically demonstrates correct performance or an approximation of correct performance.
>
> Negative Modeling: Student teacher verbally or physically demonstrates an incorrect performance or an approximation of incorrect performance.

Table 2

Student Behavioral Definitions for Each of the Observational Categories.

Student Performance: Any student performance where the music is replicated in some form including student performing on their instruments.

> Full Ensemble Performance: Student performance trial where all students play instruments as reflected by the music score
>
> Section Performance: Other than full ensemble performance, student performance where two or more members of the ensemble play.
>
> Individual Performance: Student performance where only one student plays.

Performance Approximations: Any performance in which the music is modified or altered in some way (e.g. singing, clapping, counting, conducting, fingering, and any other means of replicating the music in some form). Includes performances by individuals, sections, or full ensemble.

Student Talk: Student verbalizations, including questions and responses to questions, including both on-task and off-task comments initiated by individual students.

Marking Music: Students write on their sheet music to indicate performance instructions given by the student teacher, or personal reminders

Table 3

Definitions of Instructional Target Categories

Air/Breathing: General and specific instructions from student teacher to a student related to breathing techniques or air direction/flow.

Articulation: The manner in which the beginnings and endings of successive notes are performed. Targets include note length, note shape, releases, accents, tonguing, slurring, and phrasing.

Dynamics: Variations in loudness and softness of sound, including crescendos, diminuendos, and balance among instruments in texture.

Embouchure: Instruction from the student teacher concerning students' embouchure formation.

Table 3 (continued)

Intonation/Tone: Adjustment of pitch level in relation to predetermined pitch standard or other class members including timbre and tone quality.

Multiple Targets (2), (3), or (4): Student teacher addresses two, three, or four targets simultaneously within one rehearsal frame.

Other: Any target that does not subscribe to the operational definitions of target categories presented.

Pitch Accuracy: Performance of correct notes via adjustments in air stream, embouchure and use of correct fingerings.

Posture/Instrument Carriage: Verbalizations or other demonstrations made by the student teacher concerning students' posture or physical handling of his/her instrument in playing or resting position, including percussionists' grip of their sticks.

Rhythm Accuracy: Includes all aspects of timing; rhythmic precision among class members, and the grouping of musical sounds by means of duration and stress.

Technical Facility: Woodwind and brass fingering agility in passages, trombone slide technique, percussion sticking, and other aspects of performance related to motor skills.

Tempo: Speed at which the beat of the music is performed, including retardandos, accelerandos, transitions between tempi, and other tempo fluctuations.

Unidentified Target: No discernible target is identified by the teacher, yet the student teacher directs the class to repeat a single pass of music without verbalizing any specific directives or feedback.

FIELD NOTES

Field notes were taken to support the researcher's findings and included immediate impressions of the student teacher and other factors unrelated to instruction. Field notes reflected observations that began at the moment the researcher arrived on the school campus. Field notes were used to record factors that were unassociated with student teacher instruction, but are paramount to student success, such as the student teacher managing a dynamic classroom

environment beyond what was viewed on the recording. Field notes reported information about the setting, the general environment of the rehearsal room, studious nature of students or lack thereof, classroom management issues that may impede the instruction of the student teacher, classroom organization, director and student rapport, student teacher and student rapport, and instructional materials used.

RELIABILITY

For reliability, an independent observer used Scribe to identify and create a record of teacher and student behavior categories and identify instructional targets for 20% of all recordings. Independent observers were researchers and/or experienced teachers of instrumental music and received adequate training on terms, procedures, and any software or hardware equipment used. Reliability was calculated at approximately 92% for all categories and instructional targets.

CHAPTER 4

RESULTS

Invitations to participate in this study were sent to student teachers whose practicum experience included teaching beginning band. Nine student teachers agreed to participate and were observed and video recorded for two subsequent rehearsals during the last half of their student teaching experience. The results of this study are presented for the group of participants and individuals. Further discussion of the behavioral observation data and field notes is presented in Chapter 5. The results are organized around the research questions presented in Chapter 1:

1. What are the instructional targets of student teachers in beginning band settings?
2. Are there similarities in the distribution of instructional targets between the student teacher on the podium and the same student teacher off the podium?
3. Are the distributions of instructional targets observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?
4. What are the frequency and durational measures of specific student and teacher behaviors observed in selected rehearsal frames?
5. Are the frequencies and durations of teacher and student behaviors similar between the student teacher on the podium and the same student teacher off the podium?

6. Are the frequencies and durations of teacher and student behaviors observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?

The video recordings were analyzed to form a complete running record of events and to identify rehearsal frames and their instructional targets. Table 4 reports the total number of recorded minutes for each student teacher. This study was designed to record 40 minutes of rehearsal time for each participant, 20 minutes of teaching in the on-podium condition and 20 minutes of teaching in the off-podium condition.

Table 4

Total Observation Times for All Student Teachers (N=36, 360:21).

Subject	On the Podium (min:sec)	Off the Podium (min:sec)
A	20:02	20:03
B	20:25	20:20
C	20:14	20:15
D	20:17	20:08
E	20:25	20:31
F	20:22	20:39
G	20:08	20:05
H	20:12	20:06
I	20:04	16:05
Summary	182:09	178:12

Each participant was recorded for 10 minutes on the podium and ten 10 minutes off the podium for two consecutive rehearsals. To alleviate potential order effects, the researcher reversed the order for the second recording by asking the student teachers to begin off the podium for ten 10 minutes and then move to the podium for the remaining ten 10 minutes. The researcher signaled the student teacher when the 10-minute period had expired so that they could transition to the other position. Many of the recordings, as presented in Table 4, exceed the 20 minutes of intended recording by a few seconds to ensure there were 20 complete minutes of recording from which data could be drawn. As reported in Table 4 and Table 28, the recording for participant I was less than 20 minutes due to an unexpected release of students. Due to the date when the recording took place, additional recording time was not available to the researcher.

Upon analyzing the recordings to form a running record of events, a subsequent analysis of teacher and student behaviors revealed 34 single-performance-trial rehearsal frames and 2 multiple-performance-trial rehearsal frames. One of the purposes of this study was to reveal the number of multiple-performance-trial rehearsal frames, and compare those data among professionals and/or experts in a beginning band setting. The researcher decided, however, that due to the limited number of multiple-performance-trial rehearsal frames to analyze, all instructional targets would be reported and frequency and duration data would be collected on specified behaviors for the entire duration of the observations. The target frequency is reported for both on-podium and off-podium conditions for all single performance trial rehearsal frames. Subsequently, the multiple performance trial rehearsal frames were identified from the running record of events and further analyzed to report the target frequency, rate per minute, duration, percentage of time, and mean duration. Table 5 reports the frequency of all instructional targets

in all single-performance-trial rehearsal frames across all student teachers during the on-podium condition.

Table 5

Frequency of Instructional Targets for All Student Teachers in All Single-Performance-Trial Rehearsal Frames in the On-Podium Condition (N=9).

Target Category	Total
Air/Breathing	0
Articulation	3
Dynamics	3
Embouchure	0
Intonation/Tone	1
Multiple Targets	0
Other	0
Pitch Accuracy	7
Posture/Instrument Carriage	3
Rhythm Accuracy	10
Technical Facility	5
Tempo	2
Unidentified Target	0
Total	34

Established procedures were followed to select rehearsal frames for analysis based on criteria from previous research (Cavitt, 2004; Worthy, 2003, 2006; Thompson, 2006). The procedure included using the running record of events to identify moments within the rehearsal where both the teacher and students were engaged in a learning task that included multiple performance trials. Further analysis of the observations revealed rehearsal frames where instructional targets were identified that included multiple performance trials. There were 2 rehearsal frames identified that included multiple performance opportunities for students in the on-podium condition. The instructional targets were dynamics and rhythmic accuracy. Table 6

reports the frequency of instructional targets for all student teachers across all multiple-performance-trial rehearsal frames from the on-podium condition. The amount of rehearsal time used to address the targets ranged from 1 minute, 21 seconds (1:21) to 1:27. The most amount of rehearsal time was used to address dynamics (1:27), where the student teacher used section performance and full ensemble performance. Teacher talk (8) was the most frequent teacher behavior used to address instructional targets, followed by modeling (1). Student performance across both rehearsal frames included both full ensemble performance and section performance.

Table 6

Frequency of Instructional Targets for All Student Teachers in All Multiple-Performance-Trial Rehearsal Frames in the On-Podium Condition (N=9).

Target Category	Total
Air/Breathing	0
Articulation	0
Dynamics	1
Embouchure	0
Intonation/Tone	0
Multiple Targets	0
Other	0
Pitch Accuracy	0
Posture/Instrument Carriage	0
Rhythm Accuracy	1
Technical Facility	0
Tempo	0
Unidentified Target	0
Total	2

Table 7 shows the frequency of single performance trial instructional targets for all student teachers across all rehearsal frames during the off-podium condition. Student teachers identified 26 total instructional targets, which included rhythm accuracy (11) and technical

facility (5) as the most frequent. Air/Breathing (1) was the only target identified in the off-podium condition, but not identified during the on-podium condition. Of the 13 possible targets included in this study, 9 were identified by student teachers in the off-podium condition that did not include multiple performance trials.

Table 7

Frequency of Instructional Targets for All Student Teachers in All Single-Performance-Trial Rehearsal Frames in the Off-Podium Condition (N=9).

Target Category	Total
Air/Breathing	1
Articulation	1
Dynamics	3
Embouchure	0
Intonation/Tone	1
Multiple Targets	0
Other	0
Pitch Accuracy	2
Posture/Instrument Carriage	1
Rhythm Accuracy	11
Technical Facility	5
Tempo	1
Unidentified Target	0
Total	26

The instructional targets identified in multiple-performance-trial rehearsal frames identified in the off-podium condition, as reported in Table 8, included rhythm accuracy (2) and dynamics (2). The amount of rehearsal time used to address the targets ranged from 0:41 to 4:07. Analysis of the rehearsal frames revealed that the student behaviors included full ensemble performance, section performance, and performance approximation. Teacher behaviors identified

included directives, information and teacher questions. One participant used a whiteboard to provide a visual to help students understand the instructional target.

Table 8

Frequency of Instructional Targets for All Student Teachers in All Multiple-Performance-Trial Rehearsal Frames in the Off-Podium Condition (N=9).

Target Category	Total
Air/Breathing	0
Articulation	0
Dynamics	2
Embouchure	0
Intonation/Tone	0
Multiple Targets	0
Other	0
Pitch Accuracy	0
Posture/Instrument Carriage	0
Rhythm Accuracy	2
Technical Facility	0
Tempo	0
Unidentified Target	0
Total	4

Table 9 reports the frequency, rate, duration, percentage of combined rehearsal frames, and mean duration for observed teacher and student behaviors across all multiple-performance-trial rehearsal frames from the on-podium condition. Teacher talk (8) involved directives, information, and questions, and was the most frequent teacher behavior observed during rehearsal frames. Full ensemble performance (5) was the most frequent student behavior identified within rehearsal frames, followed by section performance (2). Individual performance, student talk, performance approximation, and marking music were not identified within rehearsal frames in the on-podium condition. Teacher talk had the longest duration (01:21) and highest

percentage (48.21%), yet full ensemble performance had the greatest mean duration (24.50), suggesting the teacher talk within rehearsal frames moved at a much more rapid pace. Section performance (:24) had the least duration of student behaviors, while modeling had the least duration (:04) of teacher behaviors within rehearsal frames.

Table 9

Frequency, Rate, Duration, Percentage and Mean Duration for Teacher and Student Behaviors in the On-Podium Condition for All Student Teachers in All Multiple-Performance-Trial Rehearsal Frames (n=2, 2:48).

Behavior	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	8	2.86	1:21	48.21	6.75
Teacher Modeling	1	.36	:04	2.38	4.00
Full Ensemble Performance	5	1.79	:49	29.16	24.50
Section Performance	2	.71	:24	14.29	24.00
Individual Performance	0	-----	-----	-----	-----
Performance Approx.	0	-----	-----	-----	-----
Student Talk	0	-----	-----	-----	-----
Marking Music	0	-----	-----	-----	-----

Table 10 reports the frequency, rate, duration, percentage of combined rehearsal frames, and mean duration for observed teacher and student behaviors across all multiple-performance-trial rehearsal frames during the off-podium condition. Teacher talk (45) was the most frequent

teacher behavior, followed by modeling (1). The most frequent student behavior off the podium was full ensemble performance (16), followed by performance approximation (4), and section performance (2). Teacher talk (4:32) had the longest duration of teacher behaviors, while full ensemble performance (3:40) had the longest duration of student behaviors. Teacher talk was used at a faster rate (3.33) than full ensemble performance (1.18), with over 1 episode per minute. Among all the behaviors identified, full ensemble performance (13.75) had the longest mean duration, followed by section performance (7.50) and performance approximation (7.25).

Table 10

Frequency, Rate, Duration, Percentage and Mean Duration for Teacher and Student Behaviors in the Off-Podium Condition for All Student Teachers in All Multiple-Performance-Trial Rehearsal Frames (n=4, 9:31).

Behavior	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	45	3.33	4:32	47.64	6.04
Teacher Modeling	1	.07	:05	.88	5.00
Full Ensemble Performance	16	1.18	3:40	38.53	13.75
Section Performance	2	.15	:15	2.63	7.50
Individual Performance	0	-----	-----	-----	-----
Performance Approx.	4	.30	:29	5.07	7.25
Student Talk	0	-----	-----	-----	-----
Marking Music	0	-----	-----	-----	-----

Approximately 180 minutes of student teacher observations were recorded and analyzed to produce the results for the on-podium condition. There were 36 instructional targets identified, 34 targets were followed by one student performance trial, while 2 targets were followed by two or more student performance trials. Analysis of the multiple-performance-trial rehearsal frames revealed dynamics and rhythm accuracy instructional targets. Teacher talk was found to be the most common teacher behavior, while full ensemble performance was the most common student behavior used in the on-podium condition. Further analyses revealed long durations of student performance, compared to short durations of teacher talk. Only 1 episode of modeling was revealed in multiple-performance-trial rehearsal frames in the on-podium condition.

Approximately 180 minutes of student teacher observations were recorded and analyzed to produce the results for the off-podium condition. There were 30 instructional targets identified, 26 were followed by one student performance trial, while 4 targets were followed by two or more student performance trials. Analysis of the multiple-performance-trial rehearsal frames revealed dynamics (2) and rhythm accuracy (2) instructional targets. Teacher talk was the most common teacher behavior, while full ensemble performance was the most common student behavior. Further analyses revealed 2 episodes of section performance and 4 episodes of performance approximation. Only 1 episode on modeling was revealed in multiple-performance-trial rehearsal frames in the off-podium condition.

In comparison between the two conditions, there were 2 additional multiple-performance-trial rehearsal frames in the off-podium condition. Analysis of the rehearsal frames revealed 45 instances of teacher talk in the off-podium condition, compared to 8 in the on-podium condition; 16 episodes of full ensemble performance in the off-podium condition, compared to 5 in the on-podium condition; and 2 episodes of section performance in the off-podium condition, while

there were no episodes of section performance in the on-podium condition. While the mean duration of teacher talk was similar between the two conditions, the average mean duration of student behavior decreased from an average of 24.25 seconds in the on-podium condition to an average of 9.5 seconds in the off-podium condition.

The collective data from all student teachers has been reported, including the frequency of single-performance-trial rehearsal frames and the frequency and duration data of multiple-performance-trial rehearsal frames. The remainder of this chapter is devoted to reporting field-note data, instructional targets, the frequency of single-performance-trial rehearsal frames, the frequency and duration of multiple-performance-trial rehearsal frames, and includes tables of the observed data for each individual student teacher included in this study.

STUDENT TEACHER A

The students in the class were well rehearsed in classroom procedures, although numerous distractions by students were noted in the field notes. The director of the ensemble provided the warm-up, subsequently turning the instruction portion of the class over to the student teacher. The ensemble was a heterogeneous group, as were all ensembles for this study, but were normally divided by section and placed in adjoining rooms for rehearsal. The observations took place following a concert; however, students continued to work on music repertoire for the duration of the observations. The class was in the morning and was the second class of the day for the students.

Table 11 reports the data from the 20 minutes of observation in the on-podium condition. A total of 6 rehearsal frames were identified during the on-podium condition. The instructional

targets included intonation/tone, rhythm accuracy, articulation, technical facility, tempo, and pitch accuracy. No rehearsal frames that included two or more student trials were identified under the on-podium condition. While the student teacher addressed specific instructional targets, subsequent student performances were limited to a single trial with no further instruction directed at the target. Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggest that the student teacher moved on to other segments of the rehearsal while errors in the student performance remained. The analysis of the observations indicates that large portions of class time were devoted to the student teacher providing directives. Field notes corroborate those numbers by indicating the student teacher invested large amounts of time explaining which measure the group was to begin playing. The researcher noted that it appeared the student teacher was uncertain if students were attentive and thus felt the need to be redundant. When the student teacher addressed a specific target, many times it was presented vaguely to the students, whereas the student teacher would acknowledge a potential error had occurred by saying, "it was too loud." Feedback statements and directive statements typically lacked specificity. Students were left with limited information as to where they may have made a mistake or how to improve on the mistake. It was apparent that the student teacher recognized an issue that needed to be addressed, but it wasn't apparent that the student teacher knew how to solve the issue, which may explain the absence of multiple trial rehearsal frames. Similarly, the student teacher's instruction during the off-podium condition revealed 5 rehearsal frames where the student teacher addressed instructional targets, including articulation, intonation/tone, rhythm accuracy, dynamics, and technical facility. The student teacher acknowledged tempo during the off-podium condition, but did not rehearse or otherwise

work with the students on improving the target. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them. None of the instructional targets identified during either condition resulted in multiple performance trial rehearsal frames.

The participant's instruction from the on-podium condition included mostly teacher talk (69 occurrences), which accounted for 40.00% of the total time observed (20:02). Student behaviors accounted for 38.69% of the rehearsal time, which included 13 occurrences of full ensemble performance, 21 occurrences of section performance and 2 individual performances. Interestingly, the total duration of recorded behaviors equaled approximately 87% of the total recorded time, leaving approximately 2 minutes and 44 seconds (13.64%) of time where, according to field notes, the student teacher was transitioning to another segment of the instruction.

Table 11

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher A (n=2, 20:02).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	69	3.44	8:02	40.00	6.99
Directives	41				
Information	6				
Positive Feedback	5				
Negative Feedback	3				
Questions	12				
Off-Task	2				
Teacher Modeling	16	.80	1.43	8.57	6.44
Positive Modeling	15				
Negative Modeling	1				

Table 11 (continued)

Student Behaviors	39	1.95	7:33	38.69	11.61
Student Performance					
Full Ensemble	13				
Section	21				
Individual	2				
Performance Approximation	3				
Student Talk	0				
Marking Music	0				

Table 12 reports data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 5 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified included articulation, intonation/tone, rhythm accuracy, dynamics, and technical facility. Again, the instructional targets identified during either condition resulted in no multiple-performance-trial rehearsal frames. Additionally, tempo was addressed during the observation period with no subsequent student performance trial.

The participant's instruction during the off-podium condition was predominantly student performance, accounting for 58.43% of the total time observed (20:03). Comparing those two behaviors between the two conditions indicate more time was devoted to students performing on their instruments as opposed to the student teacher talking. Teacher talk had a few more occurrences in the off-podium condition, yet the mean duration was less, suggesting the student teacher moved on to performance at a more rapid pace. Perhaps the most notable change observed during the off-podium condition was a decrease in the number of modeling occurrences, from 16 occurrences in the on-podium condition to 4 in the off-podium condition.

Table 12

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher A (n=2, 20:03).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	71	3.54	7:00	34.91	5.92
Directives	34				
Information	10				
Positive Feedback	6				
Negative Feedback	9				
Questions	7				
Off-Task	5				
Teacher Modeling	4	.20	:11	.91	2.75
Positive Modeling	4				
Negative Modeling	0				
Student Behaviors	30	1.50	11:43	58.43	23.43
Student Performance					
Full Ensemble	11				
Section	19				
Individual	0				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

Important information to this study was revealed in the field notes regarding the high number of teacher talk episodes and student performance trials versus the low frequency of instructional target identification during both conditions. There were occasions when the participant would stop the ensemble and merely ask the students to start at a specific measure. Once the segment was performed, the student teacher would stop and direct students to the next segment without providing any type of instruction. To address a specific instructional target, the student teacher in some instances would stop the ensemble to inform the students that they were

slowing down or dragging the tempo, yet would move on to a different segment of the rehearsal, not specifically addressing the instructional target in the segment in which the mistake occurred. Additionally, the student teacher would sometimes yell or speak loudly an instructional target as the students were performing, such as the student teacher would yell "it's too loud" to suggest an error in dynamics. The student teacher, nonetheless, in most instances, did not stop the ensemble to address why it was too loud, or what the student performers could have done to alleviate the issue. While the analysis of the student teacher suggests he/she was able to identify problems as they occur, the absence of multiple performance trial rehearsal frames to analyze will not provide a more specific analysis of instruction taking place.

STUDENT TEACHER B

The students in the class were a heterogeneous group with a balanced instrumentation. The students were well disciplined in class routines and understood the learning process and were active participants in learning. The observations for this class began at the completion of a warm-up routine, where the students continued working on repertoire for an upcoming concert that was a few weeks away. Unlike all of the other classes in this study, the percussion section had a large number of participants and had an excellent selection of mallet, timpani, and auxiliary instruments for practice and performance. The band room was large and provided adequate space for the instructor to move around to provide quality instruction. The class time was in the morning, the second class of the day for students.

Table 13 reports the data from the 20 minutes of observation in the on-podium condition. No rehearsal frames that included two or more student trials were identified during the on-

podium condition. While the student teacher addressed specific instructional targets, subsequent student performances were limited to a single trial with no further instruction directed at the target. A total of 3 single-performance-trial rehearsal frames were identified during the on-podium condition, including rhythm accuracy, pitch accuracy, and technical facility. As with a number of student teachers in this study, observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. As was the case with other participants in this study, the field notes suggest that the student teacher moved on to other segments of the rehearsal while the student performance error remained. It was noted in the field notes that the student teacher seemed inclined to focus much of the modeling occurrences using a single instrument directed to students who perform on that instrument. Of the 27 episodes of modeling that occurred during both conditions, approximately 80% were directed to that group of students. It was later confirmed that the instrument most utilized was the primary instrument of the student teacher. The student teacher's instruction during the off-podium condition revealed 8 rehearsal frames where the student teacher addressed instructional targets, including rhythm accuracy (6) and technical facility (2). The student teacher acknowledged rhythm accuracy on multiple occasions, but failed to assist students in understanding or otherwise mastering the rhythm in question. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them. None of the instructional targets identified during either condition resulted in multiple performance trial rehearsal frames, however, there were moments where the student teacher instructed the students to repeat a phrase or section multiple times, yet the student teacher was merely repeating the section without any direct communication with students relating to why they were asked to repeat the section. The

occurrences could have been related to mere repetitions of a phrase, or one of a number of instances where an error may have been identified but the student teacher did not know how to effectively resolve the issue. In most instances the student teacher moved on to another segment of the rehearsal with a limited degree of accuracy being attained by the students in a particular section to which student teacher had chosen to focus.

The participant's instruction from the on-podium condition included more frequent teacher talk (87 occurrences) than student behaviors (56 occurrences), accounting for 40.08% and 42.86% respectively of the total time observed (20:25). The longer durations of student behavior suggest that student teachers are spending more time in some type of student performance, whether it is full ensemble (22), section performance (13), or performance approximation (16), as noted in Table 13. Interestingly to this study, particularly in the on-podium condition, are the limited occurrences of feedback.

Table 13

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher B (n=2, 20:25).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	87	4.26	8:11	40.08	5.64
Directives	60				
Information	15				
Positive Feedback	0				
Negative Feedback	2				
Questions	4				
Off-Task	6				
Teacher Modeling	14	.69	1:29	.07	6.36
Positive Modeling	14				
Negative Modeling	0				

Table 13 (continued)

Student Behaviors	56	2.74	8:45	42.86	9.38
Student Performance					
Full Ensemble	22				
Section	13				
Individual	0				
Performance Approximation	16				
Student Talk	5				
Marking Music	0				

Table 14 reports the data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 8 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified were rhythm accuracy (6) and technical facility (2). Again, the instructional targets identified during either condition resulted in no multiple-performance-trial rehearsal frames. Similar to the on-podium condition, there was an instance where the student teacher repeated the same performance sequence multiple times, but provided no feedback. There were multiple occurrences where the student teacher addressed rhythm accuracy and technical facility, yet none of the occurrences lead to in-depth rehearsing.

The participant's instruction during the off-podium condition was predominantly teacher talk (107 occurrences), accounting for 38.36% of the total time observed (20:20). Similar to the on-podium condition, there were longer durations of student performance, yet the occurrences of both positive (5) and negative (5) feedback increased, as did the number of modeling occurrences (13). The increase in frequency in positive instructional behaviors did not yield an exceptional number of additional instructional targets, nor did it yield multiple performance trial rehearsal frames. The field notes, however, did indicate that the student teacher during the off-

podium condition seemed more engaged in the instructional process, which may explain the increase in instructional targets and the number of feedback and modeling occurrences. It was further noted that while the pace of instruction seemed to improve, the student teacher failed to identify many of the errors taking place, nor did he offer adequate feedback for the problems that were identified.

Table 14

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher B (n=2, 20:20).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	107	5.26	7:48	38.36	4.37
Directives	74				
Information	14				
Positive Feedback	5				
Negative Feedback	5				
Questions	6				
Off-Task	3				
Teacher Modeling	13	.64	1:07	.05	5.15
Positive Modeling	13				
Negative Modeling	0				
Student Behaviors	60	2.95	7:37	37.46	7.62
Student Performance					
Full Ensemble	24				
Section	7				
Individual	0				
Performance Approximation	29				
Student Talk	0				
Marking Music	0				

As mentioned previously, the number of teacher talk occurrences increased substantially during the off-podium condition, while the percentage of time remained similar. At the same time, the student behavior occurrences and percentage of time devoted to student behaviors remained similar during both the on-podium and off-podium conditions. This information suggests that instruction was moving at a faster pace, and when compared with the field notes, it implied that the student teacher seemed more comfortable providing instruction to the students. Further comparison between the two conditions that suggest improvement in student teacher instruction was the duration of each behavior that was observed. The mean duration of teacher talk, modeling, and student behavior decreased during the off-podium condition, while the rate per minute increased in both teacher talk and student behavior occurrences. The most notable increase noted between the two conditions was the number of performance approximations, which increased from 16 during the on-podium condition to 29 during the off-podium condition.

STUDENT TEACHER C

The students in the class were highly disruptive throughout the observed time. The students talked excessively throughout the observation and would leave their seats frequently to ask the student teacher questions at the podium. The class was a heterogeneous group with similar instrumentation throughout. The students were transported from the elementary school by bus for the class and the class time was in the late afternoon just before the students left school for the day. The class time was devoted to rehearsing music for an upcoming performance that was a few weeks away. In the majority of instances throughout this study, cooperating teachers remained in the room with their respective student teachers. The cooperating teacher for this

participant did not enter the room for the duration of the observations, but remained in the office off to the side of the main rehearsal room.

Table 15 reports the data from the 20 minutes of observation in the on-podium condition. No rehearsal frames that included two or more student trials were identified under the on-podium condition. While the student teacher addressed specific instructional targets, subsequent student performances were limited to single trials with no further instruction directed at the target. A total of 2 rehearsal frames were identified during the on-podium condition. The instructional targets included articulation and technical facility. An additional target, tempo, was acknowledged by the student teacher but was verbally expressed to the students as they were performing. No instructional time was provided to inform or otherwise instruct the students as to why the tempo was incorrect or to suggest a method to improve any errors associated with the target. Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggests that the student teacher moved on to other segments of the rehearsal while student performance errors remained. The analysis of the observations indicates there was substantial time devoted to full ensemble performance and student talk (69.52%) in long durations (26.38). Surprisingly, there were no occurrences of modeling during the on-podium condition and a limited number of occurrences of feedback (4). By comparison, there were a large number of off-task student behaviors (12) acknowledged by the student teacher. The student teacher's instruction during the off-podium condition revealed 2 rehearsal frames including rhythm accuracy and technical facility. The total number of teacher talk (83), modeling (3), and student behavior (45) episodes increased, yet of the student behaviors, the off-task behavior increased from 12 to 29 between from the on-podium condition to the off-podium

condition. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them. None of the instructional targets identified during either condition resulted in multiple performance trial rehearsal frames.

The participant's instruction from the on-podium condition included mostly teacher talk (48 occurrences), although it accounted for only 25.04% of the total time observed (20:14). Student behaviors accounted for 69.52% of the rehearsal time, which included 8 occurrences of full ensemble performance, 23 occurrences of student talk, and 1 marking music occurrence. Interestingly, the disparity between teacher talk and student performance is approximately 9 minutes of the total observed time (20:14) in the on-podium condition. Field notes taken during the observations suggest that large portions of time were devoted to student talk, whether from disruptions or students asking questions. There was a high number of student questions related to the specific measure in the music where they were asked to begin performance. Another interesting aspect of the observation during the on-podium condition was the absence of teacher modeling.

Table 15

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher C (n=2, 20:14).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	48	2.37	5:04	25.04	6.33
Directives	17				
Information	11				
Positive Feedback	1				
Negative Feedback	3				
Questions	4				
Off-Task	12				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	32	.03	14:04	69.52	26.38
Student Performance					
Full Ensemble	8				
Section	0				
Individual	0				
Performance Approximation	0				
Student Talk	23				
Marking Music	1				

Table 16 reports the data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 2 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified included rhythm accuracy and technical facility. Again, the instructional targets identified during off-podium condition resulted in no multiple-performance-trial rehearsal frames.

The participant's instruction during the off-podium condition was predominantly teacher talk with 83 occurrences. While student performance was less frequent, the total duration (9:59) was much higher than teacher talk (5:42). Similar to the on-podium condition, student talk was excessive, although it slightly decreased to 25 occurrences. The disparity between the percent of time devoted to student performance (49.30) and teacher talk (28.15) was substantial. The most notable area of improvement was the number of modeling episodes between the on-podium (0) and off-podium (3) conditions. Additionally, the number of feedback statements improved from the on-podium condition (4) to the off-podium condition (9). While the number of student talk instances decreased only slightly, the field notes indicate that the student teacher attempted to move on to other segments of the rehearsal more rapidly, and seemed to be more engaged in the learning process, as evidenced by the slightly improved numbers across the observed behaviors.

Table 16

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher C (n=2, 20:15).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	83	4.10	5:42	28.15	4.12
Directives	31				
Information	10				
Positive Feedback	5				
Negative Feedback	4				
Questions	5				
Off-Task	28				
Teacher Modeling	3	.15	:13	.01	4.33
Positive Modeling	2				
Negative Modeling	1				

Table 16 (continued)

Student Behaviors	45	2.22	9:59	49.30	13.31
Student Performance					
Full Ensemble	20				
Section	0				
Individual	0				
Performance Approximation	0				
Student Talk	25				
Marking Music	0				

While the improvement noted above did not yield any additional instructional targets, the off-podium condition indicated moderate improvement across all observed behaviors including an overall faster pace of instruction, reduced off-task behaviors, increased modeling episodes, and increased use of feedback. Important information to this observation was revealed in field notes. Students were highly disruptive throughout the observation period and the cooperating teacher did not intervene to regain order in the class. It was evident to the researcher that many of the student talk episodes may have been negated by the assistance of the cooperating teacher and/or improved classroom management training for the student teacher. Poor classroom management likely influenced the outcome of this observation. Overall, each observed behavior showed positive improvement from the on-podium to the off-podium condition.

STUDENT TEACHER D

The students in the class were well rehearsed in classroom procedures, although a few distractions by students were noted in the field notes. The ensemble was working on repertoire for an upcoming concert that was a few weeks away. The ensemble was a heterogeneous group,

with similar instrumentation throughout the ensemble. The band room was large, offering enough space for the instructor to move about during instruction, and was in a separate building from the other academic classes. The cooperating teacher was very active in the management of the class, primarily dealing with any disruptions that may have occurred. The observations took place during the afternoon, although it was not the final class of the day.

Table 17 reports data from the 20 minutes of observation in the on-podium condition. A total of 2 single-performance rehearsal frames were identified during the on-podium condition. The target identified was rhythm accuracy (2). A single rehearsal frame that included two or more student trials was also identified during the on-podium condition. The instructional target identified was dynamics and included both teacher talk (5) and student behaviors (5). Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggest that the student teacher seemed comfortable working with the students, had command of the room and moved instruction along at a consistent pace. Analysis of the observations revealed 82 occurrences of teacher talk, using 31.38% of the observed time in the on-podium condition (20:17). This was compared to 53 occurrences of student behavior, which used 64.75% of the observation time. There were not any observed episodes of modeling during the on-podium condition. The number of student behaviors included 12 occurrences of full ensemble performance, 6 student performances, 9 performance approximations, and 4 occurrences of student talk. The student talk episodes, according to field notes, were related to instruction and were not related to off-task behavior. Similarly, the student teacher's instruction during the off-podium condition revealed 3 rehearsal frames where the student teacher addressed rhythm accuracy. Again, observations recorded in the field notes indicate numerous

opportunities to address additional targets, yet the student teacher did not address them. A single multiple-performance-trial rehearsal frame was identified in the off-podium condition where the student teacher addressed rhythm accuracy. During the rehearsal frame, it was noted that the student teacher acknowledge pitch accuracy and technical facility, but all performance trials were related to the rhythm accuracy target.

The participant's instruction from the on-podium condition included mostly teacher talk (82 occurrences), which accounted for 31.38% of the total time observed (20:17). Student behaviors accounted for 64.75% of the rehearsal time, which included 31 student behaviors. Interestingly, and unlike a number of other participants in this study, this participant had quick transition times between instructional segments, leaving minimal instructional downtime. The instruction moved at an appropriate pace, whereas the teacher behavior episodes were short in duration (4.66), while the student behavior episodes were longer in duration (14.87). Analysis of the multiple-performance-trial rehearsal frame revealed dynamics was the target area and used 1:27 of the total observed time in the on-podium condition. During the rehearsal frame, there were 5 episodes of teacher talk, and 5 episodes of full ensemble performance.

Table 17

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher D (n=2, 20:17).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	82	4.04	6:22	31.38	4.66
Directives	60				
Information	12				
Positive Feedback	0				
Negative Feedback	1				
Questions	7				
Off-Task	2				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	53	2.61	13:08	64.75	14.87
Student Performance					
Full Ensemble	22				
Section	13				
Individual	0				
Performance Approximation	13				
Student Talk	5				
Marking Music	0				

Table 18 reports the data from the 20 minutes of observation during the off-podium condition. As discussed previously, student teacher instruction during the off-podium condition revealed 3 rehearsal frames that addressed rhythm accuracy, where the instruction was limited to one student performance trial. There was a single instructional target identified as a multiple-performance-trial rehearsal frame. Analysis of the instruction revealed the target was rhythm accuracy, yet the student teacher acknowledged pitch accuracy and technical facility targets, although the performance trials only addressed rhythm accuracy as the target. Further analysis of

the rehearsal frame revealed the student teacher used both full ensemble performance (7) and performance approximation (2) while addressing the targets. The rehearsal frame was 4:06 in duration, where the student teacher provided directives (11), information (2) and asked questions (4).

The participant's instruction during the off-podium condition was predominantly teacher talk (84 occurrences), yet the behavior accounted for only 37.91% of the total observation period in the off-podium condition (20:08). The student teacher divided the frequency of performance almost equally between full ensemble (20) and section performance (22). Compared to the on-podium condition, the mean performance time for student behaviors was substantially longer in the off-podium condition (26.38) than in the on-podium condition (14.87). This observation may have been related to the student teacher speaking less, which allowed more time for student performance. According to field notes, students were actively engaged in the learning process, asking questions and responding to the student teacher when addressed. This information is corroborated in the analysis of the observations by a low number of off-task distractions (2). Similar to the on-podium condition, there were not any modeling occurrences identified throughout the observation period.

Table 18

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher D (n=2, 20:08).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	84	4.17	7:38	37.91	5.45
Directives	50				
Information	13				
Positive Feedback	1				
Negative Feedback	4				
Questions	14				
Off-Task	2				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	48	2.38	14:04	59.52	26.38
Student Performance					
Full Ensemble	20				
Section	22				
Individual	0				
Performance Approximation	4				
Student Talk	2				
Marking Music	0				

While there were a number of instances where additional rehearsal frames may have been identified, according to the field notes, the student teacher addressing targets followed by specific instruction and student performance over a span of time was an indicator of quality instruction. However, given the high degree of participation from the students, teacher modeling in both the on-podium and off-podium conditions was lacking.

STUDENT TEACHER E

The students in the class were well rehearsed in classroom procedures, and were the most well behaved class included in this study. The students sat quietly, raised their hands appropriately, and were engaged in the learning process throughout the duration of the observation. The group was a heterogeneous group with similar instrumentation throughout. The group was rehearsing new material from an instrumental method book. The band room was of moderate size, but provided the room needed for the instructor to move about during rehearsal. The cooperating teacher remained in the rehearsal room for the duration of the observation and was very active in the instructional process, but allowed the student teacher complete control for the duration of the observations. The class was scheduled in the morning, but was not the first class of the day.

Table 19 reports the analyzed data from the 20 minutes of observation in the on-podium condition. A total of 6 rehearsal frames were identified during the on-podium condition. The instructional targets included pitch accuracy (3), posture/instrument carriage (2), and rhythm accuracy (1). The observation revealed that the student teacher acknowledged technical facility once and pitch accuracy an additional time, but no subsequent performance trial was associated with the target. No rehearsal frames that included two or more student trials were identified from the on-podium condition. Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggests that the student teacher moved on to other segments of the rehearsal when student performance errors remained. There were similar mean durations between teacher talk and student behaviors. There were modeling occurrences

that were 26 seconds in duration. Full ensemble performance was the primary student behavior, while section performance had 2 occurrences. The percentages of teacher talk and student behaviors were similar at 49.96% and 38.94%, respectively. There was approximately 10% of down time during the recordings. Analysis of field notes indicate there were times where it appeared the student teacher was thinking. It was further noted, that at times, the student teacher was searching for answers or ways to solve an issue, and simply chose to move on with another rehearsal segment. The student teacher's instruction during the off-podium condition revealed 5 rehearsal frames where the student teacher addressed rhythm accuracy (4), air/breathing (1). The student teacher acknowledged posture/instrument carriage and technical facility during the off-podium condition, but did not rehearse with the students on improving the target. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them. None of the instructional targets identified during either condition resulted in multiple performance trial rehearsal frames.

The participant's instruction from the on-podium condition included mostly teacher talk (57 occurrences), which accounted for 49.96% of the total time observed (20:25). Student behaviors accounted for 38.94% of the rehearsal time, which included 32 occurrences of full ensemble performance and 6 occurrences of section performance. Interestingly, the total duration of recorded behaviors equaled approximately 90% of the total recorded time, leaving approximately 2 minutes (10%) of time where, according to field notes, the student teacher was thinking and/or transitioning to another segment of the instruction. It is important to note that there were times throughout the observation in both conditions where the student teacher performed phrases or sections multiple times. As the instruction was not directed at a target, it

was noted that it was likely due to the group practicing new material and the student teacher allowed the students multiple times per phrase to learn the material.

Table 19

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher E (n=2, 20:25).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	57	2.79	10:12	49.96	10.73
Directives	40				
Information	11				
Positive Feedback	2				
Negative Feedback	0				
Questions	4				
Off-Task	0				
Teacher Modeling	2	.10	:52	.04	26.00
Positive Modeling	2				
Negative Modeling	0				
Student Behaviors	38	1.86	7:57	38.94	12.55
Student Performance					
Full Ensemble	32				
Section	6				
Individual	0				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

Table 20 reports the analyzed data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 5 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified included rhythm accuracy (4), and

air/breathing (1). Again, the instructional targets identified during either condition resulted in no multiple-performance-trial rehearsal frames. Additionally, posture/instrument carriage and technical facility was addressed during the observation period with no subsequent student performance trial.

The participant's instruction during the off-podium condition was predominantly teacher talk, accounting for 41.51% of the total time observed (20:31). The student teacher's instruction had a relatively low mean duration of student behaviors (9.52). Analysis of the field notes corroborates the finding by suggesting the student teacher often stopped the performance but failed to identify a target. There was one moment where the cooperating teacher assisted the student teacher by providing instant feedback to both the student teacher and students. The total duration of student behaviors (7:18) and teacher talk (8:31) was similar, however, teacher talk in the off-podium condition was more frequent (79) than in the on-podium condition (57), resulting in a faster pace of instruction. Most alarming was the absence of modeling occurrences during the off-podium condition. As reported in the field notes, there were times that modeling may have helped students understand what the student teacher was discussing at the moment, but the student teacher did not make the connection or know how to model the instruction being provided.

Table 20

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher E (n=2, 20:31).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	79	3.85	8:31	41.51	6.47
Directives	51				
Information	21				
Positive Feedback	3				
Negative Feedback	0				
Questions	4				
Off-Task	0				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	46	2.24	7:18	35.58	9.52
Student Performance					
Full Ensemble	34				
Section	12				
Individual	0				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

Throughout the observations, there was a low number of rehearsal frames identified, especially given the quiet and attentive group of students, as previously discussed. According to field notes, the student teacher seemed unprepared to address the issues that were presented throughout the observations during both conditions. As mentioned earlier, the student teacher invested approximately 10% of the observed time thinking or contemplating his/her next action. When in doubt, the student teacher simply returned to the next segment of rehearsal. It was

noted, that while the rehearsal was effective and improvement was attained with the student teacher and students, more improvement could have been achieved.

STUDENT TEACHER F

The students in the class were a lively group. While there were not frequent off-task behaviors reported, the students were talkative and disruptive. The class time was in the middle of the school day close to their lunchtime. The band room was temporarily located off the gymnasium as their band room was being remodeled. The noise level from gym class was very distracting. The students were a heterogeneous group and were working in class on fundamentals from an instrumental method book. The class was active in the learning process, following instructions as requested by the student teacher. The field notes suggest that this class follows a routine of clapping, sizzling (pushing air through their teeth to imitate a rhythm), and then playing the piece, often in small sections. This pattern was followed throughout the instructional process in both conditions and was not related to any specific instructional target, but rather a routine meant to establish repetitions.

Table 21 reports data from the 20 minutes of observation in the on-podium condition. A total of 2 single-performance rehearsal frames were identified during the on-podium condition. The instructional targets included technical facility and posture/instrument carriage. No rehearsal frames that included two or more student trials were identified under the on-podium condition. While the student teacher addressed specific instructional targets, subsequent student performances were limited to a single trial with no further instruction directed at the target. Observations recorded in field notes suggest that opportunities for additional instructional targets

were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggests that the student teacher moved on to other segments of the rehearsal while errors in student performance remained. The analysis of the observations indicates that there was more time allocated to teacher talk (50.33%) than student performance (37.95%), yet the mean duration of student performance (14.84) was more than teacher talk (7.82). The student teacher modeled what was expected during their performances, yet the field notes suggest such occurrences seemed to be a part of a routine established by either the student teacher or the cooperating teacher, as the occurrences were not directed toward a specific learning session nor were they directed toward helping students understand a rehearsal target. There was a high number of teacher talk episodes in on-podium condition, but according to the field notes, most were directives related to where the students were to begin in the method book. Similarly, the student teacher's instruction during the off-podium condition revealed 2 single-performance-trial rehearsal frames where the student teacher addressed instructional targets, including dynamics, and pitch accuracy. The student teacher acknowledged intonation during the off-podium condition, but did not rehearse or otherwise work with the students on improving the target, and it was noted that the intonation issue was unrelated to the piece that was being performed. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them. A single multiple-performance-trial rehearsal frame was observed during the off-podium condition. The student teacher identified an issue with dynamics, subsequently working with the full ensemble to resolve the issue.

The participant's instruction from the on-podium condition included mostly teacher talk (78 occurrences), accounting for 50.33% of the total time observed (20:12). Student behaviors

accounted for 37.95% of the rehearsal time, including 10 occurrences of full ensemble performance, 4 occurrences of section performance and 2 performance approximations. Interestingly, the student teacher invested approximately 10% of the total observed time transitioning from one instructional segment to another. The student teacher moved quickly within each segment, especially in regard to the established performance routine, but allowed students more time to transition to other segments. The student teacher asked questions throughout instruction, but provided many of the answers, moving instruction along quickly.

Table 21

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher F (n=2, 20:22).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	78	3.83	10:10	50.33	7.82
Directives	40				
Information	17				
Positive Feedback	1				
Negative Feedback	0				
Questions	18				
Off-Task	2				
Teacher Modeling	5	.25	:40	3.30	8.00
Positive Modeling	5				
Negative Modeling	0				
Student Behaviors	31	1.52	7:40	37.95	13.84
Student Performance					
Full Ensemble	14				
Section	4				
Individual	0				
Performance Approximation	13				
Student Talk	0				
Marking Music	0				

Table 22 reports data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 2 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified included posture/instrument carriage and technical facility. Additionally, intonation was addressed during the observation period with no subsequent student performance trial. A single multiple-performance-trial rehearsal frame was observed during the off-podium condition. The student teacher identified an issue with dynamics, working with the students multiple times to resolve the issue. The student teacher worked with students in full ensemble performance to resolve the issue. The duration of the episode was 41 seconds, at which point the student teacher moved on to a different segment of instruction.

The participant's instruction during the off-podium condition was predominantly student performance, which accounted for 49.23% of the total time observed (20:39), while teacher talk accounted for 42.37% of the observed time. Comparing those two behaviors between the percentage of time and the mean behavior time indicate more time was devoted to students performing on their instruments as opposed to the student teacher talking, suggesting the student teacher moved on to performance at a more rapid pace. There were limited differences between the two conditions with this participant. Many of the numbers were similar across all behavior between the conditions.

Table 22

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher F (n=2, 20:39).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	76	3.68	8:45	42.37	6.91
Directives	51				
Information	12				
Positive Feedback	0				
Negative Feedback	1				
Questions	10				
Off-Task	2				
Teacher Modeling	5	.24	1:02	5.00	5.17
Positive Modeling	4				
Negative Modeling	1				
Student Behaviors	41	1.10	10:10	49.23	14.87
Student Performance					
Full Ensemble	26				
Section	7				
Individual	4				
Performance Approximation	4				
Student Talk	0				
Marking Music	0				

Important information to this study was revealed in the field notes regarding the high number of teacher talk episodes and student performance trials versus the low frequency of instructional targets identified during both conditions. There were occasions when the participant would stop the ensemble and merely ask the students to start at a specific measure. Once the segment was performed, the student teacher would stop and direct students to the next segment without providing any type of instruction. Additionally, the student teacher would sometimes yell or speak loudly an instructional target as the students were performing, such as “don’t miss

the rest" to suggest a rhythmic inaccuracy. The student teacher, in most occurrences, did not stop the ensemble to address what the student performers could have done to alleviate the issue. While the analysis of the student teacher suggests he/she was able to identify problems as they occurred, there were additional opportunities for instruction that were missed or not acknowledged.

STUDENT TEACHER G

The students in the class were well rehearsed in classroom procedures, although numerous distractions by students were noted in the field notes. The student teacher followed a well-established routine that involved the student teacher moving quickly between instructional segments, and consistently drawing students' attention to him/her through questions, directives, information, and/or consistently counting off the next phrase or instructional segment. The students were a heterogeneous group and were working out of an instrumental method book throughout the observed time. There were numerous distractions noted throughout the observation, yet the student teacher did a satisfactory job of maintaining structure and students' attention during instruction. The pace of instruction was steady and fast, as to minimize the number of distractions related to students coming in and out of the gym.

Table 23 reports the analyzed data from the 20 minutes of observation in the on-podium condition. No rehearsal frames involving single performance trial were identified during the on-podium condition. The field notes indicate there were opportunities to address errors throughout the observation, but they were overlooked or not acknowledged by the student teacher. Further, no rehearsal frames that included two or more student performance trials were identified under

the on-podium condition. There were moments during the instruction where the student teacher would briefly stop as if he/she were going to address a prevalent issue, but chose to move on to another segment of instruction. Additionally, there were moments where the student teacher would yell an issue that he/she may have identified as the students were performing, such as "you need to play louder," but would not stop the performance or otherwise address the specific issue, and no performance trial was noted. Further analysis of field notes suggest that while the student teacher moved quickly between segments of instruction by consistently counting off the next phrase, section, and/or piece, he/she was moving quickly through performance episodes with little to no specific feedback. The analysis of the observations indicates that large portions of class time were devoted to student performance. Field notes corroborate those numbers by indicating that the student teacher invested large amounts of time (53.06%) for long durations (22.89 seconds) in student performance. Despite the seemingly fast pace that was noted in field notes, there was over 10% of instructional time where students were not engaged in instruction and between instructional segments. The student teacher's instruction during the off-podium condition revealed 2 rehearsal frames where the student teacher addressed technical facility. Field notes indicate the student teacher incorrectly acknowledged pitch accuracy during the off-podium condition, but soon rectified the misjudgment. Again, numerous opportunities were present to address targets, yet the student teacher did not address them. Similar to the on-podium condition, large amounts of instructional time was observed in student performance (62.41%) with long durations (18.34 seconds). With the limited number of instructional targets being addressed, and no episodes of feedback identified throughout the observations, the instructional segments was a rehearsal where students performed music with no time allowed to address specific performance attributes and/or instructional targets. The field notes indicated that the

cooperating teacher stopped the ensemble on numerous occasions during the off-podium condition to address targets, but the student teacher looked on as the cooperating teacher worked with the student. At the conclusion of each instructional episode, the student teacher moved on with another performance segment.

The participant's instruction from the on-podium condition included mostly student behaviors, 53.06% of the total time observed (20:02). Teacher talk accounted for 34.11% of the rehearsal time, which included 38 occurrences of directives, 6 occurrences of information and 2 comments related to off-task behaviors. The low duration of teacher talk (7.92) per episode might suggest a fast pace and that more instruction was focused on student performance with limited talk time for the student teacher. The field notes did not corroborate the numbers as such. The time invested in teacher talk was merely associated with moving to the next performance segment where the students, once again, played through the section as requested.

Table 23

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher G (n=2, 20:08).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	52	2.58	6:52	34.11	7.92
Directives	29				
Information	14				
Positive Feedback	1				
Negative Feedback	0				
Questions	2				
Off-Task	6				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				

Table 23 (continued)

Student Behaviors	28	1.39	10:41	53.06	22.89
Student Performance					
Full Ensemble	14				
Section	12				
Individual	0				
Performance Approximation	0				
Student Talk	2				
Marking Music	0				

Table 24 reports data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 2 rehearsal frames where the instruction was limited to one student performance trial. The instructional target identified was 2 episodes of technical facility. Again, the instructional targets identified during either condition resulted in no multiple-performance-trial rehearsal frames.

The participant's instruction during the off-podium condition was predominantly student performance, which accounted for 62.41% of the total time observed (20:05). Teacher talk had short durations (5.42), with longer durations of student performance (18.34), suggesting a fast pace of teacher talk and more time devoted to student performance. Those numbers are misleading, as the field notes indicate the student teacher was providing information or directives in regard to the next instructional segment. The most notable observation during the off-podium condition was the lack of feedback throughout the observation.

Table 24

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher G (n=2, 20:05).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	57	2.84	5:09	25.64	5.42
Directives	41				
Information	10				
Positive Feedback	0				
Negative Feedback	0				
Questions	4				
Off-Task	2				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	41	2.04	12:32	62.41	18.34
Student Performance					
Full Ensemble	19				
Section	10				
Individual	12				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

In addition to the lack of feedback, another notable observation was the lack of modeling during both conditions. Even with the limited number of instructional targets being identified, the student teacher had opportunities to demonstrate quality sound during the performances by merely performing with them, but chose not to. Despite the apparent negatives, there were less overall off-task behaviors acknowledged by the student teacher during the off-podium condition, 12 individual performances that allowed individuals to contribute to music making on a personal level, and an even more rapid pace of teacher talk (5.42 seconds per occurrence), indicating the

student teacher talked even less during the off-podium condition. Instruction during the off-podium condition, while not perfect, showed improvement from the on-podium condition.

STUDENT TEACHER H

The students in the class were well rehearsed in classroom procedures and engaged in the learning process by following the requests of the student teacher through participation. The ensemble was a large heterogeneous group, and was preparing music for their next performance that was a few weeks away. The few members of the percussion section worked with a teacher in a side room for portions of the rehearsal, but the distractions to the class were minimal and the group was attentive and seemed to enjoy band. A loud buzzer sounded at various points during instruction, but it did not seem to negate instruction other than the student teacher seemed to think a student was being called to the front office during each instance. The large band room, which was connected to the main academic building, allowed the student teacher ample room to move about during the rehearsal.

Table 25 reports data from the 20 minutes of observation in the on-podium condition. A total of 5 single-performance rehearsal frames were identified during the on-podium condition. The instructional targets included rhythm accuracy (2), tempo, pitch accuracy, and dynamics. While the student teacher addressed specific instructional targets, subsequent student performances were limited to a single trial with no further instruction directed at the target. A single rehearsal frame that included two or more student trials was identified during the on-podium condition. The target was rhythm accuracy, and involved the student teacher using teacher talk, modeling, and section performance to resolve the rhythmic errors. The multiple-

performance trial rehearsal frame used 1:21 of instructional time. Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analyses of field notes suggest that the student teacher moved on to other segments of the rehearsal while student performance errors remained. There were moments during the rehearsal where students were given numerous repetitions of a phrase or section, but the work was not related to any specific instructional target, rather an instructional pattern used by the student teacher to foster understanding. There were additional moments where it appeared that the student teacher would hear a mistake, but was unable to discern the precise mistake and/or formulate an adequate response, thereby moving on with instruction without resolving the issue. The student teacher's instruction during the off-podium condition revealed 2 single-performance trial rehearsal frames where the student teacher addressed instructional targets, including posture and pitch accuracy. Additionally, there were 2 multiple-performance trial rehearsal frames identified during the off-podium condition, that included dynamics and rhythm accuracy targets. The multiple-performance trials involved performance approximation, section and full ensemble performances. Again, observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address them.

The participant's instruction from the on-podium condition included more time in student performance (47.28%) than in teacher talk (45.21%). The student teacher used most of the sub-categories under teacher talk, including both positive and negative modeling. Similarly, all sub-categories, except for marking music, were identified at least once during the on-podium observation. The student teacher seemingly moved at a faster pace of instruction while talking, allowing the students greater time in performance per episode (11.02 seconds). As noted in the

percentages of behaviors observed during instruction, very little time (less than 4%) was spent in transition or wasted during the on-podium instruction. The student teacher moved quickly between segments and maintained a quality instructional environment during the observation. While not reported in Table 25, the multiple-performance-trial rehearsal frame was 1:21 of the total time observed. The student teacher addressed rhythmic accuracy, using section performance to resolve the issue. Analysis of the field notes indicate the student teacher was successful in resolving the rhythmic issues and moved on with instruction.

Table 25

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher H (n=2, 20:12).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	71	3.51	9:18	45.21	7.86
Directives	42				
Information	19				
Positive Feedback	6				
Negative Feedback	2				
Questions	0				
Off-Task	0				
Teacher Modeling	6	.30	.47	3.88	7.83
Positive Modeling	5				
Negative Modeling	1				
Student Behaviors	52	2.57	9:33	47.28	11.02
Student Performance					
Full Ensemble	10				
Section	24				
Individual	10				
Performance Approximation	7				
Student Talk	1				
Marking Music	0				

Table 26 reports data from the 20 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 2 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets were posture and pitch accuracy. There were 2 multiple-performance-trial rehearsal frames observed during the off-podium condition where the student teacher addressed dynamics and rhythmic accuracy. The rehearsal frames involved full ensemble performance, while rhythmic accuracy involved section performance and performance approximation. The participant devoted 2:20 to the dynamics target, primarily in full ensemble performance, while devoting 2:24 on rhythmic accuracy, using the white board for a visual of the rhythm and performance approximation to solidify student understanding of the rhythm. Both episodes were successful, and the student teacher subsequently moved on to a different segment of instruction.

The participant's instruction during the off-podium condition was predominantly student performance, which accounted for 47.01% of the total time observed (20:06), as compared to 39.38% in teacher talk. When comparing those behavior between the two conditions, there were similarities, but also differences, with one difference being the mean duration per episode was more in the off-podium condition for both teacher talk (8.64) and student behavior (19.55), although the frequency for both was less, 55 and 29 respectively. There were not any episodes of modeling in the off-podium condition, while in the on-podium condition there were six episodes. The most notable occurrence in the off-podium condition was the transition time between episodes: there was over 13% of the total time observed utilized for something other than instruction.

Table 26

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher H (n=2, 20:06).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	55	2.74	7:55	39.38	8.64
Directives	29				
Information	18				
Positive Feedback	3				
Negative Feedback	1				
Questions	3				
Off-Task	1				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	29	1.44	9:27	47.01	19.55
Student Performance					
Full Ensemble	12				
Section	12				
Individual	1				
Performance Approximation	2				
Student Talk	2				
Marking Music	0				

According to the field notes, there was one episode of long duration where the student teacher was having conversation with the students unrelated to instruction during the off-podium condition. There was improvement in instruction between the on-podium and off-podium conditions: there were two multiple-performance-trial rehearsal frames observed during the off-podium condition, as opposed to one multiple-performance-trial rehearsal frame in the on-podium condition. The episode of conversation was of concern in the off-podium condition due to the reduced instructional time and the potential lack of focus with instruction as the student

teacher moved about the band room. As noted earlier, despite the many positives noted with instruction, there were times where additional targets could have been identified, discussed, and/or rehearsed, yet the student teacher found time to converse with students that was not instructional, which may have limited student focus for the remainder of the instructional segment. There were not any episodes of modeling during the off-podium condition, and the field notes suggest it could be due to the student teacher not having the instrument readily available as he/she moved around the room. The participant's instrument was beside the podium throughout the on-podium condition. Also noteworthy was the fact there were more episodes of feedback during the on-podium condition, although the field notes did not provide a plausible reason.

STUDENT TEACHER I

The students in the class were well rehearsed in classroom procedures, although there were a few disruptions noted in field notes. The group was heterogeneous with similar instrumentation throughout. Approximately half of the observed instruction was devoted to rehearsing repertoire for an upcoming concert, while the latter half was devoted to new material from an instrumental method book. The band room was large, and provided the room needed for the instructor to move about during rehearsal. The band room was located in a building separate from the main academic building and the class was during the morning, but was not the first class of the day. The cooperating teacher remained in the rehearsal room for the duration of the observation and was quite active in the instructional process, but allowed the student teacher complete control for the duration of the observations.

Table 27 reports data from the 20 minutes of observation in the on-podium condition. A total of 8 rehearsal frames were identified during the on-podium condition. The instructional targets included pitch accuracy, rhythm accuracy (3), dynamics (2), technical facility, and articulation. The analysis of the observation revealed that the student teacher acknowledged articulation on numerous occasions during rehearsal, but no performance trial was associated with the comments that were made. No rehearsal frames that included two or more student trials were identified during the on-podium condition. Observations recorded in field notes suggest that opportunities for additional instructional targets were present, but were overlooked or not acknowledged by the student teacher. Further analysis of field notes suggests that the student teacher moved on to other segments of the rehearsal while errors in the students' performance remained. Further analysis of the observations indicates that the student teacher had a moderate pace of instruction with 6.00 seconds per teacher talk episode. There was no modeling occurrences observed during the on-podium condition. There was approximately 10% of down time during the recordings where limited instruction occurred, much of which was related to allowing students too much time between instructional segments, according to the field notes.

The final recording had an overall duration of less than 10 full minutes of instruction due to an unannounced event at the school. There was not an opportunity for additional observations due to the participant and school's schedule for the remainder of the semester. As a result, there was approximately 4 less minutes of observed instruction in the off-podium condition. Of the 16:05 of total observed time in the off-podium condition, the student teacher's instruction revealed 3 single-performance-trial rehearsal frames where the student teacher addressed rhythm accuracy, dynamics, and tempo. Observations recorded in the field notes indicate numerous opportunities were present to address additional targets, yet the student teacher did not address

them. None of the instructional targets identified during either condition resulted in multiple performance trial rehearsal frames.

The participant's instruction from the on-podium condition included mostly student performance, which accounted for 61.46% of the total time observed (20:04). Teacher talk accounted for 31.40% of the rehearsal time, which included 63 occurrences that were primarily directives (36) and information (20). As previously reported, there was a large amount of time where the student teacher was transitioning between segments resulting in time where instruction was not occurring. The overall amount of down time was approximately 10% of the total observed time in the on-podium condition. It is important to note that the student teacher used full ensemble performance as the primary mode of performance, while investing limited time with section and individual performances. According to the field notes, it appeared the student teacher was merely conducting the ensemble at various times for long durations. When the student teacher stopped the ensemble to address a perceived error, the comment was vague or generalized, often repetitious of a previous statement and was not followed up with a performance trial directly associated with the comment.

Table 27

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the On-Podium Condition for Student Teacher I (n=2, 20:04).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	63	3.14	6:18	31.40	6.00
Directives	36				
Information	20				
Positive Feedback	1				
Negative Feedback	0				
Questions	3				
Off-Task	3				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	40	1.99	12:20	61.46	18.50
Student Performance					
Full Ensemble	30				
Section	7				
Individual	3				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

Table 28 reports data from the approximately 16 minutes of observation during the off-podium condition. As previously discussed, student teacher instruction during the off-podium condition revealed 3 rehearsal frames where the instruction was limited to one student performance trial. The instructional targets identified included rhythm accuracy, dynamics, and tempo. Again, the instructional targets identified during either condition resulted in no multiple-performance-trial rehearsal frames.

The participant's instruction during the off-podium condition was predominantly student performance, accounting for 57.20% of the total time observed (16:05). Similar to the on-podium instruction, there was a high mean duration of student performance (19.03) that was predominantly full ensemble performance, with less section and individual performances. Analysis of the field notes indicates the student teacher did not move far from the podium during the off-podium condition. There was not any obvious reason for not moving around the room assisting students as needed, but with the high duration of student performance compared to the relatively low duration of teacher talk, it is plausible to suggest the student teacher may have felt more comfortable conducting the ensemble as opposed to working with students to resolve performance issues. This speculation, however, was not corroborated in field notes or otherwise. Most notable was the absence of modeling occurrences during both conditions. As reported in the field notes, there were times that modeling may have helped students understand that which the student teacher was discussing at the moment, but modeling was not a strategy employed by the student teacher.

Table 28

Frequency, Rate, Duration, Percentage of Total Rehearsal Time, and Mean Duration of Observed Behaviors in the Off-Podium Condition for Student Teacher I (n=2, 16:05).

Observation Categories	f	Rate (min)	Duration (min:sec)	Percentage	Mean (sec)
Teacher Talk	38	2.36	5:03	31.40	7.97
Directives	24				
Information	12				
Positive Feedback	1				
Negative Feedback	0				
Questions	0				
Off-Task	1				
Teacher Modeling	0	-----	-----	-----	-----
Positive Modeling	0				
Negative Modeling	0				
Student Behaviors	29	1.80	9:12	57.20	19.03
Student Performance					
Full Ensemble	17				
Section	11				
Individual	1				
Performance Approximation	0				
Student Talk	0				
Marking Music	0				

Throughout the observations, there was a low frequency of rehearsal frames identified during the observations. As previously discussed, there were a number of instructional targets mentioned during both conditions where no subsequent performance trial was used. Important information in field notes suggests that the student teacher may have felt comfortable addressing certain targets over others, articulation, specifically legato and marcato tonguing was discussed repeatedly during several of the instructional segments. While tonguing is an important aspect of quality performance technique, and is an instructional target within this study, there were a

number of instructional target mistakes overlooked or not identified, yet the student teacher continued to repeatedly address specific targets over another, and chose not to check for student understanding with subsequent performance trials.

CHAPTER 5

DISCUSSION

Music education department chairs from several universities in the southeastern United States were contacted to compile a list of participants who were completing their student teaching experience in a beginning band setting. Upon sending invitations to those who met the established criteria, nine student teachers agreed to participate and were provided instructions pertaining to the their participation. The student teachers were recorded for 20 minutes for two consecutive rehearsals, 10 minutes on the podium and 10 minutes off the podium. In an effort to control for possible order effects, the researcher reversed the order for the two recordings by having the participants begin off the podium for the first recording, and then on the podium for the second recording. The recorded observations were then analyzed to yield the data. In addition to the use of Scribe to analyze the rehearsals, field notes were taken to corroborate the data, provide more insight into the instruction that was taking place, and to record other details surrounding the event that may have been observed by the researcher, but not recorded on video.

The implicit identification of rehearsal errors seemed to be a common theme from the on-podium condition, where student teachers acknowledged certain targets indirectly, without any specific guidance to the students to resolve the error or situation, or provide mastery of the topic. It was unclear to the researcher if the student performers understood the error referred to by the student teacher. It is possible that the student teacher invested time prior to the observations working on similar issues, and the students knew how to resolve the issues without any direct instruction provided by the student teacher during the observation, but as an objective observer, the researcher did not detect any level of mastery of the target was achieved. Trends were noticeable from both within and outside of the rehearsal frames. Participants of this study invested a large amount of time simply conducting the ensemble while in full ensemble performance. The running record of events that were observed and recorded yielded, in one instance, 14:04 used as student behavior time with much of the time devoted to full ensemble performance, as reported on Student Teacher C in Chapter 4. In this instance, limited instruction could have taken place as students were allowed to play on their instruments for extended periods of time. Put another way, student behavior with one student teacher accounted for 69.52% of the total rehearsal time while on the podium. Chapter 4 reported one student teacher whose mean full ensemble performance time was 24.0 seconds per episode, while that of experts in previous research was reported at 5.9 seconds per episode. According to the field notes, one student teacher seemed unprepared while off the podium, investing large portions of time conducting when on the podium. This suggests that the student teacher may have felt that instruction in beginning band was limited to merely rehearsing and/or conducting the band.

Perhaps not having the score in hand could have led the student teacher to feel unprepared. Another possible reason is that student teachers sometimes continue with their plan regardless of student outcomes and are not likely to modify instruction as rehearsal progresses. According to Westerman (1990), student teachers create solid lesson plans with clear objectives, yet may fail to modify the plans as needed to suit student-learning needs. While the aforementioned study was aimed at general education student teachers, similar preparation and modification is required among all student teachers. In short, the results of this study indicate a clear trend of conducting while on the podium, which contradicts expert behavior, who remain mobile during instruction; altering the instruction as needed to best suit the needs of the students.

The primary teacher verbal behaviors observed during this study were directives and information. The effectiveness of teacher talk, however, was diluted in many instances due to the generalization of the comments by the student teachers. One of the comments included: "it's not loud enough right there." Student teachers lacked specificity with their comments in many of the circumstances. By choosing not to follow their comments with student performance, many of the students were left with unanswered questions, thereby circumventing performance-based instruction with verbal-based instruction.

While the analysis identified a few instances of positive and negative feedback, most of the feedback statements were positive comments for successful performance trials, while many of the errors identified were left uncorrected. Throughout the study, there were limited questions identified from the student teachers to the students that allowed them to analyze situations and determine solutions.

There were a limited number of individual performances throughout the study in the on-podium condition. Within rehearsal frames with two or more student performance trials, there

were no instances of individual performances, performance approximations, marking music, or student talk. Student teachers in this study devoted much of their instructional time to full ensemble and section performances both within and outside of rehearsal frames. A study by Nicholson (2009) revealed that novice teachers followed their score much more closely than did experienced teachers. This may explain why student teachers, when on the podium, chose to work for greater durations with the full ensemble. Section or individual performance may require more analysis and feedback on the part of the student teacher. Student teachers may lack confidence in evaluating individual performances and providing prescriptive feedback. Many teaching opportunities were overlooked or missed as a result of the instructional choices made by the participants, which trended toward conducting the ensemble.

Air/Breathing, embouchure, multiple targets, other, and unidentified target were not identified in any of the single performance trial rehearsal frames from the on-podium condition. Further, only dynamics and rhythm accuracy were identified in multiple performance trial rehearsal frames from the on-podium condition. Given the importance of producing a quality tone with beginning instrumentalists, it is surprising that intonation/tone was identified once in single performance trial rehearsal frames, and not at all in multiple performance trial rehearsal frames from on the podium. Pedagogues and researchers agree that characteristic tone production is a primary goal in beginning band, yet participants for this study addressed the target one time during the on-podium condition. As previously mentioned, the targets identified within multiple performance trial rehearsal frames were dynamics (1) and rhythm accuracy (1). This is in contradiction to previous research (Cavitt, 2004) that found intonation/tone to be the most frequent target among middle and high school bands. Worthy (2003) found multiple targets to be the most frequent, while Thompson (2006) listed multiple targets and pitch accuracy in the top

three. None of the targets listed as frequent targets by expert teachers in beginning band were identified within multiple performance trial rehearsal frames of student teachers in this study. In fact, multiple targets were not identified in either condition with any student teacher whether in the on-podium or off-podium conditions.

As previously noted, only 2 multiple-performance-trial rehearsal frames were analyzed from the on-podium condition. A study by Thompson (2008) revealed that three experts in beginning band produced 7, 11, and 7 rehearsal frames in approximately 6 hours of recorded observation. As discussed in Chapter 2, it could be inferred that with beginning band, more time must be spent working on individual targets, thus limiting the overall number of target identifications. Further, the frequency of rehearsal frames, in and of itself, does not rate the quality of instruction, but provides a snapshot of the number of errors that were addressed within the rehearsal, and the time devoted to helping students make the necessary modifications that could alleviate errors while performing on their instruments.

STUDENT TEACHERS OFF THE PODIUM

According to field notes, student teachers reported different opinions of their instruction during the off-podium condition. One student teacher enjoyed being off the podium and preferred to stay that way, while another felt unprepared without the music score in hand and readily available. It was noted by the researcher that the general consensus among all student teachers was that they seemed confused, not truly understanding exactly what to do when they were off the podium. It seemed that they paused to think more often and were perhaps puzzled by the different perspective from being off the podium. Yet, field notes collected during the

observations suggested considerable improvement with the explanations and instructions provided to students during the off-podium condition. Perhaps being off the podium forced the student teachers to rely less on the music score and more on what was happening around them, although the behavioral observation data may suggest otherwise.

Student teacher instruction while off the podium in a beginning band setting changed slightly when compared with instruction during the on-podium condition. While the instructional targets identified by the student teacher decreased from 36 in the on-podium condition to 30 in the off-podium condition, the number of multiple-performance-trial rehearsal frames that were analyzed increased from 2 in the on-podium condition to 4 in the off-podium condition. The identified instructional targets did not include embouchure, multiple targets, other, and unidentified target. The greatest proportions of identified targets were rhythm accuracy (43.3%), followed by dynamics (16.7%) and pitch accuracy (13.3%), which were identified largely by experts, experienced, and novice teachers in a beginning band setting (Nicholson, 2009; Thompson, 2006).

Upon analyzing the multiple-performance-trial rehearsal frames, the frequency of teacher talk (45) increased, while modeling (1) remained the same. In previous beginning band research, modeling was identified largely in the rehearsals of experts, experienced, and novice band teachers, yet limited modeling was used with student teachers across all rehearsal frames. Full ensemble performance (16) increased, while section performance (2) remained the same. Especially noteworthy was that there were no instances of individual performance identified within rehearsal frames during the off-podium condition. Performance approximations (4) increased and were used to address rhythmic errors, while student talk and marking music was not identified. Most concerning was the low frequency of positive and/or negative feedback

observed throughout this study during the off-podium condition. Positive and negative feedback are essential elements of quality instruction and are necessary to promote improvement in student performance. Feedback is especially important, not just as a formative assessment, but each episode of feedback may be directed to each individual student's progress through differentiation. While it is highly unlikely that student teachers were thinking of their formative assessments during the observations, it would be prudent to remind student teachers of the importance of quality feedback early and often during the development of young instrumentalists. Also important to this study was the absence of students marking on their music.

The remainder of this chapter is devoted to discussing the reported data and field notes taken during the live observations of each student teacher. Additionally, the chapter provides answers to the research questions, summarizes the study, and provides recommendations for the future.

STUDENT TEACHER A

According to the field notes, participant A approached the researcher at the conclusion of the first observation to ask if the rehearsal was sufficient. It is unclear to the researcher what impact, if any, the researcher's presence in the class had on the participants. Participant A seemed to be concerned with the researcher's impression of the instruction, which may or may not have had an effect on the instruction. The class was a heterogeneous group, but was normally divided by section and placed in adjoining rooms for rehearsal. The group was brought together for the purposes of this study. The class was in the morning, the second class of the day, and the

students worked on music repertoire for the duration of the observations. There was a gymnasium directly above the band room where the loud noises did not seem to adversely affect instruction.

As presented in Chapter 4, multiple-performance-trial rehearsal frames were not identified during the on-podium condition. A total of 6 single-performance-trial rehearsal frames were identified, which included intonation/tone, rhythm accuracy, articulation, technical facility, tempo, and pitch accuracy. Field notes indicated there were numerous opportunities for the student teacher to address additional targets, but the participant did not address them. Further, of the targets that were addressed, the student teacher moved on to another segment of rehearsal without completely resolving the error. Perhaps the student teacher thought the error had been resolved to his/her standard, or perhaps the participant lost focus and was distracted by other elements within the rehearsal. Whether one can accurately surmise why it occurred, errors were present and were left unattended by the participant.

Participant A invested similar amounts of time between teacher behaviors and student behaviors, which is incongruent with previous research (Thompson, 2006; Nicholson, 2009) where experts talked for longer durations and spent less time in student performance. Additionally, experts identified many more instructional targets than student teachers. One could surmise that experts stopped the ensemble more often to correct a target error, yet took more time to resolve the issue before moving on, whereas the student teacher identified less target errors, ultimately eliminating the need to stop the ensemble. With student teacher A, student performance was nearly twice the mean duration of teacher talk during the on-podium condition. There were 16 episodes of modeling by student teacher A during the on-podium condition, which was just over 20% of the teacher talk occurrences, and was similar to that of experienced

teachers who invested approximately 30% of the observed rehearsal time modeling for students (Nicholson, 2009).

While off the podium, there were 5 single-performance-trial rehearsal frames identified where the following targets were addressed: articulation, intonation/tone, rhythm accuracy, dynamics, and technical facility. As previously stated, there were not any multiple-performance-trial rehearsal frames identified during the off-podium condition. Similar to the on-podium condition, there were times when the student teacher would address a target and move on to another segment of rehearsal without fully resolving the target error, and other times when additional target areas were present but the student teacher did not recognize the error or chose to move on with instruction. There were numerous times when the student teacher's explanations drew odd faces from students, who clearly misunderstood some of the instructions. It was those moments, however, when the student teacher was clearly learning to become an effective teacher.

The participant invested twice the amount of mean performance time in student performance during the off-podium condition when compared to the on-podium condition, although the mean teacher talk time was shorter and more direct and to the point, according to field notes. The frequencies of teacher and student behaviors were similar between both conditions, while there were approximately 75% fewer modeling occurrences during the off-podium condition. The limited number of modeling episodes could be attributed to the student teacher not having his/her instrument readily available as he/she moved through and around the students during instruction. There were 2 episodes of individual performance during the on-podium condition compared to zero episodes identified during the off-podium condition. This could be related to the participant not having the score in hand to know exactly what should be

played. Other than fewer episodes of modeling and one less instructional target identified, largely similar instruction was noted with the student teacher between the on-podium and off-podium conditions. The lack of multiple-performance-trial rehearsal frames to analyze prevents any further analysis of instruction.

STUDENT TEACHER B

Instruction for this class took place in the morning, the second period of the day. The group was heterogeneous, and they worked on repertoire for an upcoming concert that was a few weeks away. The class had a large number of mallet percussion instruments and a large number of percussion students. According to the field notes, it did not appear the increased number of percussionist and percussion instruments had any effect on the type or quality of instruction that took place.

During the observation of on-podium instruction, the student teacher stepped off of the podium a few times and seemed to wonder aimlessly around the front of the group. While the meandering may have been the student teacher losing focus or needing to think about the next segment of instruction, it did not detract or otherwise diminish the instruction in any way. There were 3 instructional targets identified during the on-podium condition that included rhythm accuracy, pitch accuracy, and technical facility. Similar to other student teachers in this study, additional errors were left unnoticed or unattended and the target areas that were identified were left incomplete and/or the errors were not fully resolved. There were times during instruction when the participant would address rhythmic accuracy implicitly, but did not follow up the

connotation with a performance trial. There were not any multiple-performance-trial rehearsal frames identified during either of the two conditions.

The amount of time devoted to teacher and student behaviors was mostly similar during the on-podium condition. The mean duration of each, however, was less when compared to other student teachers, and more in line with that of experienced and expert teachers from previous research (Thompson, 2006; Nicholson, 2009). Most of the teacher behaviors were directives and information, while there were a few episodes of feedback, questions, and off-task behaviors addressed. The frequency of modeling occurrences was consistent with student teacher A (approximately 20%) and was similar to experienced teachers (approximately 30%), according to Nicholson, 2009. While individual performance and marking music were not identified, there were a few episodes of student talk and a large number of performance approximations. The limited number of feedback occurrences is concerning, given its importance to helping beginning band students understand their instruments through proper formative assessment techniques and excellent feedback on their performances.

While off the podium, the student teacher showed increases in target identification, and teacher and student behaviors. Target identification increased from 3 in the on-podium condition to 8 during the off-podium condition. The targets identified included rhythm accuracy (6) and technical facility (2). While none of the episodes involved multiple performance trials, the student teacher's growth in identifying instructional targets is noteworthy. The number of teacher and student behaviors increased in frequency, and decreased in mean duration of each, which ultimately led to a faster pace of rehearsal. The mean duration of teacher and student behaviors was congruent with that of experienced teachers in previous research (Nicholson, 2009). It was noted in the field notes that the student teacher seemed more at ease in the off-podium condition.

The number of modeling occurrences was similar between the two conditions, but the episodes of feedback increased substantially. It was noted, however, that many of the feedback episodes were simple congratulatory statements or praise for a good job, while the negative feedback episodes were simple statements directed toward how they could improve for the next performance. Had the student teacher used the negative feedback to engage the students and follow up the feedback with performance trials, there likely would have been numerous rehearsal frames to analyze, which would have a provided a more accurate picture of the instruction that took place. The number of performance approximations increased from 16 during the on-podium condition to 29 in the off-podium condition. It should be noted, however, that many of the occurrences were due to repetitions of the same phrase with no subsequent feedback to determine whether the behavior was related to any specific performance task. At other times, the student teacher began an instructional sequence with performance approximation, not addressing any specific target. This could have been due to a procedure used by the cooperating teacher that had occurred throughout the semester prior to the observations. While there were not any rehearsal frames to analyze to provide a more accurate depiction of the instruction, substantial improvements were noted from the on-podium condition to the off-podium condition.

STUDENT TEACHER C

Instruction for this class began in the late afternoon. Students were transported on a bus from a local elementary school to the high school for beginning band instruction. The students were a heterogeneous group, and they worked on repertoire for an upcoming performance that was a few weeks away. The class was highly disruptive, perhaps due to being relocated to a

different school at the end of the day. The students would leave their seats frequently to approach the student teacher at the podium to ask a question or speak to the student teacher. This class lacked structure; however, the student teacher managed the class appropriately, dealing with issues as they arose. The cooperating teacher remained in his office to the side of the main rehearsal room for the duration of the observations. The student teacher reported that he/she did not feel comfortable off of the podium from an instructional standpoint, due primarily to not having the score with him/her. The student teacher used a baton to conduct the ensemble when rehearsing in the on-podium condition.

During the on-podium instruction, there were 2 instructional targets identified that included articulation and technical facility. There were not any rehearsal frames identified that included two or more performance trials. There were a number of instructional targets not addressed or left unattended during the observation. The student teacher addressed tempo on one occasion, but did not explain what was incorrect about the tempo and did not rehearse or otherwise instruct students in how to improve on the target. Similar to other student teachers in this study, the participant, upon addressing an instructional target, moved on to another segment of the rehearsal without adequately addressing the target for which performance had been stopped. Perhaps the number of rehearsal frames may have increased, had the student teacher invested more time on the targets that were identified.

There was substantial time devoted to full ensemble performance (69.5%) during the on-podium condition, including long mean durations (26.3 seconds). There were not any occurrences of modeling during the on-podium condition, and limited episodes of feedback. According to the field notes, many of the feedback episodes were simple phrases that congratulated the students on completion of a task, but did not necessarily include formative

instruction on the task at hand. There were a large number of off-task behaviors (12) in the on-podium condition. An important note is that many of the off-task behaviors may have been alleviated by the mere presence of the cooperating teacher in the rehearsal room. It appeared to the researcher that some of the students were taking advantage of the student teacher, but more importantly, their distractions were preventing the student teacher from maintaining focus on instruction. The student teacher was clearly conducting the ensemble as opposed to working from a pre-established lesson plan. The student teacher lacked the classroom management style to control the class under the format he/she was working. Perhaps it would have been beneficial both for classroom management and student learning for the student teacher to focus on one or two instructional targets per day until he/she developed a more appropriate management plan and to help control some of the misbehavior by keeping them busy. Any time the student teacher stopped the rehearsal, talking was rampant.

Similar to the on-podium condition, 2 instructional targets were identified during the off-podium condition. The targets included rhythm accuracy and technical facility. There were times when additional targets may have been identified, but the student teacher moved on to a different segment of rehearsal. There were not any instructional targets identified that involved two or more performance trials.

The frequency of teacher and student behaviors increased during the off-podium condition, suggesting a faster pace of instruction. Off-task behaviors, however, increased from 12 occurrences in the on-podium condition to 29 in the off-podium condition. The primary student behavior was full ensemble performance, although for much less duration when compared to the on-podium instruction. The mean duration of both teacher and student behaviors was much less and there were three occurrences of modeling during the off-podium condition.

An important note is that each of the modeling occurrences led to behavior issues. The student teacher was demonstrating a specific task in each occurrence, but the student responded with uncharacteristic sounds unrelated to the task at hand. While the student teacher did a good job of dealing with the situation, it diminished the effect of the modeling episode as it pertains to instruction. Similar to the on-podium condition, much of the feedback occurrences were congratulatory statements for completing a task; comments unrelated to any specific target or assessment technique. There were no section or individual performances, performance approximations, or marking music observed during the off-podium condition. A high number of student talk episodes were observed, but many of them were unrelated to the instructional episode that was taking place. While some improvement between the two conditions has been noted, the amount of instructional improvement observed was negated by the increase in off-task behaviors. With no multiple-performance-trial rehearsal frames to compare, there was little to no quality instructional comparisons to be made.

STUDENT TEACHER D

Instruction for this class began in the afternoon, although it was not the last class of the day. The ensemble was a heterogeneous group and was rehearsing music for an upcoming concert that was a few weeks away. The cooperating teacher was active in the instruction of this class, although he allowed the student teacher to work with the students independently for the duration of the observations, only intervening for a few minor disruptions. It was noted in the field notes that the student teacher had great command of the classroom and had good rapport

with the students. Additionally, the student teacher moved instruction along at a consistent pace for the duration of the observations.

There were 2 single-performance-trial rehearsal frames observed in the on-podium condition that included rhythm accuracy (2) as the instructional target. A multiple-performance-trial rehearsal frame was also identified during the observation, which included dynamics as the instructional target. Instruction within the multiple-performance-trial rehearsal frame involved 1:27 of rehearsal time, and included 5 episodes each of teacher talk and full ensemble performance. As with other student teachers in this study, additional target errors were observed and were overlooked or unattended to by the student teacher.

Outside of rehearsal frames, the student teacher moved rehearsal at a brisk pace, congruent with previous research involving experienced teachers in a beginning band setting (Nicholson, 2009). The primary teacher behavior was teacher talk, although there were a few information episodes. Additionally, there were a limited number of teacher questions, teacher feedback, and off-task behaviors observed. The mean duration of student behavior (14.9 seconds) was still high when compared to that of experienced or expert teachers in a similar setting (Thompson, 2006; Nicholson, 2009). There were no individual performances or marking music identified during the on-podium condition. Performance approximation (13) was used often during the observations, and there were a few episodes of student talk (5), although all of the student talk did not relate to the target area that was being addressed.

During the off-podium condition, single-performance-trial rehearsal frames were identified that involved rhythmic accuracy (3) as the target area. Additionally, there was 1 multiple-performance-trial rehearsal frame with rhythmic accuracy as the target. Analysis of the rehearsal frame indicates that the student teacher mentioned pitch accuracy and technical facility

targets during the rehearsal frame, but all of the subsequent performance trials were focused on rhythmic accuracy. Perhaps the student teacher heard an error and mentioned but did not feel the error warranted a performance trial, and no other mention of the additional targets were made throughout the rehearsal frame. There were additional targets present, however, the student teacher did not address those targets.

The student teacher predominantly used teacher talk as the primary teacher behavior when providing instruction. Information, feedback, questions, and off-task behavior were all observed, although many of them were generalized statements or questions, unrelated to any specific target. Full ensemble performance and section performance was used almost identically as the primary student behaviors, while performance approximation and student talk was identified with less frequency during the observations. Oddly, the mean duration of student behavior increased substantially from 14.9 seconds in the on-podium condition to 26.4 seconds during the off-podium condition, while the mean duration of teacher talk was the same. There were not any episodes of modeling identified during either the on-podium or off-podium conditions. There were moderate gains from the on-podium condition to the off-podium condition; however, given the level of student participation as discussed in chapter 4, stellar growth may have been negated due to the lack of modeling occurrences. Students were actively participating in the learning process. Had the student teacher seized those opportunities, more growth may have been experienced with instruction.

STUDENT TEACHER E

Instruction for this class began in the morning, but it was not the first class of the day. This class was one of the most engaged and well-behaved classes included in this study. The group was a heterogeneous group and was working on new material from an instrumental method book. The cooperating teacher was active in the instructional process throughout the observation by walking around to help the students stay focused. His involvement, however, was primarily limited to reinforcing positive behaviors, and he allowed the student teacher complete control of the class and instruction for the duration of the observation. The student teacher had excellent rapport with the students and there were limited disruptions during the observations.

During the on-podium condition, there were 6 single-performance-trial rehearsal frames identified that included the following instructional targets: pitch accuracy (3), posture/instrument carriage (2), and rhythm accuracy (1). Additionally, the student teacher addressed technical facility once and pitch accuracy an additional time, but there were not any performance trials associated with the target. There were not any multiple-performance-trial rehearsal frames identified during the on-podium condition. Similar to the other student teachers in this study, additional errors were present, but were not identified by the student teacher. Additionally, the student teacher moved on to another segment of the rehearsal without adequately addressing a target area. The lack of completing an instructional segment related to one target has become a theme within this study. Not only would additional performance trials associated with a target allow this research more information into the quality and type of instruction by student teachers in this setting, but also further assist students in developing a more complete understanding of what is expected of them in a rehearsal and performance. When targets are only partially

discussed, students may fail to understand the importance of working on a target until mastery has been achieved, which ultimately helps to solidify their understanding and improve their work ethic on fundamentals throughout their middle and high school years. In short, beginning band is a critical point in student instrumentalists' development and it is not a time to demonstrate that mediocrity is acceptable.

Teacher behaviors primarily included directives, while information, feedback, and questions were identified. There were long mean durations of modeling (26.0 seconds), while the mean durations of student performances was much less (12.6 seconds). The mean duration of student performance is still incongruent with that of experts (5.9), experienced (5.12) and novice teacher (5.83) from previous research (Thompson, 2006; Nicholson, 2009) in the on-podium condition. The student teacher used full ensemble performance, while section performance was used on an individual basis. There were not any instances of individual performance, performance approximation, student talk, or marking music identified from the on-podium condition. Again, this is incongruent with the previous studies, which indicate expert, experienced, and novice teachers used individual performance consistently.

During the off-podium condition, 5 instructional targets were identified including rhythm accuracy (4) and air/breathing (1). The instructional targets did not result in multiple performance trials for students and were not analyzed as rehearsal frames. Posture/instrument carriage and technical facility was implicitly identified during the observation, but no subsequent performance trial was associated with the targets.

The student teacher primarily used directives to communicate with students, although there were some information episodes and a limited number of feedback and questions. As with previous student teachers in this study, feedback was generally limited to congratulatory

statements regarding the completion of a segment or phrase. The primary mode of performance was full ensemble performance, followed by section performance. Again, there were not any episodes of individual performance observed, which in a beginning band setting is surprising in that it is much easier to identify and correct mistakes on an individual basis. Most concerning was the absence of modeling episodes in the off-podium condition. While most experts would agree that walking around the room performing with their students is quality instruction, student teachers did not take their instruments with them when they stepped off the podium. Perhaps they were concerned with other elements of the rehearsal, but student teachers should be instructed to use their instruments as much as possible in a beginning band setting to demonstrate what is expected of the students. There was evidence that the student teacher improved during the off-podium condition. Teacher talk levels increased and were of shorter duration, and the mean duration of both teacher and student performance decreased, similar to expert instruction as discussed in throughout this study. While improvement has been noted in the off-podium condition, substantial improvement may have been negated due to the lack of modeling occurrences in the off-podium condition. Beginning band students must be shown how to play more often than told.

STUDENT TEACHER F

Instruction for this class began in the early afternoon. The class was temporarily relocated to a stage off of the gymnasium, where numerous distractions were noted. The students were a heterogeneous group and were working in an instrumental method book for the duration of the observations. As part of the instructional process, the class followed a pattern of clapping,

sizzling (performance approximation), and then performing on their instrument, often in sections. This pattern was used throughout the observations both on and off the podium and was not related to any specific instructional target, but rather a routine meant to establish repetitions. The students were cooperative learners and were active in the learning process, and the student teacher seemed to have great rapport with the students.

During the on-podium condition, there were 2 single-performance-trial rehearsal frames identified that included technical facility and posture/instrument carriage targets. There were not any instructional targets identified that involved two or more performance trials. As was the case with other student teachers, there were additional target errors that were not identified or left unattended, and many of the targets that were identified lacked completion, in that the students did not fully master the target prior to the student teacher moving on to a different segment of the rehearsal.

Teacher behaviors primarily involved directives, although a large number of information and question episodes were observed. A limited number of feedback, which was primarily congratulatory statements concerning the completion of a phrase or section, and off-task behaviors were observed. There were 5 occurrences of modeling during the on-podium condition. The field notes suggest that the student teacher felt comfortable modeling for the students, but most of the modeling occurrences were during the repetitions that was discussed earlier and were not directed toward a specific target. Student behaviors included primarily full ensemble performance, although there were a large number of performance approximations primarily related to the performance repetitions previously discussed. Additionally, there were a limited number of section performances, but there were not any individual performances, student talk, or marking music. The lack of individual performances has been discussed with previous

student teachers in this study, but it continues to be a theme throughout the study worth further investigation given its importance to beginning band instruction.

During the off-podium condition, there were 2 single-performance-trial rehearsal frames identified involving posture/instrument carriage and technical facility targets. Additionally, intonation was addressed during the observation but was not followed with any subsequent performance trial. A multiple-performance-trial rehearsal frame was also identified during the off-podium condition that involved dynamics. The duration of the episode was 41 seconds and full ensemble performance was used to resolve the issue. Similar to instruction in the on-podium condition, additional errors were present but overlooked or skipped by the student teacher and the targets that were addressed and followed by performance trials were left uncompleted or the error not fully resolved.

Teacher behaviors primarily involved directives in the off-podium condition, while information and question episodes were used moderately. Feedback and off-task behaviors were used on a limited basis. There were 5 episodes of modeling in the off-podium condition. It was noted that even while off the podium, the student teacher seemed comfortable walking with his/her instrument and playing the phrase or section as the student played. Full ensemble performance was the primary mode of performance, followed by section performance, individual performance, and performance approximation. There were no episodes of student talk or marking music identified in the off-podium condition. This student teacher was the first with whom individual performance episodes were observed. The episodes were primarily related to the repetitions discussed earlier, but the fact that individual episodes occurred is a positive improvement to instruction.

There were times with this student teacher when he/she would yell an instructional target as the students were playing. For example, the student teacher would perceive the students may have missed a dynamic marking and subsequently yell, "do not miss the forte," to suggest an error in dynamics. There were instances similar to this where the ensemble was not stopped and the error was not explicitly identified and rehearsed. Previously, emerging themes have been discussed related to not completing work on errors or moving to another segment before mastery of a target is achieved. Also discussed has been the lack of target identification across all student teachers. The issue described above, where student teachers implicitly identify targets but fail to adequately address the target is another theme that has been developing. Student teachers have performed in a college ensemble over the past several years where such occurrences may be common, given the performance level of the ensemble, but beginning band students have limited performance knowledge to make adjustments on the spot. In beginning band, each target must be identified explicitly, consciously rehearsed, and then reinforced frequently so that students have the best chance of mastering the target area. There have been some improvements noted from the on-podium condition to the off-podium condition; however, substantial improvements may have been limited due to the increase in student performance. As discussed throughout the study, experts talk more than students perform, and this student teacher failed to fully demonstrate those characteristics in the off-podium condition.

STUDENT TEACHER G

Instruction for this class began in the early afternoon. There were numerous distractions noted throughout the observation, but the student teacher did a satisfactory job of maintaining

structure and focus to the rehearsal. The student teacher's instruction followed a well-established routine where the student teacher moved quickly between instructional segments, and consistently drew students' attention to questions, directives, and information. The group was heterogeneous and was working out of an instrumental method book for the duration of the observation.

There were no single-performance-trial or multiple-performance-trial rehearsal frames identified during the on-podium condition. Similar to a number of other student teachers in this study, there were opportunities to address specific instructional targets, but the student teacher chose not to address them or did not identify the error. There were also moments where the student teacher identified a target implicitly by yelling a sentence or phrase to the students as they were playing. For example, the student teacher would yell "do not forget the rest" as a means of describing a potential error in rhythmic accuracy. As discussed with a previous student teacher in this study, beginning band students do not yet have the skill necessary to make immediate decisions related to their performance or the music being performed. As such, targets must be identified explicitly by stopping the ensemble, providing directives or information depending on the target, and then reinforced through performance as many times as necessary to master the target. Additionally, as the student teacher moved quickly through each instructional segment, he/she instantaneously counted off the next segment, essentially causing the observation to become one long instructional segment. While the consistent use of counting as a means to move instruction along seemed effective for classroom management, students seemingly moved through each segment without any knowledge of what they were playing or why they were playing it.

Teacher verbal behaviors primarily involved directives and information, while there were limited occurrences of feedback, questions, and off-task behavior. There were no modeling occurrences during the on-podium condition. Student performance was used substantially during the observations for long durations per episode. The primary mode of performance was full ensemble, while section performance was used as well. There were limited occurrences of student talk during the observation. Individual performance, performance approximation, and marking music were not identified during the observations of the on-podium condition. The long durations of student performances corroborate the lack of target identification during the on-podium condition. Students were in performance 53.1% of the observed time with a mean duration of 22.9 seconds per episode. While student performance is a necessary component in a band class, there was limited time to identify targets explicitly, or to discuss the performance and music to promote understanding of what is to be performed, why it is to be performed, and how it is to be performed.

During the off-podium condition, 2 instructional targets were identified that were followed by single performance trials. The instructional target was technical facility (2). There were no instructional targets identified that were followed with two or more performance trials. Similar to the on-podium condition, errors were present but were not identified by the student teacher. Additionally, with each episode of technical facility, the student teacher moved on to another segment of rehearsal without allowing students the time to master the technical error that was addressed. There was a moment where the cooperating teacher stopped the ensemble to address an error. The student teacher looked on as the cooperating teacher worked the ensemble briefly as the student teacher maintained the beat by clicking drum sticks together, and upon completion of the segment, the student teacher moved on with another segment of rehearsal.

Observed behaviors included primarily student performance during the off-podium condition. Student performance increased from 53% during the on-podium condition to 62% during the off-podium condition. This is incongruent with previous research that determined experienced teachers in a beginning band setting are more mobile during instruction and conduct less (Nicholson, 2009). Full ensemble performance, section performance, and individual performances were used during the observations. This student teacher was the second to use individual performances during the observations. The mean duration of both teacher talk and student performance decreased slightly between the on-podium condition to the off-podium condition to suggest a faster pace of instruction. While there has been quality improvements noted in the off-podium condition, there were no episodes of modeling occurrences identified during the observations.

In addition to the themes that have developed throughout this study, one additional theme has become apparent: the lack of modeling. Even with the limited identification of instructional targets, these student teachers are trained musicians who play their instruments well. Beginning band students, at the very least, should be hearing a quality sound throughout instruction, with or without explicitly identifying instructional targets. Such activities are congruent with previous research of expert and experienced teachers in a beginning band setting (Thompson, 2006; Nicholson, 2009).

STUDENT TEACHER H

Instruction for this class began in the morning and was the first class of the day for the students. The students were well rehearsed in classroom procedures and were active participants

in the learning process. The group was a large heterogeneous group that was preparing music for an upcoming concert that was a few weeks away. A number of students were pulled out of class by one of the teachers to work in a side room, but limited distractions were noted. The student teacher seemed to have great rapport with the students and the students were equally respectful and attentive to the student teacher, and were responsive to the student teacher's instruction throughout the observation. The participant had placed multiple instruments on stands beside the podium to use during instruction.

During the on-podium condition, 5 single-performance-trial rehearsal frames were identified which included the following instructional targets: rhythm accuracy (2), pitch accuracy, tempo, and dynamics. Additionally, a multiple-performance-trial rehearsal was identified in the on-podium condition, which focused on the rhythm accuracy target. The multiple-performance-trial rehearsal frame utilized 1:21 of the observed instructional time where the student teacher used teacher talk, modeling, and section performance to resolve the rhythmic errors. Similar to other student teachers in this study, there were additional errors noted throughout the observations that were overlooked or not addressed by the participant. Also, some of the targets that were addressed were left incomplete, where the student teacher moved on to a different segment of the rehearsal before the students were able to achieve mastery of the target.

There were similar durations between teacher and student behaviors, although teacher talk occurred slightly more frequently. With the exception of marking music, all categories of student behavior were used at least once during the on-podium observations. The student teacher moved instruction at a moderately fast pace, although the mean performance time for student performances were twice that of experienced teachers and experts from previous research (Thompson, 2006; Nicholson, 2009). The student teacher was one of only a few who used

individual performances during instruction, although a large number of both section and individual performances were part of a series of repetitions that were unrelated to any specific instructional target. As mentioned earlier, the student teacher had placed multiple instruments beside the podium for use during instruction. As a result, there were 6 episodes of modeling that occurred during the on-podium condition. The student teacher seemed comfortable using his/her instrument for instruction, and while many of the modeling instances were unrelated to any specific instructional target, it provided a means for students to hear quality tone, accurate pitch and rhythms, articulations, and to see quality technical facility, posture, and a number of other targets that were included in this study.

During the off-podium condition, there were 2 single-performance-trial rehearsal frames identified that included posture and pitch accuracy instructional targets. In addition, there were two multiple-performance trial rehearsal frames that included dynamics and rhythmic accuracy instructional targets. Subsequent student performances included full ensemble performances, section performances, and performance approximations. The student teacher used 2:20 of the total observed time focusing on the dynamics target, using full ensemble performance as the primary mode of student performance. The rehearsal frame focusing on rhythmic accuracy had duration of 2:24, where the student teacher used section performance and performance approximation as the primary modes of student performance. According to field notes, the student teacher was successful in attaining a high level of proficiency in student performance on both instructional targets. This student teacher was the first in this study to continue with instruction of a target until a high level of proficiency had been established. The student teacher used the white board to write rhythms where each student clapped the rhythm prior to performing it. While there was success with understanding the rhythmic accuracy target, there

were additional errors left unattended, whether by choice of the student teacher or lack of identification. While the student teacher attained a high level of success with instruction of the identified targets, there continued to be room for improvement in other areas that were associated with but not directly related to the target. An example is when the student teacher was working on rhythmic accuracy, students focused solely on performing an accurate rhythm, while their quality of tone was less than acceptable. Student teachers must be reminded that one element of performance builds on the other, and one must not be sacrificed in order to achieve success on the other.

The student teacher invested more time in student performance than teacher behaviors, which continues to be a theme among all student teachers in this study. There were numerous directives and information presented during the instruction, yet limited feedback, questions, and off-task behaviors were addressed. Full ensemble performance and section performance were identical in their use, while individual performance, performance approximation and student talk were used less frequently and were similar in both conditions. While the frequency of student performance decreased in the off-podium condition, the mean duration of the behavior increased, not establishing positive growth between the two conditions. Additionally, there was an episode of teacher conversation with students that was unrelated to instruction. The student teacher seemed to have great rapport with students, but the episode required the student teacher to regain focus on instruction, which limited the time students were engaged in instruction.

STUDENT TEACHER I

Instruction for this class began in the morning, but it was not the first class of the day for students. The group was a heterogeneous group who spent half of the observed time rehearsing music for an upcoming concert, while investing the latter half on new material from an instrumental method book. The cooperating teacher remained in the rehearsal for the duration of the observations, but allowed the student teacher complete control of instruction. The total observation time was less than that of the other student teachers, as there was an unannounced school event on the last day of the observations. Due to the timing of the observations, there was not an opportunity for additional recordings with the beginning band class.

During the on-podium condition, there were 8 single-performance-trial rehearsal frames identified that involved the following instructional targets: pitch accuracy, rhythm accuracy (3), dynamics (2), technical facility, and articulation. In addition, it was noted that the student teacher acknowledged articulation a number of times but no subsequent performance trial followed. There were no rehearsal frames identified that involved two or more student performance trials identified during the on-podium condition. Similar to all student teachers in this study, there were additional errors present throughout the rehearsal, but they were not identified or acknowledged by the student teacher. Additionally, of the targets that were identified, subsequent student performances were limited and did not allow the students to become proficient with the target prior to the student teacher moving to a different segment of the rehearsal. There were times when the student teacher stopped the ensemble to address a perceived error, but the comments were generalized and/or vague, often repetitious of a previous statement and the target was not followed with a student performance trial.

Teacher behaviors primarily involved teacher talk and information, while there was limited use of feedback, questions, and off-task behaviors observed. Full ensemble performance was used the most, followed by section performance and individual performance. There were not episodes of performance approximation, student talk, and marking music. Similar to other student teachers in this study, there were long durations of student performance compared to teacher talk, which is incongruent with previous research on experienced and expert teachers in a beginning band setting (Thompson, 2006; Nicholson, 2009). Over 60% of the observed time on the podium was devoted to student performance, with long mean durations of 18.50 seconds per episode. The pace of instruction was slow with only 1.9 episodes of performance per minute and only 3.1 episodes per minute of teacher talk. There were no modeling episodes observed during the on-podium condition, and only one episode of feedback.

During the off-podium condition, 3 single-performance-trial rehearsal frames were identified that included the following instructional targets: rhythm accuracy, dynamics, and tempo. There were no multiple-performance-trial rehearsal frames identified during the off-podium condition. There were moments where the student teacher discussed legato and marcato tonguing during instructional segments. Those discussions were not followed with performance trials. While tonguing is an important part of articulation and is certainly deserving of mention in a rehearsal, beginning band students struggle with the most basic aspects of articulation and differentiating between styles may be difficult. There were numerous opportunities during the observations for this student teacher to address errors, but he or she chose to focus on styles of tonguing while overlooking more basic fundamentals, such as quality of tone. Further, of the targets that were identified, student performance trials were stopped prior to the students becoming proficient on the target area. One additional note was that the student teacher moved

only a few feet away from the podium during the off podium condition. It is uncertain why the student teacher chose not to walk around the room. Perhaps the student teacher felt more comfortable conducting the ensemble as opposed to working with students on a more individual basis.

Teacher verbal behaviors primarily involved directives and information, while there was one episode each of positive feedback and off-task behaviors observed. Student behaviors included full ensemble performance, section performance, and individual performance. There were no episodes of performance approximation, student talk, and marking music observed during the off-podium condition. The student teacher invested 57.2% of the observed time in the off-podium condition in student performance, with mean duration of 19.3 seconds per episode. It became apparent with this student teacher that conducting the ensemble was favored over working to master specific instructional targets. Regardless of the limited number of targets identified, there was room to demonstrate quality performance sound, technique, and other aspects of performance, but there were no occurrences of modeling during the off-podium condition. In synopsis, limited improvements were noted between the on-podium and off-podium condition. Instruction, however, did not digress in the off-podium condition, suggesting the student teacher may have been comfortable with his/her process and being on versus off the podium had no effect on their instruction. Perhaps with some guidance on expert instruction in a beginning band setting, improvement may have been present.

A COMPARISON OF REHEARSAL FRAMES AMONG EXPERT, EXPERIENCED, NOVICE, AND STUDENT TEACHERS ON AND OFF THE PODIUM

To achieve a complete picture of the work associated with student teachers, it is necessary to compare the frequency and duration of rehearsal frames among the five groups, including expert teachers (Worthy & Thompson, 2009), experienced and novice teachers (Nicholson, 2009), and student teachers on and off the podium. While the mean frequency and duration cannot be directly compared due to the length of the recordings, the rate per minute for each rehearsal frame may be used for a more fair comparison. Also for comparison, the rate per minute of rehearsal frames with two or more student performance trials included expert teachers (.07), novice teachers (.06), experienced teachers (.08), student teachers in the on-podium condition (.01), and student teachers in the off-podium condition (.02). Single performance trial rehearsal frames for student teachers in the on-podium condition (.18) and off-podium condition (.15) may provide additional comparison, although the reporting of single performance trial rehearsal frames was not part of the investigation of expert, experienced and novice teachers (Worthy & Thompson, 2009; Nicholson, 2009). There was great disparity when comparing student teachers from both conditions with expert, experienced and novice teachers. As discussed throughout this study, the identification of rehearsal frames for analysis means the teacher stopped rehearsal to address a target error. Experienced teachers identified target errors at a slightly more rapid pace than did expert and novice teachers, and much more frequently than did student teachers in either condition. There was moderate improvement between the on-podium condition and the off-podium condition, with student teachers identifying target errors at a slightly more rapid pace while in the off-podium condition. Student teachers identified a number of target errors leading to single performance trial rehearsal frames, but single performance trial

rehearsal frames were not recorded in the investigation of expert, experienced, and novice teachers, not allowing a true comparison to be made.

While a true comparison of frequency and mean duration of multiple-performance-trial rehearsal frames cannot be made due to the low number of rehearsal frames identified during the observations of student teachers, a brief discussion is warranted. There were substantially fewer performance errors identified by student teachers than expert, experienced, and novice teachers during the on-podium condition. While the mean frequency and duration improved during the off-podium condition, the mean frequency continued to be well under that of expert, experienced, and novice teachers in a similar setting. Given the amount of time devoted to conducting the ensemble, as noted earlier in the chapter, perhaps there was less time available to address specific targets. Also discussed earlier in this chapter were the common themes that developed among all of the student teachers. One of the themes was the high number of performance errors that were overlooked or not addressed during both conditions. There were a number of errors that were present throughout the observations that needed to be addressed, but the student teacher did not acknowledge or otherwise work to improve the target areas. Another theme that has emerged was the inability of the student teacher to work on a target area until student proficiency was established. There were occasions where the student teachers would move to a different segment of the rehearsal without mastering the current identified target, and there were other times when the student teachers would improve the existing target at the detriment of other areas of performance of equal importance. As stated earlier, each target builds upon each other until mastery performance is achieved. As an example, student teachers must be told that rhythm accuracy may be worked on until it is proficient, but during the process, the quality of tone cannot be sacrificed as a result.

The first and second research questions asked:

1. What are the instructional targets of student teachers in beginning band settings?
2. Are there similarities in the distribution of instructional targets between the student teacher on the podium and the same student teacher off the podium?

Tables 5 and 7 from Chapter 4 report the frequency of instructional targets used in single-performance-trial rehearsal frames in both conditions, while tables 6 and 8 report the frequency of instructional targets in multiple-performance-trial rehearsal frames during both conditions. There were 34 instructional targets identified by student teachers on the podium during single-performance-trial rehearsal frames that included articulation (3), dynamics (3), intonation/tone (1), pitch accuracy (7), posture/instrument carriage (3), rhythm accuracy (10), technical facility (5) and tempo (2). The instructional targets identified by student teachers in multiple-performance-trial rehearsal frames during the on-podium condition included dynamics (1) and rhythm accuracy (1). Air/breathing, embouchure, multiple targets, other, and unidentified targets were not observed during the on-podium condition. During the off-podium condition, single-performance-trial rehearsal frames included the following targets: air/breathing (1), articulation (1), dynamics (3), intonation/tone (1), pitch accuracy (2), posture/instrument carriage (1), rhythm carriage (11), technical facility (5), and tempo (1). There were 4 instructional targets identified within multiple-performance-trial rehearsal frames that included dynamics (2) and rhythm accuracy (2). Air/breathing, embouchure, multiple targets, other, and unidentified targets were not identified during the off-podium condition.

Previous research (Nicholson, 2009) suggested that when novice teachers provide a performance model, they make use of their primary instrument, while many experienced teachers

use an instrument that is like the student's instrument to which they are modeling. This may have implications to the current study in that novice teachers, like student teachers, may not feel comfortable playing on instruments other than their primary instrument; likewise, they may feel uncomfortable addressing many of the targets that require pedagogical knowledge of those instruments. For example, embouchure formation on a trombone is quite different than the embouchure on the clarinet. If the student teacher's primary instrument is trombone, the student teacher may not feel comfortable modeling or bringing up discussion of any pedagogical knowledge such as embouchure formation on the clarinet, which was one of the targets not identified during either condition in this study. Again, a number of errors were present but not acknowledged by the student teachers. Perhaps a question to be asked is why a student teacher chose one target over another, when multiple errors are apparent within a rehearsal? Further, as multiple targets was not identified during this study in either condition, what prevented the student teacher from addressing multiple targets during the rehearsal? There are a number of other questions that could be asked, but researchers must determine the root cause as to why so many errors were left unattended by the student teacher. Each of the student teachers are competent musicians with proficient skills on their instruments. If one identifies an error with their own playing, would it not be possible to hear the same error among other players?

Ultimately, there were similarities in the distribution of instructional targets between the on-podium condition and the off-podium condition. Among all student teachers in all on-podium rehearsal frames, there were 36 total instructional targets identified, while 30 total instructional targets were identified in all rehearsal frames in the off-podium condition.

The third research question asked:

> 3. Are the distributions of instructional targets observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?

The distribution of instructional targets for student teachers is dissimilar to the distribution of targets for expert teachers presented in the Worthy and Thompson (2009) study and for novice teachers from the Nicholson (2009) study. There were 36 instructional targets identified by student teachers on the podium during single-performance-trial and multiple-performance-trial rehearsal frames that included, articulation (3), dynamics (4), intonation/tone (1), pitch accuracy (7), posture/instrument carriage (3), rhythm accuracy (11), technical facility (5) and tempo (2). During the off-podium condition, there were 30 instructional targets in both single-performance-trial and multiple-performance-trial rehearsal frames including, air/breathing (1), articulation (1), dynamics (5), intonation/tone (1), pitch accuracy (2), posture/instrument carriage (1), rhythm accuracy (13), technical facility (5), and tempo (1). Embouchure, multiple targets, other, and unidentified targets were not identified during either of the two conditions. Experts (Worthy & Thompson, 2009) in a beginning band setting identified the following targets within multiple-performance-trial rehearsal frames: air/breathing (1), articulation (2), multiple targets (6), pitch accuracy (7), posture/instrument carriage (4), rhythmic accuracy (3), technical facility (1), and tempo (1). Dynamics, embouchure, intonation/tone, other, and unidentified were not identified as stand-alone targets within rehearsal frames for expert teachers in a beginning band setting. According to Worthy and Thompson (2009), “Pitch Accuracy was addressed in four of the six multiple target rehearsal frames and was paired with air/breathing, articulation, intonation/ tone, technical facility and embouchure” (p. 34).

For a more direct comparison, Cavitt (2004) reported that multiple targets were more often observed in high school rehearsals than middle school, while Worthy (2003) reported that multiple targets were observed more often in college rehearsals than in high school rehearsals (Worthy, 2003). During both conditions of student teachers, multiple targets were not identified as part of the current investigation. In the Nicholson (2009) study, multiple targets were the predominant target for experienced teachers, while multiple target and pitch accuracy were identified more often with novice teachers.

In summary, the top targets for expert teachers were pitch accuracy, followed by multiple target, posture/instrument carriage, and rhythm accuracy. With experienced teachers, the top targets were multiple targets, while novice teachers' top targets were pitch accuracy and multiple targets. Student Teachers' top targets from the on-podium condition were rhythm accuracy, followed by pitch accuracy and technical facility. During the off-podium condition, the top targets were rhythm accuracy, followed by technical facility and dynamics.

The fourth and fifth research questions asked:

> 4. What are the frequency and durational measures of specific student and teacher behaviors observed in selected rehearsal frames?
> 5. Are the frequencies and durations of teacher and student behaviors similar between the student teacher on the podium and the same student teacher off the podium?

During the on-podium condition, there were 2 multiple-performance-trial rehearsal frames selected for further analysis. Table 9 in Chapter 4 reports the frequency, rate, duration, percentage, and mean duration for all behaviors observed during multiple-performance-trial rehearsal frames. The rate per minute for each of the recorded behaviors include teacher talk

(4.29), full ensemble performance (1.79), section performance (.36), and modeling (.36), while the frequency of specific behaviors included teacher talk (8), followed by full ensemble performance (5), section performance (2), and teacher modeling (1). The two rehearsal frames had a total duration of 2:48, but when broken down by subcategory, included teacher talk (1:21), teacher modeling (:04), full ensemble performance (:49), and section performance (:24). Individual performance, performance approximation, student talk, and marking music were not observed within rehearsal frames in the on-podium condition. Teacher talk had the highest rate per minute (4.29), while teacher modeling and section performance had the lowest (.36). Full ensemble performance had the greatest mean duration (24.50 seconds), followed by section performance (24.00), teacher talk (6.75), and teacher modeling (4.0).

During the off-podium condition, there were 4 multiple-performance-trial rehearsal frames selected for further analysis. Table 10 in Chapter 4 reports the frequency, rate, duration, percentage, and mean duration for all behaviors observed during multiple-performance-trial rehearsal frames. The rate per minute for each of the recorded behaviors include teacher talk (3.33), full ensemble performance (1.18), section performance (.15), modeling (.07), and performance approximation (.30), while the frequency of specific behaviors in order from highest frequency to lowest included teacher talk (45), full ensemble performance (16), performance approximation (4), section performance (2) and teacher modeling (1). The rehearsal frames had a total duration of 9:31, but when broken down by subcategory, included teacher talk (4.32), full ensemble performance (3:40), performance approximation (:29), section performance (:15), and teacher modeling (:05). Individual performance, student talk, and marking music was not observed in rehearsal frames during the off-podium condition. Teacher talk had the highest rate per minute (3.33), followed by full ensemble performance (1.18), while teacher modeling

had the lowest (.07). Full ensemble performance had the greatest mean duration (13.75), followed by section performance (7.50), performance approximation (7.25), teacher talk (6.04), and teacher modeling (5.00).

When comparing the behaviors between the two conditions, the rate per minute for full ensemble performance was similar between the conditions, while section performance was at a faster pace. Both section performance and modeling was at a moderately slower pace. The frequency of rehearsal frames was two times greater from the off-podium condition (4) to the on-podium condition (2). As such, it should be expected that some of the durations and frequencies would increase. While the frequency of rehearsal frames were doubled during the off-podium condition, the frequency of teacher talk increased from 8 in the on-podium condition to 45 in the off-podium condition, as full ensemble frequency increased from 5 to 16 between the two conditions. Performance approximation was not observed during the on-podium condition, yet was observed 4 times during the off-podium condition. The mean duration of full ensemble performance decreased substantially from the on-podium (24.50) to the off-podium conditions (13.75), as did section performance from the on-podium condition (24.00) to the off-podium condition (7.50). The mean duration of teacher talk and teacher modeling were similar between the two conditions. Overall, while there were similarities and differences in behaviors between the two conditions, the substantial increase in teacher talk, full ensemble performance, and performance approximation in the off-podium condition is noteworthy.

The sixth research questions asked:

> 6. Are the frequencies and durations of teacher and student behaviors observed in the present study similar to those of experts in a beginning band setting and other levels of band instruction?

As reported in Chapter 4, Thompson (2006) investigated expert instruction in a beginning band setting and found 275 directives and 105 total episodes of modeling. The duration of directives was 46:37 with a rate per minute of 3.5 and mean duration of 11.05. Student behavior included 138 episodes of full ensemble performance with duration of 12:36 and a mean duration of 5.90 seconds. Individual performance was the least identified with 21 episodes with duration of 01:21 and a mean duration of 2.9. The Nicholson (2009) study produced similar results. Novice teachers' frequency of teacher talk was 232, while experienced teachers' was 360. Modeling was similar with 43 total episodes for novice teachers, but 106 episodes for experienced teachers. Section performance was the most frequent student behavior in both experienced and novice teachers with 114 and 70, respectively. The duration of full ensemble performance was 06:39 with a mean duration of 5.12. The duration of individual performance was 03:26, while the mean duration was 3.75.

It is difficult to make comparisons of the frequency among the previously mentioned studies because of the differences in recording and rehearsal frame times. The rate per minute provides an opportunity to compare the current study with that of experts (Worthy & Thompson, 2009), and experienced teachers and novice teachers (Nicholson, 2009) in a beginning band setting. From the on-podium condition, the rate per minute for teacher talk for student teachers was 2.86, while using 48.21% of the recorded time, followed by full ensemble performance (.7),

teacher modeling (.4), and section performance (.4). Expert teachers talked at a moderately faster pace for teacher talk (3.5), and each of the other behaviors including teacher modeling (1.4), full ensemble performance (1.8), section performance (.7), and individual performance (.3), which was not observed with student teachers. Experienced teachers had a slower pace for most categories including teacher talk (.8), modeling (.2), and section performance (.24), while novice teachers were at an even slower pace with teacher talk (.5), modeling (.09), and section performance (.2).

During the off-podium condition, student teacher instruction improved slightly, with numbers more similar to that of experts. Student teacher's rate per minute for teacher talk (4.7) was a little faster than expert (3.5), while teacher modeling was a little slower for student teachers (.07). Full ensemble performance (1.7) was very similar to experts, yet section performance (.2) was at a slower pace. Performance approximation (.4) was observed only during the off-podium condition and was not reported in the study of experts in beginning band.

The most notable comparison among experts, experienced, and novice teachers' rehearsal frames with that of student teachers was the low number of modeling episodes in both conditions. Expert, experienced, and novice teachers used modeling frequently in beginning band rehearsals, but student teachers used limited modeling during the instructional episodes. Other dissimilarities include teacher talk and student performances were used at a more rapid pace for expert, experienced, and novice teachers, when compared to student teachers in both conditions. While student teachers improved greatly in the pace of instruction when in the off-podium condition, much work is still needed. Finally, a noteworthy finding in this study was the long mean durations of student performance for student teachers in both conditions, when compared to expert, experienced, and novice teachers in other studies. The mean duration for full ensemble

performance was 24.50 seconds, while section performance was 24.00 seconds during the on-podium condition. In the off-podium condition, the numbers improved substantially for full ensemble performance (13.75 seconds) and section performance (7.50 seconds). While there were substantial improvements between the on-podium and off-podium conditions, they continue to be far behind that of expert teachers (5.9), experienced teachers (5.12), and novice teachers (5.83).

SUMMARY AND RECOMMENDATIONS

As reported throughout the study, there were improvements, many substantial, noted for student teachers from the on-podium condition to the off-podium condition. When student teachers were off the podium, teacher talk increased, but with shorter durations, while overall teacher and student behaviors were of shorter durations. These improvements suggest that student teachers were more direct while talking to students and worked more quickly to resolve issues as they occurred, both of which are characteristic of experts in a beginning band setting as discussed throughout this study (Thompson, 2006; Nicholson, 2009). While it is difficult to be specific on the exact amount of growth that took place in the off-podium condition for student teachers, any growth is positive growth.

As discussed earlier in Chapter 5, a number of recurring themes have emerged during this study. While every student teacher throughout the study has had similarities and differences, the emerging themes are common characteristics discovered among all of the student teachers in both the on-podium and off-podium conditions. The numbers for each of the student teachers have been reported in Chapter 4 and then discussed earlier in Chapter 5. The numbers were then

compared to expert, experienced, and novice teachers in a similar setting. Using all the information that was reported throughout the study, the emerging themes center around the questions of what happened and where does it lead us from here?

First, there were a number of errors that were missed or not identified by all student teachers in both conditions. Did the student teacher merely overlook the errors? If not, is the student teacher adequately trained to identify certain errors and subsequently rehearse the targets? Multiple targets, for example, was one of the most observed targets for expert, experienced, and novice teachers in other studies. Student teachers did not identify multiple targets simultaneously in either condition throughout the study. Why then would student teachers not have the skills to address multiple targets during instruction? The answer to that question is unknown, but is worth further investigation. There were times throughout the study where numerous targets were apparent but not acknowledged by the student teacher. In each setting, there were numerous sound quality issues that would have been easy to address. Did student teachers not understand that quality of sound is important to instrument performance? Did student teachers not understand how to resolve those issues? The answers are unknown, but there were times when errors were identified but the student teacher either identified the error incorrectly or the method of instruction chosen to help the student improve the error was incorrect. The best example of that is when a student teacher recognized poor sound quality and from their own performance should have identified the student as having incorrect posture and poor breath support, but instead asked the student to hold the pitch longer, whereas holding the pitch longer is a rhythmic issue, not an issue of sound quality. The correct response should have been the student teacher asking the student to sit up straight, take a deeper breath and release more air into the instrument. The student teacher, nonetheless, addressed an error unrelated and

for reasons unknown. Certainly, student teachers must improve their craft and learn to develop better error identification and instruction through practice, but student teachers are supposed to be competent musicians; incorrect pitches, rhythmic issues, and many other potential errors are the same across instruments, so why would student teachers incorrectly make decisions they should be prepared to make? The numbers indicate that student teacher instruction moved closer to that of expert and experienced teachers when in the off-podium condition. How much improvement could have been observed had all of the potential instructional targets been identified and resolved correctly? A continued focus on this would be beneficial to both the student teacher and ultimately, the beginning band students in their charge.

Second, a number of targets were identified but left incomplete, or the student teacher moved on to a different rehearsal segment before allowing the students to attain proficiency on the target. This scenario is often related to the differences in opinion in what is considered adequate or good enough as it pertains to performance abilities. One of the questions developed for future research is to determine what student teachers believe is good enough in an instrumental setting. How close to perfection must a phrase be performed to move on to another section? Some teachers and student teachers may dismiss inaccuracy with needing more time to develop. How much time is needed to develop a quality tone? Quality sounds are paramount in beginning band classes and should be addressed immediately and without sacrifice if students are to improve adequately over time.

Worthy and Thompson (2009) found that expert teachers use a variety of techniques to address specific target areas, including modeling on primary and secondary instruments. Student teachers were exactly opposite of experts. The participants of this study were engaged in student performance, in some cases, substantially more than in teacher talk, when in fact to achieve

proficiency on a target, a teacher must explain the target clearly and then reinforce the target through performance. There were limited occurrences of modeling throughout this study, while expert teachers use modeling often and on a consistent basis. Students can often imitate what they hear even when they cannot understand an explanation, which is why modeling is so effective at the beginning band stage. Modeling also provides another instructional tool to help students master a specific target area. The most apparent questions to ask is where did student teachers learn the effectiveness of the decisions they make when working with students in an instrumental setting? Which knowledge base, theoretical or pedagogical, do student teachers employ when making decisions in an instrumental setting? In a college setting, very seldom do they witness the conductor leave the podium to address an error, nor do they witness the conductor model on an instrument, and for obvious reasons. Do student teachers even recognize the implicit instruction that is taking place in their college ensembles? When, then, do student teachers learn to make connections between what they learn in their classes and instrumental rehearsals with how they teach students? Perhaps a better aligned curriculum between their instrumental methods and private lessons courses, in consultation with their music education professors would help to achieve some improvement in this area.

Third, given the limited attention span of middle school-aged children, having students mark reminders in their music would seem appropriate at this stage of development. In fact, teachers at all levels require students to mark in their music to remember tempo changes, accidentals, and many other changes that may occur in music. Students in college rehearsals are told to mark in their music to remember certain performance aspects of the piece. Why then was marking music not observed with any of the student teachers in either condition in this study?

Continued exploration into this topic is warranted for student teachers planning to teach at any level of music performance.

Fourth, there was great disparity between the amount of time invested in student performance and time devoted to teacher talk. Worthy and Thompson (2009) found that expert teachers in beginning band talk more than students perform. Student teachers, on the other hand, felt they were to rehearse the band, especially during the on-podium condition. In fact, beginning band is not the same as a high school or other upper level band class. Students in beginning band need a lot of individual attention that focuses on clear targets. They need clear expectations and numerous drills on fundamentals as they develop to become proficient instrumentalists. In short, beginning band students need specific instructional statements and modeling followed by short performance episodes for reinforcement.

Finally, there was a lack of specificity in comments related to and unrelated to instructional targets. As an example, there were moments in the rehearsal where the student teacher would yell as the students were performing, "do not miss the sharp," referring to a possible error in pitch accuracy. A better approach would be to wait until the error actually had occurred, stop the ensemble and say to the students, "that is a C# at measure 196, we need to try that again" until mastery as been achieved. Beginning band students need specific explanations of targets. They do not yet have the performance skill to instantly modify their performance, but must still work on each target independently. Student teachers in this study treated their instructional time as a rehearsal where conducting the performance was their primary focus. In beginning band, much time is needed explaining performance expectations, how to solve performance errors, and how to perform their instruments correctly.

In summary, there is evidence to suggest that student teachers improved in many areas of instructional delivery when they remained off the podium when providing instruction to beginning band students. While there continues to be many areas where improvement is still needed, student teachers should be told in their college classes that experts remain off of the podium while providing instruction to beginning band students, and they too should begin preparing their lesson plans to remain mobile while providing instruction in a beginning band class. This, however, is impractical given the lack of instructional and experiential knowledge of student teachers. As such, student teachers must be trained what to do in a beginning band class, which includes remaining off of the podium as much as possible when providing instruction in the setting. In short, student teachers have been sensitized to conducting ensembles; they were conducted in high school and at the university level. They know and understand that conductors conduct, and believe it to be the best model for instruction in a band setting; however, they must be desensitized from conducting in a beginning band setting, as those students require more attention and work. As student teachers begin to develop skill in both teaching and preparation for teaching off the podium, those skills will transfer to on-podium instruction, further enhancing the quality of instruction taking place now and in the future when they are directors of their own ensembles.

LIST OF REFERENCES

Allen, R. M. (1994). Evolution of novice through expert teachers' recall: Its relationship to the frequency of their reflection. (Doctoral Dissertation, University of New Orleans). Dissertations & Theses: A&I. (Publication No. 9511361).

Alley, J. M. (1980). The effect of self-analysis of videotapes on selected competencies of music therapy majors. Journal of Music Therapy, *17*, 113-132.

Arnold, J. A. (1995). Effects of competency-based methods of instruction and self-observation on ensemble directors' use of sequential patterns. *Journal of Research in Music Education, 43*, 127-138.

Arthur, J. R. (2002). Experienced teachers use of time in choral rehearsals of beginning and advanced choirs. (Doctoral Dissertation, The Florida State University). Dissertations & Theses: A&I. (Publication No. AAT 3109261).

Asmus, E. P. (1986). Achievement motivation characteristics of music education and music therapy students as identified by attribution theory. *Bulletin of the Council for Research in Music Education, 86*, 71-85.

Becher, R. M., & Ade, W. E. (1982). The relationship of field placement characteristics and students' potential field performance abilities to clinical experience performance ratings. *Journal of Teacher Education, 33*(2), 24-30.

Becker, W., Engelmann, S., & Thomas, D. (1975). *Teaching 2: Cognitive learning and instruction*. Chicago, IL: Science Research Associates.

Bergee, M. J. (2005). An exploratory comparison of novice, intermediate, and expert orchestral conductors. *International Journal of Music Education, 23*, 23–26.

Bergee, M, J. (1992). A scale assessing music student teachers' rehearsal effectiveness. *Journal of Research in Music Education, 40*, 5-13.

Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research, 35*(5), 463-482.

Berliner, D.C. (1986). In pursuit of the expert pedagogue. *Educational Researcher, 15*(7), 5-13.

Beynon, C. (1998). From music student to music teacher: negotiating an identity. *Studies in Music from the University of Western Ontario, 17*, 83-105.

Blocher, L. R. (2002). Teaching for moments that matter. In R. Miles (ed.), *Teaching Music Through Performance in Band*, *4* (pp. 2-13). Chicago, IL: GIA Publications.

Blocher, L., Greenwood, R., & Shellahamer, B. (1997). Teaching behaviors of middle school and high school band directors in the rehearsal setting. *Journal of Research in Music Education, 45*, 457-469.

Bolin, F. (1988). Helping student teachers think about teaching. *Journal of Teacher Education, 39*(2), 48–54.

Bowers, J. (1997). Relationship of sequential patterns of instruction to music teaching effectiveness of elementary education majors. *Journal of Research in Music Education, 45*, 428-443.

Brand, M. (1985). Research in music teacher effectiveness. *UPDATE: Applications of Research in Music Education, 3*(2), 13-16.

Brand, M. (1982). Effects of student teaching on the classroom management beliefs and skills of music student teachers. *Journal of Research in Music Education, 30*, 255-265.

Brand, M. (1977). Effectiveness of simulation techniques in teaching behavior management. *Journal of Research in Music Education, 25*, 131–138.

Brandt, R. S. (1986). On the expert teacher: A conversation with David Berliner. *Educational Leadership, 44*(2), 4-9.

Brittin, R. V. (2005). Preservice and experienced teachers' lesson plans for beginning instrumentalists. *Journal of Research in Music Education, 53*(1), 26-39.

Brophy, F. & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (pp. 328-375). New York, NY: Macmillan.

Buell, D. S. (1990). Effective rehearsing with the instrumental music ensemble: A case study. (Doctoral Dissertation, University of Wisconsin, Madison). Dissertations & Theses: A&I. (Publication No. AAT 9025698).

Bruer, J. (1993). The mind's journey from novice to expert. *American Educator, 14*(3), 38-46.

Burrack, F. W. (2001). Using reflection and video self-confrontation to uncover the instructional thought development of student teachers in instrumental music. (Doctoral Dissertation, University of Illinois at Urbana-Champaign). Dissertations & Theses: A&I. (Publication No. AAT 3017031).

Butler, A. (2001). Preservice music teachers' conceptions of teaching effectiveness, microteaching experiences, and teaching performance. *Journal of Research in Music Education*, *49*(3), 258-272.

Cavitt, M. E. (2004). Information in rehearsal frames targeting intonation performance. *Journal of Band Research, 40*, 38-52.

Cavitt, M. E. (1998). A descriptive analysis of error correction in expert teachers' instrumental music rehearsals. (Doctoral Dissertation, University of Texas at Austin). Dissertations & Theses: A&I. (Publication No. AAT 98379170).

Coleman, T. R. (1999). The music student teaching experience: Making connections. (Doctoral Dissertation, University of Cincinnati) Dissertations & Theses: A&I. (Publication No. SST 9961813).

Colwell, R. & Richardson, C. (Eds.). (2004). The new handbook of research on music teaching and learning: A project of the Music Educators National Conference. New York, NY: Oxford University Press.

Cofer, R. S. (1998). Effects of conducting-gesture instruction on seventh-grade band students' performance response to conducting emblems. *Journal of Research in Music Education, 46*(3), 360-73.

Cutietta, R. (2007). Content for music teacher education in this century. *Arts Education Policy Review, 108*(6), 11-20.

Crane, J. E. (1894). Normal School Music, *The Music Review*, February, 1894.

Davis, V. W. (2006). Beginning music education students' and student teachers' opinions of skills and behaviors important to successful music teaching. *Contributions to Music Education, 33*(1), 27-40.

Dewey, J. (1934). *Art as experience*. New York, NY: Perigee.

Dewey, J. (1904). The relation of theory to practice in education. In National Society for the Scientific Study of Education, *Third Yearbook*. (pp. 9-30). Chicago, IL: University of Chicago Press.

Dorfman, J. (2010). The relationships between time usage during instrumental lessons and preservice teachers' self-evaluations. *Journal of Music Teacher Education, 19*(2), 89-99.

Dreyfus, H. L., & Dreyfus, S. E. (1986). *Mind over machine: The power of human intuition and expertise in the age of the computer*. Oxford, Basil Blackwell.

Duke, R. A., & Stammen, D. (2011). *Scribe 4* (for observation and assessment). Austin, TX: Learning & Behavior Resources.

Duke, R. A. (1999). Measures of instructional effectiveness in music research. *Bulletin of the Council for Research in Music Education,* no. 143, 1-48.

Duke, R. A., & Madsen, C. K. (1991). Proactive versus reactive teaching: Focusing observation on specific aspects of instruction. *Bulletin of the Council for Research in Music Education, 108*, 1-14.

Enloe, L. D. (2011). Effects of clarinet embouchure on band director tone quality preferences: An exploratory study. *UPDATE: Applications of Research in Music Education, 29*(2), 4-12.

Fant, G. R. (1996). An investigation of the relationships between undergraduate music education students' early field experience and student teaching performance. (Doctoral Dissertation, University of Arizona). Dissertations & Theses: A&I. (Publication No. AAT 9713421).

Forsythe, J. L., Kinney, D. W., & Braun, E. L. (2007). Opinions of music teacher educators and preservice music students on the National Association of Schools of Music standards for teacher education. *Journal of Music Teacher Education, 16* (2), 19–33.

Goolsby, T. W. (1999). A comparison of expert and novice teachers' preparing identical band compositions: An operational replication. *Journal of Research in Music Education, 47*(2), 174-187.

Goolsby, T. W. (1997). Verbal instruction in instrumental rehearsals: A comparison of three career levels and preservice teachers. *Journal of Research in Music Education, 45*, 21–40.

Goolsby, T. W. (1996). Time use in instrumental rehearsals: A comparison of experienced, novice, and student teachers. *Journal of Research in Music Education, 44*, 286-303.

Graber, K. C. (1995). The influence of teacher education programs on the beliefs of student teachers: General pedagogical knowledge, pedagogical content knowledge, and teacher education course work. *Journal of Teaching in Physical Education*, *14*, 157–178.

Grant, J. W. & Drafall, L. E. (1991) Teacher effectiveness research: A review and comparison. *Bulletin of the Council for Research in Music Education, 4*, 12-34.

Guyton, E., & McIntyre, D. J. (1990). Student teaching and school experiences. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 514-534). New York, NY: Macmillan.

Hendel, C. (1995) Behavioral characteristics and instructional patterns of selected music teachers. *Journal of Research in Music Education, 3*, 182-203.

Hilliard, Q. (2001). Diagnosing problems behind poor tone in young bands. *The Instrumentalist, 55*, 74-76.

Housner, L.D., & Griffey, D.C. (1985).Teacher cognition: Differences in planning and interactive decision-making between experienced and inexperienced teachers. *Research Quarterly for Exercise and Sport, 56*, 45-53.

James, R. L. (1968). A survey of teacher training programs in music: From the early music conventions to the introduction of four-year degree curricula. (Doctoral Dissertation, University of Maryland). Dissertations & Theses: A&I. (Publication No. 7023295).

Kelly, S. (2003). A time-use analysis of student intern verbal and non-verbal teaching behavior. *Contributions to Music Education, 30*, 55-68.

Kelly, S. N. (1997). Effects of conducting instruction on the musical performance of beginning band students. *Journal of Research in Music Education*, *45 no. 2*, 295-305.

Kostka, M. J. (1984). An investigation of reinforcements, time use, and student attentiveness in piano lessons. *Journal of Research in Music Education, 32*(2), 113-122.

Kotchenruther, M. J. (1998). A descriptive study of the rehearsal priorities of middle school string teachers. (Doctoral Dissertation, University of Michigan). Dissertations & Theses: A&I. (Publication No. AAT 9840579).

Krueger, P. J. (1985). Influences of the hidden curriculum upon the perspectives of music student teachers: An ethnography. (Doctoral Dissertation, University of Wisconsin, Madison) Dissertations & Theses: A&I. (Publication No. AAT 8511153).

Legette, R. M. (1997). Enhancing the music student-teaching experience: A research review. *UPDATE: Applications of Research in Music Education,16*(1), 25-28.

Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology, 78*(2), 75-95.

Lethco, L. M. (1999). Preparing undergraduate music majors to teach beginning instrumentalists: The effects of self-evaluation, teacher observation, and performance-oriented instructional approaches on teacher behaviors and pupil responses. (Doctoral Dissertation, Louisiana State University and Agricultural and Mechanical College). Dissertations & Theses: A&I. (Publication No. AAT 9925534).

Maclin, J. P. (1993). The effect of task analysis on sequential patterns on music instruction. *Journal of Research in Music Education, 41*(1), 48-56.

Madsen, C. K., Standley, J. M., Byo, J. L., & Cassidy, J. W. (1992). Assessment of effective teaching by instrumental music student teachers and experts. *UPDATE: Applications of Research in Music Education, 10*(2), 20-24.

Montemayor, M. & Moss, E. A. (2009). Effects of recorded models on novice teachers' rehearsal verbalizations, evaluations, and conducting. Journal of Research in Music Education, 57(3), 236-251.

Morrissey, D. J. (2003). A history of early field experience in the music division of the school of music at the University of Illinois at Urbana-Champaign. (Doctoral dissertation, University of Illinois at Urbana Champaign). Dissertations & Theses: A&I. (Publication No. AAT 3101929).

Murray, R. (2011). Instructional planning and rehearsal practices of three selected high school band directors. (Doctoral Dissertation, University of Mississippi). Dissertations & Theses: A&I. (Publication No. AAT 3461308).

Napoles, J. (2006). The relationship between type of teacher taught and student attentiveness. *Journal of Music Teacher Education, 16*(1), 17-19.

National Association of Schools of Music. (2010-2011). *NASM Handbook*. Retrieved from http://nasm.arts-accredit.org/index.jsp?page=Standards-Handbook

National Council for Accreditation of Teacher Education. *NCATE Unit Standards*. Retrieved from http://www.ncate.org/Portals/0/documents/Standards/NCATE%20Standards%20200 8.pdf.

Nettle, E. B. (1998). Stability and change in the beliefs of student teachers during practice teaching. *Teaching and Teacher Education, 14*(2), 193-204.

Nicholson, D. (2009). *Instructional content of experienced versus novice teachers in beginning band* (Unpublished master's thesis). University of Mississippi, Oxford.

Paul, S. J., Teachout, D. J., Sullivan, J. M., Kelly, S. N., Bauer, W. I., & Raiber, M. A. (2001). Authentic-context learning activities in instrumental music teacher education. *Journal of Research in Music Education*, *49*(2), 136.

Pearson, B. (2001). Selecting music for the young band. In R. Miles & T. Dvorak (ed.), *Teaching Music Through Performance in Beginning Band* (pp. 45-49). Chicago, Il: GIA Publications.

Phillips, C. A. (1925). The History of Teacher Training in the South. *Peabody Journal of Education, 2*, 313-325.

Polk, J. A. (2006). Traits of effective teachers. *Arts Education Policy Review, 107*, 23-30.

Porter, A. C., & Brophy, J. E. (1988). Good teaching: Insights from the work of the Institute for Research on Teaching. *Educational Leadership, 45*(8), 75–84.

Price, H. E. (1992). Sequential patterns of music instruction and learning to use them. *Journal of Research in Music Education, 40, 14-29.*

Price, H. E. (1989). An effective way to teach and rehearse: Research supports using sequential patterns. *UPDATE: Applications of Research in Music Education, 8*(1), 42-46.

Price, H. E. (1983). The effect of conductor academic task presentation, conductor reinforcement, and ensemble practice on performers' musical achievement, attentiveness, and attitude. *Journal of Research in Music Education*, *31 no. 4*, 245-257.

Prickett, C. A. & Duke, R. A. (1992). Evaluation of instruction by musicians and nonmusicians assigned differential observation tasks. *Bulletin of the Council for Research in Music Education, 113*, 41-50.

Ramsey, D. S. (2001). Beginning band-goals and objectives: Teaching music through performance in band – Beginning band. In R. Miles& T. Dvorak (ed.), *Teaching Music Through Performance in Beginning Band* (pp. 13-26). Chicago, IL: GIA Publications.

Rideout, R., & Feldman, A. (2002). Research in music student teaching. In R. Colwell & C. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp. 874-886). New York, NY: Oxford University Press.

Rohwer, D. & Henry, W. (2004). University teachers' perceptions of requisite skills and characteristics of effective music teachers. *Journal of Music Teacher Education, 13*(2), 18-27.

Schmidt, M. (1998). Defining "good" music teaching: Four student teachers' beliefs and practices. *Bulletin of the Council for Research in Music Education, 138*, 19-46.

Schmidt, M. E. (1994). Learning from experience: Influences on music student teachers' perceptions and practices. (Doctoral Dissertation, University of Michigan). Dissertations and Theses: A&I. (Publication No. AAT 9423310).

Sehmann, K. (2000). The effects of breath management instruction on the performance of elementary brass players. *Journal of Research in Music Education, 48*, 136-150.

Sogin, D. W. & Wang, C. C. (2002). An exploratory study of music teachers' perception of factors associated with expertise in music teaching. *Journal of Music Teacher Education, 57*(1), 12-18.

Stegman, S. F. (2007). An exploration reflective dialogue between student teachers in music and their cooperating teachers. *Journal of Research in Music Education, 55*(1), 65-82.

Stegman, S. F. (2001). Perceptions of student teachers in a secondary choral classroom. *Journal of Music Teacher Education, 11*,(1), 12-20.

Tabachnick, B. R. (1980). Intern-teacher roles: Illusion, disillusion, and reality. *Journal of Education, 162*, 122-137.

Teachout, D. J. (2001). The relationship between personality and the teaching effectiveness of music student teachers. *Psychology of Music, 29*, 179-92.

Teachout, D. J. (1997). Preservice and experienced teachers' opinions of skills and behaviors important to successful music teaching. *Journal of Research in Music Education, 45*, 41-50.

Thompson, B. S. (2006). *Observation and analysis of expert teaching in beginning band* (Unpublished master's thesis). The University of Mississippi, Oxford, MS.

Tillema, H. H. (2000). Belief change towards self-directed learning in student teachers: immersion in practice or reflection on action. *Teacher and Teacher Education, 16*(5), 575-591.

United States Department of Education. (2000). *Goals 2000: Educate America act*. Retrieved from http://www2.ed.gov/legislation/GOALS2000/TheAct/index.html.

United States Department of Education. (2001). *No child left behind act of 2001*. Retrieved from http://www2.ed.gov/nclb/landing.jhtml.

Verrastro, R. E. & Leglar, M. (1992) Music teacher education. In R. COLWELL (Ed.), *Handbook of research on music teaching and learning* (pp. 676-696). New York, NY: Schirmer.

Waxman, H. C., & Walberg, H. J. (1986). Effects of early field experiences. In J. D. Raths and L. G. Katz (Eds.), *Advances in teacher education* (Vol. 2 pp. 165 – 184). Norwood, NJ: Ablex.

Waymire, M. (2011). Behavioral analysis of directors of high-performing versus low-performing high school bands. (Doctoral dissertation, University of Mississippi). Dissertations & Theses: A&I. (Publication No. AAT 3479034l).

Westerman, D. A. (1990). A study of expert and novice teacher decision making: An integrated approach. Journal *of Teacher Education, 42*(2), 292-395.

Wink, R. L. (1970). The relationship of self-concept and selected personality variables to achievement in music student teaching. *Journal of Research in Music Education, 18*, 234-241.

Winkle, C. (1999). The ins and outs of clarinet tone. *The Instrumentalist, 53*, 44-54.

Witt, A. C. (1986). Use of class time and student attentiveness in secondary instrumental music rehearsals. *Journal of Research in Music Education, 34*, 34-42.

Worthy, M. D. (2006). Observations of three expert wind conductors in college rehearsals. *Bulletin of the Council for Research in Music Education, 168*, 51-61.

Worthy, M. D. (2003). Rehearsal frame analysis of an expert wind conductor in high school vs. college band rehearsals. *Bulletin of the Council for Research in Music Education, 156*, 11-19.

Worthy, M. D. (2002). Master the fundamentals. *Teaching Music, 10*, 40-43.

Worthy, M. D., & Thompson, L. (2009). Observation and analysis of expert teaching in beginning band. *Bulletin of the Council for Research in Music Education, 108*, 25-37.

Wubbels, T. (1992). Taking account of student teachers' preconceptions. *Teaching and Teacher Education, 8*(2), 137-149.

Yarbrough, C., & Hendel, C. (1993). The effect of sequential patterns on rehearsal evaluations of high school and elementary students. *Journal of Research in Music Education, 41*, 246–257.

Yarbrough, C., & Price, H. E. (1989). Sequential patterns of instruction in music. *Journal of Research in Music Education, 37*, 179-187.

Yarbrough, C., & Price, H. E. (1981). Prediction of performer attentiveness based on rehearsal activity and teacher behavior. *Journal of Research in Music Education, 29*(3), 209-217.

LIST OF APPENDICES

APPENDIX A

Email to University Supervisor

Date, 2012

[Name of College/University Supervisor]
[College/University Name]
[College/University Address]
[City, State] [Zip Code]

Dear [College/University Supervisor name]:

My name is Eric Bonds, and I am a candidate for the Ph.D. in Music Education at the University of Mississippi. I am currently working on my dissertation entitled, "An Analysis of Student Teachers' Instruction in a Beginning Band Setting," and am requesting your assistance to supply a potential pool of student teacher participants for the study.

This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482. The study involves observing and video recording student teachers working with beginning band students in a rehearsal setting. Upon video recording my observations, my dissertation will utilize rehearsal frame analysis to identify the instructional targets of student teachers, and their resulting teaching behaviors addressing the identified targets. Those data will be compared both on and off the podium.

Please provide me with the names, addresses, phone numbers, and email addresses of your students who are currently engaged in their student teaching practicum in a beginning band setting, regardless of the level (4^{th}, 5^{th}, 6^{th}, or 7^{th} grades). I will then contact the student teacher to complete a questionnaire that will allow me to develop a final participant list. In line with the Institutional Review Board policies at the University of Mississippi, the student teacher must volunteer to participate in the study. To ensure anonymity, each participant will be coded with a letter to prevent anyone from being aware of a participants' identity. All recordings will be stored by the researcher and will not be offered to or viewed by others without consent from the participant.

Should you have any questions or concerns, please contact me at [researcher's phone number] or [researcher's email address]. Thank you for your time and willingness to assist me with this investigation.

Sincerely,

Eric Bonds, Ph.D. candidate in Music Education
University of Mississippi

APPENDIX B

Email Questionnaire to Potential Student Teacher Participants

Date, 2012

[Name of Student Teacher]
[College/University Name]
[College/University Address]
[City, State] [Zip Code]

Dear [Student Teacher name]:

My name is Eric Bonds, and I am a candidate for the Ph.D. in Music Education at the University of Mississippi. This correspondence is an invitation to participate in a study of student teachers working with beginning band students. This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

If you are selected to participate in this study, there will not be anything you need to do other than teach. I will video record two segments with you on the podium, and will record two segments while you are off the podium. Again, you will only be required to teach, such is the requirement for successful completion of your student teaching practicum. I will then use the recording to ascertain and report on the teaching behaviors and instructional targets of your teaching.

To further assist me with developing a pool of participants for this study, a few questions need to be answered that will allow me to narrow the list of candidates that will participate. Please respond to the following questions so that I may be provided a snapshot of information related to you. Please be as accurate as possible in providing answers, although some of the information will require you to provide a best guess.

In line with the Institutional Review Board policies at the University of Mississippi, you must volunteer to participate in the study. To ensure anonymity, your name and video recording will be coded with a letter to prevent anyone from being aware of your identity. All recordings will be stored by the researcher and will not be offered to or viewed by others without your consent.

Future emails will provide detailed information regarding my visit. Thank you for agreeing to participate, and please return answers to the questions below by simply responding to this email.

Sincerely,

Eric Bonds, Ph.D. candidate in Music Education
University of Mississippi

APPENDIX C

Questions to be answered (Please utilize as much space as needed to fully answer the questions).

1. What is your age?
2. What is your sex?
3. Is this your first student teaching practicum? If not, please explain.
4. Prior to enrolling in student teaching, approximately how many hours have you engaged in teacher observations of a music class?
5. Prior to enrolling in student teaching, approximately how many hours have you engaged in teaching activities such as micro-teaching segments, summer marching band staff (full group or sectional), or other activities where you were allowed to teach students or peers.
6. Please provide the number of students in your beginning band class.
7. Are the band classes distributed by section, other groupings, or homogenous classes?
8. How many days per week do the students have band class, and how many minutes are each period?

APPENDIX D

Email to Student Teacher Participants

Date, 2012

[Name of Student Teacher]
[College/University Name]
[College/University Address]
[City, State] [Zip Code]

Dear [Student Teacher name]:

After analysis of the questionnaire that you provided, you have been selected to participate in research of student teaching in a beginning band setting. My dissertation is entitled, "An Analysis of Student Teachers' Instruction in a Beginning Band Setting." This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

I have attached consent forms to this email. Please print and complete the questions prior to my arrival. Also, I requested your cooperating teacher provide me with information to the demographic make-up of his/her school. I would like for you to follow-up with him/her to ensure that information is ready for me upon my arrival.

Below you will find the mutually agreed upon dates and times to which I will be at your school; during the interim, please feel free to contact me at [researcher's phone number], or [researcher's email address] should you have questions or concerns (especially if a conflict arises with the date).

[date] Arrive at [school name] Middle School on [day of week, month, numerical date].
I will check in at your school's main office as advised at [time]
Set up camera prior to start of class at [time]. Video 10-minute teaching segment on the podium, and 10-minute teaching segment off the podium.
Gather recording materials, and check out of school at main office.

I appreciate your willingness to participate in this study, and I look forward to meeting with you soon.

Sincerely,

Eric Bonds, Ph.D. candidate in Music Education
University of Mississippi

APPENDIX E

Email to Cooperating Teacher

Date, 2012

[Name of Cooperating Teacher]
[School Name]
[School Address]
[City, State] [Zip Code]

Dear [Cooperating Teacher name]:

My name is Eric Bonds, and I am a candidate for the Ph.D. in Music Education at the University of Mississippi. It is my hope you are having a great semester, and I sincerely appreciate your willingness to advance music teacher training through hosting a student teacher.

I am currently engaged in research for my dissertation. After communicating with your current student teacher, [Student Teacher Name], and his/her University Supervisor, [University Supervisor name], I am scheduled to visit your school on [date of visit] to observe and record [Student Teacher name] engaged in instruction with beginning band students. It is my intent to video-record four 10-minute teaching segments by the student teacher; two on the podium and two off the podium.

One request that I have of you, as required by the University of Mississippi, is to provide me a current school demographic enrollment report that is printed on school letterhead and signed by your principal. I truly appreciate your help, and I hope this does not create a burden.

I plan to arrive at the school early on [date of visit] to allow ample time for us to converse and sufficient time for me to answer any questions you may have. Below are the dates and times of my visit, that have been mutually agreed upon between myself and the student teacher; during the interim, please feel free to contact me at [researcher's phone number], or [researcher's email address] should you have questions or concerns:

[date] Arrive at [school name] Middle School on [day of week, month, numerical date].
I will check in at your school's main office as advised at [time]
Set up camera prior to start of class at [time]. Video 10-minute teaching segment on the podium, and 10-minute teaching segment off the podium.
Gather recording materials, and check out of school at main office.

I look forward to visiting your class on [day of week, month, numerical date], and I thank you for sharing your band room for this research.

Sincerely,

Eric Bonds, Ph.D. candidate in Music Education
University of Mississippi

APPENDIX F

Procedures Student Teacher Participants

1. Communicate with your cooperating teacher to determine the best time to record the instructional segments.

2. Upon agreeing on a date and time for the recording, the researcher will arrive at the school to begin the recorded observations.

3. Upon setting up the recording device, the researcher will determine whether you are to begin instruction on or off the podium for the first and subsequent recordings.

4. You are to provide instruction to students just as you would if recorded observation was not taking place.

5. You are to provide 10 minutes of instruction from on the podium and 10 minutes of instruction off the podium. This is to be done for two consecutive class meetings.

6. Please do not include any announcements, whether class or school related, during the 10-minute recording. You will use the complete 10 minutes to provide instruction.

7. Do not focus your attention on the recording; pretend as if the researcher is not in the room.

8. Once complete, the researcher will pack up the recorder and all associated materials and depart for the day.

9. Should you have any questions or concerns regarding any of the instructions or procedures, please ask.

VITA

Eric Bonds graduated from Tishomingo County High School in Iuka, Mississippi. Upon graduating with a Bachelor of Music Education degree from North Georgia College and State University, Eric taught at Roswell High School in the Fulton County School System of Atlanta, Georgia. While in the Fulton County System, Eric also taught 4th and 5th grade bands at Sweet Apple Elementary, and assisted with 6th, 7th, and 8th grade bands at Elkins Pointe Middle School, while completing the Master of Music Education degree at Boston University. Eric returned to Mississippi in 2009 to attend the University of Mississippi to complete the Ph.D. in Music, under the instruction of Dr. Alan Spurgeon and Dr. Michael Worthy. Eric has taught at all levels of education, most recently as a Clinical Assistant Professor of Music Education at Auburn University.