

UNIVERSITY OF CAPE COAST

IMPACT OF GHANAIAN BASIC SCHOOL BAND DIRECTORS'  
REHEARSAL STRATEGIES ON STUDENTS' PERFORMANCE

JOHN-DOE YAO DORDZRO

2017

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BY

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Thesis submitted to the Department of Music and Dance of the Faculty of  
Arts, College of Humanities and Legal Studies, University of Cape Coast, in  
partial fulfillment of the requirements for the award of Doctor of Philosophy  
Degree in Music Education

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## **DECLARATION**

### **Candidate's Declaration**

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Name: John-Doe Yao Dordzro

Signature..... Date:.....

### **Supervisor's Declaration**

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:..... Date.....

Name:.....

Co-Supervisor's Signature..... Date:.....

Name:.....

## **ABSTRACT**

There has been a concern about the quality and depth of the musical leanings accruing from school musical performances. The concern in Ghana is the level of technical ability students are able to achieve and how instructors are able to help their students develop acceptable technical control over the musical instruments they are studying. Unfortunately, no study has been done in this area in Ghana. Employing a mixed methods design with a sample of 10 Basic School Bands and 90 scores obtained from three judges' ratings of three band performances, the present study sheds light on the neglected issues of wind instrumental pedagogy in Ghana, by examining the impact of basic school band directors' rehearsal strategies on students' performance. Analysis of codes generated from videotapes of rehearsal sessions, field notes, and interviews revealed that teacher-directed instruction was the most utilized instructional category. However, in band instructors' attempt to reach their instructional goals and objectives, some teachers emphasized staff notation in their teaching while others taught by rote method. Out of the ten bands, only two bands' performance scores fell within the average mark for tone/intonation. Four bands performed averagely well on technique and all ten bands performed poorly on interpretation. There was a significant difference between rehearsal strategies employed and students' performance. There was also a strong positive relationship between performance scores and rehearsal observation scores.

## **KEY WORDS**

School Band

Rehearsal Strategies

Instrumental Music Education

Music Teaching Styles

School Band Directors

Performance

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## **DEDICATION**

To my dear wife, Edna and our lovely son, Elikem.



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## **LIST OF ACRONYMS AND ABBREVIATIONS**

<i>JHS:</i>	Junior Secondary School
<i>SHS:</i>	Senior Secondary School
<i>IRB:</i>	Internal Review Board
<i>MENC:</i>	Music Educators National Conference
<i>PTA:</i>	Parent Teacher Association
<i>KMEA:</i>	Kentucky Music Educators Association
<i>MI:</i>	Multiple Intelligence
<i>IQ:</i>	Intelligence Quotient
<i>ANOVA:</i>	Analysis of Variance
<i>PEF:</i>	Performance Evaluation Form
<i>SPSS:</i>	Statistical Package for the Social Sciences

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background to the Study**

Throughout its history, the Music Education profession has devoted much, if not most of its energies to teaching young people to sing and play instruments (Reimer, 2009). To this day, singing is the major form of music involvement in most Ghanaian schools while instrumental instructions take the minority, existing in few private and mission schools in big cities (Dordzro, 2012).

Band musical activities are a positive element in school life and an integral part of assemblies and other corporate events (Zdzinski, 2013). School Band programmes across Ghana vary in size, instrumentation and ability levels, but often share similar rehearsal structures and goals. These rehearsal strategies have been well established through a long history and tradition dating back to the nineteenth century (Beecham, 1841). Band directors in Ghana tend to look towards the past when seeking guidance on rehearsal strategies despite the vast literature available on proposed alternatives in philosophy and practice which can be found among the scholarly literature on band.

The fact that some basic schools in Ghana have provided an opportunity for their pupils to learn to play a band instrument is unique among basic schools since just a handful of schools can provide their pupils with this potential musical experience due to the poor economic status of schools. It is difficult for the average Ghanaian child to get three square meals a day, let alone purchase expensive musical instruments. The few fortunate schools that

have bands in Ghana have collections of “Marching band” musical instruments. According Rickels (2012), “a marching band is an activity consisting of a group of instrumental musicians who generally perform outdoors and incorporates some type of marching with their musical performance. Instrumentation typically includes brass (trumpet, cornet, French horn, trombone, euphonium, tuba), woodwinds (clarinet, saxophone, oboe, piccolo), and percussion (bass drum, snare drum, tenor drum cymbal) instruments.” (p. 56)

The importance of the band directors’ delivery as a determinant of the success or failure in school instrumental music programmes cannot be overemphasized. Several studies have been conducted to determine the components that contribute to effective instrumental music education and in this process, many variables and challenges, components of effective teaching have received attention by music education researchers. Among the general variables shown to influence student learning and performance include an instructor’s teaching style, pedagogical techniques, personal attributes, and classroom environment (Madsen, Standley & Cassidy, 1989; Steele, 2010; Waller, 1965; Yarbrough, 1975). Personal characteristics attributed to effective teaching include a teacher’s enthusiasm, energy level, sense of humor (Fox & Beamish, 1989; Kelly, 2007), experience (Madsen & Cassidy, 2005), and personality (Gordon & Hamann, 2001; Kelly, 2007; Madsen, Standley, Byo, & Cassidy, 1992; Rohwer & Henry, 2004; Teachout, 1997, 2001; Yarbrough, 1975). Instructional behaviours include a teacher’s delivery style, delivery pace, creativity, flexibility (Fox & Beamish, 1989), the desire to help others (Gordon & Hamann, 2001), proximity to students (Madsen *et al.*,

1989), and the extent students are involved in the learning process (Fox & Beamish, 1989).

Knowing very well that the musical instruments that constitute the ensemble under discussion are not originally from our part of the world, I deem it fit to add a little historical perspective to this discussion by addressing the history of wind bands, how they found their way into Africa, and especially how these instruments found their way into Ghana, for that matter, Ghanaian schools. The discussion below follows the following pattern: A brief history of Brass band music in Ghana, and Brass band music in Ghanaian schools.

### **A brief history of brass band music in Ghana**

Among the earliest musical activities of the 19<sup>th</sup> century associated with the British settlements in Cape Coast were the military brass and fife bands. Brass band music in Ghana can be traced as far back to the establishment of the regimental ‘native orchestra’ the British set up at the Cape Coast Castle in the 1830s that played western military marches, polkas and dance music. However, this band did not play local songs (Beecham, 1841). This changed after 1873 when the first of 7000 soldiers from the English speaking West Indies were stationed at Cape Coast and the neighboring Elmina Castle, to help the British in their 1873-1901 war against the inland Ashanti Kingdom (Aboagye, 1999). These West Indian soldiers naturally had regimental brass bands and in their spare time they played early forms of calypsos and other Afro-Caribbean music. Not surprisingly Afro-Caribbean music resonated with the local *Fanti* brass band musicians who had

obtained their skills from military personnel. At first, these local musicians simply copied the West Indians clave rhythms and melodies.

Despite this initial imitation phase, Ghanaian brass band performers later moved on to develop their own distinct “*adaha*” music (it is considered the earliest form of highlife music performed in Ghana. It was created by the blend of syncopated march music fused with Caribbean and local Ghanaian music). “*Adaha*” utilized local melodies and bell rhythms and was played in both syncopated 4/4 time and, using the hemiola techniques, in polyrhythmic 6/8 time. In short, Black Caribbean music acted as a catalyst for Ghanaian brass band musicians to indigenize their own music (Collins, 2016).

Mensah (1960) notes that two late 19<sup>th</sup> century local brass bands from Elmina were the Lions Soldiers and Edu Magicians and these included *adaha* music in their repertoires, as well as imported marches, polkas and calypsos. These and the others that followed were street bands whose members had colourful uniforms (red-rimmed black shorts and jackets and red caps with tassels) that were borrowed from the ‘zouave’ uniforms worn by the West Indian Regiment on ceremonial occasions. It should be mentioned that there were objections to *adaha* and its street parades by the Europeans. In 1888 Reverend Kemp, one of the European colonial priests at that time, described the sound of drum and *fife* bands as ‘tormenting’ and warned that allowing Sunday school processions to be led by them would “ultimately lead to the ballroom, the heathen dance, and other worldly amusements” (Boonjazer-Flaes & Gales, 1991, p. 13). Then, in 1908 the district Commissioner of Cape Coast, A. Foulkes, put a curb on the five local brass bands of the town from playing their ‘objectionable native tunes’ as these, he claimed, led to

competitive quarrelling, obstruction of roads, drinking and dancing (Letter from District Commissioner's Office, 16 March 1909 as cited in Collins 2011).

Despite European colonial and missionary protests, these local marching bands spread like wildfire from the coastal Fanti area into southern Ghana, in both urban and even the rural areas. As a result, from the early 1900s and up until the 1930s, brass bands were the principal popular music ensembles of Ghana, until they were eclipsed by elite dance orchestras and a 'poor-man's copy' of *adaha* brass band music known as '*konkoma*' or '*konkomba*' (Collins, 1992).

Other scholars also traced the spread of brass band music in Ghanaian schools back to the beginning of the 20th century. Flolu and Amuah (2003) noted the following:

By the beginning of the 20<sup>th</sup> century, having recognized the musical enthusiasm of the Gold Coast people, the missionaries began to import some Western instruments for the purpose of enhancing church musical activities. Harmoniums and, later, church organs were brought in to accompany hymn singing... School brass bands and fife bands started to emerge in many towns and villages. These activities, combined with those of the regimental bands of the forts and the sea shanties and folk songs of the sailors, began to influence the public. Many native musicians came together to form orchestras, concert bands and brass bands from which the Highlife later grew (p. 9).

With this assertion, one would get the impression that the proliferation of brass band music in Ghana will by now be at its peak with several town bands and schools having well designed and organized school music programmes as seen in the United States, Asia and other European countries. But this is not the case. Despite the important role brass band music plays in the Ghanaian community, today only few private and mission schools have some band instruments and one or two town bands are scattered here and there. In times past, brass band music featured prominently in social gatherings such as church festivities, processions, demonstrations, festivals, funerals, outdoorings, engagements, weddings, opening ceremonies and other state events; basically the same roles the few bands in existence today still play. According to Fo Atsu, a famous brass band owner and a wind instrument repairer in Ho, a city in the Volta Region of Ghana, who is currently residing at Kasoa:

the brass band and other such bands which were mainly responsible for such performances in the township have lately changed their music style. They now prefer to play highlife music using guitars and other instruments that are used by dance band groups to the disadvantage of the wind instruments of brass bands (personal interview, 5<sup>th</sup> February, 2015).

This for me sums up the low status of brass band music in Ghana today as compared to two or three decades back. There have been quite a number of very vibrant and famous bands in the 1960s, 70s, 80s and 90s in Ghana, but today most of these bands are nowhere to be found. This was vividly captured by Professor Kwesi Yankah, Pro-Vice Chancellor of the University of Ghana

(2006-2009), and Mr Ben Mensah, former Municipal Chief Executive of Agona West Assembly 2008-2012 (both citizens of Duakwa, who took the initiative and commitment towards the formation of bands to train the youth) statements at the inauguration of the Agona Duakwa Brass Band that, the occasion was meant to rekindle brass band music, which reached its peak between 1960 and 1980. Prof Yankah then continued to emphasize that the Agona area of the Central Region was once the treasure bed of brass band music in Ghana and that the emphasis on the youth this time was meant to ensure the continuity and sustenance of the musical tradition from one generation to another. The latter statement supports the assertion that town bands have largely died out, as compared to the 60s, 70s, 80s and early 90s. There are some brass band activities associated with the Greater, Eastern, and Western regions. In the Central Region (especially in Agona Swedru, Winneba and Cape Coast) it is associated with brigade bands of the Methodist church, masquerade parades, demonstrations and health walks. But for the Volta Region of Ghana, brass bands are associated with the Catholic and Evangelical Presbyterian Churches where they play very important roles such as accompaniment for congregational hymns and fund raising events. Famous bands such as; the Agona Kwanyaku, Swedru, Winneba, Keta, Aflao, Afife, Likpe and Denu bands are no longer as vibrant as we knew them to be (Dordzro, 2012).

But all hope is not lost since individuals and corporate bodies are doing their very best to revive brass band music back to its glory days. A typical example of such an effort by corporate bodies to revive brass band music was the launch of a national brass band competition at Agona Swedru in the

Central Region of Ghana which was held at the Swedru Sports Stadium. This competition was organised by Dateline Marketing Company and was co-sponsored by Kasapreko.

According to Adam (2008 in press), three brass band groups from Swedru, Winneba and Agona Kwanyako participated in the competition. The three brass bands lighted up the spirits of the people in the streets and brought back some good memories. The event was heavily patronized by both the youth and the elderly of the Swedru township who found in it an opportunity to satisfy their craving for this type of music which they used to be fond of but which has been dying gradually. In my opinion, the positive attitude of the people toward the event was a clear statement that they still cherish their brass band music which some time ago enabled them dance to their local ‘adaha’ and other traditional styles of dancing.

Launching the festival, Mr. S K Boafo, Minister for Chieftancy and Culture (2006-2009) said brass band groups will now be encouraged and nurtured into holding annual festivals as event tourism to draw people from other countries to come and watch (Adam, 2008). He opined that even though brass band was a relic of our colonial past it has been adapted and integrated into our culture in a way that it has become authentically Ghanaian to the admiration of the people who brought it.

Prominent individuals in the Ghanaian society are also making considerable efforts to contribute their quota to the revival of brass band music in Ghana. One notable example is Kofi J.S. Gbolonyo, an assistant professor of music at University of Columbia (2010). He established a music academy called “Nunya Music academy” (first campus) at Dzodze, in the Volta Region,



where they are giving special training to children interested in playing any wind instrument. The academy has a well organized regimental band that performs at various events. Below are two pictures of the Nunya Music Academy band.



*Figure 1: Nunya Music Academy band (Pictures retrieved from Kofi J.S. Gbolonyo's facebook page, 3<sup>rd</sup> November, 2013)*

### **Brass band music in schools**

In Ghana, school bands can only be found at the Basic and Senior High School levels but not in colleges or the other tertiary institutions except, in the Universities where music is offered. I would like to state that school band projects in Ghanaian basic schools are not part of the schools' official curricula but can better be described as what Adentwi & Sarfo (2011, p. 16) termed as an "extra-curricular" activity. Therefore, the establishment of a band in a school is a sole prerogative of the head teacher, Parent Teacher Association (PTA), proprietors (in the case of private schools), churches (in the case of mission schools), or benevolent societies. Since school band

programmes are not part of the schools' official curricula, rehearsals are normally scheduled either early morning 6am to 7.30am, during break period, or after class hours each day, or even weekends, in order not to interfere with regular academic work (Dordzro, 2012).

The school bands have a collection of musical instruments that can best be described as a “marching band.” Figure 2, for example, presents a photograph of a school band performing during a school event.



*Figure 2: School Band performing during a school Event*

*(Picture taken in 2015 during one of my visits to schools in the Accra metropolis)*

Based on the above, I can confidently say that all school wind bands in Ghana can be referred to as marching bands since their performances match the description above. Modern-day Ghanaian school marching bands consist of various combinations of the following instruments: trumpet, cornet, second trumpet or French horn, tenor trombone, bass trombone, euphonium, tuba, saxophone, clarinet, flutes, oboe and percussions such as snare drum, bass drum, cymbal and tenor drum.

School bands in Ghana are usually under the direction of one or two band directors who are experts in wind/percussion instruments. Not all band directors/instructors have formal musical training. We have people who are appointed into such positions based on their musical experience rather than qualification (for example retired police or military personnel or any individual who has knowledge in this area is called upon to help). In the same way, we have band directors who hold Master's degrees, Bachelor's degrees or a Diploma in Music from one of the public universities in Ghana except for a few band instructors who are fortunate enough to have had the opportunity to be sponsored by their respective schools to take short courses in the area of wind ensemble pedagogy abroad.

Although some students learn to play an instrument prior to entering a school or a school band, students generally start daily band classes from classes two or three for basic schools and form one for the senior high schools. What usually happens is that pupils who had a band experience in the basic school opt for Senior High Schools that have school bands, consequently resulting in continuous school band participation. The beginning band students usually make up a band based upon their class, which may then be broken up into sections such as trumpeters to one side, snare drummers to the other, to provide better instrument-specific instruction.

School bands are not that common in public schools in Ghana due to the poor financial status of the schools and the Ghanaian economy at large. School bands in Ghana are generally similar to those in the United States and the United Kingdom in terms of instrumentation, although pure brass bands are more commonplace among Ghanaian schools.

School bands are normally found in private (schools established by individuals or groups independent from the government) and mission schools (schools established by the missionaries) in Ghana these days, partially because parents and proprietors are becoming aware of the benefits their wards and schools respectively can derive from participating in music. Both public and private schools organize bands as a medium of “advertisement” for their schools and some as a business venture. Often, the Parents Teacher Associations (PTA) of the various schools come into agreement to raise funds for such projects. Sometimes donor agencies, old student’s associations of the various schools, individuals, and community members also help in providing the schools with some of the instruments. Most school bands have some instruments available for the students to practice with, but do not have enough for every band member. Therefore, what happens is that parents who really want their children to play in the school band and of course, have the resources may purchase the instrument for their wards, which they bring along with them to school anytime they have band rehearsal.

Usually, large percussion instruments, sousaphones and contrabass clarinets and other expensive woodwinds are not common in Ghanaian school bands due to lack of funds. School bands in Ghana follow some sort of dress code (which is usually reflective of the school’s colour) for performances. Dress requirements for band performances vary greatly from one school to another or even from one band to another in the same school. Expensive items like marching uniforms are usually owned by the schools. Some school bands may require the purchase of matching t-shirts or polo shirts with the band or school’s name for each band member- these are mostly provided by PTA in

collaboration with the school administration or donations from benevolent societies and individuals.

School bands in Ghana are organized in a very informal fashion with students earning no credits for participation in school instrumental music group. No curriculum for band has been implemented for school bands in Ghana till date. Consequently, school band directors are left largely on their own when determining the instructional content of their lessons and rehearsals. Typically, instructional materials consist of fingering and positional charts of the valve and slide instruments but not band method or instruction books.

The band music performed reflects mostly folkloric and choral traditions of Ghana, typically consisting of military tunes (slow and quick time marching songs), hymns, patriotic songs and arrangements of existing works such as folk tunes, highlife, contemporary instrumental works by Ghanaian composers and local gospel tunes. School bands attend events/programmes such as; speech and prize giving days of their schools and other schools, Independence Day parades, weddings, funerals, graduation ceremonies of their schools and other schools, sports festivals, school worship, school carol services, anniversaries of their schools and other schools , school fun fair programmes and many other events of both educational and social value.

### **Statement of the Problem**

Exposing students to a wide range of musical experiences is a major goal of music education (Hui, 2009; Wiggins, 2001). For that reason, I say *ayikoo* (congratulations) to the few schools in Ghana that are trying their possible best to provide their students with some instrumental music

experiences. However, exposing students to a wide range of musical experiences is not our ultimate aim as music educators, but, our success depends “on our pursuit of significant values... It depends equally on how well we teach” (Reimer 2009, p. 189). The quality of instrumental instruction available to students cannot be compromised in this process since the rehearsal methods employed by a school band director are among the most important factors in determining the course and the quality of a student’s instrumental music education (Fortney, Boyle, & DeCarbo, 1993).

Learning to play a musical instrument may be both rewarding and frustrating for the young or beginning student. As with many music instruments, the western wind family also presents challenges and difficulties for the beginning student, which may limit the appropriate development of skills necessary for success among young players when learning to play. Often, young musicians have difficulty developing skills necessary to play and perform on instruments of the wind family at an acceptable musical level as indicated by the national standards for middle school and high school students in the US (Prodan, 2005). According to these standards devised by the Music Educators National Conference (MENC, 1996), a student in grades five through eight participating in an instrumental ensemble is expected to perform with “good posture, good playing position, and good breath, bow, or stick control,” and with “expression and technical accuracy” at a music difficulty level of two on a scale of one to six (Music Educators National Conference, 1996, p. 66-67). Specifically, students should be able to perform without hesitation or errors, using appropriate playing position and posture, with accurate intonation and rhythm, and proper tone quality, and “demonstrate an

understanding of dynamics, phrasing, style, and expression” (MENC, 1996, p. 66-67).

There has been a long-standing concern about the quality and depth of the musical leanings accruing from school musical performances due to the absence of an in-depth curriculum for band instruction in our tertiary and teacher training institutions. At the tertiary level, music is studied in three of the five state universities in Ghana. However, only one - University of Education, Winneba, is mandated with the responsibility to train teachers for both the basic and secondary levels (Flolu, 2004). But as I said earlier, there is no curriculum for school band instruction even in the only institution responsible for the training of teachers. Students are only allowed to offer a principal instrument (western or African) known as ‘Applied music’. Despite the aforementioned deficiency in our teacher education, there is undoubtedly much enthusiasm for music and the other arts in basic schools in Ghana. School bands (Marching and Combo bands) are in existence and they play important roles during end-of-term celebrations, anniversaries and regular occurrences and events highly valued for both educational and social reasons.

Again, the concern in Ghana is the level of technical ability students are able to achieve and what is reasonable in that regard and how instructors are able to help their students develop acceptable if not admirable, technical control over the musical instruments they are studying. One of the basic premises of this study has to do with what students are or are not learning beyond the level of proficient sound production; learnings that cause their playing to be “musically authentic, genuinely expressive, fully artistic and thereby deeply satisfying for themselves and their audiences” (Reimer 2009, p.

203). This brings to mind the question: how well are our instrumental music teachers equipped to deliver?

Music educators who teach performance face a perplexity that is as old as music itself (Reimer 2009). Performance in music, whether singing or playing an instrument, requires a complex set of skills if it is to be more than perfunctory. There is nothing wrong with casual untrained performance, of course, it is something people all over the world enjoy doing. But music educators are not needed for people to enjoy spontaneous and untutored performance (Reimer 2009). Nor are teachers of any subject when learning is accomplished as a natural part of life, requiring no developmental tuition. Education, conceived as the organized effort to provide learning in pursuit of developing competencies, does indeed require special institutions such as schools and special people-teachers, whose responsibilities are to build on the desire and need for increased competencies to be attained. For we all know that nurturing expertise in instrumental performance, whether as an aspect of general education in music or as a specialized elective, requires an enormous amount of attention to all the aspects of theory and practice.

To the best of my knowledge, information regarding strategies and approaches used by school band instructors pertaining to the teaching of beginning bands ranges from limited to non-existent in Ghana. Investigating strategies and approaches adopted by basic school band instructors who currently teach beginning wind students may reveal strengths and/or weaknesses pertaining to school band instruction, including instruction regarding fundamentals such as proper embouchure, breath control, posture, articulation, hand position, and fingerings. Further, an investigation of specific



methodologies of school band instructors may lead to a better understanding of effective teaching approaches, and may enhance the overall musical development of wind players' performance skills.

### **The Purpose of the Study**

The intent of this study was to examine the impact of rehearsal strategies being employed by basic school band directors in the Accra metropolis on students' performance in terms of playing proficiency. Stemming from this, the specific objectives of the study were to:

- a) Explore the rehearsal strategies school band directors in the Accra metropolis employ;
- b) Assess the performance level of basic school bands in the Accra metropolis;
- c) Examine if there was a significant difference in the performance scores of the school bands;
- d) Examine if there was a significant difference in the performance scores of school bands that use different strategies;
- e) Examine the possible relationship between performance scores and rehearsal observation scores.

### **Research Questions**

The following research questions guided the study:

- a) What rehearsal strategies do basic school band directors in the Accra metropolis employ?
- b) What is the level of performance of basic school bands in the Accra metropolis on the performance dimensions?

- c) What is the difference in the performance scores of the school bands?
- d) What is the difference in the performance scores of school bands that use different strategies?
- e) What is the relationship between performance scores and rehearsal observation scores?

Besides the research questions above, three research hypotheses corresponding to the last three research questions were set to be tested.

### **Research Hypotheses**

The following null and non-directional alternative hypotheses were formulated and subjected to statistical testing to help establish the differences in performance scores of school bands and the possible relationship between students' performance and directors' instructional strategy.

- 1) **H<sub>0</sub>** – There are no significant differences in the performance scores of the school bands

**H<sub>1</sub>** – There are significant differences in the performance scores of the school bands

- 2) **H<sub>0</sub>** – There is no significant difference in the performance scores of school bands that use different instructional strategies.

**H<sub>1</sub>** – There is a significant difference in the performance scores of school bands that use different instructional strategies.

- 3) **H<sub>0</sub>** – There is no significant relationship between performance scores and rehearsal observation scores.

**H<sub>1</sub>** – There is a significant relationship between performance scores and rehearsal observation scores.

## **Significance of the Study**

The problem at hand is an inquiry into the teaching strategies of basic school band directors and the impact of these strategies on students' performance. Unfortunately, my experiences as a music educator suggest that the subject of school band instruction in Ghana is too rarely addressed. There appears to be little information related to instrumental music involvement of children, although internationally this is an area that has received so much attention. There is an urgent need for data in this area to provide a solid basis for further research and to provide a baseline to determine trends.

The finding of this research will be beneficial to instrumental music teachers and scholars. For example, the findings can serve as a resource base, which will help instrumental instructors in Ghana take a second look at their methods of instruction and help their students become better instrumentalists.

It will also create the platform to which music educators and other stakeholders can turn to evaluate the instrumental music programme in Ghanaian schools. Also, school band instructional practices need to be identified in order to develop pedagogies for teachers motivated to pursue a wind band instrumental music curriculum. Finally, yet importantly, this research will increase the body of knowledge in music education in Ghana.

## **Delimitations**

The research area for this study was the Accra metropolis. I chose Accra because (a) of proximity, (b) of easy access to information because of the rapport I had already established between myself and schools in the metropolis during my previous study and, (c) I was sure to get a sizable number of bands from which I can sample.

The study investigated and focused on the strategies used by basic school band instructors and their impact on students' performance. Basic school is the stage at which most school band programmes offer beginning level instruction. Not included were teaching strategies and approaches used with students in senior high schools, nor the teaching of students at the tertiary levels and music academies.

It was my fervent wish to include school music groups such as the school choir, combo bands and orchestras in this study, but due to the absence of required time, funds, and labour, I concentrated on only school brass bands. Even with the brass band, I still had to sample ten schools to facilitate the completion of the work in good time.

Lastly, due to the case study nature of observations, data from observations has limited generalizability of findings to the population and did not establish causality (Bazan, 2007). However, due to the mixture of quantitative and qualitative data based on multisite observations, transferability of results and findings to other band programmes in the Accra metropolis was analytically possible.

### **Limitation**

Since the study was mixed method and the instruments used were interview, observation and a researcher-designed performance task, a pilot study was conducted to ensure that the research instruments (semi-structured interview and observation guides as well as the performance task) measured what they were intended to measure. Efforts were also made to reduce variability and all biases in the sample. Hence, the sample size was large

enough to limit the effects of biases and as well variability was reduced by ensuring that the data was carefully collected.

“Cultural validity” (Cohen, Manion & Morrison, 2007, p. 139) as a limitation in this study stems from the fact that the performance evaluation form for measuring band instructors’ teaching strategies and students’ performance was designed and validated by people in a different cultural setting all together. Considering the performance dimensions assessed, it may be that some of the dimensions are not the priority of the school band directors included in this study. Granted this is so, the cultural viability of using the performance evaluation form in Ghana and outside America may be highly reduced.

Of course, evaluation of works of art, even by professionals, is highly subjective (Bergee, 2005). To help minimize the influence of this problem, researchers have employed predetermined evaluative criteria as an attempt to improve reliability (e.g., Fiske, 1978; Hunter & Russ, 1996; Winter, 1993). Abele (1973) asserts that "rating scales improve evaluation because adjudicators must use a common set of evaluative dimensions rather than develop their own subjective criticisms" (p. 246). Therefore the *Kentucky Music Educators Association performance evaluation form* was adapted and modified with the limitation mentioned above in mind.

## **Definition of Terms**

**A school band:** A group of student musicians who rehearse and perform instrumental music together.

**Band Pupils:** School children who are involved or participate in the playing of the band instruments.

## **Junior High**

**School:** The last three years of nine years basic education after which one gets admission into the senior high school.

## **Band**

### **Instructor/Director**

**or mistress:** People who train, conduct and lead the band and perform for others. In Ghana band masters are the music professionals in charge of church bands, school bands and other professional groups.

**Accra Educational Metropolis:** Accra Educational Metropolis is one of the 10 educational districts in the Greater Accra Region which has seven hundred and ninety-two (792) basic schools made up of public and private institutions. This study includes both private and public schools. Each educational directorate functions from the metropolis, municipality and district capitals as a department under their respective metropolitan, municipal and district assemblies but are supervised, co-ordinated and monitored by the Regional Education Directorate which acts as a liason between the Metropolitan, Municipal and District Directorates of

Education, Ghana Education Service- Headquarters and the Ministry of Education on one hand and the Regional Co-ordinating Council on the other (GES Regional Annual Review Report, 2011).

**Basic school:** The first nine years of schooling in Ghana between pre-school and Senior High School.

**Musical Instruments:** Objects such as piano, guitar and drums that are used for playing music.

**Extracurricular:** Activities that go on in school but are not part of the official school curriculum.

**Adaha Music:** While difficult to know the exact time of origin, the earliest known form of refashioned European band music is *adaha* (literally “dance here”) developed by the Fante people near Cape Coast. It is considered the earliest form of highlife music performed in Ghana. It was created by the blend of syncopated march music fused with Caribbean and local Ghanaian music (Collins, 1992).

**Teaching and Learning Strategies:** Silver (2013) defined teaching strategies as the “particular set of steps to evoke from learners a specific set of desired behaviors” (p. 8). Teaching and learning strategies include the activities used in the classroom through which students can learn. These activities are directly related to the subject and/or curriculum and may be traced to instructional objectives. Whereas teaching strategies address what teachers do to cause learning, learning

strategies are what students may do to cause their own learning. Synonyms used for teaching and learning strategies include: instructional strategies, instructional activities, teaching techniques, teaching practices, instructional method and learning activities.

**Student-Directed Instruction:** Ormrod (2004) described student-centered instruction as instruction that “encourages students to construct their own knowledge and understandings... Discovery learning, whole-class and small-group discussions, cooperative learning, and group problem-solving activities are all examples of student-centered instruction” (p. 242). Following this definition, as all instruction focuses on students, Ormrod suggested that student-directed replace the misnomers student-centered, child-centered, or learner-centered to properly describe instruction where students direct their own learning and learning activities with the teacher as guide or facilitator.

**Teacher-Directed Instruction:** Ormrod (2004) described teacher-directed instruction as instruction “in which the instructor directly presents the material to be learned – for instance, through lectures, explanations, textbooks, and educational videos” (p. 241). As all instruction centers on students, Ormrod suggested that teacher-directed replace the misnomer teacher-centered to properly describe instruction where teachers direct student learning and activities.

### **Organization of the Study**

The entire project report was organized into five main chapters. In chapter one, the following sub-topics are presented: introduction, background to the study, definition of the research problem, purpose of the study, outlining



of the research objectives, research questions, hypotheses, significance of the study and definition of terms. In chapter two, literature related to the area of the study is being reviewed. Chapter three focuses on the research methodology, and this covers the description of the procedures by which data was collected and analyzed. The chapter also presents the research design, population, sampling, and sampling procedure, research instruments, data collection procedure and data analysis. In chapter four, analytical techniques, with appropriate statistical modules employed by the researcher in analyzing the data are discussed. The chapter also presents the findings of the study, as well as the discussion of the results. Chapter Five summarizes the work, draws conclusions from the findings, offered suggestions, and made recommendations for future research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter is a summary and synthesis of the literature, theories and published research related to school band instruction. This review therefore recapitulates materials that different scholars have written about rehearsal strategies/techniques and for that matter, practices that are appropriate and congenial and made students' instrument playing artistic and thereby deeply satisfying. The literature review was done under the following sub-headings: the development of instrumental music curriculum and instruction; instructional practices in instrumental music education; theoretical foundation of school music participation; current practices in school band education; teaching beginning bands; effective use of rehearsal time; and strategies for improving rehearsal technique.

#### **The Development of Instrumental Music Curriculum and Instruction**

Insights into school band instructional style prevalent in instrumental music education can be gained by examining the history and development of bands in American public schools. Instrumental music educators belong to a long tradition extending back to ancient Egypt and Greece (Whitwell, 1985). Throughout history, bands have frequently served utilitarian, outdoor entertainment, or military functions (whether it is an ideology or reality can be contested). The training of instrumentalists for these bands was usually through a master-apprentice relationship where students followed the direction of master instrumentalists (Whitwell, 1985), a tradition that can be noticed in private instrument lessons occurring today.

One factor that may have had an influence on the current practices of teaching students instruments involves the relationship between school bands and military bands. Military bands, due to their volume, timbre, durability and portability of instruments, provided drum cadences and music for soldiers to march to formation, while also boosting soldier morale and providing music for ceremonial functions (Whitwell, 1985). Many early band directors in U. S. public schools began teaching careers following years of performance and training in military bands. After World War I, many of the military bandsmen returning from military service needed employment and became instrumental music teachers in schools. The military style, which is authoritarian in nature, became the model used to develop many of the early school bands (Colwell & Goolsby, 2002). The military band influence is evident to this day in school band programmes when considering both instructional approaches utilized and the types of performances in which school bands engage such as parades, football halftime pageantry, school ceremonies such as commencement and so on (Bazan, 2007).

Many important composers and band directors from the military band tradition, such as Patrick S. Gilmore and John Philip Sousa, were also involved in the evolution of the professional concert bands during the late nineteenth and early twentieth century. Professional bands traveled throughout the country and were a major source of entertainment for the populace. These bands, and their directors, shaped the wind band repertoire which included marches, transcriptions of orchestral works, novelty numbers, works featuring virtuoso soloists, and, later, original compositions (Battisti, 2002; Colwell & Goolsby, 2002). The entertainment role of the band continues to influence

many school instrumental music programmes, and the repertoire performed by school bands continues to include many pieces originating from the time of the great professional bands.

Around 1950, an important movement in the wind band world began. Significant conductors came to believe that bands were capable of aesthetic, artistic music performance on the level of great symphony orchestras and need not continue to be relegated to simply utilitarian and entertainment functions (Battisti, 2002). Edwin Franko Goldman, leader of the influential and famous Goldman Band, commissioned band repertoire from major composers and Frederick Fennell formed the Eastman Wind Ensemble in 1952. This group was an ensemble designed to perform quality music written specifically for the ensemble by prominent composers. During this time, distinguished composers, including Vincent Persichetti, Robert Russell Bennett, and Darius Milhaud, contributed significant works to the wind band repertoire. Commissioning by school bands also began and major works for high school band began to grow in number (Colwell & Goolsby, 2002; Battisti, 2002). However, school bands continued to march and serve traditional entertainment roles—as well as taught in a teacher-directed fashion—a situation still evident today (Colwell & Goolsby, 2002).

Preparing music for performance has always been a key component of any band curriculum. Wind band repertoire and method books are the core materials for developing performance abilities of students in many public schools. Schleuter (1997) stated that band method books have traditionally emphasized: (a) fingerings and notation rather than sound, (b) the mathematics of note values, (c) note naming, and (d) a mixture of technical and melodic

material. It has also been noted that method books have not developed a sense of tonality, melodies have been primarily in major modes, and technical drill rather than musicality has been emphasized. Schleuter suggested that despite the thousands of successful instrumental musicians trained with these materials there are likely many possibilities for improving instruction.

Mark (1996) described attempts for change toward child-centered music curricula, noting that such attempts are not new, occurring as early as the normal school movement at the beginning of the Twentieth century. Yet for many reasons, including certain extrinsic demands on instrumental music educators, student-directed instruction has not proliferated in band rooms. At the same time, authors have noted that a regimented atmosphere often acts as a deterrent to effective and meaningful student learning (Erbes, 1978; Ormrod, 2004). Despite the history of instrumental ensembles trained for military and utilitarian functions, contemporary methods and approaches to instrumental music education incorporating comprehensive musicianship approaches, intended to develop complete and musical musicians, are being introduced and explored (Garofalo, 1983, 1995; Labuta, 1997; Miles, 1997, 1998, 2000, 2001, 2003, 2004; Austin, 1998; O'Toole, 2003).

In sum, the literature review in connection with the development of instrumental music curriculum and instruction reveals important points that are pertinent to the purpose of this study: (a) it helped us understand the factors influencing current practices of teaching students, (b) the relationship between school bands and military bands, and (c) that school band instructional strategies are not a constant entity that stays relatively unchanged once it is developed (instructional strategies are not static) but changes over

time. The findings in this review, indeed has a direct connection as far as the purpose of this current study is concerned. Since there is paucity of research on school band instructional strategies in Ghana, it gives as an insight into school band instructional strategies prevalent in instrumental music education in other parts of the world which will in the long run provide a solid base for the current study.

### **Instructional Practices in Instrumental Music Education**

Researchers examining the teaching and learning strategies of instrumental music educators have identified a predominantly teacher-directed instructional style. Blocher, Greenwood, and Shellahamer (1997) analyzed rehearsals of nine band directors teaching in Florida who experts identified as exemplary teachers. From the categories of instruction identified, non-verbal directions from the teacher (27%), non-interactive listening (22%), and nonmusical behaviors (8.47%) formed the majority of rehearsal time. Non-interactive listening was defined as when a director was conducting by merely beating time with no interaction, eye contact, or communicated instructions. Additionally, verbal directions from the teacher amounted to 31.45% of rehearsal time and conceptual teaching was not recorded. In a student-directed classroom there would likely be an increased amount of discussion, student communication and input, and teaching of concepts with less emphasis on either non-verbal or verbal directions from the teacher (Gumm, 2003b).

Goolsby conducted a series of studies (1996, 1997, 1999) on the teaching strategies used by instrumental music directors in Georgia by analyzing videotapes of participants' rehearsals. One finding was that experienced teachers spent more time in warm-ups and kept students playing

instruments for a greater percentage of total rehearsal time than did inexperienced teachers. Further, experienced teachers tended to stop rehearsing for shorter times, and although verbalizing less, seemed to verbalize more efficiently, addressing several performance issues at each stop when compared to inexperienced teachers. In Goolsby's 1997 study, a cyclical pattern of instruction consisting of rehearsal frames was reported: (a) the director provided specific verbal instruction for performance or asked a question, (b) an individual or the ensemble as a whole performed teacher-chosen music or answered a question, and (c) the teacher provided specific feedback on student responses or performance. Teachers who ask students questions are taking steps toward student-directed environments (Allsup & Baxter, 2004), however, student self-assessments, student input, student choices in activities, and opportunities to be creative or apply critical thinking skills seem to be lacking from the rehearsals observed by Goolsby.

Cavitt (2003) investigated the error correction processes of 10 directors as observed in videotapes of four consecutive rehearsals each. The researcher noted that the five middle school and five high school programmes observed were highly competitive, ranking high in significant band competitions. The primary goal of these instrumental music educators was to effect daily positive change in music performance. Cavitt coded teacher verbalizations and modeling as (a) directive, (b) information, (c) questions, (d) positive feedback, (e) negative feedback, (f) positive modeling, (g) negative modeling, and (h) off-task talking. After calculating number of occurrences, durations, and rates per minute for these behaviors Cavitt found that 49% of rehearsal time was devoted to error correction, and that teachers talked for 53% of this time.

Dynamics (46%), intonation (21.4% of all rehearsal frames), articulation (20.2%), and rhythm (14.8%) seemed the primary objectives of error correction. Quantitative and qualitative descriptions of the rehearsals seemed largely teacher-directed with rehearsal frames consisting of teacher feedback on errors followed by student performance.

It would seem, based on Goolsby's (1996, 1997, 1999) and Cavitt's (2003) data, that the focus of participants' rehearsals was on student performance, not on teaching concepts or aspects of comprehensive musicianship. Teacher-directed teaching strategies, not student-directed learning strategies, seemed to be preferred for attaining the primary goal of quality music performance. Most instructional processes described relied on students performing what educators chose, followed by students awaiting feedback and directions from their band teacher. However, in Goolsby's (1999) study, there were indications that expert educators were more likely than novices to expect students to figure out music independently and would teach students how to fix, for example, rhythms for themselves. Where and how directors expected these skills to begin and develop was not reported.

Instrumental music teachers may also model their instruction on traditions in other areas of music and from general education. For example, Mackworth-Young (1990) stated that the typical piano lesson is highly teacher-directed with the student being seen as a subordinate, dependent learner. Although student-directed trends may be beginning, traditional approaches to general education have also involved direct instruction where the student is a passive recipient of knowledge (Shapiro, 2003). Distressingly, traditional instruction has been noted to be the most suitable for the education



of “disadvantaged kids, usually minorities, on the grounds that they: need more discipline; need more structure; need more basics; are slower developmentally—and any other excuse we can dredge up” (Shapiro, 2003, p. 337).

Besides instructional precedents set during the rehearsals conducted by expert, exemplary band teachers, the pedagogy presented in some instrumental music textbooks seems to advocate a teacher-directed approach to teaching music. Colwell and Goolsby (2002) acknowledged that rehearsal time is a precious commodity to be used efficiently and that directors should plan adequately for each rehearsal and establish routines. Procedures advocated include warm-ups, technical drill, working on concert music, sight reading, playing through previously prepared music, or listening activities. It seems that little time is appropriated for discussion, questioning, student creativity, or other student-directed learning activities. Kohut (1996) noted that performance alone does not necessarily provide the best opportunity for teaching students about music, yet described only two basic approaches to teaching instrumental music: (a) modeling to students and having them imitate the teacher, or (b) analytical teaching where the teacher analyzes performances and critiques results. It must be recognized that many fine bands, with excellent young musical performers, exist where instrumental music educators apply these practices. Fine bands, performing at similar levels and being developed through alternative, student-directed instruction are less identified or visible.

Instrumental music teachers may prefer teacher-directed rehearsals because of a firm tradition of instrumental music education and a well-developed pedagogy. However, students may not readily accept student-

directed teaching approaches either. Such a style places onus upon students, causes students to become actively engaged in activities, and demands interaction with peers and the teacher. Some students may prefer student-directed learning environments while others prefer teacher-directed environments (Kelly, 1972; McMillin, 2000; Moehle, 2005). Students also become accustomed to certain teaching styles and may find student-directed activities unfamiliar.

Although teachers may appreciate constructivist philosophies and self-regulation theories underpinning student-directed instruction, they may not entirely understand how to connect theory with instruction, which may result in hesitancy to adopt related strategies (Confer, 2001; Meyer, 2000; Wehmeyer, Agran & Hughes, 2000). Confer (2001) stated that student-directed instruction is not always implemented effectively by teachers increasing potential resistance by both students and teachers to this teaching style. Teachers require training and information about what truly is a student-directed classroom—and what teaching and learning strategies can be implemented—in order for such instruction to be fully appreciated by the students, the teacher, and the school. Nevertheless, instructors and the strategies they employ directly affect the development of self-directed learners (Johnson & Johnson, 2004; Nielsen, 1999; Zurcher, 1987;). Researchers may be able to help develop a body of knowledge that can aid instrumental music teachers in becoming aware of alternative, approaches to instruction.

In conclusion, whereas there is a tilt of many educators today towards student-directed instructional styles, for example, the trend is still more towards teacher-directed instructional styles. While student-directed

instruction appears to be growing more prevalent in some educational disciplines, this instructional approach does not seem to have gained a great deal of acceptance by instrumental music educators. This review is directly related to the main topic since it provides us with the current trends in wind instrumental music education which will be pertinent in shaping the methodology of this thesis.

### **Theoretical Foundation of School Music Participation**

Numerous theories ground research and practice in the broad domain of music. Theories of psychoacoustics guide the construction of a concert hall, theories of information and expectancy suggests to composers a listeners' capacity for music appreciation, theories of musical preference affect or inform a concert programmer's decision making as to the genre of music to play, and theories of measurement influence the construction of a musical aptitude tests. In music education, theories of learning have contributed to an understanding of how the learner processes information and, through corresponding instructional theories, have caused change in instructional practice. Theories of motivation and theories of intelligence (Dweck, 1999) assist teachers in eliciting student productivity. Theories of child development govern the construction of age-appropriate subject matter.

It seems quite clear by now that performance in music, whether singing or playing an instrument, requires a complex set of skills if it is to be more than just a casual or untrained venture. We all know that education, conceived as an organized effort to provide learning, do not exist without developmental tuition. Theories of musical development can be of great benefit to school instrumental music education because they open up opportunities for

systematic curriculum construction. A developmental model offers a sequence of stages that represent different ways of engagement with music in terms of theory and practice. If one succeeds in linking these different approaches to band instruction to specific chronological ages, one obtains a coherent picture of the musical capabilities one may expect at various periods of childhood. Such an overview makes it possible to decide which curriculum materials are suitable for a particular age. This issue of age appropriateness and sequential presentation of instruction is exactly what is explained in the *stage-dependent theory of Jean Piaget (1973)*.

According to (Boyd, 2013), it is critical for one to consider how students learn in relation to their physical growth. Piaget (1973) encouraged educators to consider how students learn, based on their age and physical development. This theory, though more than half a century old, still provides an important model of cognitive development in its combination of the child's biological growth with an increasingly mature intellectual grasp of concepts. The stage-dependent theory is governed by maturation and features earlier stages of learning that provides the foundation for later more complex learning. Whatever the emphasis, multileveled theories stem from developmental psychology, such as this, "establish that children do not learn all at once but bit by bit and in increasingly complex ways over time." (Campbell et al., 2002, p. 18).

Through longitudinal observations of children from birth through to adolescence, Piaget evolved a theory that has greatly influenced views on child development. His observation was that children progress through four stages of thinking: (a) sensorimotor (ages zero to two), learning through direct

sensory experience; (b) preoperational (ages two to seven), learning through the manipulation of objects-noting the consequences and internalizing them for the future, thus transforming stimuli to symbols; (c) Concrete operations (ages seven to eleven), viewing objects in concrete, tangible, and systematic ways but not abstractly; and (d) formal operations (ages eleven through adulthood), learning abstractly using logic and deductive reasoning.

The stages suggest that younger children in particular should be given many opportunities to listen, sing, move to music, and most importantly, play musical instruments. The introduction of staff notation should occur only after preliminary experiences. Piagetian theory implies that music instruction follows a “sound-before-symbol” approach. As students progress over time, also, they move through various stages of development (Dolgin, 2011). Theorists, such as Dolgin and Piaget, maintained that students learn best when the needs of their respective stage of development has been respected. Also, one must realize that students will not learn at the same high rate when they are between learning levels, developmentally. As students move from the Grades 1-12, they move from concrete to abstract thinking, respective to their learning stage.

The *stage-dependent theory* has however been adopted, tried and verified in research on school music participation (Boyd, 2013, Compton 2015). Other notable applications of Piaget’s principles to music learning indicate that age eight is a watershed year in a child’s cognitive development (Campbell et al., 2002). At this time, children are capable of identifying timbres, discriminating among random melodies, and perceiving structure in

simple melodies, although they are less successful in perceiving the sound of more than one simultaneously musical line (harmony).

This theory is critical to the understanding of the complex issue of school instrumental music teaching and learning for two reasons: Firstly, if we require children constantly to operate at the limit of their capabilities, as music educators, we risk causing them to lose their enthusiasm for music. If they are barely able, or unable, to cope with the tasks assigned them, they may come to think of participating in school band as something very difficult that yields only small satisfaction. As a result, children may begin to avoid musical activities. Secondly, there is little point in passing on to a new stage if the sort of technical skill typical of the one preceding it has not been thoroughly mastered. A child in the second stage of Piaget's theory, for example, who has gained sufficient insight into the expressive properties of music, can in the third stage learn to employ the principles of form in such a way as to enhance the expressive effect of a composition. The situation may be different for a child who has had scant opportunity to explore the expressive opportunities offered by sound. Such a child may be taught to obey formal principles, but for him the forms will remain empty, that is, without musical impact.

Therefore, music editors should contribute to the stabilization and reinforcement of various kinds of musical understanding. Efforts to speed up the developmental process can subvert this aim. Stimulating musical development can therefore be best understood as an attempt to ensure (a) the avoidance of stagnation and the facilitation of students' progress to the later stages where they will be better off musically than in their current ones, and (b) the students acquiring new types of musical understanding as smoothly as

possible by introducing them gradually to curriculum materials designed to promote learning in the next stage of development.

### **Teaching styles**

To lay a solid foundation for research design decisions to be discussed in chapter three, there was the need for the discussion of *theories of teaching styles*. Teaching styles have been defined as the range of practices by which a teacher can operate and accomplish objectives (Weng, 2002). Teaching style researchers have found value in examining teachers' thinking, beliefs, and skills (Storm, 2004), the pattern of instructional practices employed by teachers, as well as how teachers' unique approaches interact with learning styles, personalities, and other psychological or educational factors. Nelson (1999) used the terms teaching style, teaching method, and teaching strategies equivalently, suggesting that the focus of teaching style research is the long term approach to teaching as evident in the instructional methods and strategies teachers choose for lessons.

Due to unique learning style, personalities, training, personal backgrounds, and expertise, teachers instruct classes in different ways (Bazan, 2011). As there are multiple ways to teach based on a variety of factors, there are several ways to consider and measure teaching styles. The Dunn and Dunn Teaching Style Inventory has been employed in several studies (e.g., Mawhinney, 2002; Pengiran-Jadid, 1998) and offers a practical approach for measuring teaching styles in relation to individual learning styles (Dunn & Frazier, 1990). The model for the inventory was based on six major elements of teaching style: (a) instructional planning, (b) teaching methods, (c) teaching environment (including student groupings, room design, and other aspects of

teaching environment such as resources), (d) evaluation techniques, (e) teaching characteristics and classroom management, and (f) educational philosophy.

The *Dunn and Dunn teaching style inventory* finds support in Gumm's *theory of music teaching styles*, but Gumm's theory was specifically designed for music. Gumm's theory of music teaching styles was designed based on a principle of triadicity; relationships formed between the teacher, the student, and the subject matter. The varying emphases of different teaching styles create unique relationships between these three dimensions of classroom instruction. For example, in a student-directed teaching style, students would be interacting with the subject matter directly, creating subject matter that would be assessed by students themselves and their peers, and the teacher would facilitate deepening interactions between the students and subject matter (Gumm, 1992 as cited in Bazan, 2007).

It has been suggested that music teachers should adopt teaching practices best suited to their unique teaching styles (Kerley, 1996). Kerley studied the decision-making processes, leadership styles and behaviors, and musicality of two master elementary choral music teachers using interviews, video recording, and observations. Many similarities between the educators were identified including strong musicality, use of diverse teaching techniques, preparation of rehearsal plans, keen analysis of student performance, the ability to make split-second decisions, and reflective analysis of rehearsals. However, certain qualities were identified that made for unique teaching styles. The rehearsals of one teacher were described as technical, very intense, task oriented, consistent, logically sequenced with new concepts



presented only after prerequisite skills were learned, positive, and people-oriented. The other teacher used modeling, student emulation, student identification of new components in new music, and constant motion through the classroom while conducting. This style resulted in students with a rich, full vocal tone similar to their teacher and far beyond their years.

Kerley (1996) suggested that music teachers should not attempt to adopt the style of another music teachers, particularly one diametrically opposed to their personality or comfort level, but should recognize their uniqueness and emphasize their strengths because multiple teaching styles can be equally effective. This seems to contradict the suggestions of other teaching style researchers (e.g., Pengiran-Jadid, 1998; Nelson, 1999) who have suggested a value for building awareness of, and implementing, other teaching styles to best suit the learning styles of students. However, Kerley's study also suggested a need for schools and music education areas to understand, develop, and accommodate a variety of teaching styles.

Borst (2003) conducted a qualitative study investigating the similarities and differences between two exemplary choral teachers, including teaching styles. Specifically, Borst sought to explore the link between teaching style, effective teaching, and excellent performance. The researcher designed the study around teaching style theories, including Gumm's theory of music teaching style, as opposed to specific teacher behaviors, teaching strategies, or teacher and student perceptions. Borst suggested that although specific behaviors or techniques have been quantitatively researched, effective teaching is complex and no single component is solely responsible for excellent teaching. Based on interviews, observations, and informal

interactions, Borst suggested that aesthetic music performance can be a manifestation of teacher interpersonal skills with students. Building a communal approach to teaching and including teacher-student interaction to attain performance goals was noted as having a positive effect on learning outcomes. By building a sense of community, Borst stated that students integrate their sense of self with their peers, their teacher, and society with the music being performed. An emphasis on respect for student individuality and personal freedom within the choral context and building a positive, open atmosphere of mutual respect were also noted as contributing to these exemplary programmes (Bazan, 2007).

With the purpose of enabling the identification of music educators' teaching styles, Gumm designed a Music Teaching Style Inventory (MTSI) (Gumm, 1992, 1993, 2003a, 2004a). Gumm suggested that how a teacher prioritizes certain dimensions of teaching depends on many factors including: (a) their personality; (b) the learning styles of students, particularly if the teacher is predisposed to attend to and adapt instruction towards student learning styles; and (c) their perceptions of effective teaching, in that, "any particular effective teaching behavior only has a particular effect on a particular learning behavior in a particular learning situation" (Gumm, 2003b, p. 8). Gumm's intent was not to evaluate teaching styles, but instead suggested that there was value in all teaching styles (see table 1 below).

Based on a national study of 473 randomly selected music teachers, Gumm (2003a) supported eight teaching style dimensions: Assertive Teaching, Nonverbal Motivation, Time Efficiency, Positive Learning Environment, Group Dynamics, Music Concept Learning, Artistic Music

Performance, and Student Independence. Gumm found significant differences in teaching style dimensions based on music teacher years of experience. For example, teachers with between eight and ten years of experience were significantly more likely than other groups to focus on the Group Dynamics dimension suggesting a transition to collaborative and self-directed learning in the classroom environment.

Table 1: *Gumm's Music Teaching Style Dimensions*

<b>Music Teaching style Dimension</b>	<b>Definition</b>
Assertive Teaching	Ability to capture and maintain students' attention to teacher-directed goals and activities through verbally controlling student behaviors.
Nonverbal Motivation	Ability to motivate student attention to teacher directed activities without any verbalizations through methods such as monitoring, training, eye contact, cues, or proximity.
Time Efficiency	Use of clock time to motivate student attention to teacher-directed activities by prioritizing number of activities, goals, or tasks as well as pacing of instructional activities.
Positive Learning Environment	Focus on careful learning by teacher use of empathy, humor, patience, sensitivity, accommodation, support, and care. Learning is promoted by students' desire for approval and praise from their teacher and by teachers' monitoring, feedback, accommodation, encouragement, and elaboration of learning.
Group Dynamics	Represents focus on building interdependence between peers through collaborative learning and student self-responsibility within groups, sectional rehearsals, student presentations, student-led activities, discussions, and peer performances
Music Concept Learning	Maintaining a focus on developing students' musical knowledge and ability to analyze while providing students opportunities to demonstrate understanding back to the teacher such as through questioning and critical thinking activities.
Artistic Music Performance	Maintaining a focus on musical performance at an artistic level involving personal, human response by students.
Student Independence	Represents a teacher's focus on students' abilities to think and create new knowledge on their own by emphasizing creativity.

*Source: Based on descriptions and definitions by Gumm (2003b).*

These findings seem to contrast with those by Storm (2004c) who, based on experienced general education teachers' statements of their teaching philosophy, found that age, number of years in their present school, and level of education did not predict teaching styles. Although there was evidence of developmental stages of teaching styles, Gumm determined that data supported a definition of music teaching style as, "the stable focus, orientation, or intent underlying the entire pattern of teaching behaviors" (Gumm, 2004a, p. 13). Gumm suggested that future research in teaching styles employ behaviour observation techniques.

Specific teaching style dimensions have been reported as relating to higher-order teaching and learning levels (Gumm, 2004a). In a study investigating 273 middle- and high school choir students' perceptions of their teachers' teaching styles, Gumm suggested that Assertive Teaching, Nonverbal Motivation, Positive Learning Environment and Time Efficiency were indicators of a teacher dependent learning environment. Alternately, Group Dynamics, Music Concept Learning, Artistic Music Performance, and Student Independence were suggested as the four dimensions related to a learning environment that prioritized student-oriented, reflective, cognitive learning. Based on the data, Gumm found that students reported their teachers as more frequently demonstrating teacher-directed, behavioral teaching styles as opposed to student-directed, cognitive-reflective teaching styles.

Brakel (1994) adapted Gumm's (1992) Music Teaching Style Test (MTST) for use in identifying instrumental music teaching styles. Brakel's Instrumental Music Teaching Style Test (ITMST) adapted the wording of several items from the original version of Gumm's MTSI, as it was

determined Gumm had included some verbiage suiting teaching and learning activities used by choral teachers, not those by instrumental music teachers (n =184) studied by Brakel. Gumm's instrument has since been revised and deemed suitable for all music teaching contexts (Gumm, 2003b). The ten dimensions identified by Brakel revealed a teacher-directed norm in participants (i.e., high Group Efficiency, Teacher Authority, and Nonverbal Motivation contrasted with lower priority placed on Student Independence, Flexible Classroom Structure, and Group Dynamics).

Music teaching styles have been studied in relation to instrumental music programme retention rates. Brakel (1998) examined the relationship between teaching styles, as measured by the ITMST, to retention rates of the programs of 184 Midwestern high school band directors. Based on measured two-way interactions in certain pairs of teaching style dimensions, Brakel reported that high band student dropout was related to teacher-directed teaching styles involving low degrees of student independence and greater teacher control. Brakel recommended an increased emphasis on aesthetic music performance in order to increase student retention. Although Brakel reported that individual teaching style dimensions may not relate to attrition, the combinations of certain dimensions may.

Researchers have noted that learning environments are a complex interaction of a teacher's overall approach to instruction (the way a learner prefers to learn, personality types, and other aspects of education). The literature on teaching style does indicate that it can influence ensemble performance outcomes (Costello, 2005; Davis, 2000; Gumm, 2003b; Gumm, 2004a; Yarbrough, 1998). Dunn and Dunn Teaching Style Inventory and

Gumm's model has helped to better understand which teaching styles may influence behavior and performance outcomes of basic school bands in the Accra metropolis, and helped educators understand which styles they employ and to what degree. It would also seem that an understanding of teaching styles may contribute to a more effective classroom and positive learning environment. Due to the variety of teaching and learning styles possible, a variety of instructional approaches may be necessary in order to prevent mismatches of students and teachers and, perhaps, increase academic achievement and retention in music programmes.

### **Current practices in school band education**

School band programmes across the world may vary in size and performance abilities, but typically have similar rehearsal structures based on long-standing and well developed traditions dating back to the military bands of the early twentieth century (Allsup & Benedict, 2008; Garafolo, 1983).). These teacher-centered practices often emphasize the importance of efficiency, discipline, and competitiveness, while being driven by performances and repertoire (Allsup & Benedict, 2008). According to a 1993 study by Miles, school bands participate in an average of 42.05 performances per year. These demanding performance schedules create an environment in which directors are under tremendous pressure to produce an exceptional product. In addition, the quality of a director and programme is often judged on festival ratings and competition results rather than the learning that takes place within the classroom (Bergee, 1989). Only a few significant developments have influenced educational practices in band and other performance-based classes during the last century. The ideals of aesthetic

education became the primary philosophical base for music education during the second half of the twentieth century exemplified in the writing of Bennett Reimer (1970). An aesthetic approach to music education focuses on great musical works, listening for aesthetic qualities in music, the intrinsic value of music, and the aesthetic experience (Panaiotidi, 2003). During the same timeframe in which aesthetic music education was being promoted, comprehensive musicianship was developed. This approach to music education encouraged teachers to include many facets of music in their curricula, such as theory, history, listening, performing, and creativity regardless of the type of music class (Contemporary Music Project, 1971). During the 1990s, the importance of these two movements in music education was solidified through the establishment of the National Standards for Arts Education (Consortium of National Arts Education Associations, 1994). This historic document outlines what all students should know and be able to do in the arts, aesthetics and comprehensive competence can be found in the first paragraph of the synopsis (Consortium of National Arts Education Associations, 1994). The long-term effects of these movements can be seen in books, teacher resources, journals, and other educational material such as the *Teaching Music through Performance* series by Richard Miles and his colleagues (Miles, 1997, 1998, 2001, 2003, 2004, 2007, 2009, 2011, 2012).

A vast amount of research in band focuses on the conductors and their behaviors in rehearsals. Researchers have investigated the differences in teacher experience levels, approaches used for groups of different grade levels, the amount of time spent in performance and other rehearsal activities, the types of communication used by directors, the use of feedback in rehearsals,

and the musical elements on which conductors focus during rehearsals. This research provides a detailed depiction of what occurs in traditional band rehearsals. These studies are described below.

Several studies have compared the differences among teachers with various levels of experience using categories such as expert, experienced, novice, student, and preservice teachers. In terms of musical performance, Goolsby (1999) found significant differences ( $p < .01$ ) between novice and expert teachers' ensemble performance scores when preparing the same composition. An earlier study by Goolsby (1997) found that experienced teachers focused more on the overall sound of the ensemble while novice teachers concentrated on tuning individual notes while student teachers addressed wrong notes the most. The results of a study by Yarbrough and Price (1989) showed that experienced teachers were more disapproving but gave the highest amount of specific reinforcement to students. Goolsby's 1996 study found that student teachers talked the most and allowed students to perform the least. Experienced teachers also used modeling more often and divided rehearsal time more equally between warm-up and practice on musical selections. In terms of student discipline, Stuber (1997) found that less experienced teachers focused on discipline more frequently than experienced teachers.

Studies have investigated the differences in approaches for ensembles of various grade levels. Blocher, Greenwood, and Shellehamer (1997) looked at differences between high school and middle school directors' use of rehearsal time, types of instruction, and feedback to students. Results indicated that both high school and middle school directors spent approximately the



same amount of time on non-musical activities (8%) and in direct verbal communication (31%). The two groups differed in their use of noninteractive listening with middle school directors using three times more than high school directors (34% and 9%, respectively). The high school directors also used more nonverbal communication (43% and 11%) and spent more time in conceptual teaching (3% and 2%). In a study by Worthy (2003), the researcher compared how one director rehearsed the same piece with a college group and with a high school group. The conductor focused on multiple musical concepts simultaneously when working with the collegiate group and mostly single musical targets with the high school group. Additionally, talking episodes were shorter but more frequent with the high school group which the researcher described as being faster paced.

How conductors use their rehearsal time is another topic that has been researched extensively through micro-analyses of the types of activities, their frequencies, and durations. Yarbrough and Price (1989) looked at several variables involved in music rehearsals. In terms of time spent on activities, all subjects spent over half of the time in performance and directions related to performance. Band teachers spent the most rehearsal time ( $M=66.14\%$ ) on performance compared to those teaching choir, college students, and pre-school children. Cavitt (2003) reported 28.98% of instrumental rehearsal time being devoted to performance by middle school and high school band directors. Goolsby (1996) found that experienced band directors spent approximately 51.2% of rehearsal time on performance with an average of 20.6% of the time in warmups, 28.9% on the first musical selection, and

32.5% on the second musical selection. They also averaged between 8.3 and 13.3 rehearsals to prepare a musical selection (Goolsby, 1999).

The types of activities in which the teacher engages have been analyzed using many different frameworks. Goolsby (1996, 1997, 1999) looked at the amount of time spent on preparatory activities, teacher talk, warm-up, rehearsal, breaks, and dismissal. According to Goolsby's 1996 study, more rehearsal time was spent in full ensemble performance and verbal instructions while the least amount of time was spent on teacher talk at the end of the rehearsal. Goolsby's 1997 and 1999 studies indicated that experienced teachers more frequently used guided listening, focused questioning, and specific positive feedback. Carpenter (1986) looked at more than 20 variables in band rehearsals, including pedagogical elements, procedural components, personal qualities, and error-detection approaches. The majority of time was spent on verbal/technical directions (80%) and 14.5% of the rehearsal was devoted to modeling. Cavitt (2003) similarly showed a high amount of time on teacher talk (52.57%) and a lower use of modeling (6.12%), which occurred in episodes of approximately two seconds. According to Blocher et al. (1997), 8.47% of rehearsal time was spent on non-musical activities.

Few studies have investigated student actions during rehearsals. Cavitt (2003) found that student talk occurred less than 1% of the time. Yarbrough and Price's (1989) study showed that band and choir teachers engaged students in verbal and non-verbal responses the least when compared to pre-service teachers. Witt (1986) looked at student attentiveness during rehearsal and found that band students were more attentive than the orchestra students.

Considering the sizeable amount of time spent on teacher talk and instructions in rehearsals, researchers have analyzed the specific types of communication used by teachers (Blocher et al., 1997; Carpenter, 1986; Goolsby, 1996, 1997, 1999; Pontious, 1982; Witt, 1986). Pontious (1982) reported that, of their verbal communications, band directors focused on procedural instructions approximately half of the time (52%) and on musical elements the other half (48%). Blocher et al. (1997) reported that high school band directors used verbal communication (43.04%) more than non-verbal communication during rehearsals (31.84%). Goolsby (1996) found that experienced band directors only spent .9% of their rehearsal time on discipline; they additionally used verbal communication 24.1% of the time and non-verbal cues 5.4% of rehearsal time. A somewhat unique investigation found that band directors used verbal imagery 1.8% of the time (Carpenter, 1986). Discrepancies exist among the literature regarding how teacher talk is used in rehearsals. Some of these can be explained by differences in definitions of the terms, the number of variables being measured, as well as data analysis procedures. Nonetheless, non-verbal communication clearly plays a large role in band rehearsals and directors address non-musical issues a considerable amount of time.

Feedback has been identified as an important component in becoming a self regulated musician (McPherson & Zimmerman, 2002). Yarbrough and Price (1989) states that feedback is an essential part of the teaching and learning process. Students need immediate and relative feedback on their performance. They found that band directors, compared with choral directors and pre-service teachers, had the highest degree of reinforcement in rehearsal

and that it was usually specific feedback. Contrastingly, Blocher *et al.*, (1997) found that band directors only engaged in feedback an average of one minute and 36 seconds per 20 minute rehearsal segment. When looking at correlations between rehearsal characteristics and highly rated rehearsals, Carpenter (1986) found that feedback accounted “for 43% of the observed variance in overall rehearsal rating” (p. 58). In a survey of new general music teachers, Button (2010) found that they ranked feedback as one of the least important factors for effective teaching. Out of 48 factors, feedback ranked 42nd. Napoles and Bowers (2010) compared the effects of teacher feedback and self-assessment on pre-service choral teachers’ uses of specific reinforcement and found no significant difference between the two. Both approaches were identified as being effective in increasing the desired teacher behaviors.

Researchers have performed detailed analyses on the musical elements band directors address in rehearsals. Performance elements such as rhythm, intonation, and expression vary in definition, use, and categorization among the research literature making it difficult to compare results. Studies by Carpenter (1986), Cavitt (2003), Goolsby (1999), Menchaca (1988), and Pontious (1982) have investigated which musical elements directors attend to most during rehearsals. Carpenter (1986) found that band directors focused mostly on rhythm, tempo, dynamics, style/articulation, and instrumental fundamentals, and spent the least amount of time on theory, tone, intonation, expression, and blend/balance. Cavitt (2003) found that intonation/tone and articulation were given the most focus in rehearsal; they were distantly followed by rhythm and dynamics; and the least amount of rehearsal time was spent on tempo, pitch accuracy, and technical facility. Goolsby’s (1999) study

showed that expert directors spent drastically more time on rhythm and articulation. Dynamics, blend/balance, style, and expression/phrasing received moderate attention and subdivision, notes, airstream/posture, energy, entrances/confidence, intonation, and tone received the least amount of consideration. The variation among the studies makes it difficult to identify the degree of focus on musical elements, but it appears that rhythm, articulation, and dynamics generally receive the most attention. This summation is supported by Menchaca's (1988) conclusion that more time is spent on fundamentals rather than expression.

Comprehensive musicianship has shaped the way many directors approach their band classes (Willoughby, 1990). An important component in this approach is engaging students in higher-level thinking about musical concepts. With this growing philosophy in music education, researchers have increasingly investigated the degree to which directors implement these elements. Although high school band directors reported comprehensive musicianship as a high priority, it was not highly rated as strength (Miles, 1993). Blocher et al. (1997) found that band directors engage in conceptual teaching for only 32 seconds in a 20 minute time frame. Some of the subjects did not use conceptual teaching at all during rehearsals. When comparing music teachers of different levels and in different performance mediums, Yarbrough and Price (1989) found that band and choir teachers provided the lowest amount of musical information to students and that band directors had a low occurrence of questioning in rehearsals. Carpenter's (1986) study echoed those results finding a low volume of questioning during band rehearsals. Most of the teaching moments were focused on basic performance skills. A

study in the choral setting found that directors engaged students in critical thinking only 6.36% of the time and focused on lower-level concepts 45.96% of rehearsal (Garrett, 2009).

The National Standards for Music Education were developed to “advance both quality and accountability” (Consortium of National Arts Education Associations, 1994, p. 10) for arts education. These standards grew out of the movement towards comprehensive musicianship and encouraged music educators to focus on a variety of musical aspects in their classrooms, including listening, creating, performing, history, and culture (Diehl & Scheib, 2013). Although the performing and responding standards have easily been integrated into band classes, those focused on creating have been more difficult to implement (Diehl & Scheib, 2013, Skube, 2002). Diehl and Schieb (2013) found several factors correlated with the implementation of the creating standards into rehearsals, including band size, performance schedule/demands, and the expressive qualities within certain musical selections. Interestingly, “teachers who selected repertoire based upon pedagogical criteria...were more likely to integrate the standards than those who emphasized technical or practical criteria” (Diehl & Schieb, 2013, p.5).

Teachers’ perceptions do not always reflect what they are actually doing in their classrooms. Wang and Sogin (1997) found that general music teachers overestimated the amount of time they spent on activities and that teacher talk was relatively high. When looking at middle school teachers’ use of student-directed instructional (SDI) practices, Bazan (2011) found that teachers who highly valued SDI still emphasized teacher directed instruction significantly more in their rehearsals. In a national survey by (Miles, 1993),

band directors identified their highest priorities as “teaching with the emphasis on aesthetic awareness” and “teaching with a comprehensive approach to music education” (Miles, 1993, p. 66). However, when asked about their programme strengths, they most often reported high level of performance, community support, positive image of the programme, and large enrollment. This disparity between perception and action in the classroom makes it imperative that activities and interventions are measured for effectiveness.

In a case study of six wind-band conductors, Gonzalez (2001) identified two factors for rehearsal effectiveness as (1) achieving musical goals and (2) “satisfaction for all involved as a meaningful musical experience” (p. iii). The analysis of the conductors’ procedures and philosophies identified several unifying characteristics: their rehearsal formats were systematic; conductors maintained an effective pace; and they made timely interjections and appropriate instructional comments. Sink (2002) identified traits for effective music teaching as knowledge of subject matter, use of modeling, use of verbal and nonverbal presentation skills, and analytic skills. Missing from these criteria are student performance and learning. The standards in these studies were identified by describing only what successful conductors do in rehearsals, without looking at the effects on students.

Music teacher evaluation approaches vary greatly among the literature and in practice. Madsen and Yarbrough (1980) promote the use of teacher self evaluation using recordings of rehearsals and careful analysis of their behaviors, including verbal and non-verbal characteristics, use of approval/disapproval, and personal characteristics. They also promote

analyzing student behaviors during rehearsals. Madsen and Yarbrough (1980) disapprove of blindly following tradition and state:

It seems unfortunate that there are many inexperienced music educators who believe that the best, if not only, way to develop the art of effective rehearsal technique is to amass isolated procedures or “good ideas” that have been garnered over the years from seemingly effective teachers (pp. 17-18).

Doerksen (2006) discusses the importance of evaluating teachers in terms of reaching lesson objectives and suggests that the evaluation process can be especially challenging in music classrooms. The author emphasizes the necessity for defining teacher tasks and using a specified system to evaluate them.

In a meta-analysis of research on rehearsal effectiveness, Duke (1999/2000) only found 13 studies between 1972 and 1997 that included assessment of student achievement as a factor for determining effectiveness. As a conclusion, Duke states that research needs to expand “to include the systematic measurement of teaching effectiveness in relation to the accomplishment of instructional goals” (p. 143). From this research, Duke (1999/2000) developed an approach to rehearsal evaluation called “rehearsal frames” (p. 19). The organizing principle of the frame becomes the performance goal rather than a time period. A variety of techniques may occur during a frame, including repetition, modeling, decontextualizing, and verbal directions. The frame concluded when the goal has been achieved. Irwin (2006) investigated the rehearsal frame as an instructional tool for choral directors and found that it increased the subjects’ perceptions of effective



teaching. Yarbrough and Price (1989) suggest that a specific pattern of instruction is the most effective teaching method. This “optimal pattern” (p. 179) consists of presenting the task, student responses to task, and feedback. When evaluating experienced and pre-service teachers’ use of the pattern, they found that band directors completed the least number of complete patterns in rehearsals.

Research on student behavior or achievement in rehearsals is sparse, but the variables investigated include attentiveness, teaching intensity, and comprehensive musicianship. Witt’s (1986) study compared class time use and student attentiveness in orchestra and bands (N=48). The activities were classified as student performance, teaching, or getting ready. During performance, students were found to be off-task less (M=3.4%) than during non-performance time (M=17.8%). Orchestra students were reported to be less attentive than band students during all rehearsal activities.

An investigation by Gustafson-Hinds (1998) on the effect of comprehensive musicianship on group performance found no significant difference between the control and treatment group. However, the author found significant improvement in both groups’ performances, showing that comprehensive musicianship was still an effective approach. Additionally, students reported enjoying the comprehensive musicianship approach and believed it improved their musical understanding. Montemayor (2006) found a positive significant correlation between performance quality and rehearsal effectiveness. The author also found that ensemble skill level is more strongly correlated with performance quality and therefore cautions against evaluating teachers solely in terms of student achievement.

All in all, there seem to be a lot of studies conducted on band instructors and their classroom practices in America, Europe and Asia, but not a single study was mentioned on the current subject in Africa, for that matter, in Ghana. Also, research on current practices in school band has focused on the ideals of aesthetic education, comprehensive musicianship and National Standards for Arts Education as the primary philosophical base for instrumental music education in other parts of the world. The finding in this review provides the opportunity to know what has been said already by other researchers and will also help strengthen the researcher's claims by citing what other reliable authors have said about more effective school band instructional practices when discussing the results in chapter four of this thesis.

### **Teaching Beginning Bands**

Beginning level band instructors employ numerous strategies and approaches to provide a meaningful musical experience and to lead their students to success in instrumental music performance. Instructors must consider various aspects of instrumental music study and determine strategies and approaches appropriate for their students. These aspects of instrumental music study include fundamentals of performance skills on specific instruments, music notation reading, audiation, aural skills, types of instruction, and selection of instructional materials. In anticipation of a new beginning level band class, instructors must determine criteria for recruiting students and selecting instruments for each.

When recruiting students for beginning level band, Klinedinst (1991) has recommended accessing academic records and administering a music

aptitude test to assist in finding students with greater potential for success. Students with high scholastic ability and achievement, especially in reading and math, may experience higher achievement in instrumental music performance (Klinedinst, 1991). Further, higher achievement in instrumental music performance may lead to a higher rate of retention of beginning level students. Results of Klinedinst's (1992) second year study support the original study findings, indicating that scholastic and academic success affect instrumental music performance achievement.

Aspects influencing band instructors in assigning instruments to students include the need for a balanced ensemble and physical characteristics of students, such as size, weight (Bayley, 2004), and physical strength (Turner, 2004). Turner has recommended considering personality, musical style preference of the student, length of fingers, and size of lips when selecting appropriate instruments for students. Klinedinst (1991), however, has contended that physical characteristics may not be reliable predictors of success on musical instruments. Some band instructors may exclude oboe from initial instrument choices presented to students (Bayley, 2004). Reasons for exclusion include lack of availability of oboes in their schools and lack of familiarity with teaching double reed instruments. Cost (Bayley, 2004) and gender identification (Johnson & Stewart, 2004) have not appeared to significantly affect instrument assignments made by band instructors.

Proper embouchure, breathing, and posture are regarded as high priorities when teaching beginning level band (Lenzini, 1999; Stycos, 1993; Worthy, 2002), as well as developing proper quality of tone (Worthy, 2002). Accurately formed embouchure and posture, combined with efficient and

consistent use of air, are important aspects of producing appropriate tone and accurate intonation on band instruments (Worthy, 2002). Developing a strong, proper embouchure requires close attention and constant reminding from the instructor to be certain students implement correct formations (Stycos, 1993; Worthy, 2002). Consulting a variety of sources, including books, articles, or sessions with colleagues or professional specialists, may provide helpful information on proper formations of embouchures. Whereas some professionals emphasize the importance of teaching accurate intonation in the beginning of instrumental music study (Lenzini, 1999; Stycos, 1993; Worthy, 2002), Smith (2004) has argued that aspects of intonation should be addressed only when students have learned notes and rhythms of their study material, and have developed fundamental performance skills such as proper formation of embouchure and production of tone. Further, students should learn tuning adjustments that should be made with the embouchure in correlation with fingerings (Smith, 2004).

Although many professionals have agreed that students may benefit from exposure to a reduced number of concepts in the beginning stages of their study, methods for introducing concepts differ. To avoid overwhelming beginning level students by simultaneously focusing on too many concepts, some professionals have advocated teaching the fundamentals of reading music notation, including note reading, rhythm reading, accidentals, and key signatures, before learning to play instruments (Banister, 2002; Conway, 1997). Students may also benefit from developing aural skills through rote-instructed singing, exposure to tonal and rhythmic patterns, and movement activities involving duple and triple meters (Conway, 1997). Once students

learn the basics of reading music and developing aural skills, Banister (2002) has recommended teaching proper breathing, breath control, and embouchure techniques on their mouthpieces or reeds before using entire instruments. These techniques may better prepare students in producing desirable tone and accurate intonation on their instruments from the earliest possible moment. Another strategy used by some beginning level band instructors is delaying use of printed music and teaching by rote method for the first several lessons in order to focus on developing proper embouchure and breath control (Lenzini, 1999; Stycos, 1993). Students may better develop skills by concentrating on fundamental aspects of instrumental music performance, rather than simultaneously processing visual symbols while playing. Stycos (1993) however, has advocated providing students with written fingering sequences in place of music notation when needed. Teaching initially by rote may lead students to achieve proper production of tone and accurate intonation early in their study before incorporating other concepts (Stycos, 1993). Comparison of these approaches has revealed that although selection of initial concepts varies desired outcomes of proper production of tone and accurate intonation remains consistent.

Comprehensive music instruction and whole music instruction are widely accepted alternatives to traditional performance skill instruction (Edwards, 1971; Gleason, 1998; Kvet & Tweed, 1996; MENC, 1996; Whitener, 1982). Some suggest that comprehensive music instruction, including the teaching of music theory, music history (Whitener, 1982), as well as physical design of band instruments and aspects of proper production of tone (Edwards, 1971), may be more effective than teaching only specific

performance skills through a traditional band method book. Gleason (1998) has suggested that whole music instruction, including a comprehensive approach combined with interdisciplinary and multi-cultural aspects, may enhance cognitive music learning while not hindering performance ability. Kvet and Tweed (1996) have provided strategies to incorporate comprehensive music instruction into the school curriculum. These strategies are intended for use with a variety of literature and materials and are designed to comply with the national standards devised by MENC (1996) for middle school band students. No known literature indicates whether public school band instructors implement the strategies or approaches discussed above pertaining to beginning band instruction.

Gordon (1993) has contended that it is best to delay teaching notation in order to allow students to develop tonal and rhythmic pattern audiation skills to better comprehend the music studied (Conway, 1997; Dalby, 1999). Dalby (1999) has agreed, suggesting that students may struggle if asked to simultaneously read music notation and contend with physical challenges posed by instruments. Audiation skills learned through singing may improve intonation and phrasing by eliminating the physical challenges of their instrument and allowing students to focus on what they hear in their minds (Dalby, 1999). Audiation and vocalizing may also lead to more accurate rhythm in music performance (Conway, 2003), improved intonation, and more efficient rehearsals due to students hearing and correcting their own mistakes (Robinson, 1996). Students should sing and chant patterns before performing patterns on their instruments (Gordon, 1993). Schleuter (1997) has supported this philosophy by emphasizing the importance of aural/oral and verbal

association of tonal and rhythmic patterns. Students who do not receive adequate instruction in developing audiation skills may associate music notation symbols with specific fingerings rather than with musical sounds, thereby hindering instrumental music performance (Schleuter, 1997). Popular beginning level band method books often neglect the instruction of pitch relationships, emphasizing instead the visual aspects of technical development (Bernhard, 2004). Tonal development emphasized within the context of traditional beginning level band instruction may affect melodic ear playing achievement, thereby reducing reliance on discrete visual symbols (Bernhard, 2004).

According to some professionals, beginning instrumental music students may benefit from tonal pattern instruction. Tonal pattern instruction may be an effective method for teaching music notation reading, especially for the development of sight-reading skills (Grutzmacher, 1987; MacKnight, 1975), and may also improve melodic ear playing achievement among beginning level instrumental music students (Bernhard, 2004). Students may develop stronger auditory/visual discrimination skills through tonal pattern instruction (Bernhard, 2004; MacKnight, 1975), and incorporation of tonal patterns in their study may help students develop skills in aurally identifying major and minor sonorities (Dalby, 1999; Grutzmacher, 1987).

Although indicates that beginning level music students experience no difference in achievement when receiving individual or group instruction (Schleuter, 1997), some band instructors incorporate homogeneous-instrument teaching in their band programmes. Despite Gordon (1993) has suggested that students may benefit from heterogeneous instruction by which they may

develop musicianship more quickly, homogeneous instruction may provide an environment for students to play notes that better suit their instruments in terms of comfortable response and fingerings, as well as allow students to associate with other like instruments (Lenzini, 1999; Stycos, 1993). Some professionals have recommended using peer teachers as another form of instruction to supplement beginning level students' study, to recruit new band students (Lenzini, 1999; Mills, 2003; Staley, 2004), and to strengthen retention in the band programme (Staley, 2004). The use of peer instruction with beginning level instrumental music students may also enhance motivation, practice technique, and production of tone (Staley, 2004). Chamber music and large-ensemble sectional settings may provide opportunities for students to gain insights regarding performance skills, including production and quality of tone, intonation, and articulation. No known literature discusses the potential benefits of students receiving private/solo instruction from either the band instructor or a professional specialist.

Some professionals have recommended using a variety of instructional materials, selecting those most appropriate for their students (Heresniak & Woitach, 2001). Research indicates that using supplemental materials such as audio and/or video models may contribute to students' success. According to Puopolo (1971), students may experience more efficient individual practice sessions when using recorded audio models, instructions, and accompaniments. Employment of audio-recorded practice assistance may lead students to more efficient classroom rehearsals and greater success in instrumental music performance. Schleuter (1997) has supported the use of modeling materials, including incorrect models along with correct models, for



purposes of comparing and contrasting and developing students' critiquing skills. Video-recorded models may help students to achieve proper and accurate embouchure, hand position, instrument position, and posture (Linklater, 1997). Linklater's study also indicated more successful development of accurate intonation and quality of tone in students who included video-recorded models in their instrumental study. Williams' (1978) study has suggested that video-recorded models of oboe embouchure and reed adjustments provided effective instruction.

In sum, the literature reviewed in connection to teaching beginning bands reveals recommended features of effective rehearsal such as fundamentals of performance skills on specific instruments, music notation reading, audiation, aural skills, types of instruction, selection of instructional materials, proper embouchure, breathing, and posture and other fundamentals that are regarded as high priorities when teaching beginning level band. The findings in this review, indeed, have far reaching consequences as far as the data collection for this study is concerned. One of the data collection instruments for this study is the use of observation. The literature review on teaching beginning bands has given pointers with regards to elements of effective rehearsal to look out for during data collection for the current study.

### **Effective use of Rehearsal Time**

Rehearsal periods provide a time in which musical behaviors can be taught and learned. The amount and quality of music learning probably depend to some degree on how the conductor structures rehearsal time and what behaviors occur during that time. Effective teaching has been defined as the degree of effect that observed teacher behaviors have on student behavior

(Yarbrough & Price, 1989). However, this definition is subject to tremendous variability as researchers report defining effective teaching can be difficult, yet recognizable when observed ( Madsen, Standley, & Cassidy, 1989). Therefore, the purpose of this discussion is to specifically examine the most important aspects and/or elements that effective band directors focus on during their music rehearsal.

Educational researchers are frequently encouraged to begin the study of comprehensive issues such as "music teacher effectiveness" with descriptive studies, followed by research involving correlational techniques, and, finally, investigations involving experimental methods (Rosenshine & Furst, 1973). An example of this long-range approach is the initial and continued work addressing time on task introduced by Madsen (1971), which has withstood the test of repeated scrutiny (Madsen & Duke, 1993) to establish time on task among the significant components of music learning and teaching.

Significant contributions to our understanding of teaching music have been investigated during the past 20 years. In descriptive studies, researchers have examined choral teacher behaviors (Caldwell, 1980; Thurman, 1977; Yarbrough, 1975) and specific behaviors of elementary general music teachers (Forsythe, 1977; Moore, 1976, 1981; Wagner & Strul, 1979). Investigators have also focused on the effects of teacher behaviors on student attitude and attentiveness in a variety of ensemble settings for nearly two decades (Kostka, 1984; Price, 1983, 1992; Yarbrough, 1975; Yarbrough & Price, 1981, 1989). This body of literature has led to increasing insight into music learning and teaching at various grade levels, labeled "sequential patterns of instruction"

(Price, 1992; Yarbrough & Hendel, 1993; Yarbrough & Price, 1989; Yarbrough, Price, & Hendel, 1994).

In the continuing search for more effective instructional models in instrumental music few descriptive studies of effective music teaching have focused on junior high and high school band or orchestra teachers. The first step in the investigative pattern suggested by Rosenshine and Furst remains incomplete. Since 1980, when Madsen and Yarbrough recognized that "the specific use of rehearsal and class time has not been clearly isolated as a variable" (1985, p. 40), only two studies have been published, those of Witt (1986) and Carpenter (1988). Both compare junior high and high school band directors on selected aspects of teaching instrumental music.

Witt (1986) compared 48 instrumental music teachers equally divided between junior and senior high school orchestra and band directors. Across groups, she reported that 17.8% of the class time was spent "getting ready," 38.9% in teacher talk, and 43.3% in performance (p. 38). Carpenter (1988) randomly selected 14 junior high and high school band directors to examine verbal communication and overall effectiveness of 56 rehearsals. He used one to five audio tapes, submitted by each director, to rate the directors' effectiveness based on their verbal comments. Carpenter reported that verbal instruction consisted of 80% technical directions, 15% modeling, 1.5% imagery, and 3.3% questioning (p. 39).

Sherrill (1986) also compared exemplary junior high and high school band directors. Sherrill videotaped four junior high and four high school band directors and analyzed 20-minute portions of the eight tapes for verbal behaviors. He reports that conductors spent between 30% and 56% of the

rehearsal segments in verbal instruction, with a mean of 44% (p. 54). Pontious (1982) and Buell (1990) also studied outstanding band directors. Pontious (1982) videotaped five teachers who received three consecutive superior ratings at festivals. After analyzing the verbal behaviors during the first 30 minutes of two rehearsals for each (excluding the warm-up and announcements), he reported that 58% of the directors' teaching included band performance and 42% included talking. Buell (1990) completed the only case study. He described ensemble preparation by an outstanding college band director from initial sight-reading to the final performance.

The only studies that compare instructional behaviors of "effective" and "less effective" instrumental music teachers were by Ellsworth (1985), who studied 13 orchestra directors, and Grechesky (1985), who studied 11 band directors. Both researchers used 5-minute, solicited audiotapes from volunteer directors to rank and divide the teachers into "musical" and "less musical" directors. Both analyzed 19 to 22 minutes of videotaped rehearsals. Ellsworth found no difference in teacher behavior. Grechesky found a strong relationship between a high quantity of talking and "less effective" directors.

The instrumental ensemble remains a fundamental and basic component of the music education curriculum in American secondary schools (Price, 1981). Although each of these descriptive studies contributes to an understanding of the dynamics of instrumental music rehearsals, each is also limited, either by a small sample or by analysis of short portions of rehearsals. A more complete examination of the teaching behaviors of experienced and successful band directors could broaden the baseline of descriptive data for instrumental ensemble rehearsals, which in turn might lead to future studies

identifying additional characteristics of outstanding directors. Such an examination might also prove beneficial to those involved in music teacher education programmes who are constantly striving to help future teachers attain the maximum performance level within limited rehearsal periods. Effective use of the limited time in instrumental music rehearsals requires constant decision-making on the part of the conductor, effective instrumental music teachers need to be able to make competent decisions guiding the rehearsal (Price, 1981). Analysis and comparison of complete rehearsals of band directors who have demonstrated repeated success as master teachers with those directors new to the profession might in part serve this need.

Notwithstanding extensive past research, effective teacher characteristics have continued to receive attention from the research community. For example, Steele (2010) recently identified nonverbal communication, strong positive self-efficacy, and strong leadership skills as three common characteristics of effective music teachers. Furthermore, by surveying high school band students, Kelly (2007) found teachers who maintained high music standards and exhibited a high level of subject matter knowledge were perceived as effective. Finally, in a review of 25 years of published research articles concerning effective teaching, Duke (1999/2000) perceived two consistent characteristics of effective teachers: (a) teachers who kept students' attention and actively engage in rehearsal activities were deemed effective and (b) effective teachers were individuals who used rehearsal time efficiently. An example of Duke's conclusions was illustrated by Worthy (2003) who, while investigating wind band conductors, suggested that effective high school conductors focused on single concepts in shorter

durations during rehearsals, thus efficiently keeping students more on task. Worthy's conclusions supported previous findings by Goolsby (1997) who found that while expert band teachers may use more verbal instructions, these instructions were more specific than novice and preservice teachers.

The ongoing scope of investigations regarding effective music teacher characteristics would suggest a continuing challenge to accurately define what skills and behaviors are required for effective instruction. A challenge in determining effective music teachers is the performance-based nature of an ensemble classroom. Music educators frequently assume that a superior performance is an indicator of effective teaching (Saunders & Worthington, 1990). Yet studies have suggested that ensemble teachers perform a variety of tasks, techniques, and behaviors that influence the teaching/learning process, subsequently contributing to better performances. For example, the tasks, techniques, and behaviors shown to influence student learning in performance include sequentially presenting information (Price, 1992; Yarbrough & Price, 1989), a greater focus on student on-task performance with less teacher talk (Blocher, Greenwood, & Shellahamer, 1997; Brendell, 1996; Goolsby, 1996, 1997, 1999; Witt, 1986), and providing specific positive feedback (Goolsby, 1997; Schmidt, 1995).

While it appears there are many common approaches and techniques that effectively influence student learning and performance, mastering these skills to achieve the highest performance level is not universally achieved. Goolsby's studies (1996, 1997, 1999) and Byo and Austin (1994) have shown marked differences between different experience levels of teachers. Blocher *et al.*, (1997) and Kelly's (2003) investigations have shown differences between

instructional levels. However, studies have shown that expert teachers, at all levels, share common characteristics when approaching ensemble rehearsals. For example, Cavitt (1998) found expert teachers were better able to detect errors in ensemble performances, Dunn (1997) demonstrated the influence of specific verbal feedback frequently used by expert educators, Henninger (2002) stated that expert teachers focused more on student behaviors, and Madsen (2003) showed how delivery of instruction can influence student learning and performance. Specifically, Goolsby (1997) determined that expert band directors devoted the greatest amount of time during their rehearsal to developing the overall sound of the ensemble, most notably, tone production. Furthermore, exemplary high school band directors in Samuels's (2011) article consistently focused their instruction on ensemble conceptual fundamentals, such as tone production, articulation, and blend and balance. These directors also routinely used a variety of approaches such as specific warm-up routines, long tone exercises, and sight-reading activities to teach and reinforce performance fundamentals.

Investigations of effective music teaching have most frequently focused on observations or surveying individuals perceived as effective teachers. While these approaches have added a tremendous amount of knowledge to understanding effective teacher characteristics, empirically isolating specific behaviors that may be applied to all individuals has been minimal. One approach that has received minimal empirical attention is asking a broad spectrum of teachers to state what characteristics contribute to their success. This descriptive approach has previously been effectively used to expose more salient aspects of teaching (Madsen & Duke, 1999; Madsen &

Kelly, 2002). When not restrained by specific questionnaires or surveys, individuals may feel more open to telling their “story” which may shed further insight into specific characteristics of effective teachers.

Perhaps the initial start to empirically having better knowledge of success is with expert conductor/teachers. Investigating the tasks, techniques, and behaviors used by expert conductor/teachers to consistently produce high performance levels could provide a more sound teaching approach, which may be more generalized to a broader segment of teachers. Furthermore, such investigations could offer an additional understanding of successful skills and knowledge that add to more insight for university preservice programmes. Therefore, Juchniewicz, Kelly, and Acklin (2014) examine what “superior” band directors, in their own words, consider to be the most important aspects and/or elements of their music rehearsal. Additionally, responses between middle school and high school directors were compared for any differences.

In their study, a total of 131 respondents from Florida, Kentucky, and North Carolina who received a “superior” rating for 4 out of the past 5 years completed an open-ended essay question online asking them to describe which aspects and/or elements they considered to be the most important during their music rehearsal. Using a previously established descriptive approach consisting of qualitative coding techniques, responses were analyzed and placed into a taxonomic structure according to similar themes that emerged from the data. Results from the 792 comments listed indicate that both middle and high school directors spend the most time working on “Music Fundamentals,” with “Tone Quality/Production” listed as the most frequent response for both groups. Additionally, directors placed importance on



“Conductor/Teacher Behaviors,” “Teaching Techniques,” “Classroom Environment/Behavior,” “Use of Specific Warm-ups to Teach,” “Selecting Literature,” and “Good Relations with Students.”

In conclusion, the continuing search for more effective instructional models in instrumental music has focused on descriptive studies of effective music teaching. In relation to the current study, the findings on effective use of rehearsal time are very beneficial. This study aims at finding out the rehearsal approaches of basic school band instructors in the Accra metropolis. Use of rehearsal time by individual band instructors offers a distinct criterion for categorizing instructors as different from another. On one side of the coin the review has summoned adequate evidence in support of the fact that due to individual differences, school band instructors approach their rehearsals in different ways therefore instructors should teach based on their strengths. On the other side of the coin, some rehearsal strategies are considered as more effective than others, therefore, instructors should adopt the more effective instructional styles. Thus this review offers another element to consider during my observation.

### **Strategies for improving Rehearsal Technique**

One of the greatest challenges large ensemble music directors face when entering the profession is learning how to maximize their rehearsal efficiency for an extended period of time. Prior to their student teaching internship, undergraduates are rarely afforded the opportunity to conduct or rehearse for more than 10 or 15 minutes during a single teaching episode, leading many students to feel that the lack of podium time is the biggest impediment to developing their rehearsal skills (Silvey, 2011). This line of

thinking, consistent with perceptions cause of some university conducting faculty (Romines, 2003; Zirkman, 1984), may lead many to mistakenly believe that all of their rehearsal weaknesses are the result of inadequate time in front of students rather than perhaps their own limited understanding of key principles of effective large-group instruction. The rehearsal issues that conductors face are commonplace, and many of these can be remedied once the underlying instructional problems have been diagnosed.

Music education specialists try to prepare students for the inherent difficulties in teaching—especially with large ensembles—there are so many issues to consider that even the most systematic pedagogues cannot cover every important rehearsal principle nor do they agree on the importance of such topics (Chapman, 2008; Manfredo, 2008). When confronted with students in an environment away from the skillful guidance of their instructors, many novice conductors often forget the helpful instruction from their preparation. Even experienced teachers are sometimes unaware of unproductive rehearsal habits that may have formed over time or the strategies necessary for their eradication or improvement.

The goal of the current discussion is to illuminate conducting and rehearsal behaviors that may impede the productivity and efficiency of the daily rehearsal. It should be noted that the decision to include these general topics—while excluding others that were also deserving of further examination—was intentional. Silvey (2013) first identified specific conducting and rehearsal skills that he believed were problematic issues for many teachers, basing this list primarily on his observations of pre-service and in-service teachers' rehearsals. After reviewing extant conducting and

rehearsal technique research, he selected six topics that (a) appeared frequently in the literature and (b) epitomized rehearsal skills that large ensemble music directors could change quickly. Using extant research findings as a basis for discussion, solutions that might positively affect all conductors who struggle with these problems were described.

### *The importance of the warm-up period*

Conductors sometimes mismanage the warm-up period, one of the most important aspects of daily rehearsal in terms of building fundamentals and musicianship. From giving a litany of announcements while taking attendance to never altering the content of warm-up activities such as lips slurs, vowel matching exercises, or scales, teachers unwittingly indicate to their students that warming-up is not a critical part of their time together. Because conductors establish the intensity of a rehearsal in the opening minutes of a class period, teachers would be advised to treat the warm-up period seriously. A casual demeanor can undermine the intensity of a rehearsal (Madsen, 1990), and even fumbling through scores and the mere appearance of unreadiness can negatively influence perceptions about a conductor's effectiveness (Fredrickson, Johnson, & Robinson, 1998).

I believe that adopting a nonverbal approach, in which the first thing that happens in the rehearsal is sound production (even in terms of long tones or a chorale), puts the emphasis where it belongs—on music making. During this time, conductors can focus on providing insightful comments regarding students' posture, tone quality, and technique. Greater specificity and attention-to-detail during the warm-up will let students know that they must be

mentally, physically, and emotionally engaged from the first moments they play their instruments.

Warming up before playing and performing is a recommended and ubiquitous practice used to prepare musicians for the mental and physical challenges encountered during a rehearsal, performance, or practice session. Indeed, a wealth of articles and published exercises prescribe methods and advocate the benefits of a comprehensive warm-up routine. For example, in a book on band techniques, Rush (2006) recommended a complete concert band warm-up replete with breathing exercises, long tones, lip slurs, and chorales. Lisk (2006) described the warm-up as a time to acclimate students to the focused attention required to produce creative and comprehensive musicianship. Casey (1993) compiled a compendium of opinions and beliefs on ensemble warm-ups held by preeminent band conductors from throughout the United States—this copious collection of professional opinions unanimously supported the warm-up as the highest priority for a quality rehearsal. In essence, these resources and others have suggested that warm-ups should be attended to every day and should include exercises focused on improving the performance of music through development of playing skills and practice in basic concepts, such as blend and balance.

Music researchers have examined the warm-up activities of music educators and observed that most directors make conscious efforts to allocate time for it. For instance, Goolsby (1996) found that experienced high school band directors spent more rehearsal time systematically warming up their performing groups than directors with less experience and Brendell (1996) observed choral music educators dedicating over 10% of their rehearsal time

to warming up. Brittin (2005) examined the content of instrumental music educators' lesson plans and noted that all contained a section devoted to warming up the ensemble. Obviously, teachers value warming up, and this value has extended to the practice intentions of studio teachers, performers, and college students (Kostka, 2002). As before, the prevailing finding supports the warm-up as an integral component.

The opinions expressed by many instrumental professionals demarcate the techniques for warm-ups into the categories of *mental* and *physical* exercises (Casey, 1993). Common physical exercises include long tones, range exercises, articulation studies, flexibility patterns, rhythm drills, scale playing, tone drives, chorale playing, and body stretches. When diligently applied, improvements to an ensemble's technique, tone, endurance, flexibility, and musicianship are anticipated. However, studies directly supporting these outcomes in instrumental music education are scarce.

In contrast, researchers in the fields of sports medicine and kinesiology have examined the physical processes and outcomes of warming up in detail. For instance, it is widely believed that athletes participating in physical warm-ups experience fewer injuries and are more likely to attain a peak performance. However, research-based evidence has been inconclusive (Fradkin, Gabbe, & Cameron, 2006); tenuous relationships have been documented between warming up and seemingly intuitive outcomes such as increased endurance (Wittekind & Beneke, 2009) and enhanced performance (Mandengue, 2009), thus mitigating the perceived effectiveness of the enterprise. Moreover, the formal use of warm-up programmes in team sports, although effective at deterring general injuries, appeared ineffectual at

reducing sport-specific injuries (Soligard *et al.*, 2008). On the other hand, athletes participating in tailored neuromuscular warm-ups (Everett *et al.*, 2011; Pasanen, Parkkari, Pasanen, & Kannus, 2009) and dynamic approximations of the movements involved in a sport (McMillian, Moore, Hatler, & Taylor, 2006) experienced significant improvements. In general, research supports the use of *focused* and *dynamic* warm-ups to obtain the protections and enhancements sought by athletes.

In addition to physical exercises, mental warm-ups using techniques such as imagery are a mainstay of elite athletic training, and several studies reveal compelling evidence for musicians. In a comprehensive research review, Jones and Stuth (1997) reported athletes competing at the highest level incorporated mental exercises and visualizations into their preperformance routines (i.e., warm-up). Significant improvements in emotion control, cognitive functioning, distraction reduction, and overall readiness were common for individuals and groups of athletes. In a study of Olympic athletes, consistent use and training using mental imagery and visualizations were critical to performance readiness—the only factor of three (mental, physical, technical) linked with the final ranking (Orlick & Partington, 1988). Generally, the use of a mental warm-up involves specific and general imagery of the task; however, the act of visualizing a positive performance has been documented as being especially important to performing well (Woolfolk, Parrish, & Murphy, 1985).

In music, researchers have examined mental practice primarily as a means of improving sight-reading. Research in the area suggests that mental practice amplifies the benefits of physical practice; however, mental practice

by itself is not as effective as physical practice alone (Coffman, 1990; Ross, 1985). From a pedagogical standpoint, Lisk (2006) applied the results from a multitude of studies in learning and merged these findings with anecdotal experiences as an accomplished band director. He developed a series of landmark exercises focused on thinking about internal timing, mental recitation, and the physical sensations of producing a characteristic tone— all designed to improve students' mental awareness, thus leading to more musical performances.

Other sources imply a broad set of goals for the warm-up period before a rehearsal, lesson, or performance. In essence, a warm-up unifies disparate sounds, instruments, and persons toward achieving a common goal (Casey, 1993); motivates students by relating prior learning to new skills (Hunter, 1993); and mitigates performance anxiety through familiar exercises (Roland, 1994). Group cohesion, a concept borrowed from team sports (Turman, 2003) and examined among successful band directors (Matthews & Kitsantas, 2007), seems an especially desirable outcome. In addition, a set of diverse activities from sight-reading to neck stretches have been cited as warm-ups by choral educators (e.g., Brendell, 1996; Jordan, 2005) which suggests that the warm-up activities used by band directors may be similarly diverse.

Goolsby (1996) examined the content of 60 regular music rehearsals conducted by middle and high school band directors. Data describing the warm-ups included the amount of time spent in teacher-orientated tasks (verbal instruction, nonverbal instruction, verbal discipline), performing tasks with different groups of students (full band, section, individual), and other behaviors (breathing, clapping, counting, humming, and singing). Data in

these micro categories were collapsed into one macro category and revealed 17% to 21% of a regular band rehearsal was spent warming up.

Band directors devote a large amount of time warming up their ensembles, and most music performance assessments provide a designated warm-up period. Researchers have examined the festival performances of high school concert bands on-stage (e.g., Price, 2006) and middle school and high school bands in the sight reading room (Orman, Yarbrough, Neill, & Whitaker, 2007), as well as the warm-ups preceding regular rehearsals of middle and high school bands (Goolsby, 1996); however, little is known about the warm-ups used by middle and high school bands and their directors immediately preceding an adjudicated festival or contest performance.

Therefore in a more recent study, Ward and Hancock (2014) examined and compared the warm-up activities of middle and high school bands participating in state-level concert band assessments in order to provide (a) insight into the practice for music teachers and (b) data-based suggestions for future research. They observed 29 middle and high school bands and coded the frequency and duration of warm-up activities and behaviors. Results indicated that most bands rehearsed music and played scales, long tones, and interval exercises; approximately one third concentrated on breathing, articulation, and chorales. More high school directors used singing exercises than middle school directors, and more middle school directors tuned their ensembles than high school directors. Middle school directors spent 23% of the warm-up time tuning with an electronic tuning device. Directors mostly spent time teaching, tuning, and playing through pieces, and mental warm-up exercises and imagery constituted less than 1% of all activities. Considering the abundance



of recommended practices and limited time available for warm-up at a festival; this study also provides evidence for the profession to differentiate between warm-up practices for rehearsal and assessment.

### *The need for eye contact*

Many conductors find it difficult to make specific and meaningful eye contact with their students during rehearsals. It is not difficult to imagine scenarios in which students misbehave, consistently use incorrect fingerings, or never look up from their music as a result of their conductor's limited eye contact. Poor eye contact can be the result of not knowing the music well enough, an unwillingness to visually engage the performers, lack of confidence, or caused by speaking to the ensemble while looking down at the score (Silvey, 2013). Not surprisingly, performers prefer conductors who make lots of eye contact during rehearsals (Fredrickson, 1994), and expert conductors have been shown to maintain eye contact for longer periods of time than novices (Byo & Austin, 1994). Frequent eye contact between teachers and students increases on-task behavior in the classroom (Yarbrough, 1975; Yarbrough & Madsen, 1998), and eye contact influences overall ratings of conductor effectiveness (Carvalho, 1997; Harden, 2000; VanWeelden & McGee, 2007).

Although eye contact during music performance is perhaps most often regulated based on music complexity (Byo & Lethco, 2001), it can also provide important information about students' behavior before the rehearsal begins. One strategy that will improve eye contact is to start with the exercises, scales, and chorales that generally take place during a typical warm-up. Instead of keeping their eyes on the music that is probably already

memorized, it is advised that conductors focus on the individual instrumentalists throughout the rehearsal time. Detailed observation of students' posture, hand position, fingers, and embouchures will be enlightening. Also, rather than going from one warm-up exercise to another, concentrating your gaze on students' playing will help direct attention toward student performance and learning (Fredrickson, 1992).

Another approach is to mark in the score, perhaps at each phrase or important musical starting or stopping point, the individual or section with whom to make eye contact. In fact, Fredrickson (1991) found that adding eye contact prompts to the music score increased the amount of time that conductors looked at their ensembles. Increasing the amount and frequency of eye contact will also benefit overall classroom management, as conductors may begin to understand more clearly students' musical and nonmusical habits and behaviors.

#### *Working to reduce conductor talk*

Most likely, students who enroll in performing ensembles do not intend to hold their instruments for a long time without getting to play or stand without singing; however, this is a common feature in many teachers' classrooms. The main reason that most students want to be in an ensemble, especially at the beginning stages of instruction, is to *perform*. Some teachers, especially novices, tend to talk too much, often at the detriment of student learning and ensemble performance achievement. Expert conductors have been shown to spend more than 50% of their rehearsal time in performance, whereas novice conductors spend a majority of their rehearsals talking (Caldwell, 1980; Goolsby, 1996, 1999). Furthermore, high school choral

students paid greater attention during rehearsal when teacher talk was limited (Napoles, 2006). Regardless of previous conducting experience or the level of the performance group, conductors should strive to emulate what expert conductors do in regard to time spent in rehearsal, with the likely result being increased rehearsal efficiency and superior ensemble performance gains.

The most drastic way in which to cut down talking time is to not talk—*at all*. These silent rehearsals have been dubbed *monk rehearsals* because neither the conductor nor the students speak. An excellent summary of the musical and nonmusical benefits of monk rehearsals can be found in Grauly (2010). By focusing on gesture, eye contact, and facial expression, conductors can convey expressive information to their students without always having to explicitly tell them. Although results involving the effects of expressive conducting on ensemble performance are mixed, research indicates that musicians and observers prefer expressive conductors over unexpressive conductors (House, 1998; Laib, 1993; Morrison, Price, Geiger, & Cornachio, 2009; Price & Winter, 1991; Sidoti, 1990).

A less extreme alternative that I have found successful is to give an ensemble member a stopwatch with the direction that they raise their hand if any single instance of talking goes beyond *X* seconds in duration. The entire ensemble will need to be informed so that they realize the conductor is trying to better their time management skills. When students and colleagues know that personal improvement is the goal, they will be enthusiastic collaborators. Keep enlisting help from time to time until unnecessary verbalizations are kept to a manageable duration. Researchers have also employed similar strategies

by using computer software to help decrease novice conductors' talk time during rehearsals (Lethco, 1999; Worthy, 2005).

A final strategy might include drafting a list of usable terms to say during a single rehearsal. For instance, choose pairs of words such as “louder and softer,” “brighter or darker,” and “shorter and longer,” and only use these words throughout a rehearsal. The focus of these strategies should be on streamlining what is said to increase productivity.

#### *Making feedback more specific*

“Great job!” “That doesn’t sound good!” “Let’s try it again, but better this time!” All of these statements represent an attempt at conveying information to our students. The problem, however, is that this type of feedback does not explicitly describe to the ensemble (or individual students) the precise nature of what they have done successfully or unsuccessfully, nor does it offer any real diagnostic information focused on changing student performance. Try to imagine students’ thoughts after hearing these types of general statements. Their responses might range from “I don’t need to work on this any longer because the director thinks I’m great” to “I’ll never be able to play or sing this at all.” In an effort to eliminate this type of thinking, teachers should use specific feedback, an idea that is consistent with research that found that observers preferred teachers who used specific feedback compared to general feedback (Price & Yarbrough, 1993; Siebenaler, 1997).

Often, conductors feel more comfortable complimenting the ensemble first, then immediately rattling off a list of errors they just heard in the performance. Rather than stating positive or negative feedback in general terms— especially for younger or less experienced performers—conductors

should think about offering specific feedback that will illuminate more than *what* the problem is, but *how* to fix that problem. In many cases, students already know that they were out of tune on a particular note or did not play or sing that technical passage accurately at tempo. The task should be to deliver specific feedback that will elicit quicker change in students' performance and to move beyond generalities such as "better" and "not good."

In thinking about ways in which to help the undergraduate conductors, Silvey (2013) recommends that they become more effective in delivering specific feedbacks. He advises them to attach a musical description to the nonspecific "good" and "bad" that they say too frequently. For instance, instead of saying "Good job, flutes!" after a few measures have been performed, say, "Good job flutes on making those sixteenth notes more crisp with a lighter tongue!" (Silvey, 2013, p. 13). This procedure also works for negative feedback. Using the same hypothetical scenario: "Flutes, you used too much tongue on those eighth notes and they sounded too harsh and long. Crisper notes, please." With this statement, students know exactly what they did incorrectly, and there is no guesswork as to what needs to be achieved when playing that passage again. Perhaps most important, make sure to give students ways to fix their mistakes. With regard to tonguing, Sullivan (1998) found that woodwind performers who learned a variety of articulation syllables (e.g., tah, dah, tut, taht) were able to execute articulations more effectively than those who used a one-syllable approach. Combining specific feedback with physical actions to improve performance would appear to be an excellent method of delivering instruction.

In addition to providing specific feedback, conductors should not be afraid of giving their students negative feedback. Not only do expert music teachers use more negative than positive feedback during their teaching (Buckner, 1997; Duke & Simmons, 2006; Whitaker, 2011), but also the use of negative feedback does not adversely affect students' attitudes about music teachers or ensemble rehearsal (Cavitt, 2003; Duke & Henninger, 2002). Indeed, negative feedback can be a very powerful tool in shaping students' performance. An example of productive negative feedback might be telling your tenor saxophonist that his "tone sounds airy" rather than saying the less helpful and unspecific "your tone sounds bad." After delivering this type of feedback, the student is more aware of what is deficient in their playing, perhaps enabling them to fix this issue on their own or with your assistance.

#### *Moving beyond notes and rhythms*

Although the technical aspects of music making often represent the bulk of complaints made by conductors to their students in rehearsal, much of the insecurity about these technical issues can be avoided. Rather than just complaining about the precision of those 16th notes, describe ways in which the students could practice those measures outside of the rehearsal. Not surprisingly, researchers have indicated that middle school and high school students' practice sessions lack structure (Barry, 1992; McPherson & Renwick, 2001; Oare, 2012). However, this lack of focus while practicing can be lessened when teachers discuss with their students a variety of practice strategies (Rohwer & Polk, 2006). In addition to describing how to rehearse a technical passage, model for the students by performing on a primary or secondary instrument. Studies suggest that modeling may encourage musical

independence (Morrison, Montemayor, & Wiltshire, 2004) and the development of performance expressivity (Woody, 1999). If students can hear improvement in your modeled sound, they may be more willing to use these strategies in their own practice.

Many conductors seem to spend all of their rehearsal time fixated on “right notes, right rhythms” because these issues are somewhat easier to address and correct in rehearsal than balance, blend, or intonation. Researchers have found that middle and high school band directors most often address issues related to rhythm and tempo when working with their ensembles (Carpenter, 1986; Pontious, 1982; Sherill, 1986). Some conductors may believe that you either play or sing the written rhythm and notes on the page or you don’t, right? Perhaps there is no subjectivity about assessing whether a student performed an F-major scale in quarter notes at a specified tempo marking. However, for experienced conductors, there is a lot more to an F-major scale than “right notes, right rhythms.” Elements such as tone quality, expression, and intonation must also be taken into consideration. Interestingly, research findings have indicated that experienced teachers addressed intonation, expression, balance, and blend much more frequently than did novices, who spent the majority of their rehearsals getting their ensembles to play together (Birkner, 1992; Goolsby, 1997, 1999).

One of the best ways to spend more time talking about sophisticated musical skills is to choose less technically demanding repertoire. What if rehearsals were also centered on higher-level musical skills, not just notes, rhythms, and dynamics? By choosing repertoire that is not dominated purely by technical demands, more time can be spent on musical elements such as

expression, balance, blend, and musical nuance. It is important to note that I am not advocating playing or singing music with no technical challenge because overall ensemble technique would be stifled. However, think carefully about when to programme such pieces. A suggestion might be to programme repertoire that is slightly too difficult for some ensemble members in a less threatening and stressful environment than a large group contest performance.

#### *Leaving time for contextualized performance*

For conductors who have thoroughly prepared their scores, each rehearsal presents an opportunity to make significant improvement based on familiarity with the music. From achieving rudimentary skills such as notes and rhythms to more advanced nuances such as dynamic inflection and tapered releases, each phrase and large section of music deserves special attention. Although this level of musicianship is necessary to elevate any performance from good to excellent, conductors can easily become fixated on one specific technical passage or getting two different instrument groups or choir sections to line up perfectly. While this specificity in rehearsal is a valuable asset, if that single-mindedness impedes ensemble members from understanding how that piece of music functions as a whole, then that is not a desirable outcome. Beyond just teaching students to perform technically on their instruments or with their voices, teachers need to instill the importance of how phrases and sections join together to create an entire piece of music, a concept known as comprehensive musicianship (Austin, 1998; Garafolo, 1983).

A suggestion that will help curtail “spot-to-spot” rehearsing is to name the measure numbers that will be rehearsed. Rather than telling students “Let’s



start rehearsing at measure 10,” tell them “I’d like to hear measures 10 through 20.” This type of rehearsing promotes two very important ideas. First, the ensemble knows that the expectation is to play or sing from measure 10 through measure 20 without stopping. Although mistakes may happen, students should continue to the end of the section. With specific directions based on rehearsing phrases or bigger sections, students’ “big picture” musical thinking will be developed. Given that knowledge of teaching goals can affect perceptions of teacher effectiveness (Henninger, 2002), it is likely that students would appreciate and benefit from knowledge of rehearsal goals. Second, rather than growing frustrated because the ensemble does not quit playing after you cut them off—because students cannot reliably predict when that might happen—there is a greater likelihood that students will stop playing based on your explicit instructions. At this point, the ensemble may be served better by rehearsing individual measures, especially with regard to vertical tuning, specific technical passages, or vowel placement.

Finally, try to end the rehearsal of each piece with at least a run-through of the measures that were practiced that day. This gives the conductor the opportunity to determine whether the performance issues that were addressed during the rehearsal actually improved in a larger context than just the few measures or phrases that were rehearsed. Equally important, ensemble members get another chance to solidify their performance with increased understanding of how their individual part fits into the musical whole.

All in all, the goal of the above discussion was to illuminate conducting and rehearsal behaviors that are conceded appropriate and others that may impede the productivity and efficiency of the daily rehearsal. The

benefits of reviewing literature on strategies for improving rehearsals for the current study cannot be overemphasized. This review offers, yet other aspects of effective rehearsal to look out for during my observation and also a great resource that will help in the explanation of the findings in chapter four.

### **Chapter Summary**

In this review, pertinent and related literature on issues concerning school band instruction was discussed. The introduction to the chapter set the tone for the discussion by acknowledging the importance of the whole exercise and presenting the structure of the review. This literature review suggests that despite the amount of research done in the area of school band instruction; there is paucity of documentation on methods, strategies and approaches employed by Ghanaian basic school band instructors and their impact on performance.

Research is conducted in order to inform people with new knowledge or discovery. However, it is not to be expected that everybody would believe your findings. Thus, to make this research more credible is to support it with other works, which have spoken about the same, aspect or related topic as the one in discussion. This is where this literature review comes in.

Band paradigms are built upon long-standing traditions and well-established practices. In a discussion on teacher education in the arts, Colwell (2006) states that the field “needs to focus on distinguishing between assumptions, traditions, and effective practices” (p. 17). As demonstrated by the numerous studies in band, the traditions and effective practices have been thoroughly investigated. However, little attention has been given to the assumptions on which these studies and practices have been built.

Performance-based music education practices have evolved based on the assumptions that the director is the central figure in the rehearsal and that the student role is to react to instructions given by the director. This is evidenced by the numerous studies analyzing details of conductor behavior, the lack of research involving the role of the students, and the lack of student interaction in rehearsals. Cooperative learning is a well-established educational strategy for improving achievement, social interaction, motivation, active participation in learning, and higher order thinking. This approach to teaching has not been widely adopted in performance-based classes at the high school level. There is only one known teacher resource and a limited number of research investigations using cooperative learning in secondary performance classes. Of those, few empirically measure the effect on performance.

The studies and scholarly writings in music education also show that the traditional band paradigm is performance-oriented, teacher-centered, concerned with efficiency, and steeped in tradition. Band programmes have demanding performance schedules and are often informally evaluated on those performances. The amount of research dedicated to conductor behaviors at the minute level demonstrates that great importance is placed on the conductors and their action in rehearsals. Rehearsals typically focus on fundamental musical concepts with minimal attention given to expressive elements or conceptual teaching. Student interaction with the director and one another is minimal. Students generally engage in the learning experience by responding to the instructions given by the teacher.

To increase the construct validity of this study, theoretical foundations of music participation were also discussed. To understand the complexities of

teaching and learning, one must first understand how music participation relates to learning theories. Furthermore, music programmes are assistive in helping younger learners move from various stages of development (Dolgin, 2011). According to Piaget's (1952) stages of physical development, students in the middle grades are moving from concrete to abstract reasoning. Music can help students bridge the gap between these two phases of development (Dolgin, 2011).

In the literature describing teaching events in instrumental music education, much attention was given specifically to the use of time during entire rehearsals, and how this use of time contributes to the notion of rehearsal pacing. Ideas regarding pacing emerge largely from conventional wisdom (e.g., that a good warm-up is prerequisite to an effective rehearsal), and personal experience or observations supported by various instrumental method books (e.g., Colwell & Goolsby, 1992; Kohut, 1973) and periodicals that deal with methods (e.g., Brand, 1990; Hunt, 1989; Tellejohn, 1989). A systematic study of selected aspects of pacing, through analysis of time usage in rehearsals, might provide empirical evidence to support or challenge conventional wisdom.

Regardless of the quality or depth of previous conducting and rehearsal preparation research, there is always room for improvement. One way that teachers can begin to analyze their instruction is by developing procedures for reflective practice, a process that allows teachers to carefully describe, analyze, explain, and reflect on their teaching (Ostermann & Kottkamp, 1993). Examples of reflective practice strategies that might lead to professional growth include journal keeping, guided observation, discussion with peers,

and videotaping (Schmidt, 1998). For large ensemble directors, regular videotaping of rehearsals should be a commonplace event. Research results have indicated that videotaped analysis of rehearsal is an important part of the overall self-assessment process and aids in the development and refinement of teaching and conducting skills (Lethco, 1999; Worthy, 2005; Yarbrough, 1987). Even though it can sometimes be difficult to analyze teaching videos from an unbiased perspective, invite a trusted colleague from a neighboring school district to provide feedback, consider sending a teaching video to a professor at your alma mater, or ask a friend in your degree programme to give advice.

Although rehearsing effectively takes experience and training, certain skills—including the timing, pacing, and content of conductor verbalizations—are teachable and can be improved with practice (see reviews by Duke, 1999; Price & Byo, 2002). By addressing and correcting errors more quickly and with greater detail, conductors can help solve students' performance problems and establish an environment in which individual and ensemble musicianship are the main priorities. Given that most ensemble directors will rehearse daily for their entire teaching careers, the drive to improve and find more effective and efficient ways to lead rehearsals should be of great importance—not just for our betterment, but most important, for that of our students.

The central premise for this research, therefore is that, the use of appropriate and congenial rehearsal techniques/methods – which involves band directors spending most time working on (a) appropriate teaching techniques, (b) classroom environment/behaviour, (c) use of specific warm-

ups to teach, (d) selecting quality literature, and (e) good relationship with students will make students' instrument playing to be artistic and thereby deeply satisfying.

There are clear-cut ties between the works cited, the topics on which the literature review was based and the main research topic. The topics that were discussed in the literature review were under the following headings: the development of instrumental music curriculum and instruction, instructional practices in instrumental music education, theoretical foundation of music participation, current practices in school band education, teaching beginning bands, effective use of rehearsal time, and Strategies for improving rehearsal technique.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

The intent of this study was to examine the impact of rehearsal strategies being employed by Ghanaian basic school band directors on students' performance in terms of playing proficiency. This chapter discusses the research design, the population, the sample, and the method of sample selection, research instrument, procedures for collecting and analyzing the data, and pilot study are discussed.

#### **Research Design**

In educational research, the impact of teachers' practices and epistemological beliefs toward teaching and learning are investigated by using qualitative methodology (e.g., observations, interviews); on the other hand, the other important outcome, students' academic achievement, provides strong criteria to measure the accomplishments of teachers (Chinn & Malhotra, 2002; Songer, Lee, & McDonald, 2003). In particular, students' performance on tests becomes crucial to evaluating educational setting and the impact of teachers' classroom practices (Wright, Horn, & Sanders, 1997).

The foregoing statements informed the choice of a mixed methods paradigm for the current study. As Creswell (2003) described, with the development and perceived legitimacy of both qualitative and quantitative research within the social and behavioral sciences, mixed methods research employs data collection methods from both types of research. Mixed methods research designs are relatively new but are expanding in use and, although more complicated, take advantage of the strengths of both qualitative and quantitative research. Due to the complicated nature of this design, Creswell

and Clark (2011) came up with key principles that researchers can consider to help navigate this process. The first is to determine whether that mixed methods design is fixed and/or emergent. The design employed in this study can be classified as the “Fixed mixed methods design” (p. 54) since the use of quantitative and qualitative methods was predetermined and planned from the very start of the research process, and the procedures were implemented as planned.

Another point, perhaps the most important choice, which defines the mixed methods design used in a study, is to look at the different ways the qualitative and quantitative strands of the study relate to each other. A strand is a component of a study that encompasses the basic process of conducting quantitative or qualitative research: posing a question, collecting data, analyzing data, and interpreting results based on that data (Teddlie & Tashakkori, 2009). Therefore, the specific major mixed methods design used was the convergent parallel design (Creswell *et al.*, 2011); using qualitative data collection methods, but also employed quantitative data and statistical analyses to enrich perspective on the impact of teaching and learning strategies. Creswell (2003) states mixed methods research designs can “expand an understanding from one method to another [and] converge or confirm findings from different data sources” (p. 210).

The purpose of the convergent design is “to obtain different but complementary data on the same topic” (Morse, 1991, p. 122 as cited in Creswell *et al.*, 2011) to best understand the research problem. The intent in using this design is to bring together the differing strengths and non-overlapping weaknesses of quantitative with those of qualitative methods



(Patton, 1990). This design is also used when the researcher wants to triangulate the methods by directly comparing and contrasting quantitative statistical results with qualitative findings for corroboration and validation purposes.

The convergent parallel design seems most appropriate for this type of study because, (a) it involves collecting and analyzing two independent strands of data (qualitative and quantitative) in a single phase, (b) it also allows the merging of results from the two strands, and (c) it allows convergence and divergence, contradictions and relationships. The use of both the qualitative and quantitative methodologies was to encompass the different aspects of teacher-student holistic approach to teaching and learning. To address the diversity and complexity of rehearsal strategies and its impact on performance, a mixed methodology is necessary.

The procedures for implementing a convergent design are as follows: First, the researcher collects both quantitative and qualitative data about the topic of interest. These two types of data collection are concurrent but separate-that is, one does not depend on the other. They also typically have equal importance for addressing the study's research question.

Secondly, the researcher analyzes the two data sets separately and independently from each other using typical quantitative and qualitative analytic procedures. Once the two sets of initial results are in hand, the researcher reaches the point of interface and works to merge the results from the two data sets in the third step. This merging step may include directly comparing the separate results or transforming results to facilitate relating the two data types during additional analysis. In the final step, the researcher

interprets to what extent and in what ways the two sets of results converge, diverge from each other, relate to each other, and/or combine to create a better understanding in response to the study's overall purpose.

### **Variables**

A single primary dependent variable – band performance – was selected in order to maintain a clear design and reduce confounding variables (Madsen & Madsen, 1970). The variable was measured using the Performance Evaluation Form (Appendix B). The type of rehearsal strategy, the various performing groups and the performance dimensions served as the independent variable for this study.

### **Research Instruments**

The researcher made use of three research instruments; observation (band rehearsal sessions), semi-structured interview (for band instructors) and a researcher designed performance task (for students). Performances of the school bands were video recorded and scored by three independent judges, to encompass the different aspects of teacher-student holistic approach to teaching and learning.

### ***Interview***

One of the most important sources of case study evidence is interviewing (Merriam, 2009). The five band instructors were interviewed after all observations and performances were recorded. All the interviews were semi-structured and guided by a researcher prepared guide consisting of both highly structured questions that were formulated to address my research questions and a list of issues to be explored depending on their relevance to a

specific research setting. This ensured that I obtained uniform information from each participant while also allowing for probing and clarifying “to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (Merriam, 2009, p. 90).

The interviews were audio-recorded. I listened to and transcribed (verbatim) all five recordings. The transcripts were entered into a double-entry interview log, side by side with my reflections and questions. More specifically, the content of the interview log included (1) the questions and topics that had been covered (2) insights and themes suggested by the interview, (3) questions that needed to be clarified, and (4) interpretations that were to be confirmed by the interviewees.

### ***Rehearsal Observations***

Observational data is another valuable source of data in qualitative research, as it “represents first hand encounter with the phenomenon of interest rather than a second hand account of the world obtained in an interview” (Merriam, 1998 p. 94); therefore, observations are often conducted in conjunction with interviews. Preliminary observations were done to inform the stratification of the sample. In the data collection proper, school band rehearsal sessions of selected school bands were observed five times each (excluding videotaping of performance), and all the observed sessions were videotaped. The purpose of the observations was three-fold: (1) to gain familiarity with the research setting and things that had become daily routines for the participants (Merriam, 2009, p. 123), (2) provide answers to the relevant research questions and generate findings that would be triangulated

with the findings of the interviews and document analysis, and (3) identify potential areas of interest and topics that would be addressed by the interview.

The observations were mainly guided by a checklist. I had a copy of the checklist consisting the use of appropriate and congenial rehearsal techniques/methods – which involves band directors spending most time working on (a) appropriate teaching techniques, (b) classroom environment/behaviour, (c) use of specific warm-ups to teach, (d) selecting quality literature, and (e) good relationship with students at hand for each observation and kept brief notes of instances when individual director features were recognized. In addition, I was open to what transpired in the rehearsal session: the physical setting, the participants, class activities that were conducted, and interactions and conversations between the teacher and the students. Following each observation, I viewed the videotaped lesson a couple of times to confirm what I had observed earlier in the classrooms. The videos were also sent to three music education faculties for the confirmation of the strategies identified before the stratification of the sample.

In addition to rating the lessons using the checklist, I also entered the field notes into a double-entry observation log. In the left column of the log were detailed transcripts of what occurred in the lesson that were elaborated based on the notes that I jotted down in the field; in the right column were my reflections, tentative themes that emerged, and ideas to pursue further. The observational notes informed the next data-collection session by helping me plan what questions to ask during the interview or what classroom activity or instructional practice to focus on for the next observation session.

The school band performances were assessed using the modified evaluation form used by Kentucky Music Educators Association at yearly Concert Band Festivals, which is titled “Kentucky Music Educators Association Evaluator’s Comment Sheet–Band Events” (as cited in Compton, 2015). A copy of the form can be found in Appendix B. It is used at both the district level concert festivals and the state level festival. The dependent variable of this study is ensemble performance; therefore, it is logical and appropriate to use the form that is consistently used to evaluate band performances throughout the US. Because this form uses a global approach to evaluation, which would result in only a single overall rating, modifications were needed to provide more detailed and quantitative data (Compton, 2015).

Measuring ensemble performance is extremely subjective, though steps can be taken to increase objectivity (Boyle & Radocy, 1987). Few issues existed in the original configuration of the KMEA form for the purposes of this study. The first was the need for clarification and limitation of the performance elements being measured. Boyle & Radocy (1987) states the number of categories should be between five and ten. An instrument that contains less than five categories is more likely to produce lower reliability while an instrument with more than ten makes it difficult to distinguish between the categories with overlap possibly occurring. The categories listed on the KMEA form greatly exceeded that limit.

Research into factors affecting performance evaluations is quite extensive, with physical and non-musical attributes appearing frequently. Although results are mixed on the effects of audio versus audio-visual recordings of performances (Benson, 1996; Howard, 2012; Pope, 2012; Ryan

& Costa-Giomi, 2004; Ryan, Wapnick, Lacaille, & Darrow, 2006; Siddell-Strebel, 2007; Wapnick, Darrow, Kovacs, & Dalrymple, 1997; Wapnick, Mazza, & Darrow, 2000), several specific non-musical attributes have been identified as affecting performance evaluations: gender (Lien & Humphreys, 2001), ethnicity (Elliott, 1995; McCrary, 1993; VanWeelden, 2004), performer attractiveness (Ryan & Costa-Giomi, 2004; Siddell-Strebel, 2007), conductor appearance (VanWeelden, 2004), and school population (Bergee & Platt, 2003; Bergee & McWhirter, 2005). To reduce the influence of possible factors on performance evaluations in the current study, the decision was made to educate the judges and to remove the physical categories (Posture/Playing Position and Stage Presence) from the performance evaluation form.

The category of Choice of Music was eliminated since the participants were provided with the pieces to perform. The researcher in consultation with the school band instructors selected three pieces which were studied over the 2015/2016 academic year. The remaining musical categories were compared to evaluation criteria used in other studies (Bergee, 1992; Dirth, 2000; Ellsworth, 1985; Evans, 2012; Hewitt, 2002; Montemayor, Wiltshire, & Morrison, 2004; Worthy, 2003). Criteria were placed in the category most similar to those found on the KMEA form based on the descriptions and definitions given by the authors mentioned above. If an evaluation element contained terms found among multiple categories, they were entered twice with repetitions placed in parentheses. Based on the comparison, KMEA items that had two or less matching criteria were removed or combined with another category. Style, Breath Support, and Control criteria were completely eliminated due to the lack of consistency among studies. The element of

Blend from the Tone category was combined with Balance based on the descriptors and the combinations found in other studies. Individual and Ensemble Intonation were combined into a single element labeled Intonation since no other study separated the two in such a manner.

The most problematic criteria were Expression under the Interpretation category and Precision under the Technique category. Expression first appears to be somewhat consistently used in other studies. However, a closer look at the specific terminology shows a wide range of possible characteristics that expression could encompass. In conformity to what was done in Compton (2015), I chose to combine Phrasing with Expression into a single element of Phrasing/Expression under the Interpretation category. The element of Precision found on the KMEA form was quite vague with no supporting description available to clarify. Therefore, I chose to combine it with Rhythm into a single category of Rhythmic Precision under the Technique category.

Once the final categories were selected, operational definitions (Appendix C) were created to clarify each term. Creswell (2003) suggests that operational definitions increase the validity of the instrument and reliability among the judges.

After defining and limiting the specific categories, a ten point rating scale was added (one-meaning low presence of the performance dimension whiles ten-means a high presence of the performance dimension). The modified version of the KMEA form (adapted from Compton 2015) used for measuring band performance in the current study can be found in Appendix B titled Performance Evaluation Form (PEF).

## **Population**

All Basic schools in the Accra metropolis constituted the target population of the study. Accra metro has a total number of 299 Basic Schools, but only 25 schools that have Bands- fifteen private schools, nine mission initiated schools, and one public school. These 25 schools constituted the accessible population for this study.

## **Sample and Sampling Technique**

Ten functioning bands from different basic schools were selected based on the probabilistic sampling techniques, specifically, the stratified and the random sampling with replacement or independent (within-sample) random sampling methods (Glenberg & Andrzejewski, 2008). Firstly, I stratified the population using the rehearsal strategy as a stratification variable. Secondly, the random sampling with replacement method was used to sample from each stratum. This was done by writing the name of each school band on a standard-size slip of paper. I put all the slips of paper in a large hat and thoroughly mixed them. I then closed my eyes and pulled out one slip of paper at a time from the hat and then put the slip back into the hat and repeated the process. This was done until the ten school bands that are supposed to make up the sample were selected. The name sampling with replacement is used because after a slip of paper is selected, it is replaced in the hat before the next draw.

All the ten school bands were located in the same township, were approximately the same size, and performed almost the same type of music for the past four years. Sample size selection for qualitative research relates to the questions and the type of approach (Creswell, 2007); one or two people in a



narrative study, 20-30 in grounded theory project and 4-10 when cases are being studied. Based on Creswell's assertion, five school band directors were selected for the interview using the purposeful sampling method, specifically, the maximum variation sampling.

### **Data Collection and Analysis**

The Head of the Department of Music, University of Cape Coast signed an official introductory letter for data collection on November 19, 2015 (See Appendix F). A copy of this letter was then forwarded to the basic schools selected officially informing them about my intentions. Another introductory letter was also sent to the Accra metropolitan Education Directorate, officially asking for their permission; to grant me access to the schools and also for me to have access to the list of basic schools in the Accra metropolis including their locations. The Accra metropolitan education office, upon the acceptance of my permission, wrote officially to all Circuit Supervisors, Culture Coordinators and school heads to assist me in conducting this research.

After receiving the list of schools and permission from the Metropolitan Education Director, I started the hunt for basic school bands in the Accra metropolis. This search was made a little easier through the kind courtesy of the circuit supervisors and cultural coordinators. I visited all the basic school bands included in the sample informing the school heads and band instructors about the study.

Having clarified and set the research topic into perspective, I ensured that the various instruments for the data collection were vetted and organized. After determining my sample size, I met with each respondent at their various

schools before data collection started. During the first meeting, I explained in detail the nature and purpose of the study and the research activities to be conducted, walked the participants through the Institutional Review Board (IRB) informed consent form and got their signatures, and asked about school policies regarding permitting outside researchers to conduct research in their schools. I also asked for permission to videotape the teacher's classes and discussed with the teachers how to gain permission from the students' parents. The formal data collection process occurred after ethical clearance was obtained from the Institutional Review Board Secretariat, University of Cape Coast. Observations and interviews with the five band instructors took place from September, 2015 to July 2016. Schedules for each data collection session were negotiated with the directors initially in person, but subsequently through the mobile phone.

In addition to accommodating the school band instructors' schedules, I gave primary consideration to having variety in the type of lesson I observed (e.g., not observing the same school band two or more times in a row) and tried to avoid days when a test or quiz or exam was arranged. However, few observation days with certain schools were wasted, because there was miscommunication, or other unforeseen school activities that came across our way. Follow-up interviews on some of the responses were conducted where respondents were asked to clarify their responses to some questions or responded to additional questions. Despite being more informal in the way it was conducted, it was also guided by a brief interview guide.

Information about data collection activities summarized in table 2 below.

Table 2: *Data collection activities*

	School 1	School 2	School 3	School 4	School 5
<b>DCS 1</b>	October 14, 2015 Observation: 45 min	September 28, 2015 Observation: 60 min	September 30, 2015 Observation: 50 min	October 19, 2015 Observation: 45 min	October 14, 2015 Observation: 45 min
<b>DCS 2</b>	November 2, 2015 Observation: 60 min	October 28, 2015 Observation: 45 min	November 18, 2015 Observation: 50 min	November 16, 2015 Observation: 50 min	November 23, 2015 Observation: 50 min
<b>DCS 3</b>	January 27, 2016 Observation: 45 min	February 8, 2016 Observation: 50 min	February 17, 2016 Observation: 60 min	February 15, 2016 Observation: 50 min	February 24, 2016 Observation: 50 min
<b>DCS 4</b>	March 14, 2016 Observation: 50 min	March 23, 2016 Observation: 60 min	March 16, 2015 Observation: 50 min	March 28, 2016 Observation: 50 min	March 30, 2016 Observation: 45 min
<b>DCS 5</b>	May 18, 2016 Observation: 50 min	May 25, 2016 Observation: 50 min	May 16, 2016 Observation: 50 min	May 30, 2016 Observation: 50 min	June 8, 2016 Observation: 60 min
<b>DCS 6</b>	July 11 (morning), 2016 Video recording of performance and interview: 45 min	July 11 (afternoon), 2016 Video recording of performance and interview: 45 min	July 13 (morning), 2016 Video recording of performance and interview: 45 min	July 13, (afternoon), 2016 Video recording of performance and interview: 45 min	July 18, 2016 Video recording of performance and interview: 45 min

Data collected was therefore analyzed qualitatively by the identification of themes, patterns, structures and relationships that arose over the course of the study. The interview data were analyzed through typological analysis. Typological analysis is one of the five qualitative analysis models that Hatch (2002) introduced in his guide for doing qualitative research in education settings, and it combines both deductive and inductive processes. Hatch noted that typological analysis is particularly suitable for studies that rely on interviewing as the primary data collection tool and mainly involves “dividing the overall data set into categories or groups based on predetermined typologies” (p. 152). Typologies, according to Hatch, “are generated from theory, common sense, and/or research objectives” (p. 152). For this study, the

typologies were generated based on the research questions and the review of related literature, so there were four major typologies or categories to start with: goal and objectives of instruction, rehearsal routine, rehearsal strategy and band organization. After the typologies were established, I conducted analysis according to the following steps suggested by Hatch (2002).

Having transcribed and organized the interview data, I first read the interview transcripts carefully and color-coded excerpts (or portions) that would be entered under each typology. For instance, I highlighted in yellow all the excerpts that I identified as evidence for goals and objectives. The other typologies were coded as blue, green and orange. Each excerpt was numbered for easy retrieval. Then, I read the entries by (and within) typology and looked for patterns, relationships, and themes.

The observation data were analyzed mainly to have a firsthand insight into the rehearsal strategies that the school band directors employ and to examine whether the directors' self-reports via the interviews were supported by my observations.

The observation notes were read carefully and repeatedly and coded for examples of the presence or absence of each effective rehearsal feature, and generalizations were made about the teachers' implementation of such strategies. In addition, the observation notes were analyzed for two "pre-determined" themes, which are, the classroom environment and interaction pattern, and how (and how effectively) the teachers approached instruction of the school bands. Although these themes had been briefly examined under the relevant rehearsal features, I believed their importance for the students' instrumental music skill acquisition warranted separate and more in-depth

discussions. Analysis of the classroom environment and interaction pattern focused on how the teachers offered opportunities for using appropriate/recommended rehearsal routines, as specified by the literature, by facilitating teacher-student(s) and student(s)-student(s) interactions. Analysis of the second theme involved teasing out the rehearsal activities that the teachers conducted and examining them in terms of whether (and to what extent) the design and conduct of the activity supported the development of students' performance skills.

The second part of data collection (which I referred to as stage-two) concentrated on the impact of directors' rehearsal methods on students' performance. A Performance task (see the concluding part of appendix A) scored by three independent judges provided continuous data for the quantitative analysis. The performances were rated to a corresponding numerical scale ranging from one to ten (1-meaning low use of the instrumental performance dimension and 10- meaning high use of the instrumental performance dimensions).

The descriptive statistics, t-test, analysis of variance (ANOVA) and correlation were computed using the Statistical Package for the Social Sciences (SPSS) version 17.0.

### **Pilot Study**

The term pilot study is used in two different ways in social science research. It can refer to so-called feasibility studies that are "small scale versions, or trial runs, done in preparation for the major study" (2001 (Polit, Beck & Hungler, 2001, p. 467). However, a pilot study can also be the pre-testing or "trying out" of a particular research instrument (Baker, 1994, p.

182). The latter meaning was the main reason for the current pilot study. One of the advantages of conducting a pilot study is that it might give advance warning about where the main research project could fail or whether proposed methods or instruments are inappropriate.

### **Objectives of the Pilot Study**

Several steps were taken to ensure the validity and reliability of measurements and resulting discussion. Validity is how well a test or methodology measures what it is intended to measure and reliability is how consistently a test or methodology measures what it is designed to measure (Gay & Airasian, 2000). I can confidently say that appropriate steps were taken to enhance reliability and validity in this research. Because, both video and audio recordings were done well using professional equipments (Camera: photo & video -Canon rebel T5 with 18-55mm IS II Lenskit and audio recorder: TASCAM DR-40 4-Track Portable Digital recorder respectively), the semi-structured interview guide was vetted by experienced qualitative music education researchers and also, I adapted a very reliable and well defined set of performance evaluation form (as cited in Compton, 2015).

### ***Validity and Reliability***

Validity and reliability are two factors that qualitative researchers should be concerned about while designing a study, analyzing results, and judging the quality of the study. Yin (2003) identified four tests for judging the quality of case study designs: construct validity, internal validity, external validity, and reliability. Similarly, Lincoln and Guba (1985) suggested four

criteria for developing the trustworthiness of a qualitative inquiry: credibility, transferability, dependability, and conformability (as cited in Zhang, 2014).

Reliability and validity are also conceptualized as trustworthiness, rigor and quality in qualitative paradigm (Golafshani, 2003). Lincoln and Guba (1985) also argue that sustaining the trustworthiness of a research report depends on the issues, quantitatively, discussed as validity and reliability. The idea of discovering truth through measures of reliability and validity is replaced by the idea of “trustworthiness, exploring subjectivity, reflexivity, and the social interaction of interviewing” (Davies & Dodd, 2002, p. 281), which are “defensible” (Johnson 1997, p. 282) and establishing confidence in the findings (Lincoln & Guba, 1985).

I synthesized key literature (Merriam, 1998, 2009; Yin, 2003, 2009) on case studies and developed a list of procedures for achieving validity and reliability in this type of research. The list then served as a guide throughout the research process. Table 3 below shows whether or not these procedures were employed in this study. The information also sheds light on the limitations of the study, which were discussed in Chapter 1.

Therefore, the specific objectives for this pilot study were to: (a) examine the trustworthiness, exploring subjectivity, reflexivity and the social interaction of interviewing; (b) assess the feasibility of the major work; (c) identify possible problems which might occur using the proposed method; (d) assess if each question on the semi-structured interview guide measure what it was supposed to measure; and (e) test the efficiency and clarity of the data collection equipments (such as video camera and audio recorder).

In any qualitative research, the aim is to "engage in research that probes for deeper understanding rather than examining surface features" (Johnson, 1995, p. 4). Therefore, to acquire valid and reliable multiple and diverse realities, multiple methods of searching or gathering data are in order. This is the main reason I made use of data triangulations to record the teaching-learning realities of basic school bands in the Accra metropolis. Triangulation is the use of multiple sources of data in order to create a more complete picture and to cross-check information (Creswell, 2000). The belief is that, engaging multiple methods, such as observation, interviews and content analysis (video recordings of rehearsal session) will lead to more valid, reliable and diverse construction of realities.

To guard against all odds, a pilot study was completed that informed the present methodology. The purpose of the pilot study was to test the data collection instruments and equipments employed in the main work. Two band instructors, chosen from a group of instrumental music educators recommended by collegiate music faculty, were observed on three different occasions and videotaped (obtrusively) conducting three ensemble rehearsals and five performance pieces. During the observations, I concurrently wrote field notes using a defined protocol derived from the available literature as regards the use of time in rehearsal and skills that are appropriate for beginning bands such as; warm-up routines: tone (individual and ensemble), rhythmic accuracy/independence, appropriate posture/embouchure techniques, Phrasing, Music Reading, Intonation, Technique/Facility, Balance, Dynamics, Articulation, Ensemble Playing, and teacher behaviour (error correction, teacher talk, instructions).



Table 3: *Reliability and Validity checklist*

	Definition	Procedures	Phase in which the strategy occurs	Used or not in this study
Construct validity (confirmability)	Whether the operational measures are suitable for the concepts being studied?	triangulation; use multiple sources of evidence establishing a chain of evidence	data collection	Yes
			data collection	Yes
Internal validity (credibility)	How do research findings match reality?	member checking long-term observation peer review and debriefing collaborative modes of research examination of the researcher's biases	data collection;	Yes
			data analysis	No
			data collection	No
			data analysis all stages at the outset of the study	No Yes
External validity (transferability)	How generalizable are the results of a research study?	rich thick description multisite designs achieved through purposive sampling using replication logic in multiple case studies	writing participant selection	Yes Yes
			research design	No
Reliability (dependability)	The extent to which research findings can be replicated	clarifying the investigator's position using case study protocol using external audits developing case study database	writing research design;	Yes Yes
			data collection	Yes
			after writing	Yes
			data collection	Yes

In addition, an interview (semi-structured) on teaching practices and other pertinent issues on school band activities was conducted with the participant directors after the completion of all observed rehearsals. The first rehearsal videotape was discarded to minimize the effect of camera and researcher presence. Remaining videotapes were evaluated by three independent judges. The interviews were also transcribed and coded for teaching and learning strategies. Codes derived from the literature on self regulation and emerging during data analysis included: (a) listening activities, (b) modeling, (c) training in practice strategies, (d) providing students with self reflection/self-assessment activities, (e) questioning techniques, (f)

problem solving, (g) teacher-directed instruction, and (h) non-instructional behaviours.

Upon reflection, three main limitations to the pilot study were identified. First, the pilot study was a case study of two individual instrumental music teachers. A larger sample size, chosen in a manner designed to identify teachers with the specific attributes of interest, may have the potential for a greater diversity of observed teaching and learning strategies. Second, analysis of only two rehearsal videotapes may be insufficient to accurately reflect a director's repertoire of teaching and learning strategies. A more longitudinal approach by observing several rehearsals may uncover a greater variety of teaching strategies due to inherent variability between rehearsals. In addition, the validity of the findings could improve if there was a longer duration of field work (Gay & Airasian, 2000).

The Performance Evaluation Form was tested for reliability between three judges during a pilot study. The result of a Pearson product-moment correlation coefficient was a reliability rating of  $r = .74$ . In order to improve this reliability in the main work, judges were provided with the video recording, definition of terms, and anchor Performance Evaluation Form prior to judging any study recordings. A brief training was held with each judge before the materials are handed over. I also left my phone number with them to discuss the anchor, the forms, and to answer any further questions. The judges used in this study were experienced music educators who had either completed doctoral degrees in music or an expert in wind instruments. Additionally, the judges were instrumentalists and had several years of experience teaching band.

## **CHAPTER FOUR**

### **PRESENTATION, ANALYSIS AND DISCUSSION OF DATA**

#### **Introduction**

In this chapter, the data collected on the rehearsal strategies of Ghanaian basic school band directors and the impact of such strategies on students' performance, are presented, analyzed and discussed. Results of the study are presented and discussed in the order of the research questions, with stage-one data (qualitative) described first followed by stage -two data (quantitative). Qualitative data was collected during Stage-One using observation, field note, and interview.

#### **Presentation and analysis of Stage-One Results**

The first stage of the study was designed to answer Research Question 1, which explores the rehearsal strategies adopted by basic school band directors in the Accra metropolis. This question was answered qualitatively by the observation of rehearsal sessions, field notes, and interviews. The five band directors selected for the interview were observed during five rehearsal sessions each. Data from the first rehearsal of each participant was discarded in order to decrease researcher effect. The selection of the band directors for the interview was done to represent the categories of band instructors who are currently in charge of Ghanaian basic school bands. The categories considered for the selection were: (1) instructors with post graduate degrees, (2) instructors with first degrees, (3) instructors with diploma degrees, (4) instructors who are music teachers but do not play any wind instrument, and (5) instructors who are appointed because of their experience (e.g. retired military or police bandsmen).

Analysis of observations, field notes and interview transcripts revealed similarities and differences in participants' band rehearsal strategies. Therefore, each participant was described separately, as reporting all teaching and learning strategies together would not provide detailed and a valid perspective of what occurred during rehearsals. Descriptions began with demographic details, followed by specific data on the teaching and learning strategies used by each participant, and concluded with general statements made during interviews.

### **Participant-One**

The first participant was in his 25th year of teaching, an experienced teacher, teaching music and dance at the basic school level. After a successful completion of his two-year post-secondary teacher training education, he continued to pursue a Bachelor's degree at the National Academy of Music, today University of Education, Winneba, emphasizing music and had lots of experience playing clarinet in the wind band ensemble during his undergraduate studies. This participant had also completed a Master's degree in music. His first posting was to the Ashanti region where he was appointed as a District Cultural Coordinator, but this was short-lived since he did not have the relevant skill in Ghanaian cultural drumming and dancing. Nonverbal motivation, positive learning environment, music reading and music concept learning were the dimensions most prioritized by this participant.

This participant later came to Accra and continued his teaching career as a class room teacher who had an oversight responsibility of the music aspect of the Cultural Studies syllabus at the JHS level. But in 1997 he was posted to the JHS level as a full-time music teacher. His responsibilities were

to teach music from JHS 1 to 3, take care of the school choir and also to assist another teacher in directing the *ateteben* (bamboo flute) ensemble. Due to his love for school bands, in the year 2000, he was instrumental in organizing a brass band in his school to augment the 50<sup>th</sup> anniversary celebration of the school. The school band currently is made up of an enrollment of about 25 students. The ensemble seemed to be well balanced regarding the number and quality of musical instruments representing a typical brass band with trumpets, cornets, trombones, euphonium, tuba and percussion (bass drum, snare drum, tenor drum and cymbal). The band performs pieces such as hymns, gospel and highlife tunes, anthem, slow and quick march traditions of the military style (mainly during morning assemblies and for the school cadet corps during special school festivities). Band rehearsals are held three days in a week (Mondays, Wednesdays and Fridays) after official school hours 2:30-4:30pm.

### ***Goals and objectives***

Participant One stated that his goal and objectives were to develop student musical performance skill on instruments, and to develop students' skills in sight reading. Theory, musical concepts, and connections to other disciplines were important to this participant but were not the priorities of the band. The teacher's own words best reflect what he desired to develop in students.

### ***Participant One:***

The school band is not to make the children professional musicians. I want them to be thoroughly familiar with what you would consider the theory of music...my policy is to ensure that every child is able to do

some sight reading. When it comes to performance on a musical instrument, there are certain things that must be explained, taught, or demonstrated by a master. Once these skills are learned to a level of independence by students, then students can be held responsible for their personal development.

Further, this teacher alluded to the social atmosphere inherent to band; much of what is done as a band is not done independently, but as a group. Nevertheless, there are few occasions when small group homogenous instrumental instruction is necessary for beginning band students.

**Researcher:** What skills would you like your students to develop?

**Participant One:**

I would say fundamentals of good tone production, and sight reading. I always insist on sight reading instead of the tonic solfa, so, that's why you will see all the boys are shying away from the brass to play the drums since they know they will not do sight reading there...I insisted they start the staff reading from class six.

Musical performance seemed to be both the primary activity and primary goal of the school band programme. However, there is an important learning outcome that needed attention: "Not just doing it correctly, but doing it and knowing why [emphasized by speaker] they are doing it correctly." It would seem that appreciable technical ability and performance were not enough for this instructor; students knowing about score reading and being engaged in 'metacognition' were also valued.

### ***Rehearsal Routines***

Related to his goal and objectives, it was evident after going over the observational field notes and watching videotapes of rehearsal sessions, that this teacher valued student performance on instruments. Students performed on their instruments for most part of the rehearsal session and the little teacher-talk or organizational time seemed devoted to developing musical performance. However, there was minimal drill and practice of technical exercises or warm-ups. He did not use any band methods books or supplemental materials (such as audio and videos recordings) except for fingering and position charts he downloaded from the internet. Teacher-directed instruction remained the most utilized instructional category. Between and during student performances on instruments, there were many examples of (a) direct teacher modeling on an instrument, (b) teacher explanations about posture and good tone acquisition, (c) teacher instructions for students to do something, and (d) students performing what the teacher chose. Detailed total instances of codes by instructional category are shown in Table 4 below.

Table 4: *Use of teaching and learning strategies by participant one*

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#### **Instructional Category**

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#### NON-INSTRUCTIONAL

Administrative

Behavioural cues/feedback

Building rapport

Non- instructional related student talk

Organizational

Other teacher talk

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Table 4 continued

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TEACHER-DIRECTED INSTRUCTION

Organization for performance

Teacher-directed performance

Teacher feed back during class and performance

Teacher instruction

Teacher modeling

Teacher directed questioning

Teacher-directed student talk

Vocal and non-vocal cues during performance

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***Teaching and Learning Strategies***

For the junior band which is made of pupils from primary 4, 5 and 6, they are first of all introduced to sight reading after which they are given the fingering and position charts to study. The tone for embouchure development is then set by giving them a mouth piece of the instrument they intend learning to ‘blow’ (play). Upon seeing improvements in students’ embouchure formation which is manifested in the nature/quality of sound produced on the mouthpiece, the students are then given the real instruments for initial sound production “I just want a mono tone...long tones” the instructor quickly added. As soon as they can make some sound on the instrument, they are introduced to the B Flat major scale and its corresponding fingering positions “...And they start playing” (participant one).

But for the senior band, which is made up of students from JSS 1-3, The rehearsals instructed by this participant followed a general routine of (a) teacher modeling a scale in a new key followed by student echoes, (b)



rehearsal of new and old musics, and (c) lots of teacher talk on correct fingering positions and tone production. Occasionally the teacher provided some feedback in between each echo, discussing such things as posture, and technique. A favorite phrase that the teacher used during echoing (and at other points during rehearsals) was “Think about the sound before you blow.” This seemed to be provided in order to have students attend to the frequent variations found in music and to support good sound production and precision. The teacher provided feedback and many other instructions on articulation and posture, and motivated students verbally encouraging them to work hard towards good sound production.

A run-through of a selection began each rehearsal frame followed by the teacher refining musical performance. The teacher seemed relaxed during the initial stages of rehearsal but got agitated during the latter part when pupils’ lips were getting tired and sound production getting bad. The agitation of the instructor resulted in few scolding and lashes.

**Researcher:** What skills/expertise should good band instructor possess?

**Participant one:**

In fact, he should have command over the music as a subject. I have colleagues who are teaching other schools and they are using tonic solfa or teaching off head, that’s what I discourage. I want to look at the music...(aha..). Quite recently, I wanted to teach ‘Ghana Nyigba’ and I didn’t have the score, I just put it on a friends’ whatsapp page and he sent it to me. You should let the children read from the score! You should let the children read from the score!!

### *Use of rehearsal time*

Participant-One used most of his rehearsal time teaching new “songs” as he called it, or rehearsing old pieces, or preparing for a performance. Of the five participants, this teacher used the most student-directed instruction, which primarily involved asking students about the music or having students explain concepts or skills in their own words. Questioning students about the music they are performing and awaiting their responses or explanations were the most frequently utilized student-directed strategies. For example, the teacher asked students about the highest note in the music. Students would call out the names such as ‘A’ or ‘D’ and the teacher would select one of the student descriptions and ask students to apply the corresponding fingering and position (for the trombone).

Self-assessment was also used, though minimally, with the teacher asking students to rate their performance and identify sections of the music they had problems with. Typically, students were asked to raise their hands to questions such as “How many are having trouble with the rhythm?” or “How many feel they played the best they ever have?” Although not a formal self-assessment, these sorts of questions effectively made students reflect upon their performance, and they did seem engaged and always ready to offer their opinions. Peer assessment, creativity and problem solving were sometimes used, and included asking students to transfer a single line of music in tonic solfa notation to the staff or providing students with a musical problem such as subdividing musical phrases. It should be noted that problem solving and peer assessment activities were very minimal, and more time was devoted to performance, particularly perfecting tone and fingering positions.

How Participant One's teaching style developed was explored during his interview, with particular focus on those factors that contributed to his instructional philosophies. The teacher's own learning was cited as contributing to his approach to band instruction.

***Participant One:***

I was telling my colleague the other time that if we were taught the way we are teaching now, we would have excelled. We were learning to play by rote; we did not understand what we were doing so most of my friends lost interest in the music. But thanks to Dr. Manford of Winneba, you see, if you are really schooled to teach, when you have done psychology of education how to teach (aha...) and a little bit of your own experience. Thanks to Dr. Mereku of Winneba, he took us through the brass and this other man, Aquah Harrison and Mr. Dor supervised my work. So, I'm not totally trying to correct the past, but I'll tell kids, I'm trying to make your reality different from mine.... I saw some people get turned off of music... Although they'd not been professional musicians, they would have kept up with it and it would have made a difference in their life after some rough times. I would really much like for you to leave my class having it been one of the best things that you can look back to and a reason for maybe building a connection to the rest of your life...

From his evidently musical training, Participant One had developed a lot on his approach, yet instruction seemed embedded in the traditional rehearsal framework focused on performance as a major activity for a band.

### ***Band Organization***

The band began with students in JHS who already knew how to play band instruments from their churches. But with time, those students fizzled out of the system and the band instructor had to train new students. For the purpose of continuity, students are encouraged to join the band from as early as primary three. The most junior in the band at the time of the current research was in class five.

Instrument selection is basically based on students' interest but on setting occasions the instructor had no choice but to re-assign the student another instrument.

### ***Participant One:***

Of course, for instance the trombone there is one guy who is short and having problems with the slide he was complaining I can't play the low notes so I had to re assign him to the trumpet...and of course, those with thick lips cannot play the trumpet.

Due to administrative pressures, the limited number of instruments, the unexaminable status of music, changes in class scheduling, and financial constraints, the participant expressed how difficult it was implementing many things he wish he could have done. He indicated limitations and deficiencies regarding his teaching strategies and approaches by concluding:

Despite the numerous challenges I am faced with e.g the school does not have enough instruments for everyone to rehearse with so students become reluctant to come for rehearsal since they do not want to share a mouth piece with anybody, parents preventing their wards from partaking in the band due to poor academic performance and other

teachers advising students to concentrate on their studies than school music, I am still trying my best. The only thing the school authorities are interested in is a good performance during school programmes. So far as my strategy can give me that, it is fine with me.

### **Participant Two**

The second participant was in his fourth year of teaching, a novice teacher with the least amount of experience among the respondents. He studied business at the Senior High School but had the opportunity to play percussion (drum set and conga) in the school band and later went on to pursue a Bachelor's degree in music from one of the Universities in Ghana, where he majored in African drums and became a full-time basic school band instructor after completion.

The school consisted of primarily basic school students (from primary 1 to JHS 3). It is important to state here clearly that this participant did not teach music as an academic subject since music was not among the official subjects taught in his school. Creative Arts was, however, thought at the primary level, but the emphasis was on painting. Therefore, the sole responsibility of this participant was to rehearse the wind and the combo/guitar bands. The band observed was the senior wind band which is made up of pupils from JHS 1 to 3 with a combined enrollment of 15 students. The ensemble seemed quite balanced in instrumentation of a typical brass band with trumpet, flugelhorn, bass trombone, tenor trombone, euphonium and percussion. The band rehearsed everyday of the week from Monday through to Sunday before or after school hours; early morning 4am to 6am or 2:30pm to 4:30pm or sometimes even beyond.

### ***Goals and Objectives***

When detailing his goals and objectives, Participant Two declared that his main objective was to put up a good show when they go for programmes, since “that’s what I’m being paid for”. Other objectives included (a) creating a fun learning experience, (b) developing a quality musical product, (c) developing instrument tones, and (e) other music fundamentals were his desired learning outcomes. As the teacher stated:

I try to achieve a lot of different things. At this school, band activities are very important to my boss, so it is very important to make band a fun learning experience to students for continues participation. That’s why I can have access to the students anytime I want them for rehearsal. Along with that, I try to make a quality musical product. Some students learn to read notes, and all those sorts of things. It’s very important that they get sound quality that’s characteristic of their instrument. Those are the things that I’m working on at this point. Solid tone production and correct fingering and slide position fundamentals, absolutely. They usually start in primary four, we (referring to himself and his assistants) take our time and we get the job done there. Hopefully it pays dividends by the time they get to the JHS level. We work a lot again on solid fundamentals, tone, and other things.

However, there were also indications of goals and objectives dedicated to developing complete, musicianship.

***Participant Two:***

We're developing them as an entire musician. Most of these kids, well I shouldn't say most, in primary three to JHS 3 which you saw, we have five overlaps with guitar band, kids that do both brass band and guitar band. But otherwise, this is the only music that they have in primary 4-6, and the only music teacher that they see is me. So in that regard, we can focus a little bit more. In this band setting, where they don't have anything else, we're trying to accomplish a whole lot. It's mainly performance based. Obviously, we always do our best to get everything performance ready.

Although music performance outcomes were stated first and as primary goals, students understanding musical theory, a little background information of what they play, and the connections of music to society and the world in general were also priorities.

***Rehearsal Routines***

Based on observations, the general rehearsal routine of participant two was to perfect new and old pieces. The primary intent of this participant during observed rehearsals seemed to be to prepare concert selections for upcoming performances. There was nothing like warm-up or any technical exercise at the beginning of rehearsal. Feedback and instruction were primarily delivered in between band performances, and conducting gestures and nonverbal communication were the primary techniques used during band performance. Only occasionally did this participant deliver verbal feedback or vocal cues during band performance.

### ***Teaching and Learning Strategies***

Related to his goals and objectives, it was evident when reading over observational field notes and watching videotapes of rehearsal sessions, that this teacher valued student performance on instruments. Students performed on their instruments for majority of class time and teacher-talk was usually devoted to developing musical performance. This participant does not play any of the wind instruments; he therefore asks the seniors to mentor the juniors. When it got to the turn of the seniors, he taught them by rote.

***Researcher:*** Since you don't play any wind instrument, how do you go about the teaching?

***Participant Two:***

What I did was, since I can't blow, I made it a point to study the fingering positions of all the keys. So some children who already know how to blow...somebody was actually teaching them but the person left...So what I did was, ok, you already know the fingering. When they play a wrong note you will know and be able to correct them as to what they should do. So, I let them teach the younger ones. When the need arose, I know the fingering so I just give them the solfas and we move on. I give them hard training. Since I don't know how to blow I make sure they know how to blow properly.

They (the seniors) start by giving them (the juniors) the mouth piece to blow for some weeks sometimes a whole term. I don't see it as a punishment. So by the time they come to the real instrument it will not take them a long time to produce good sound. After that they teach them how to play the scale in the key of F. And with the trombone



players, they also do same but they use the positions...I know they have positions like one to six or something. With the trombone itself I don't know too much about it but you won't play wrong notes and go scot free. There are times that you also have to do some trial and errors since the fingering and slide positions are so many, but at long last, it works.

This participant taught using the rote learning method. There was minimal drill and practice of technical exercises or warm-ups. He also did not use any band methods books or supplemental materials (such as audio and videos recordings) except for fingering and position charts he got from a friend. Teacher-directed instruction remained the most utilized instructional category. Between and during student performances on instruments, there were many examples of (a) direct modeling by seniors for juniors, (c) teacher instructions for students to do something, and (d) students performing what the teacher chose.

Feedback to students, followed by instructions on how to improve performance, were used occasionally, primarily in between performances of musical sections. Teacher-directed instruction remained the most utilized instructional category just as the first participant. .

As with Participant One, this teacher discussed during interviews how his teaching style was partially a reaction to a disciplined, controlling private band instructor he had. However, there were extrinsic pressures, from the school administration, to reach certain performance goals. As the teacher detailed at the end of his interview:

Right now there's extreme pressure from the administration especially in my third year of teaching, as I attain tenure, to turn out a truly musical product. Now, that's not to say that that's not something I always strive for, but I think there's, let me go a different direction. When I was in high school, when I was growing up through the primary and secondary band scene, everything was very controlled, it was very tight, it was very ... almost claustrophobic. There was one way to do things, and there was never anything where you could express yourself. It was always very rhythmic; it was always very structured.... I always felt as a young musician that I was held back, I was too controlled, I was never allowed to express myself. I was never allowed to take the chance and make a mistake.

Now, of course, in the professional music world you're allowed to take chances to some degree, but not really because if you do you lose your job. One of the things that I really strive for in this group is, you probably heard a lot of talking, and you heard a lot of students talking to each other, and I'm not sure how much your video picked up, but they were actually talking about (in most cases, not all) about the music. They were talking about things that we talked about before. It's very important that I give them a relaxed atmosphere, that they can make mistakes.

You didn't see me single too many people out. I think that's in most cases, unless you're preparing for a contest or something, I think that's the wrong way to go about it, especially with these kids. I'm not out to hurt their mental set or how they feel about different things. I

want them to feel relaxed, especially classes 4, 5 and 6 pupils, when they come in. They can take a chance and they can make a mistake and at times, as I'm sure you heard, they can over-blow. It's not confined to a small box.... In that case, and especially when we talk about the guitar band, they've seen huge, tremendous improvement based upon the pure fact that they're not hampered by being worried about me yelling at them. "You missed an E natural, what are you doing?" "You need to do this. You need to do that." They are allowed to make mistakes. Will I have them mark it with their pencils, oh, absolutely! But they'll do it as a section and not only one student's going to circle a note, they're all going to circle it that way we never make that mistake again. So as much as at times I go back and forth and say maybe it's too relaxed, I would almost prefer it that way, so that the students do get a chance to take the chance on making music and artistry.

Artistic music performance, with opportunities for self-expression seemed valued. Notably, the development of a "relaxed atmosphere" where students are not intimidated and are free to communicate seemed a trend among all three participants.

During observations, I recorded rehearsals where the majority of rehearsal time was devoted to musical performance on instruments. Very little time was devoted to any type of student-directed instruction. Organization was efficient, and downtime seemed to be minimized. The class seemed well disciplined and used to the routine, yet engaged and relaxed. However, when asked whether it was the teacher bringing in musical content to present, or the

students seeking out their own information and sharing it, the teacher replied, “It’s always me bringing in the content.”

Just like Participant One, there was a desire expressed to involve more theory of music and student-directed instruction, but performance demands, administrative expectations, and other extrinsic pressures were expressed as hindering instructional possibilities.

### **Band Organization**

There are no restrictions as to the class or level a student is to attain before being eligible to join the band. The door is opened for every student as early as class 2 if only the interest is there.

#### ***Participant Two:***

We normally start from class two or three, but, when you start it doesn’t make you a full member of the band until we get parents’ approval. Also, if a student gets to a level which I think he can fit into the group then we push him in there. So it is your learning ability which is going to make you a part of the brass band. There are lots of students when they come, I want to be part of this, I want to be part of that, but when they start, they had to run away because they realize it is a difficult thing to do. They don’t go home during vacations too, so when they hear about all that, they easily give up.

The students when they enter the band’s room, they touch any instruments they see. At a point you will realize that someone might not show interest in a certain instrument but he is picking up faster on it than the other instruments. So I just say, you, stay here. The fact that

they express interest in some instruments doesn't mean that they can't learn other instruments. Most of them know how to play either two or three instruments.

The major challenges faced by this band director were two; Lots of pressure from school authorities on him for immediate results and he was overburdened since he had to handle the brass and the combo bands alone.

### **Participant Three**

The third participant was in his 19th year of teaching, an experienced teacher with an average amount of experience when compared to Participant One. He was successfully writing his ABRSM grades 4 and 8 exams and also had a diploma in music. Positive learning environment and artistic music performance were the dimensions most prioritized by this participant and time efficiency the least prioritized.

This teacher began his music career as a kid with the euphonium but currently plays the trumpet. He started his teaching profession in 1996, taught as part-time band instructor in several basic schools and churches in Accra before finally landing a full time job in his current school as a music teacher (He still teaches other schools anyway). His main duties were to teach the music aspect of the Creative Arts syllabus (from classes 4-6), Music and Dance at the JHS level and also to rehearse the school's brass band. The band observed was the senior band with an enrollment of about 35 students. The ensemble seemed well balanced in instrumentation with alto saxophones, trumpet, cornet, trombone, French horn, euphonium, tuba, and percussions. The band rehearsed two times a week before or after school.

### ***Goals and Objectives***

The goals and objectives for Participant Three were reported as focusing on students' ultimate experiences and performance. A positive learning environment and rewarding experience were valued, alongside developing character traits such as self-discipline and other elements necessary to succeed in life beyond music. However, musical performance skills were also prioritized.

### ***Participant Three:***

I think with each band the goals and objectives ... change. From the onset it was all about performance. The school head mistress at that time made it clear to me that she needed immediate results. The band must perform at every school function for the parents to see that we did not miss use their money. For the most part I want these kids to have a good experience working together, so that when they look back at band they have good memories, but at the same time they're learning skills they use outside of my class. Discipline, self-discipline, long term/short term goals, pride, teamwork, all kinds of things they need to succeed in life, not necessarily to be band directors, but that will enhance everything that they do.... Of course I want the bands to sound good, because when they play well, they know they play well, and it really raises their level of expectation in everything. But, since music is not examinable at the basic level, many people including other teachers advice them to stop spending time in the music room. You will just be there and students you spent lots of time teaching will

come and tell you that “my parents said I should stop playing in the school band.”

What skills [are most important]? I’d say some good listening skills, as far as getting through the rehearsal, obviously I’d like their technique to improve as well, but again, I’m a firm believer that band just goes hand in hand with life. I’m not trying to make band directors out of the kids. I want them to just be better people in general. So, their skills? I’d say mostly just self-discipline. That would encompass transferring whatever they learn here to their classrooms

This teacher suggested that band could serve as a platform to develop student skills that could be useful outside of music and throughout their lives.

### ***Rehearsal Routines***

This teacher could be described as a disciplinarian. There were punishments for every wrong action taken by a student in the band classroom, ranging from verbal abuses such as insults to corporal punishment. The overall rehearsal routine of the third participant was to develop the performance quality of programme repertoire selected for activities of his school and other off-campus events. Repertoire rehearsal would begin by a run-through of selected repertoire, followed by frequent stoppages to improve individual sections of repertoire. The teacher would provide feedback and instruction during each stoppage, followed by attempts for students to incorporate newly introduced corrections with regard to appropriate playing techniques. As students were performing on instruments, this teacher would frequently call out instructions, vocal cues, and provide feedback to students. Comparing the five teachers, this participant’s rehearsals seemed to be the most intense from

a subjective estimation, yet were still positive and to a minimal degree free of any type of intimidation.

### ***Teaching and Learning Strategies***

Based on observations and videos of rehearsal sessions, this teacher seemed to value student performance on instruments and used teacher-directed instruction as the primary method for developing musical performance. Students performed on their instruments almost the entire rehearsal time and instances they were not performing, much teacher-talk or organizational time seemed devoted to developing musical performance. There was frequent repetition of isolated measures or phrases within musical performance instances. Students seemed to always be engaged and ready when the teacher expected them to be, yet students still seemed relaxed. The teacher seemed anxious to get things done, yet approached students in a positive way, always ready to provide constructive criticism or positive feedback.

Teacher-directed instruction remained the most utilized strategy of all instructional instances. There were many examples of (a) teacher explanations about music and technical skills, (b) teacher instructions for students to do something, (c) teacher feedback on prior performances, and (d) students performing what the teacher chose.

***Researcher:*** How do you go about the teaching of the wind instruments?

***Participant Three:***

There are no class restrictions for joining the band. When new students join the band, they all rush to play the drums since the percussion is regarded the less difficult instrument. I usually seat them down and



explain to them that we have advantages and disadvantages. So when they play the wind instruments they will be open to more prospects in the future than concentrating only on drums (snare, tenor and bass drums).

I first of all organize a little orientation for my new students; introducing them to the various instruments we have, how to handle and care for the instruments, especially, the saxophone since it is the most fragile. Then I give them the mouth piece of the various instruments based on their physic and the thickness of their lips to begin working on tonguing (articulation). If a realized that their pitching is not good on the trumpet then I push them to trombone or bass (euphonium/tuba). We don't have any band methods books. I only use the Methodist hymn book and fingering and slide position charts.

Participant Three's teaching style was stated as developing from his childhood band experiences. He made it clear that due to the limited instructional time he does not teach them how to read music. He teaches using the rote method. He teaches sight reading only in his private lessons. When asked about his ideal learning environment he responded:

Well, I think my teaching style evolved from my childhood instrument instructors who were soldiers. I found it very tough growing up so I can say today that my saviour that time was playing in my school band. Band participation, It's, in my opinion, it's a safe place. Band assignments are the only times I can get at least two good meals a day and some money buy soap to wash my clothes. I have a lot of good memories, and so I felt good there. I think for the kids.... When I first

started here I thought, “Oh, I need to get some strategies in place, and make the bands room look aesthetically pleasing.” I never acted upon it, but the kids seem to like coming here, they want to come at times when they don’t need to be here. I’m starting to realize that was probably not as big a deal as much as what goes on here and how they feel about being in this room. It’s basically, I just want to generate a good feeling for them in this room and that they feel good about how they play. It makes them want to come back as this is a room they like to be in.

However, this teacher seemed to appreciate more of his adolescent band experiences than did the first two participants, who although learning from their experiences and appreciating musical growth, found a disciplined, military approach to band suppressing. The importance of developing a positive, relaxed, safe, yet productive learning environment seemed a priority of Participant Three. This priority seemed to influence his goals.

Student self-assessments, student reflections, and asking students reflective questions were absent. This teacher discussed how closer to concerts he, “directs them quicker as opposed to letting them think a little more.” Again, as Participant Two discussed, leeway to instruct at a slower, more relaxed pace without pending performances may facilitate the use of a more relaxed instruction within this teacher’s rehearsals.

#### **Participant Four**

The fourth participant was in his 9th year of teaching band at the basic school level. After few years of enjoying the post of a part-time band instructor, he continued to pursue a diploma degree in music at the University

of Education, Winneba, with voice as his major, but had lots of experience playing trumpet in the wind ensemble during his undergraduate studies. After the completion of his diploma he quickly returned to his post, but this time as a full-time band instructor in 2008.

The school band was made up of an enrollment of about 25 students. The ensemble seemed balanced in instrumentation representing a typical marching band with trumpets, cornets, alto saxophones, trombones, euphonium, tuba and percussion (bass drum, snare drum, tenor drum and cymbal). The band performs pieces such as hymns, anthems, slow and quick march traditions of the military style (mainly during morning assemblies and for the school cadet corps during special school festivities), gospel, patriotic tunes and highlife pieces. The band rehearses three times a week (Mondays, Wednesdays and Fridays) after official school hours 2:30-4:30pm.

***Researcher:*** What are your responsibilities?

***Participant Four:***

The musicians at my school are three in number. For me, I am purposely for brass band. However, since I had a lot of experience teaching choirs, when the school choir is rehearsing and of course I am free, I go there to help them in the teaching of songs and other things.

***Goals and objectives***

Participant Four stated that his goals and objectives were to develop student musical performance skill on instruments. This goal was pretty much demonstrated in the video recordings of his band's rehearsal sessions. Theory, musical concepts, and connections to other disciplines were important but

were not the priorities of the band. The teacher's own words best reflect what he desired to develop in students:

The school band is not to make the children professional musicians. We are trying to do our best but you know, the contact hours are not sufficient. I want to teach the children how to pitch or to play the instrument very well so that when they go out there people will know that somebody taught them. I first of all want them to be good performers to satisfy my employers and also be able to appreciate good music.

Musical performance seemed to be both the primary activity and primary goal of the school band programme. Further, this teacher alluded to the social atmosphere inherent to band; "much of what is done as a band is not done independently, but as a group."

On his thoughts on the attributes of a good band instructor, he responded:

He must be musically inclined. Someone who can read the staff, teach and interpret the music very well. More importantly, he should be someone who can play at least one instrument. For me, I play all the instruments.

### ***Rehearsal Routines***

Related to his goals and objectives, it was evident after going over and observational field notes and watching videotapes of rehearsal sessions, that this teacher valued student performance on instruments. Students performed on their instruments for most part of the rehearsal session and the little teacher-talk or organizational time seemed devoted to developing musical performance. He taught by rote method and encourages playing from memory.

However, there was minimal drill and practice of technical exercises or warm-ups. He also did not use any band methods books or supplemental materials (such as audio and videos recordings) except for fingering and position charts and choral music pieces composed by Ghanaian composers. Teacher-directed instruction remained the most utilized instructional category. Between and during student performances on instruments, there were many examples of (a) direct teacher modeling on an instrument, (b) teacher explanations about posture and good tone acquisition, (c) teacher instructions for students to do something, and (d) students performing what the teacher chose.

### ***Teaching and Learning Strategies***

This teacher begins his instrumental instruction journey to a new student by organizing a short orientation for them after which he gives them the mouth piece of the various instruments they want to learn to start working on tone production. The forth teacher explains how he goes about his teaching:

When the students come fresh like that, I do orientation and during the orientation, I introduce them to the instruments. Then I introduce them to the basics, thus, tonguing of the mouth piece, handling of the instrument and so on. So we do the basic ones for at least one month then they start pitching. Like “doh” how to pitch the various notes of the scale in C. Key C is the first key I always teach them.

How Participant Four’s teaching style developed was explored during his interview, with particular focus on those factors that contributed to his instructional strategies. The teacher’s own learning was cited as contributing to his approach to band instruction.

***Participant Four:***

We call something methodology in teaching. That's the strategies that you can adopt so that the children can pick it fast. It is my own style. For instance, I always start with C (key C) and then when they reach "doh" d r m f s l t d, when they reach there it means they can play three keys for me...they can play B, they can play F, they can play G for me. Then when they master "doh" then we go to "ray" octave higher. Especially, when they master "me" it means they can pitch key G very well then I start teaching them songs. I start with simple songs like hymns then to highlife and so on.

***Band organization***

The band allowed students to start band participation at JHS 1. For the purpose of continuity, students were encouraged to join the band from as early as stage five. Instrument selection was basically based on students' interest but on setting occasions the instructor had no choice but to re-assign the student another instrument. This was what the teacher has to say about recruitment and instrument selection:

Initially, we start from JHS one but for JHS one they will have to play for only two or three years then you will have to train again. So now I have changed my style I am now handling the primary. I am starting from stage five (class five) so that they can play for four to five years for the school.

It is part of the orientation. When they come you look at the age...Yeah, the age number one then you look at how tall or short the person is. The tallness and shortness that one depends on the uniform,

the type of uniform you have. Because if the person is very short, there will be no inform for him which means he can't be a member of the band. And we can't go back to sew a new uniform. So you look at the uniform you have and you do the orientation and select. And then sometimes you give the trumpet to someone and the person can't pitch so during the basic level you will notice that this person can't pitch or cannot play trumpet then you shift that person to trombone or euphonium. Or it also depends of the lips of the person

Due to administrative pressures, the un-examinability of the status of music, changes in class scheduling, and financial constraints, the participant expressed how it was difficult to implement many things he wish to do. He indicated limitations and deficiencies regarding his teaching strategies and approaches by concluding:

The only thing the school authorities are interested in is a good performance during school programmes. Since I am still here, I think I am doing well.

### **Participant Five**

The final participant was in his 15th year of teaching a school band. He was a military officer by profession, but teaches school bands on part-time bases. He was a middle school, Form four leaver and currently a Warrant officer Class 2 (WOII) in the Ghana Armed Forces. Positive Learning Environment, Artistic Music Performance and Time Efficiency were the dimensions most prioritized by this participant. This instructor joined the Ghana Armed Forces in 1999. He began his musical career as a kid with the French horn but later changed to the trombone. He has taught as part-time

band instructor in several basic schools and churches in the Accra Township. His main responsibility was to teach the school band. The band observed was the senior band with an enrollment of about 30 students. The ensemble seemed well balanced in instrumentation with clarinets, alto saxophones, trumpet, cornet, trombone, French horn, euphonium, tuba, and percussions. The band rehearsed two times a week before or after school.

### ***Goals and Objectives***

The goals and objectives for Participant Five were reported as focusing on performance alongside developing character traits such as self-discipline and other elements necessary to succeed in life beyond music.

### ***Participant Five:***

They hired me to train the school band that's the main reason why I am here. As you know it, I am a military man so I want to impact the military life into them. The band must perform at every school function for the parents to see what their children are doing. Music is a good thing. Let me tell you, many people bring their children to this school because of the school band. That is why the proprietor does not joke with me o.

This teacher suggested that band could serve as a platform to develop student skills that could be useful outside of music and throughout their lives.

### ***Rehearsal Routines***

This teacher could also be described as a disciplinarian. But does not behave like participant-three. He is most of the time patient with the children, very careful not to step out of line. The overall rehearsal routine of the fifth



participant was to developing the performance quality of programme repertoire selected for activities of his school and other off-campus events. Repertoire rehearsal would begin by a run-through of selected repertoire, followed by frequent stoppages to improve individual sections of repertoire. The teacher would provide feedback and instruction during each stoppage, followed by attempts for students to incorporate newly introduced corrections with regard to appropriate playing techniques.

### ***Teaching and Learning Strategies***

Based on observations and videos of rehearsal sessions, this teacher seemed to value student performance on instruments and used teacher-directed instruction as the primary method for developing musical performance. Students performed on their instruments almost the entire rehearsal time and instances they are not performing, much teacher-talk or organizational time seemed devoted to developing musical performance. He taught using the tonic sofas and emphasizes plying off head.

Teacher-directed instruction remained the most utilized strategy of all instructional instances. There were many examples of (a) teacher explanations about technical skills, (b) teacher instructions for students to do something, (c) teacher feedback on prior performances, and (d) students performing what the teacher chose.

***Researcher:*** How do you go about the teaching of the wind instruments?

***Participant Five:***

I always look at their physic. I mean their structure before I allow them to choose the instrument they want. What I do first is that I try to

talk to them about the instruments, how to take good care of them. Then I give them the mouth piece to blow. If I realized that their pitching is not good on the trumpet then I push them to trombone or bass (euphonium/tuba). We don't use any books apart from when we are going for programme and they ask as to play a hymn then we use him book... I only use the Methodist hymn book and fingering and slide position charts.

Participant Five's teaching style was stated as developing from his experiences. He does not know how to read the staff. When asked about his ideal learning environment he responded:

The way I also learn it is what I am also trying to give to them. It was a white man who start to teach me the trumpet when I was young but he died. Even that time I will be behaving as if I am reading from the book but I was doing my own thing. But when he died, I join a brass band in my village that was when I start playing real music. I am fast, I look at peoples' fingers when they are playing...my ear is also sharp so I can play every music I hear. I have seen that this children don't respect at all so I want to teach them the military life so that they will respect.

However, this teacher seemed to appreciate more of his adolescent band experiences than did the first two participants, who although learning from their experiences and appreciating musical growth, found a disciplined, military approach to band the best.

## Discussion of Stage-one Results

Band instructors provided demographic information concerning their age, years of experience teaching school band and their principal instrument. Results revealed that, all the school band instructors in the Accra metropolis were males with ages ranging from 30-50 and above. There was a conscious attempt by the researcher to be gender sensitive, but the actual gender distribution of band instructors was positively skewed towards the males. Despite the extended presence of brass instruments in Ghana, some persistent misconceptions still indicate their enduring “foreignness” within the Ghanaian culture. In a previous study, Dordzro (2012) revealed that many Ghanaians believe that brass playing can be deleterious to one’s health. More specifically, some believe that ladies who play brass instruments may develop problems with their reproductive system, as this notion was tied to the effort of blowing brass instruments. The perceived connection between wind capacity and the sexual organs also generated the belief that women could become sterile or miscarry from playing brass instruments. (To my knowledge, similar concerns do not exist for women who play traditional wind instruments such as *mmenson*, *atentenben* or *wia*.) Reasons for the absence of female band instructors are difficult to discern from the data, but it is speculated that the “myth” that females cannot give birth if they involve themselves in the playing of wind instruments especially the brass (wind) instruments could be an important factor. Interestingly, in the nineteenth century Western women were also similarly discouraged from the “physical risks” of playing wind instruments (Leppert, 1993).

Churches in Ghana provide the most opportunities for female players. But among the local town or social bands, there are definite obstacles to allowing women to join. Most often, it is parents who restrict their daughters from participating in brass bands. The brass players have long been associated with drinking *akpeteshie*, a powerful local gin made from palm wine or sugar cane. In fact, palm wine or *akpeteshie* may even serve as partial remuneration for many bands. Alcohol consumption, combined with late nights and travel in close proximity with members of the opposite sex, makes parents look unfavorably on brass bands as a potential career path for young girls.

This gender imbalance also finds justification in other parts of the world as far as professional and academic musical practice is concerned. Schloesser (2002) confirms this. He writes: “women have historically been underrepresented in many fields. While the number of women in professional music has increased over the last few decades, the 25 largest orchestras still have three times more men than women.” (p. 24)

He goes on to say that, in high schools and colleges, the number of female instructors is little more than half the number of male instructors. Thus, the imbalance here is a reflection of what actually exists in other countries. Levels of teaching experience among band instructors varied from 4 years to more than 20 years. One instructor played clarinet, two played trumpet, another one played the trombone while the remaining one played no wind instrument.

According to the participating band instructors, there were no age or class restrictions for band participation. Normally, interested students began school band participation from primary three or four. Consistent with results

from existing research (Hartley, 1996), many band instructors did not have class restrictions for joining of school bands, and they also permit fresh students to join their band programmes. Although few students join later in the JHS, some also learn to play an instrument (either at church or by private tuition) prior to entering a school band. This appears to oppose the recommendations of many professional oboists and specialists who have advocated postponing the study of oboe playing beyond the beginning level until students were more mature and more adequately prepared in other aspects of music such as notation, rhythm, and development of aural skills (Kemper, 1970; Prodan, 2005; Robinson, 2001; Weiger, 1998; Westphal, 1990).

In addressing the goals and objectives of the participating teachers, it is stated clearly that their main goal was to develop students' performance skill on the various band instruments. This is explicitly captured in an interview with one of the band directors:

I think with each band the goals and objectives...change. From the onset it was all about performance. The school head mistress at that time made it clear to me that she needed immediate results. The band must perform at every school function for the parents to see that we did not misuse their money.

Another director also confirmed this by saying:

The school band is not to make the children professional musicians. We are trying to do our best but you know, the contact hours are not sufficient. I want to teach the children how to pitch or play the instrument very well so that when they out there people will know that

somebody taught them. I first of all want them to be good performers to satisfy my employers and also be able to appreciate good music.

But other objectives stated included: (a) developing sight reading, (b) putting up a good show when they go for programmes, (c) creating a fun learning experience, (d) developing a quality musical product, (e) developing characteristic instrument tones, (d) focusing on students' ultimate experiences, and (e) developing character traits such as self-discipline. In relation to the above, development of fundamentals such as theory, musical concepts, and connections to other disciplines were important to these participants, but were not the priorities of the various school bands. Summary of goals, objectives and teaching strategies prioritized by participants are shown in table 5 below.

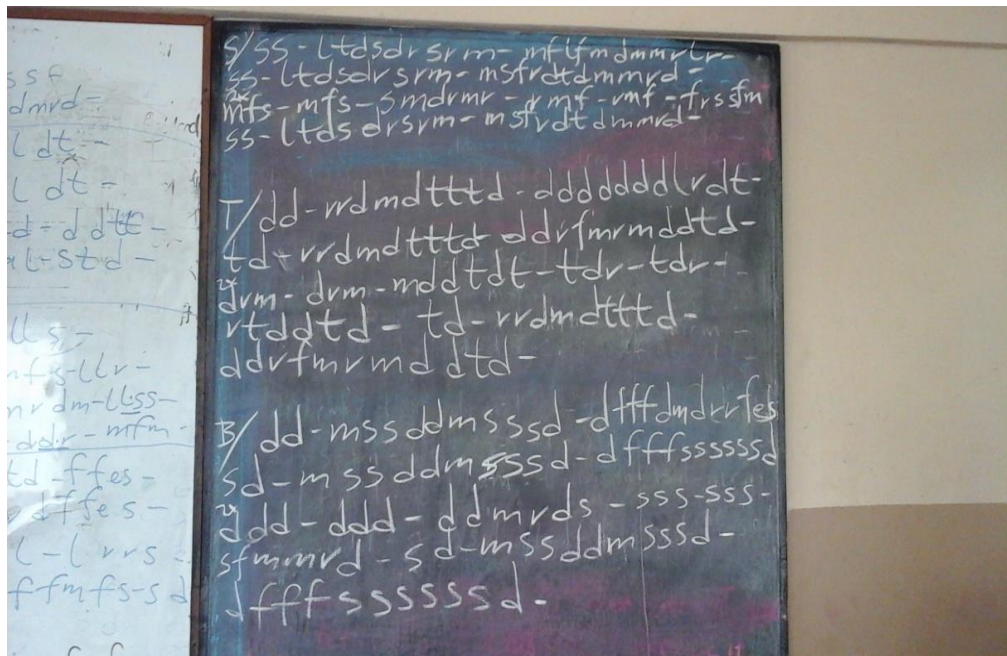
Table 5: *Goals, objectives and teaching strategies of participants*

<b>Participant</b>	<b>Goals and objectives</b>	<b>Teaching strategy</b>
Participant-One	-Performance skill on instruments -Sight reading skill	-Sight reading -No warm-up -Teacher-directed instruction - No use of band method books & audio-visuals -small-group homogeneous instruction
Participant-Two	-Performance skills -Creating a fun learning environment -Developing a quality musical product	-Sight reading -No warm-up -Teacher-directed instruction -No use of band method books & audio-visuals -small-group homogeneous instruction
Participant-Three	-Students' ultimate experience -Performance skill	-Teaching by rote -No warm-up -Teacher-directed instruction -No use of band method books & audio-visuals -small-group homogeneous instruction
Participant-Four	Performance skill	-Teaching by rote -No warm-up -Teacher-directed instruction -No use of band method books & audio-visuals
Participant-Five	Performance skill	-Teaching by rote -No warm-up -Teacher-directed instruction -No use of band method books & audio-visuals

Based on observations, the general rehearsal routine of the five participants was to learn new and old pieces to perfection. The primary intent of the participants during observed rehearsals seemed to be to prepare repertoire for upcoming performances. There was nothing like warm-up or any technical exercise at the beginning of rehearsal. Rehearsal would begin by a run-through of selected repertoire, followed by frequent stoppages to improve individual sections of repertoire. The teacher would provide feedback and instruction during each stoppage, followed by attempts for students to incorporate corrections with regard to sound production, rhythm, and fingering/slide positions. As students performed on instruments, teachers would frequently call out instructions, vocal cues, and provide feedback to students. Conducting gestures mainly focusing on the beating of time and nonverbal communication were also used during band performance.

Analysis of observations (videos), field notes and interview transcripts revealed similarities and differences or variations in participants' band rehearsal strategies. Results revealed that all five teachers seemed to value student performance on instruments and used teacher-directed instruction as the primary method for developing musical performance. Majority (three out of the five instructors) of the band instructors began their instruction of new band students with sound production (tonguing); by giving them (students) the mouth piece of the various instruments they wanted to learn to blow. Upon seeing improvements in students' embouchure formation which is manifested in the nature of sound being produced on the mouthpiece, the students were then given the real instruments for initial sound production. As soon as the desired result was achieved, they were introduced to the notes of the B Flat

scale and its corresponding fingering/slide positions and subsequently simple hymn and highlife tunes. Most bands tended to stick to key C, F, and G, with entire sets of tunes played in one key only. They made use of a system of musical notation based on movable “doh” solfege “developed by John Curwen” (Groulx, 2013, p. 139), where every tone was given a name according to its relationship with other tones in the key: the usual staff notation was replaced with Anglicized solfege syllables (e.g. doh, ray, me, fah, soh, lah, te, doh) or their abbreviations (d, r, m, f, s, l, t, d). See, for example, figure 4 presents an excerpt solfa score from a rehearsal room of one of the school bands. This finding is corroborated by Rumbolz (2001) when he states “Sol-fa training is a common element in many Ghanaian school music curriculum and is widely employed by bands and choirs alike to facilitate rote learning of parts” (p. 107).



*Figure 3: Tonic solfa score Excerpt on a chalk-board in a band room (Photograph taken during an observational visit to schools in 2016)*



While the remaining two instructors began their rehearsal by introducing students to the reading of the staff notation and fingering/position charts before the production of sound.

The above findings partially align with the stage-dependent theory of Swiss biologist Jean Piaget (1973), whose theory implies that school band instruction should follow a sound-before-symbol approach, and the available literature on teaching beginning band students. Although many professionals have agreed that students may benefit from exposure to a reduced number of concepts in the beginning stages of their study, methods for introducing concepts differ. It is generally agreed that to avoid overwhelming beginning level students by simultaneously focusing on too many concepts, some professionals have advocated teaching the fundamentals of reading music notation, including note reading, rhythm reading, accidentals, and key signatures, before learning to play instruments (Banister, 2002; Conway, 1997). Students may also benefit from developing aural skills through rote-instructed singing, exposure to tonal and rhythmic patterns, and movement activities involving duple and triple meters (Conway, 1997; Piaget, 1973). Once students learn the basics of reading music and developing aural skills, Banister (2002) has recommended teaching proper breathing, breath control, and embouchure techniques on their mouthpieces or reeds before using entire instruments. These techniques may better prepare students in producing desirable tone and accurate intonation on their instruments from the earliest possible moment.

Another strategy used by some beginning level band instructors was delaying use of printed music and teaching by rote method for the first several

lessons in order to focus on developing proper embouchure and breath control (Lenzini, 1999; Stycos, 1993). Students may better develop skills by concentrating on fundamental aspects of instrumental music performance, rather than simultaneously processing visual symbols while playing. Stycos (1993) however, has advocated providing students with written fingering sequences in place of music notation when needed. Teaching initially by rote may lead students to achieve proper production of tone and accurate intonation early in their study before incorporating other concepts (Stycos, 1993). Comparison of these approaches has revealed that although selection of initial concepts varies desired outcomes of proper production of tone and accurate intonation remains consistent.

But, the disparity in the instructional style of most Ghanaian basic school band instructors as against the theoretical framework and findings in the available literature is that, after beginning with the rote instruction method, the instructors who used the rote method never went back at any point to incorporate the fundamentals of reading music notation (including note reading, rhythm reading, accidentals, and key signatures) into their rehearsal. This, as it is deduced from the data presented, is partially as a result of is partially as a result of the limited knowledge of some instructors in music notation, inadequate instructional time due to the congested nature of the schools' official curriculum and intense pressures from employers for immediate results in the shortest possible time.

However, in their attempt to reach their instructional goals and objectives, some teachers emphasized staff notation in their teaching while others taught by rote strategy. Students performed on their instruments almost

the entire rehearsal time and in instances when they were not performing, much teacher-talk or organizational time seemed devoted to developing musical performance.

Responding band instructors indicated differences in criteria used when selecting students to play in the band. Often, the instructors took into consideration multiple characteristics that students are suppose to possess. These characteristics, summarized and arranged into categories by the investigator, include specific qualities pertaining to study habits and behaviour, physical attributes (such as size of fingers and hands, height, size and shape of lips and mouth), musical experience and ability, and availability of equipment and support. These responses are summarized in Table 6 below. This result partially supports findings in Prodan (2005) and Klinedinst (1991), since instructors in the current study did not consider intelligence or academic achievement when recruiting students for band. Whereas some professional specialists (Kemper, 1970; Weiger, 1998) have recommended consideration of these physical attributes, Prodan (2005) argues that it is unnecessary. Klinedinst (1991), however, has also contended that physical characteristics may not be reliable predictors of success on musical instruments.

Table 6: *Criteria Used in recruiting students*

<b>Category</b>	<b>Characteristics</b>
Students' behaviour	Desire/interest/motivation, good work ethic Punctuality, maturity and responsibility
Students' physical characteristics	Embouchure formation & size/shape of lips/mouth Size/structure of body (height, fingers and hands)
Students' musical ability and experience	Ability to hold/carry/produce sound on instrument Skill/knowledge on other instruments Overall music ability Sign of basic music skills
Availability of equipment and support	Availability of instrument Ability to afford a personal instrument Parental support

Band instructors were asked to indicate whether they provided small-group homogeneous instruction for students. According to the responses, three out of the five instructors provided some small-group homogeneous instruction for students. This was possible because one of the instructors was the assistant head master of his school, therefore, he was able to demand financial support from his school to sometimes invite resource persons to help with the instruments he was not comfortable teaching. But the other instructors did not have that luxury; their schools were not supportive like that of the latter. They were supposed to manage the little resources available to them and must also made good use of the little time they spent with the students. Although most band instructors indicated they actually provided small-group homogeneous instruction for their students, they however, indicated variable scheduling of small-group instructions based on necessity, availability of time,

resource persons, and funds. Of the band instructors who indicated they provided small-group homogeneous instruction, several indicated they implemented it more often for new students and it lasted for about 45 to 60 minutes per a meeting.

According to the band instructors, they did not make use of instructional materials such as band method books, scale sheets, etudes, video and audio recordings and Supplemental materials (informational materials pertaining to wind instruments) in their rehearsal sessions. This development was partially attributed to unavailability of funds and also due to enormous pressure from school authorities on band instructors to deliver (in terms of performance) in the shortest possible time.

The above findings can be explained by one of the tenets of Dunn and Dunn's teaching style inventory which talks about the teaching environment as a major determinant of instructors teaching style. So in this instance, rehearsal scheduling, availability of teaching and learning materials, *tutti* or small group homogeneous instruction and other factors relating to teaching environment such as available resources and circumstances within which school band instructors operate can be said to be major contributors to the way instructors in the Accra metropolis teach.

The scope of investigations regarding effective music teacher characteristics suggests a continuing challenge to accurately define what skills and behaviors are required for effective instruction. A challenge in determining effective music teachers is the performance-based nature of an ensemble classroom. Normally, stake holders including music educators frequently assume that a superior performance is an indicator of effective

teaching (Saunders & Worthington, 1990). Yet studies have suggested that ensemble teachers perform a variety of tasks, techniques, and behaviors that influence the teaching/learning process, subsequently contributing to better performances. For example, the tasks, techniques, and behaviors shown to influence student learning in performance include sequentially presenting information (Price, 1992; Yarbrough & Price, 1989), a greater focus on student on-task performance with less teacher talk (Blocher, Greenwood, & Shellahamer, 1997; Brendell, 1996; Goolsby, 1996, 1997, 1999; Witt, 1986), and providing specific positive feedback (Goolsby, 1997; Schmidt, 1995).

Some band instructors also recommended the need for supplemental materials and private instruction. Some band instructors agreed that video-recordings, audio-recordings, and pictures that were included with band method books were appropriate aids in the teaching of fundamental concepts such as embouchure, hand position, posture, breathing, and production of tone. According to responses, several band instructors indicated limitations and deficiencies regarding their teaching strategies and approaches. Some band instructors indicated that particular fundamental concepts such as articulation, air support, and dynamic range were challenging for students, and therefore the teaching of these concepts was often overlooked.

### **Presentation and Analysis of Stage-Two Data**

The aim of the quantitative data was to assess the impact of instructors' rehearsal strategies on students' performance. To achieve this, a performance task (see appendix B) scored by three independent judges provided continuous data for the quantitative analysis. The performances were rated to a corresponding numerical scale ranging from one to ten (one- meaning low use

of the instrumental performance dimension and ten- meaning high use of the instrumental performance dimensions) based on three performance dimension as specified by the modified version of the KMEA performance evaluation form- tone/intonation, technique and interpretation.

The ten bands that made up the sample were provided with three pieces that were rehearsed during the 2015/2016 academic year. In the second week of July, 2016, approximately two weeks to the end of that academic year, I in consultation with the school band instructors, went round the schools to do video recording of the pieces during one of their regular band rehearsal sessions for assessment.

#### *Criteria for the selection of the pieces*

Pieces were selected based on MENC specifications but after going to the field and getting to know the kind of pieces school bands in Accra metropolis performed, I changed the pieces to reflect the taste of the school bands, but still considered the standards set by MENC. Selections were taken based on the professionally recorded pieces that had been identified as grade 3 and 4 (out of 6) difficulty in the *Teaching Music Through Performance in Band series* (Miles, 2009, 2011, 2012). Looking at the type of pieces school bands in the Accra metropolis performed, I selected a chorale recommended for elementary school bands entitled “Great things” originally composed by Haydn, but arranged for school bands and two marches- “A march from Scipio” by G. F Handel and “Trumpeters’ march”. All the selected pieces were of similar length, difficulty, and featured major key centers, *tutti* ensemble playing, the use of rubato and staccato, an escalation to a predictable *forte* climax, and a gradual decrescendo and a *piano* resolution. The selection of

pieces was consistent with previous research involving conductor and ensemble expressivity (Morrison et al., 2009; Price, 2006; Silvey, 2011a).

Both descriptive and inferential statistical procedures were used in the analysis of stage-two data. The study employed the SPSS (version 17.0) computer software, to capture the data and run the analyses. Statistical tables were used in summarizing and organizing the data. In answering the second research question: “What is the performance level of basic school bands on the performance dimensions?” The descriptive statistics (means and standard deviations) were computed and discussed. For the third research question: “What is the difference in the performance scores of the various school bands?” The analysis of variance (ANOVA) and post-hoc were computed. For research question four: “What is the difference in the performance scores of school bands that use different strategies?” The independent-sample t- test was used, while correlation was run for research questions five: “What is the relationship between students’ performance scores and observation video rating?”

**Research Question 2:** What is the performance level of the school bands on the performance dimensions?

The study sought to, first of all, determine the performance level of the school bands on tone/intonation. In the range of performance scores, using the categorizations specified by the KMEA performance evaluation form, school band performances were clustered into five categories, The descriptive scale terminology (poor, fair, average, good, excellent) used for individual musical dimension was converted to a corresponding numerical scale ranging from one



to ten. Poor (1-2), Fair (3-4), Average (5-6), Good (7-8) and Excellent (9-10).

Table 7 summarizes the performance of the school bands on tone/intonation.

Table 7: *Descriptive statistics of Band performance Level on Tone/Intonation*

Groups	Mean	Std. Deviation
Band 1	3.67	.33
Band 2	3.56	.50
Band 3	3.11	.50
Band 4	5.78	.69
Band 5	3.67	.33
Band 6	5.67	.50
Band 7	3.56	.50
Band 8	3.56	.50
Band 9	3.89	.50
Band10	3.22	.50
Total	3.99	1.03

*Scale: 1-2 poor, 3-4 fair, 5-6 average, 7-8 good and 9-10 excellent*

From Table 7, it can be observed that out of the 10 bands that made up the sample for this study, Band 4 recorded the highest mean performance level (M = 5.78, SD = .69). This mean value according to the performance scale indicates that Band 4's performance can be classified as "average". This is followed by Band 6 which recorded the second highest mean value (M= 5.67, SD = .50), this performance can also be classified as "average". This implies that Bands 4 and 6 were the only bands that recorded an average performance under the Tone/Intonation dimension. This means that in terms of the band's sound quality, breath support and control, blend and balance, it is only these two bands whose performance can be described as average. However, the standard deviations recorded indicate that scores recorded by these bands are scattered around the mean score.

Also, the remaining eight bands all scored between 3.00 to 3.89 with the highest mean value in this category recorded by Band 9 (M = 3.89, SD = .50) and the least mean value recorded by Band 3 (M = 3.11, SD = .50). The performance of the remaining eight bands can be described as “fair”.

The next dimension assessed was Technique. Technique refers to accuracy of notes/pitch, articulation, and rhythmic precision. Results are presented in Table 8.

Table 8: *Descriptive statistics of Band performance Level on Technique*

Group	Mean	Std. Deviation
Band 1	4.33	.57
Band 2	4.00	.57
Band 3	4.44	.19
Band 4	4.89	.19
Band 5	4.11	.59
Band 6	4.78	.19
Band 7	4.11	.19
Band 8	4.67	.33
Band 9	4.44	.39
Band10	4.83	1.08
Total	4.47	.51

*Scale: 1-2 poor, 3-4 fair, 5-6 average, 7-8 good and 9-10 excellent*

From Table 8, it can be observed that Bands 4, 6, 8 and 10 scored approximately 5.00 making their performance an average performance. This implies that, in terms of accuracy of notes and the precision of the rhythm, these four bands did averagely well. On the other hand, the remaining six bands scored mean values ranging from 4.00 to 4.44 with bands 3 and 9 recording the highest mean value in this category while Band 2 recorded the

lowest mean value of 4.0. The performance of the six bands could be described as “fair”.

The last dimension considered was Interpretation. Interpretation connotes phrasing, tempo, expression and dynamic variation.

Table 9: *Descriptive statistics of Band performance Level on Interpretation*

Groups	Mean	Std. Deviation
Band 1	1.89	.59
Band 2	1.67	.33
Band 3	1.67	.33
Band 4	2.33	.33
Band 5	2.11	.50
Band 6	2.67	.33
Band 7	2.11	.39
Band 8	1.78	.59
Band 9	2.00	.33
Band10	1.67	.00
Total	1.9889	.45049

*Scale: 1-2 poor, 3-4 fair, 5-6 average, 7-8 good and 9-10 excellent*

It was expected that the bands would be able to perform adequately well under this dimension, however, a cursory look at Table 9 (above) shows that, the performance of all the 10 bands in terms of this dimension could be described as “poor”. However, it was only Band 6 that recorded mean value (M = 2.67, SD = .33) which is approximately 3.00 (Fair). In summary, it could be stated that the performance of all the bands with reference to this dimension was poor.

**Research Question 3:** What is the difference in the performance scores of the various school bands?

To answer this question, a corresponding hypothesis that stated a no difference in the performance scores of the school bands was set and tested. In assessing if there was a significant difference among the various school bands, the one-way analysis of variance (ANOVA) was computed, and the results are summarized in Table 10 below. The analysis of the variance is the most suitable statistical tool since we are interested in comparing the scores of more than two groups (10 bands). One- way ANOVA involves one independent variable (students' performance), which has a number of different levels (tone quality, interpretation and technique) with one continuous dependent variable (performance scores). Table 9 presents a summary of the results.

Table 10: *Descriptive Statistics of Bands' performance*

Group	Mean	Std. Deviation
Band 1	10.44	1.59
Band 2	9.22	.83
Band 3	9.22	1.09
Band 4	13.00	2.06
Band 5	9.89	1.27
Band 6	13.11	1.45
Band 7	9.78	1.48
Band 8	10.00	1.58
Band 9	10.33	1.12
Band10	9.78	.97
Total	10.4778	1.88565

From Table 10, it can be observed that, Band 6 recorded the highest mean performance with a mean value ( $M = 13.11$ ,  $SD = 1.45$ ), this is followed by Band 4 ( $M = 13$ ,  $SD = 2.06$ ). This means that, on the average, the band whose performance with respect to all the three dimensions assessed by the various judges was highest was Band 6. Again, Bands 1, 9 and 8 were the next group of bands whose mean performance ranged around 10.00 to 10.44. It is however, important to note that, Bands 2 and 3 recorded the least mean values in terms of their performance ( $M = 9.22$ ) for each of the two bands.

The mean values suggest a difference between the various bands; however, whether these differences were significant or not was determined by the ANOVA results in Table 11.

Table 11: *ANOVA Results of Bands*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	162.233	9	18.026	9.351	.000*
Within Groups	154.222	80	1.928		
Total	316.456	89			

*\*Significant at 5%*

From Table 11, the null hypothesis was rejected, there is a significant difference between groups ( $F = 9.351$ ,  $sig. < 0.05$ ). This implies that the mean differences in performance recorded between the various Bands are statistically significant. A post hoc analysis was carried out using the Fisher's Least Significant Difference (LSD) which is a tool used to identify which pairs of means are statistically different using t-values. The results are presented in Table 12.

Table 12: *Post hoc analysis for the ANOVA results*

	(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.
LSD	Group1	Group2	1.22222	.65452	.066
		Group3	1.22222	.65452	.066
		Group4	-2.55556*	.65452	.000*
		Group5	.55556	.65452	.399
		Group6	-2.66667*	.65452	.000*
		Group7	.66667	.65452	.311
		Group8	.44444	.65452	.499
		Group9	.11111	.65452	.866
		Group10	.66667	.65452	.311
		Group2	Group1	-1.22222	.65452
	Group3		.00000	.65452	1.000
	Group4		-3.77778*	.65452	.000*
	Group5		-.66667	.65452	.311
	Group6		-3.88889*	.65452	.000*
	Group7		-.55556	.65452	.399
	Group8		-.77778	.65452	.238
	Group9		-1.11111	.65452	.093
	Group10		-.55556	.65452	.399
	Group3		Group1	-1.22222	.65452
		Group2	.00000	.65452	1.000
		Group4	-3.77778*	.65452	.000*
		Group5	-.66667	.65452	.311
		Group6	-3.88889*	.65452	.000*
		Group7	-.55556	.65452	.399
		Group8	-.77778	.65452	.238
		Group9	-1.11111	.65452	.093
		Group10	-.55556	.65452	.399
		Group4	Group1	2.55556*	.65452
	Group2		3.77778*	.65452	.000*
	Group3		3.77778*	.65452	.000*
	Group5		3.11111*	.65452	.000*
	Group6		-.11111	.65452	.866
	Group7		3.22222*	.65452	.000*
	Group8		3.00000*	.65452	.000*
	Group9		2.66667*	.65452	.000*
	Group10		3.22222*	.65452	.000*
	Group5		Group1	-.55556	.65452
		Group2	.66667	.65452	.311
		Group3	.66667	.65452	.311

Table 12 continued

	Group4	-3.11111*	.65452	.000*
	Group6	-3.22222*	.65452	.000*
	Group7	.11111	.65452	.866
	Group8	-.11111	.65452	.866
	Group9	-.44444	.65452	.499
	Group10	.11111	.65452	.866
Group6	Group1	2.66667*	.65452	.000*
	Group2	3.88889*	.65452	.000*
	Group3	3.88889*	.65452	.000*
	Group4	.11111	.65452	.866
	Group5	3.22222*	.65452	.000*
	Group7	3.33333*	.65452	.000*
	Group8	3.11111*	.65452	.000*
	Group9	2.77778*	.65452	.000*
	Group10	3.33333*	.65452	.000*
Group7	Group1	-.66667	.65452	.311
	Group2	.55556	.65452	.399
	Group3	.55556	.65452	.399
	Group4	-3.22222*	.65452	.000*
	Group5	-.11111	.65452	.866
	Group6	-3.33333*	.65452	.000*
	Group8	-.22222	.65452	.735
	Group9	-.55556	.65452	.399
	Group10	.00000	.65452	1.000
Group8	Group1	-.44444	.65452	.499
	Group2	.77778	.65452	.238
	Group3	.77778	.65452	.238
	Group4	-3.00000*	.65452	.000*
	Group5	.11111	.65452	.866
	Group6	-3.11111*	.65452	.000*
	Group7	.22222	.65452	.735
	Group9	-.33333	.65452	.612
	Group10	.22222	.65452	.735
Group9	Group1	-.11111	.65452	.866
	Group2	1.11111	.65452	.093
	Group3	1.11111	.65452	.093
	Group4	-2.66667*	.65452	.000*
	Group5	.44444	.65452	.499
	Group6	-2.77778*	.65452	.000*
	Group7	.55556	.65452	.399
	Group8	.33333	.65452	.612
	Group10	.55556	.65452	.399

Table 12 continued

Group10	Group1	-.66667	.65452	.311
	Group2	.55556	.65452	.399
	Group3	.55556	.65452	.399
	Group4	-3.22222*	.65452	.000*
	Group5	-.11111	.65452	.866
	Group6	-3.33333*	.65452	.000*
	Group7	.00000	.65452	1.000
	Group8	-.22222	.65452	.735
	Group9	-.55556	.65452	.399

*\*The mean difference is significant at the 0.05 level.*

From Table 12, it can be observed that, with the exception of Bands 4 and 6 which seems to have no significant difference between their means, there is a significant difference between the means of Band 4 and all the other bands and also Band 6 and all the other bands. This implies that, the mean performances for the remaining bands significantly differ from that of Bands 4 and 6.

**Research Question 4:** What is the difference in the performance scores of school bands that use different strategies?

To answer the question, a corresponding hypothesis that stated no difference in the performance scores of school bands that use different strategies was set and tested. An independent t-test was computed. Table 13 presents a summary of the results.

Table 13: *Independent t-test showing the difference between strategy and performance*

Strategy	M	SD	T	Df	$\rho$
Rote	9.83	1.28	-8.878	88	.000
Notation	13.06	1.73			

\*Significance level .05



From Table 13, it can be observed that, the mean values for bands that use Staff Notation at their rehearsals is relatively higher ( $M = 13.06$ ,  $SD = 1.73$ ) than mean score obtained by bands that apply Rote method as a means for studying new pieces ( $M = 9.83$ ,  $SD = 1.28$ ). To determine whether this difference is significant, an independent t-test was conducted.

From Table 13, the Levene's Test for Equality of variances was used to determine whether the difference in performance was significant. The null hypothesis was rejected with mean performance of bands that employed the Notation strategy ( $M = 13.06$ ,  $SD = 1.73$ ) significantly higher ( $t = -8.878$ ,  $df = 88$ , two-tailed probability  $< .05$ ) than the performance of bands that were taught using the Rote strategy ( $M = 9.83$ ,  $SD = 1.28$ ).

**Research Question 5:** What is the relationship between students' performance scores and rehearsal observation scores?

For research question five, a corresponding null hypothesis and its alternative hypothesis that specified a no relationship and a relationship respectively between performance scores and rehearsal observation scores were set to be tested. The reason for using the Pearson product-moment coefficient was to establish the possibility of an existing relationship without determining that the relationship existed in a cause and effect situation. The results yielded a point on a scale between -1.00 and 1.00. The closer the result was to one of these two limits, the weaker or stronger the relationship was determined to be respectively. Table 14 below summarizes the results.

Table 14: *Correlation between Performance scores and Rehearsal observation scores*

		Performance scores	Rehearsal observation scores
Performance scores	Pearson Correlation	1	.878**
	Sig. (2-tailed)		.000
	N	90	90
Rehearsal observation scores	Pearson Correlation	.878**	1
	Sig. (2-tailed)	.000	
	N	90	90

\*\* *Correlation is significant at the 0.01 level (2-tailed).*

Before performing this correlation, a scatterplot was first of all generated to enable me check for the violation of the assumptions of linearity and homoscedasticity, and also to give me a better idea of the nature of the relationship between the variables under consideration. Once I have explored the distribution of scores on the scatterplot and established that the relationship between the variables was roughly linear, and that the scores were evenly spread in a cigar shape, I proceeded with calculating Pearson's correlation without any hesitation.

Results in table 14 (above) revealed the null hypothesis was rejected with a large correlation between the two variables  $r(90) = .878$ ,  $p < .01$  suggesting a strong positive relationship between performance scores and rehearsal observation scores. It seems the logic of garbage in, garbage out (GIGO) can be applied here. This implies that the performance elements or

behaviours demonstrated by the instructors in rehearsal sessions, behaviours which were impacted and were absorbed by the students, were the same behaviours demonstrated by students' during their performance. The relationship is significant at the .01 alpha level ( $.000 < .01$ ).

### **Discussion of Stage-Two Results**

The main objective of Stage-Two data was to assess the impact of the rehearsal strategies employed by basic school band directors on students' performance. Thus, the primary research questions that guided the present study concerned the impact of rehearsal strategies on students' performance.

The second research question sought to determine the performance level of the school bands on the three performance dimensions using categorizations specified by the KMEA performance evaluation form. To achieve this, school band performances, scored under tone/intonation, technique and interpretation using a corresponding numerical scale ranging from one to ten, were clustered into five categories using the descriptive scale terminology; Poor (1-2), Fair (3-4), Average (5-6), Good (7-8) and Excellent (9-10).

Looking at the performances of the various schools bands on tone/intonation, the results revealed that out of the 10 bands studied, Bands 4 and 6 recorded the highest mean performance level ( $M = 5.78$ ,  $SD = .97$ ) and ( $M = 5.67$ ,  $SD = .50$ ) respectively. Followed by Band 1 ( $M = 4.22$ ,  $SD = 1.20$ ) and the least mean value was recorded by Band 3 ( $M = 3.11$ ,  $SD = .78$ ). These mean values according to the performance scale suggested that Bands 4 and 6's performance can be classified as "average". This implies that Bands 4 and 6 (two out of the eight bands representing a minority) were the only groups

that recorded an average performance under the Tone/intonation dimension while the majority (eight out of the ten bands) performed below the average. The performance of the remaining eight bands can be described as “fair”. This means that in terms of performance elements such as sound quality, breath support and control, blend and balance, it is only two bands’ performance that can be described as average. This low performance recorded by majority of the bands, according to judges’ comments, can largely be attributed to incorrect embouchure, posture and breathing techniques exhibited by the various school bands. The table below summarizes judges’ comments on tone/intonation.

Table 15: *Adjudicators’ comments on Tone/Intonation*

Comments
Noticeable airiness in trumpets and saxophone sound production
Extended lapses in trumpets and trombone tones for some sections of the piece
Noticeable imbalances between woodwinds and brass in some sections of the music
Very noticeable intonation issues in most part of the music

One critical element that affects brass tone production is the development of the embouchure (the set of over 150 tiny muscles around the mouth that are engaged when playing any wind instrument). Developing a “proper” embouchure is nearly an obsession in western brass pedagogy (Rumbolz, 2001, p. 113). Several books on the subject prescribed just how the mouth piece should be set upon the lips (eg. 1/3 on the upper and 2/3 on the

lower) or how the teeth should be aligned (Farkus, 1962). Such refinements in brass band training are rare in Ghana and among Ghanaian basic schools. If a student can produce a sound, they generally work it completely by ear. Additionally, the consistently loud dynamics used by the school bands makes maintaining a balanced embouchure nearly impossible. It is not uncommon to see trumpeters using their fingers to reinforce a weak embouchure by wrapping the left index finger around the mouthpiece or playing with a handkerchief pressed alongside the mouthpiece to keep the seal intact.

Another important factor that might contribute to the below average performance on tone/intonation of most of the school bands has to do with tuning. This is another area among Ghanaian school bands where one finds a divergence from the Western practice. When I questioned school band directors about tuning, their responses seemed to betray a lack of familiarity with the western goal of “perfect” unisons and tuned intervals. Even with some of the most experienced instructors, basic misconceptions about tuning were evident. One band director informed me that “we don’t tune our instruments because they are all made in one key and come from the same manufacturer.” Another band director also told me that in training of students, “tuning is not covered as it slows down the learning of keys”.

There seem to be a slight improvement on the performance level on technique as compared to tone/intonation. Technique in this context includes performance elements such as note accuracy, articulation and rhythmic precision. Bands 4, 6, 8 and 10 scored approximately 5.00 making their performance an “average’ performance while the remaining six bands with means ranging from 4.00 to 4.44 still scored below average. This implies that,

in terms of performance elements like articulation, accuracy of notes and the precision of the rhythm, only four bands did averagely well. The performance of the remaining six bands can be described as “fair”. In looking for possible explanations to the results, the judges revealed that “poor air-starts, poor execution of notes and limitations in terms of students’ inability to perform clearly notes of the higher register. Table 17 below summarizes the judges’ comments on technique.

Table 16: *Adjudicators’ comments on Technique*

Comments
Consistent wrong notes in trumpets and sometimes clarinets
Note accuracy, especially in the higher registers consistently have wrong notes
Performance of rhythm is consistently accurate
Minor lapses in rhythm but are quickly recovered
Lapses in articulation is a common problem for all the bands

Reasons for the almost perfect execution of rhythm revealed in Table 16 is difficult to discern from the data but may be attributed to the general notion among scholars that the most outstanding characteristic of African music is its emphasis upon rhythm as well as its percussive concept of music performance (Merriam, 1959; Kauffman, 1980, Agawu, 1995).

Band performance on interpretation appears to have the lowest scores among the three performance dimensions. It was expected that the bands will be able to perform adequately well under this dimension, however, a cursory look at the means shows that, the performance of all the 10 bands in terms of

this dimension can be described as “poor”. However, it is only Band 6 that recorded mean value ( $M = 2.67$ ,  $SD = .71$ ) which is approximately 3.00 (Fair). Interpretation in this context connotes phrasing, tempo, expression and dynamic variation which are elements that form what Seashore (1938) terms “expressive performance”. Seashore (1938), who believed that “the medium of musical art lies primarily in artistic deviation from the fixed and regular” (p. 29), revealed performers used much variation in intensity and duration to achieve expressive effect. Much research was conducted to substantiate Seashore’s findings (Gabrielsson, 1987; Sundberg, Askenfelt, & Fryden, 1983). These studies, which have been primarily analytical, reveal that performers manipulate dynamics and duration to achieve expressive effect. As a general rule, dynamics increase and decrease with the rise and fall of the melodic contour. Duration varies in an opposite manner; note values decrease as the contour rises and increase as the contour falls. Duration increases also delineate phrases. Additionally, Nakumara (1987) and Geringer (1991, 1992) have shown that expressive effect is readily perceived by both children and adults.

Considering these findings, it can be said that the ultimate aim of all school band instructors is to help their students perform music “expressively”. Based on this, it can therefore be concluded that school band instructors were not working hard enough in terms of their general approach to school band instruction. Despite the presence of performance elements which suggests expressive performance in the pieces selected for study, there was not enough work done on the part of the directors to elicit expressive performances from their bands (field notes and observation videos confirms this). In an attempt to

give possible explanations to this phenomenon, some of the comments the judges made for the poor performance on interpretation were that “the conductors were time beating,” “expressions were not well executed” and the fact that “there was a complete lack of attention given to any performance element by the directors”.

For effective band directors, each rehearsal presents an opportunity to make significant improvement based on familiarity with the music. From achieving rudimentary skills such as notes and rhythms to more advanced nuances such as dynamic inflection and tapered releases, each phrase and large section of music deserves special attention. Beyond just teaching students to perform technically on their instruments, teachers need to instill the importance of how phrases and sections join together to create an entire piece of music, a concept known as comprehensive musicianship (Austin, 1998; Garafolo, 1983).

More so, another factor which greatly affects any musician’s development is access to an instrument on which to perform or rehearse (Rumbolz, 2001). Due to a struggling economy and limited opportunities for employment, a personal instrument is a rare luxury for a band student. Access to instruments, therefore, is usually to group rehearsals and performances. Furthermore, the absence of qualified instrument repair technicians and the marginal condition of many of these instruments makes unregulated access even more unlikely, as institutions are concerned about the preservation of their set of instruments.

Despite the general below average performances exhibited by the various school bands on the performance dimensions, it is clear that some



school bands had higher scores on the performances than others. Therefore the analysis of variance was computed to determine if there was a significant difference in the performance of the various bands. Results revealed a significant difference between groups ( $F = 9.351$ ,  $\text{sig.} < 0.05$ ). A post hoc analysis was also carried out using the Fisher's Least Significant Difference (LSD). It is clear from the post hoc that Bands 4 and 6 seems to have no significant difference between their means, but there is a significant difference between the means of Band 4 and all the other bands and also Band 6 and all the other bands. This implies that, the mean performances for the remaining bands significantly differ from that of Bands 4 and 6.

In an attempt to explain the significant difference in the scores of the various school bands, the demographics of the bands were considered. This was informed by the several studies that have compared the differences among teachers with various levels of qualification and experience using categories such as expert, experienced, novice, student, and preservice teachers (Cavitt, 2003; Goolsby, 1996,1997; Worthy, 2003; Yarbrough & Price, 1989).

There was the need to pay particular attention to Bands 4 and 6 since they consistently performed relatively better than the rest of the bands on all the performance dimensions. Therefore, demographics such as instructors' qualification, teaching experience, and number of rehearsal sessions per week (among others) might be the possible factors creating the disparity in performance scores. Apart from employing rehearsal strategies that differed from that of the other bands, it is interesting to note that the Band directors of Bands 6 and 4 were the directors with the highest qualifications (masters and bachelor degrees respectively) at the time the study was conducted, the bands

with the most frequent rehearsal schedule and also the bands with the most experienced directors with 25 and 19 years of experience respectively. Therefore, it is no coincidence at all if these two bands performed better than the other eight bands. This finding corroborates Goolsby's (1999) study that found significant differences ( $p < .01$ ) between novice and expert teachers' ensemble performance scores when preparing the same composition.

One determinant of a child's success or failure in instrumental music is the band directors' method of teaching. Almost all instrumental music instructors have had students drop out of a programme because the students ostensibly disliked the directors' style of delivery (Fortney, Boyle, & DeCarbo, 1993), which reiterates the importance of the band directors' strategy as a determinant of the success or failure in school instrumental music programmes. In the light of the above, research question four sought to assess if there was a significant difference between rehearsal strategies employed and performance. To achieve this, an independent t-test was computed since results from Stage-One data revealed two strategies, rote learning and staff notation. Results revealed that, the mean values for staff notation ( $M = 13.06$ ,  $SD = 1.73$ ) is relatively higher than rote learning ( $M = 9.83$ ,  $SD = 1.28$ ). To determine whether this difference is significant, the Levene's Test for Equality of variances was used. The test indicated that the variances for the two groups were equal ( $F = 1.437$ ,  $p > .05$ ), and therefore a test for equal variances was used. The mean performance of bands that employed the Notation strategy ( $M = 13.06$ ,  $SD = 1.73$ ) was significantly higher ( $t = -8.878$ ,  $df = 88$ , two-tailed probability  $< .05$ ) than the performance of bands that used the Rote strategy ( $M = 9.83$ ,  $SD = 1.28$ ). This result simply means that school bands that used

the staff notation approach performed better than school bands that used the rote learning approach, which implies that the staff notation approach is more effective than the rote learning approach. This result reiterates the importance of the band directors' strategy as an important factor in determining the success of a school band programme.

Many proposed alternatives in philosophy and practice can be found among the international scholarly literature on band (Allsup & Benedict, 2008; Bazan, 2011; Beitler, 2012; Brown, 2012; Djordjevic, 2007; Elliott, 2005; Holsberg, 2009; Inzenga, 1999; Reynolds & Beitler, 2007). These views on band instruction include comprehensive musicianship, technology integration, focus on critical thinking, implementation of the national standards, cooperative and collaborative learning, reflective practices, constructivism, self-assessment, ArtsPROPEL, and student-centered classes. Despite the prevalence of these instructional methods in educational disciplines, this instructional approach does not seem to have gained grounds in Ghana. Although some authors and educators have advocated approaches to instrumental music teaching and learning that could be considered more effective (e.g., Labuta, 1997; Schleuter, 1997; O'Toole, 2003), there may be several reasons why band directors hesitate to change their teaching styles, including: (a) historical precedents set by prior directors (Jorgensen, 2003), (b) an established pedagogy based on historical precedent, research, and observation (Goolsby, 1996, 1997, 1999; Cavitt, 2003), (c) poor reception by some students or teachers (Kelly, 1972; Mackworth-Young, 1990), and (d) lack of awareness on how to implement the propose instructional methods (Meyer, 2000; Confer, 2001). Specific factors that may cause Ghanaian band

teachers to favour one instructional strategy over another need to be investigated.

Finally, to explore the relationship between performance scores and rehearsal observation scores, Pearson's correlation coefficient was employed. The relationship between students' performance scores (as measured by the KMEA evaluation form) and rehearsal observation scores (as measured by the KMEA evaluation form) was investigated using Pearson product-moment correlation coefficient. There was a strong, positive correlation between the two variables ( $r=.878$ ,  $n=90$ ,  $p<.0005$ ), with the extent to which attention was given to the various performance elements during rehearsal sessions highly correlated with students' ability to perform music "expressively" on their instruments. This offers a plausible explanation to the comparably low performance of most of the school bands on the performance dimensions.

### **Chapter Summary**

This study was conducted in two stages. The first stage of the study was designed to answer Research Question 1, which explored the rehearsal strategies adopted by Ghanaian basic school band directors. This question was answered by observing rehearsal sessions, field notes, and interviews. The five band directors selected for the interview were observed during five rehearsal sessions each. Data from the first rehearsal of each participant was discarded in order to decrease researcher effect. The selection of the band directors for the interview was done to represent the categories of band instructors who are currently in charge of Ghanaian basic school bands. The categories considered for the selection were; (1) instructors with post graduate degrees, (2) instructors with first degrees, (3) instructors with diploma degrees, (4)

instructors who are music teachers but do not play any wind instrument, and (5) instructors who are appointed because of their experience (e.g. retired military or police bandsmen).

Analysis of observations, field notes and interview transcripts revealed similarities and differences in participants' band rehearsal strategies. Therefore, each participant was described separately, since reporting all teaching and learning strategies together would not have provided a valid perspective of what occurred during rehearsals. Descriptions began with demographic details, followed by specific data on the teaching and learning strategies used by each participant, and concluded with general statements made during interviews. These items were investigated by analyzing codes generated from videotapes of rehearsal sessions, field notes, and interviews.

It was found that teacher-directed instruction was the most utilized instructional category. However, in their attempt to reach their instructional goals and objectives, some teachers emphasized sight reading in their teaching while others taught by rote method. Students performed on their instruments almost the entire rehearsal time and instances they were not performing, much teacher-talk or organizational time seemed devoted to developing musical performance.

Research Questions 2, 3, 4 and 5 were posed to assess the impact of directors' instruction on students' performance. By computing descriptive statistics for the performance dimensions, it was observed that out of the ten bands, only two bands' performance scores fell within the average mark for tone/intonation. Four bands performed averagely well on technique and all ten bands performed poorly on interpretation. The analysis of variance was

computed to determine if there is a significant difference in the performance of the various bands. Results revealed a significant difference between and within groups ( $F = 9.351$ , sig.  $< 0.05$ ). A post hoc analysis was also carried out using the Fisher's Least Significant Difference (LSD). It is clear from the post hoc that Bands 4 and 6 seems to have no significant difference between their means, but there is a significant difference between the means of Band 4 and all the other bands and also Band 6 and all the other bands.

To assess if there was a significant difference between rehearsal strategies employed and performance, an independent t-test was computed since results from stage-one data revealed two strategies, rote learning and staff notation. Results revealed that the mean values for notation ( $M = 13.06$ ,  $SD = 1.73$ ) is relatively higher than rote ( $M = 9.83$ ,  $SD = 1.28$ ). The mean performance of bands that employed the staff notation strategy ( $M = 13.06$ ,  $SD = 1.73$ ) was significantly higher ( $t = -8.878$ ,  $df = 88$ , two-tailed probability  $< .05$ ) than the performance of bands that used the rote strategy ( $M = 9.83$ ,  $SD = 1.28$ ).

In finding out if there was a relationship between performance scores and rehearsal observation scores, a Pearson's correlation was run. Results from the study indicated that a Pearson's correlation coefficient of .878 indicates a strong positive relationship between performance scores and rehearsal observation scores. Conclusions and recommendations based on findings from the current chapter are presented in chapter five.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

In this chapter, a summary of the whole thesis is presented. The summary covers a recapitulation of the purpose of the study, the research questions addressed, the highlight of the available literature reviewed, an overview of the research methods employed, the kinds of analysis performed on the data and a statement of the main findings. The summary will be followed by conclusions as well as recommendations based on the findings of the study. I then close the chapter with suggestions for further studies.

#### Summary

The intent of this study was to examine the impact of rehearsal strategies employed by Ghanaian basic school band directors on students' performance in terms of playing proficiency. One major determinant of a child's success or failure in instrumental music is the band directors' method of teaching. To the best of my knowledge, information regarding strategies and approaches used by school band instructors pertaining to the teaching of school bands is non-existent in Ghana. Investigating strategies and approaches of basic school band instructors who currently teach beginning wind students may reveal strengths and/or weaknesses pertaining to school band instruction, including instruction regarding fundamentals such as proper embouchure, breath control, posture, articulation, hand position, and fingerings. Further, an investigation of specific methodologies of school band instructors may lead to a better understanding of effective teaching approaches, and may enhance the overall musical development of wind players' performance skills.

Stemming from the purpose of the study, the specific objectives of the study were to (a) explore the rehearsal strategies basic school band directors in the Accra metropolis employ, (b) assess the performance level of basic school bands in the Accra metropolis, (c) examine if there was a significant difference in the performance scores of the school bands, (d) examine if there was a significant difference in the performance scores of school bands that use different strategies, and (e) examine the possible relationship between performance scores and judges' observation video ratings.

To accomplish the objectives above, five research questions and three research hypotheses (which correspond with the third, fourth, and fifth research questions) were set to help gain a deeper insight into the differences in performance scores of the school bands and the possible relationship between students' performance and directors' strategy.

1. What rehearsal strategies do basic school band directors in the Accra metropolis employ?
2. What is the level of performance of basic school bands in the Accra metropolis on the performance dimensions?
3. What is the difference in the performance scores of the school bands on the performance dimensions?
4. What is the difference in the performance scores of school bands that use different strategies?
5. What is the relationship between students' performance scores and rehearsal observation scores?

Related literature was reviewed under the following sub-headings: the development of instrumental music curriculum and instruction, instructional



practices in instrumental music education, theoretical foundation of music participation, current practices in school band education, teaching beginning bands, effective use of rehearsal time, strategies for improving rehearsal technique and performance evaluation.

The study adopted the mixed method approach, specifically the *convergent parallel design* (Wittink *et al.*, 2006); using qualitative data collection methods, but also employing quantitative data and statistical analyses to enrich perspective on the impact of teaching and learning strategies. A single primary dependent variable – band performance – was selected in order to maintain a clear design and reduce confounding variables (Madsen & Madsen, 1971). The dependent variable was measured using the

KMEA Performance Evaluation Form (Appendix C). The type of rehearsal strategies/technique served as the independent variable for this study.

Ten bands from different basic schools in the Accra metropolis were selected using the stratified sampling and the random sampling with replacement or independent (within-sample) random sampling methods (Glenberg & Andrzejewski, 2008). Five school band directors were selected for the interview using the purposeful sampling, specifically the maximum variation method (Creswell & Clark, 2011). I made use of three research instruments: observation (school band rehearsal sessions), interview (for band instructors) and a researcher-designed performance task (for students) which was video recorded and assessed by three independent judges, to encompass the different aspects of teacher-student holistic approach to teaching and learning.

In all, ten school bands and five instructors participated in the study. Before the data collection exercise, adequate permission was attained from the Institutional Review Board (IRB) secretariat, University of Cape Coast and the Accra Metropolitan Educational Directorate. With the cooperation of Accra metro Circuit Supervisors, Culture Coordinators, head teachers and school band instructors, the researcher was able to gather relevant data.

Qualitatively, data was gathered using a semi-structured interview guide on band directors' views on school band methods and other critical issues with regard to school band activities in Ghana which was audio recorded, transcribed and coded together with the organization of field notes. Data collected was therefore analyzed qualitatively by the identification of themes, patterns, structures, relationships and typologies that arose over the course of the study.

The second part of data collection concentrated on the impact of directors' rehearsal strategies on students' performance. A Performance task scored by three independent judges provided continuous data for the quantitative analysis. The performances were rated to a corresponding numerical scale ranging from one to ten (one-meaning low use of the instrumental performance dimension and ten- meaning high use of the instrumental performance dimensions). The descriptive statistics, t-test, ANOVA and correlations were computed.

Results revealed that school band instruction in Ghana is a male dominated profession with ages ranging from 30-50 and above. According to the participating band instructors, there are no age or class restrictions for band participation. Normally, interested students begin school band

participation from primary three or four. Most school bands rehearse two-three times a week in the exception of one particular basic school which runs the boarding school system and therefore rehearses everyday of the week including vacations.

### **Major Findings**

The following findings emerged from the study: (a) The main goal, as stated clearly in the results, for the establishment of school bands was for the participating teachers to develop students' performance skill on the various band instruments, but other objectives stated included, developing sight reading, putting up a good show when they go for programmes, creating a fun learning experience, developing a quality musical product, developing characteristic instrument tones, focusing on students' ultimate experiences, and developing character traits such as self-discipline. (b) In line with the goal stated above, based on observations, the general rehearsal routine of the band directors was to perfect new and old pieces. (c) Results also revealed similarities and differences in participants' band rehearsal strategies- some instructors emphasized the reading of music and other employed the rote method. (d) Often, the instructors took into consideration multiple characteristics that students are suppose to poses. These characteristics included specific qualities pertaining to study habits and behavior, physical attributes (such as size of fingers and hands, height, size and shape of lips and mouth), musical experience and ability, and availability of equipment and support. (e) Although most band instructors indicated they actually provide small-group homogeneous instruction for their students, they however, indicated variable scheduling of small-group instructions based on necessity,

availability of time, availability of resource persons, and availability of funds. Of the band instructors who indicated they provide small-group homogeneous instruction, several indicated they implement it more often for new students and it lasts for about 45 to 60 minutes per a meeting. (f) According to the band instructors, they did not have any curriculum nor use any wind band method books. Apart from fingering/slide charts, they also did not make use of instructional materials such as, scale sheets, etudes, video and audio recordings and Supplemental materials (informational materials pertaining to wind instruments) in their rehearsal sessions. (g) Only two out of the ten bands performed averagely well on tone/intonation. The means of the remaining eight bands fell within “fair”. Four school bands out of the ten performed averagely well on technique while all ten school bands performed poorly on interpretation. (h) There was a significant difference in the performance scores of the various bands ( $F = 9.351$ , sig.  $< 0.05$ ). It is clear from the post hoc that Bands 4 and 6 seems to have no significant difference between their means, but there is a significant difference between the means of Band 4 and all the other bands and also Band 6 and all the other bands. (i) Results also revealed a significant difference between rehearsal strategies employed and performance with Staff notation mean values ( $M = 13.06$ ,  $SD = 1.73$ ) relatively higher than Rote ( $M = 9.83$ ,  $SD = 1.28$ ). (j) Results from the study indicated that a Pearson’s correlation coefficient of .878 indicates a strong positive relationship between performance scores and rehearsal observation scores.

## **Conclusions**

The study concluded on the following based on the above findings: Instructional strategies employed by basic school band instructors seem not to be the most effective. Wind band instruction among basic schools in the Accra metropolis is done using two main strategies, teaching by rote and the staff notation approach. Inasmuch as these instructional models can be said to be the main contributing factors, the level of performance of the various school bands cannot be the sole result of the two instructional strategies, since confounding variables such as private instruction, participation in church/town bands, instructors' qualification, rehearsal scheduling and so on may also be contributing factors.

The performance of basic school bands in the Accra metropolis on the various performance dimensions was generally below average. This conclusion is based on the descriptive scale terminologies (poor, fair average, good and excellent) found on the performance evaluation form adapted for this study.

Proper embouchure, breathing, and posture are regarded as high priorities when teaching beginning level band, as well as developing proper quality of tone (Worthy, 2002). But it is surprising to note that the latter did not seem to be the case with the instructors included in this study. Observation of rehearsal sessions revealed that most of rehearsal time was spent on fingering/slide positions and teaching new or perfecting old pieces. It was evident that students were using their fingers to reinforce a weak embouchure by wrapping the left index finger around the mouthpiece or playing with a

handkerchief pressed alongside the mouthpiece to keep the seal intact. Some also played with their chicks blotted.

Comments made by the judges suggest that a substantial number of young wind players do not use their tongue correctly when articulating. In addition to general misuse of the tongue, many students use air-start as the primary way to initiate a musical tone rather than the tip of the tongue. Once acquired, these habits can be difficult to correct and can lead to frustration for both student and teacher. It is therefore my hope that this study will lead to more informed pedagogical practices regarding how to teach young wind players to articulate correctly.

Lastly, data from the interview revealed that basic school band instructors in the Accra metropolis rely so much on chorale pieces more than pieces written specifically for school wind bands when selecting repertoire for events.

### **Recommendations**

Firstly, the findings seem to suggest that the strategies currently employed by basic school band directors in the Accra metropolis are not very effective. Therefore, I recommend that teachers look at other alternative methods of instruction. Many proposed alternatives in philosophy and practice can be found among the international scholarly literature on band. These alternative views include comprehensive musicianship, technology integration, focus on critical thinking, implementation of the national standards, cooperative and collaborative learning, reflective practices, constructivism, self-assessment, Arts PROPEL, and student-centered classes

Repertoire, according to Reynold (2000), is to serve as the curriculum for performance ensembles, therefore the importance of the process used by the band director to select repertoire for his or her ensemble becomes critical. School band instructors in the Accra metropolis should endeavour to select repertoire specifically composed for school wind bands since “literature chosen for preparation in the ensemble provides the teaching materials used by the instructor to teach musical concepts as well as the techniques that are specific to the various band instruments.” (Hayward, 2004, p. 2).

Also, accurately formed embouchure and posture, combined with efficient and consistent use of air, are important aspects of producing appropriate tone and accurate intonation on wind instruments (Worthy, 2002). Developing a strong, proper embouchure requires close attention and a constant reminder from the instructor to be certain students implement correct formations. Consulting a variety of sources, including books, articles, or sessions with colleagues or professional specialists, may provide helpful information on useful warm-up exercises that will facilitate proper formations of embouchures. Whereas some professionals emphasize the importance of teaching accurate intonation in the beginning of instrumental music study (Lenzini, 1999; Stycos, 1993; Worthy, 2002), Smith (2004) has argued that aspects of intonation should be addressed only when students have learned notes and rhythms of their study material, and have developed fundamental performance skills such as proper formation of embouchure and production of tone. Further, teachers must make sure students learn tuning adjustments that should be made with the embouchure in correlation with fingerings (Smith, 2004).

Furthermore, research results have indicated that conductors' demonstration of frequent and sustained eye contact, expressive gestures and varied facial expression during performance positively affected ensembles' expressivity. Therefore, workshops and band clinics should be organized for school band instructors to help them build on their instructional strategies and conducting skills.

Finally, band instructors may consider recommendations for professional brass/woodwind players and instrumental specialists by implementing video and audio models more often in their instruction and by requiring or providing private instruction.

### **Suggestions for Further Research**

The study presented must be viewed as an exploratory study of school band directors' instructional models in the Accra metropolis. The expansion of the sample to cover school bands from other educational districts and regions of the country will be necessary to encompass a broader perspective on the teaching strategies adopted by Ghanaian school band instructors.

Continued study on how music teachers, especially Ghanaian teachers, develop their teaching and learning strategies they employ would be an important contribution to the literature. In particular, investigations should be conducted as to what specific factors may cause Ghanaian band teachers to prefer one teaching style over other rehearsal models. The relationships between other theories of teaching and the strategies identified in this study should also be explored.

Although many descriptive studies contribute to an understanding of the dynamics of instrumental music rehearsals, each is also limited, either by a



small sample or by analysis of short portions of rehearsals. A more complete examination of the teaching behaviors of experienced and successful band directors could broaden the baseline of descriptive data for instrumental ensemble rehearsals, which in turn might lead to future studies identifying additional characteristics of outstanding directors.

Whether band programmes are appropriate environments for IQ development requires philosophical discussion and experimental investigation. Specifically, what is the difference in effect within the band programme among schools using different strategies? Do the learning outcomes of alternative rehearsal approaches outweigh the benefits of a curriculum dedicated to music performance? Furthermore, a comprehensive inventory of most effective instructional strategies that can be implemented in the school band setting should continue to be explored and developed.

Finally, perhaps the initial attempt to empirically having better knowledge of success is with expert conductors/teachers. Investigating the tasks, techniques, and behaviors used by expert conductors/teachers to consistently produce high performance levels could provide a more sound teaching approach, which may be more generalized to a broader segment of teachers. Furthermore, such investigations could offer an additional understanding of successful skills and knowledge that add to more insight for music teacher training programmes.

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## APPENDIX A

### INTERVIEW GUIDE

The following questions are designed to solicit information on critical issues concerning school band teaching strategies and band activities in Ghana.

#### **Bio data**

Name

Age

Sex

#### **Educational background**

1. Can you tell me about your educational background?
  - (a) Which schools have you attended?
  - (b) What is the highest level of education you have received?
  - (c) What other relevant training did you have which is relevant to your position?
  - (d) What courses have you read in music that deals with band instruction?
  - (e) Did you take courses in rehearsal techniques/methods?

#### **Professional background**

2. Which musical instrument(s) do you play?
  - (a) how long have you been playing)
  - (b) How did you become a school band director?
  - (c) How long have you been a director?
  - (d) Which bands have you thought in the past?
  - (e) What are/were your major responsibilities?
  - (f) What skills/expertise should a band director possess?

(g) Which skills have you acquired that makes you the right person for this job?

(h) What have you accomplished as a band director?

(i) In your view, what qualities should a good band director possess?

### **Teaching Strategy**

3. Which method of band teaching do you employ in your delivery and why?

(a) How do you teach a beginning student?

(b) How did you come by the strategies you employ today?

(c) Why do you teach the way you do?

(d) What (elements) do you work of during rehearsal?

(e) Which method, in your view, is appropriate for beginning bands and why?

(f) What kind of pieces do you play?

(g) What are the primary goals and objectives of your teaching?

(h) What skills do you most want your students to develop during band?

(i) What difficulties do you encounter as you carry out your duties?  
(Have you found any ways to overcome such difficulties?)

(j) What do you do differently that distinguishes you from other directors?

### **Band organization**

(a) At what grade level do students begin instrumental study?

(b) What strategies do you use for selecting students to play in the school band?

- (c) For what duration are students required to study in the school band?
- (d) How do students receive instruction on the instruments, i.e., heterogeneous, homogeneous, and/or private teaching?
- (e) How often do students receive various types of instruction? (theory and practical)
- (f) Which band method books or supplemental materials (audio recordings, video recordings, and computer software) do you use and how are they selected?
- (g) Do you consider your approach and the method books you use in band class to be appropriate and sufficient for teaching the fundamentals to beginning instrumentalists?

Other questions may be added dependent on observations and answers to these questions.

### **PERFORMANCE TASK**

This part of data collection concerns the impact of band directors' rehearsal strategy on students' performance. The detailed performance task is as follows:

1. The various school bands perform three selected pieces
2. The performance will be video recorded for assessment by three independent judges on the following performance dimensions: tone/intonation, technique and interpretation.

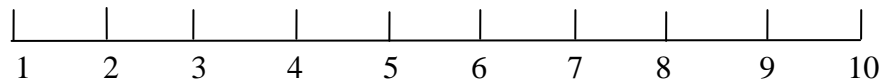
**APPENDIX B**  
**PERFORMANCE EVALUATION FORM**

**School band**

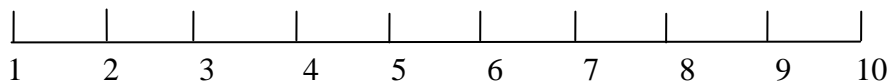
This research involves basic school bands in the Accra metropolis. The study focuses on the impact of directors' rehearsal strategies on students' performance. I should be grateful if you could rate the following performances on a scale of 1-10 (1-meaning low expression of performance dimension and 10-meaning high expression of performance dimension).

Performance 1 (Circle the appropriate score)

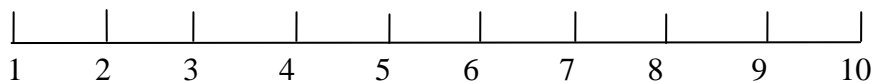
**Tone quality/ Intonation**



**Interpretation**



**Technique**



Evaluators' Comment

.....  
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Evaluators' signature:.....

**Tone/Intonation:**

Quality,  
Breath support and control,  
Blend,  
Balance

**Interpretation:**

Tempo,  
Phrasing,  
Expression,  
Style,  
Dynamic variation

**Technique:**

Note accuracy,  
Articulation,  
Precision,  
Rhythm, & Posture

**Operational Definitions for Performance Assessment**

**Tone Quality:** The overall quality of instrumental and ensemble sound (e.g., maturity, airiness, support).

**Blend/Balance:** The overall unity of sound and appropriate emphasis of musical lines in relation to their function in the piece (e.g., melody, countermelody, harmonic foundation)

**Intonation:** The overall ability of the ensemble members to play in tune with one another; the sharpness and flatness of pitches.

**Phrasing/Expression:** The overall interpretation and execution of expressive elements resulting in an appropriate degree of musical effect and representative style (e.g., phrasing through interpreted dynamics; interpreted articulation).

**Dynamic Variation:** The execution of indicated dynamic markings with appropriate levels of contrast.

**Tempo:** The overall execution of the indicated tempo markings in the musical score.

**Note Accuracy:** The ensemble's overall performance of correct written pitches (e.g., correct fingerings or slide positions).

**Rhythmic Precision:** The overall correctness and unity in the performance of written rhythms.

**Articulation:** The overall execution of the way in which notes are attacked, sustained, and released; the execution of indicated articulation markings.

## **APPENDIX C**

### **INSTRUMENTAL MUSIC TEACHER INFORMED CONSENT**

#### **DOCUMENT FOR REHEARSAL OBSERVATION AND INTERVIEW**

##### **Background Information**

This research study is designed to gather data on the teaching practices of selected Ghanaian basic school teachers of instrumental music. You were selected as a potential participant because you are a school instrumental music educator. Please read this form and ask any questions that you may have before agreeing to participate in the study. By observing and videotaping at least five (5) rehearsals, and by interviewing you, data may be compiled that could expand the teaching and learning strategies available to music educators. John-Doe Dordzro, a doctoral student in Music Education at University of Cape Coast will be conducting this study.

##### **Procedures**

If you wish to be a participant in this research, you are granting permission for the researcher to observe and videotape at least five (5) of your band rehearsals and conduct one semi-structured, one hour interview with you after all videotaping/observing is completed. Consent to conduct research in your school has been received from your administrator. Rehearsals within one (1) week of an important performance will be avoided. The observation and video recording of rehearsals is an integral part of the study. If you do not wish to be observed or videotaped you should not participate in the study.

##### **Risks and Benefits to Participating in the Study**

No evaluation of the programme, teacher, or students' abilities are taking place. There are no foreseeable risks to the participants, either

physically or psychologically. There are no direct benefits of participating in the study. Secondary benefits of participation may be that observed teaching and learning strategies could help music educators better adapt instruction to their students and better understand their own teaching styles. This study is not designed to change your instruction, but to observe and describe it, and should not affect any instruction in the foreseeable future.

### **Compensation**

There will be no compensation, payment, or reimbursement for participating in this study.

### **Confidentiality**

Confidentiality is assured. No names or other identifiers will be included on the videotape and the videotape will not be observed by anyone other than you (the teacher), the researcher and my academic advisors. All records of this study will be kept confidential, private and secure by the researcher. All records, data, videotapes, and other identifiers will be destroyed within two (2) years after completion of the study. No names of the teacher, school, location, or other identifiers will be included in the reporting of this study.

### **Voluntary Nature of the Study**

Participation is voluntary. If you choose not to participate, it will not affect your current or future relations with your administration, your school, other teachers, the researcher, or University of Cape Coast. There is no penalty or loss of benefits for not participating or discontinuing your participation.



### **Contacts and Questions**

John-Doe Dordzro is the researcher conducting this study. At any time, if you have any concerns or questions, you may contact Mr. John-Doe Dordzro at 0244475708 or [doe.dordzro@ucc.edu.gh](mailto:doe.dordzro@ucc.edu.gh) or Mr. Dordzro's thesis adviser Prof., I. R. Amuah at 0242478404 or [richardamuah@yahoo.com](mailto:richardamuah@yahoo.com). You may also write to Prof., I. R. Amuah at the Department of Music, University of Cape Coast, Cape Coast.

### **Statement of Consent**

I have read the above information. I have received answers to the questions I have asked. I consent to participate in this research. I am at least 18 years of age. I also understand that I reserve the right to change my mind and withdraw at any time without giving a reason and without cost.

Print Name of Instrumental Music Educator: \_\_\_\_\_

Signature of Instrumental Music Educator: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX D**

**PARENT AND STUDENT INFORMATION LETTER**

Dear Parents, Guardians and Students:

Music teachers are always considering new approaches to instruction in order to provide the best education to their students. Your band director was measured by survey as having a particularly positive and interesting teaching style worthy of follow-up study. Over the next several weeks your band director [Instrumental Music Teacher Name] has expressed a willingness to participate in an observational study. The hope is that this research study will discover strategies that could help band students' musical experiences.

Mr. John-Doe Dordzro, a Ph.D. student in Music Education at University of Cape Coast Case will be observing and videotaping your rehearsals and performances. However, video recordings will not be shared other than with Mr. Dordzro's thesis advisory committee. Participation is entirely confidential and no names, identities, or other identifying statements will be made about your band director, students, or the school during the reporting of this research.

Participant band directors will make a valuable contribution to music education. If you have any concerns or questions you may contact Mr. John-Doe Dordzro at 0244475708 or [doe.dordzro@ucc.edu.gh](mailto:doe.dordzro@ucc.edu.gh) or Mr. Dordzro's thesis adviser Prof., I. R. Amuah at 0242478404 or [richardamuah@yahoo.com](mailto:richardamuah@yahoo.com). You may also write to Prof., I. R. Amuah at the Department of Music, University of Cape Cost, Cape Coast.

Thank you for your assistance in my research.

Sincerely,

.....

John-Doe Dordzro

(Doctoral Candidate Dept. of Music and Dance, U.C.C)

## APPENDIX E

### BASIC SCHOOL BANDS IN THE ACCRA METROPOLIS

SCHOOL BAND		LOCATION
Accra Royal School Band		
Alsya Academy School Band	-	Dzorwulu
Christ the King International School Band	-	La
Day Spring Montessori International School Band	-	Kokomlemle
De youngsters International School Band (Adenta)-		Kotobabi
De youngsters International School Band	-	Ring road central
Mary, Mother of Good Council School Band	-	Airport Residential
Sunbean School Band	-	South Odorkor
Rev. John Tei Memorial School Band	-	Ofankor
Orion International School Band	-	Adenta
Providence School Band		
St. Theresa's School Band	-	Bubuashi
St. Peter's School Band	-	Madina
Victory Church School Band	-	Adenta
St. Francis Xavier School Band	-	Kotobabi
Laterbiokorshi Presby School Band	-	Laterbiokorshi
Covenant Presby School Band	-	Dzorwulu
Achimota Basic School Band	-	Achimota
Derby Avenue School Band	-	Agbogbloshie
Presec Basic School Band	-	Osu
Silicon School Band	-	Ofankor
University of Ghana Basic School Band	-	Legon
Nii Boi Town SDA School Band	-	Nii-Boi Town
Asimah Memorial School Band	-	Achimota

APPENDIX F

UNIVERSITY OF CAPE COAST  
FACULTY OF ARTS  
DEPARTMENT OF MUSIC AND DANCE

TELEPHONE: 03321-30947/Ext. 209  
TELEX: 2552, UCC, GH.  
E-mail: musdeptucc@yahoo.com



UNIVERSITY POST OFFICE  
CAPE COAST, GHANA

19<sup>th</sup> November, 2015

*In case of reply please quote:*

Our Ref: MUS/71/Vol.2/77  
Your Ref:

Dear Sir/Madam,

TO WHOM IT MAY CONCERN

The bearer, **Dordzro John-Doe Yao**, is a second year PhD student in the Department of Music and Dance, University of Cape Coast.

In partial fulfillment of his degree, he has to conduct research and give a report on **"THE IMPACT OF GHANAIAN BASIC SCHOOL BAND DIRECTORS' REHEARSAL METHODS ON STUDENTS' PERFORMANCE."**

We would be very grateful if you could extend to him the necessary assistance in conducting his research. Please do not hesitate to ascertain any further information about him from the Department when necessary.

Counting on your favourable consideration

Thank you.

Yours faithfully,

A handwritten signature in black ink that reads "Florian Carl".

Florian Carl (PhD)  
DEPARTMENT OF MUSIC & DANCE  
UNIVERSITY OF CAPE COAST  
CAPE COAST

+233 242 125 731

APPENDIX G

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 03321-33172/3 / 0207355653/ 0244207814

C/O Directorate of Research, Innovation and Consultancy

E-MAIL: irb@ucc.edu.gh

OUR REF: UCC/IRB/A/28

YOUR REF:



19<sup>TH</sup> AUGUST, 2016

Mr. John-Doe Yao Dordzro  
Department of Music  
University Cape Coast

Dear Mr. Dordzro,

**ETHICAL CLEARANCE –ID NO: (UCCIRB/ CHLS/2016/13)**

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for implementation of your research protocol titled: “: **The impact of Ghanaian Basic School Band Directors’ rehearsal strategies on students’ performance.**”

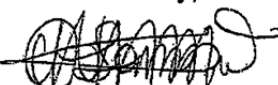
This approval requires that you submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

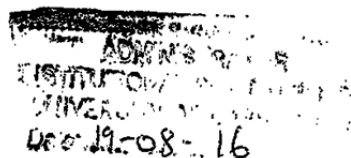
Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

  
Samuel Asiedu Owusu  
Administrator



cc: The Chairman, UCCIRB

APPENDIX H

GHANA EDUCATION SERVICE

In case of reply the number and date of this letter should be quoted

My Ref. No: GES/ACD/PG. 48/VOL.10/035

Your Ref. No:



METRO EDUCATION OFFICE  
POST OFFICE BOX 337  
ACCRA

Tel. No.: 030-2632370  
030-2676199

Email: metroeducationoffice@gmail.com

June 27, 2016

CIRCUIT SUPERVISORS  
ACCRA METRO

PERMISSION TO CONDUCT RESEARCH  
MR. DORDZRO JOHN-DOE YAO

I write to introduce Mr. Dordzro John-Doe Yao who is a second year PhD student of the Department of Music and Dance, University of Cape Coast

As part of the University's academic requirements for the award of the Degree, he must conduct and present a research work to the University. He has therefore been granted permission to conduct the research in selected schools within the Metropolis on the topic: *"The Impact of Ghanaian Basic School Band Directors' Rehearsal Methods on Students' Performance"*.

By this letter, you are directed to ensure that Headteachers and school / cluster based Culture Coordinators assist Mr. Dordzro John-Doe Yao to fulfill this academic requirement. Meanwhile, you are entreated to ensure that contact hours are not compromised.

Thank you.



MR. KWESI HUTCHFUL  
DIRECTOR OF EDUCATION  
ACCRA METRO

Cc: DD. Management and Supervision, AMEO, Accra  
Basic Schools' Coordinator, AMEO, Accra  
Headteachers, Accra Metro  
Culture Coordinator, AMEO, Accra

Mr. Dordzro John-Doe Yao, University of Cape Coast, Accra

## APPENDIX I

### VITA

- 1997-1999.....Volta Barracks Junior High School (B.E.C.E)
- 2000-2002.....Mawuli Senior High School (S.S.C.E)
- 2003-2007.....Bachelor of Arts degree (Music and Ghanaian Language)  
University of Cape Coast.
- 2009-2012 ..... Master of philosophy (Music Education) Degree,  
University of Cape Coast.
- 2009-2014.....Senior Research Assistant, Department of Music and  
Dance, University of Cape Coast.
- 2015 till date.....Principal Research Assistant, Department of Music and  
Dance, University of Cape Coast.
- Major Field: Music Education (Wind Instrumental music pedagogy)