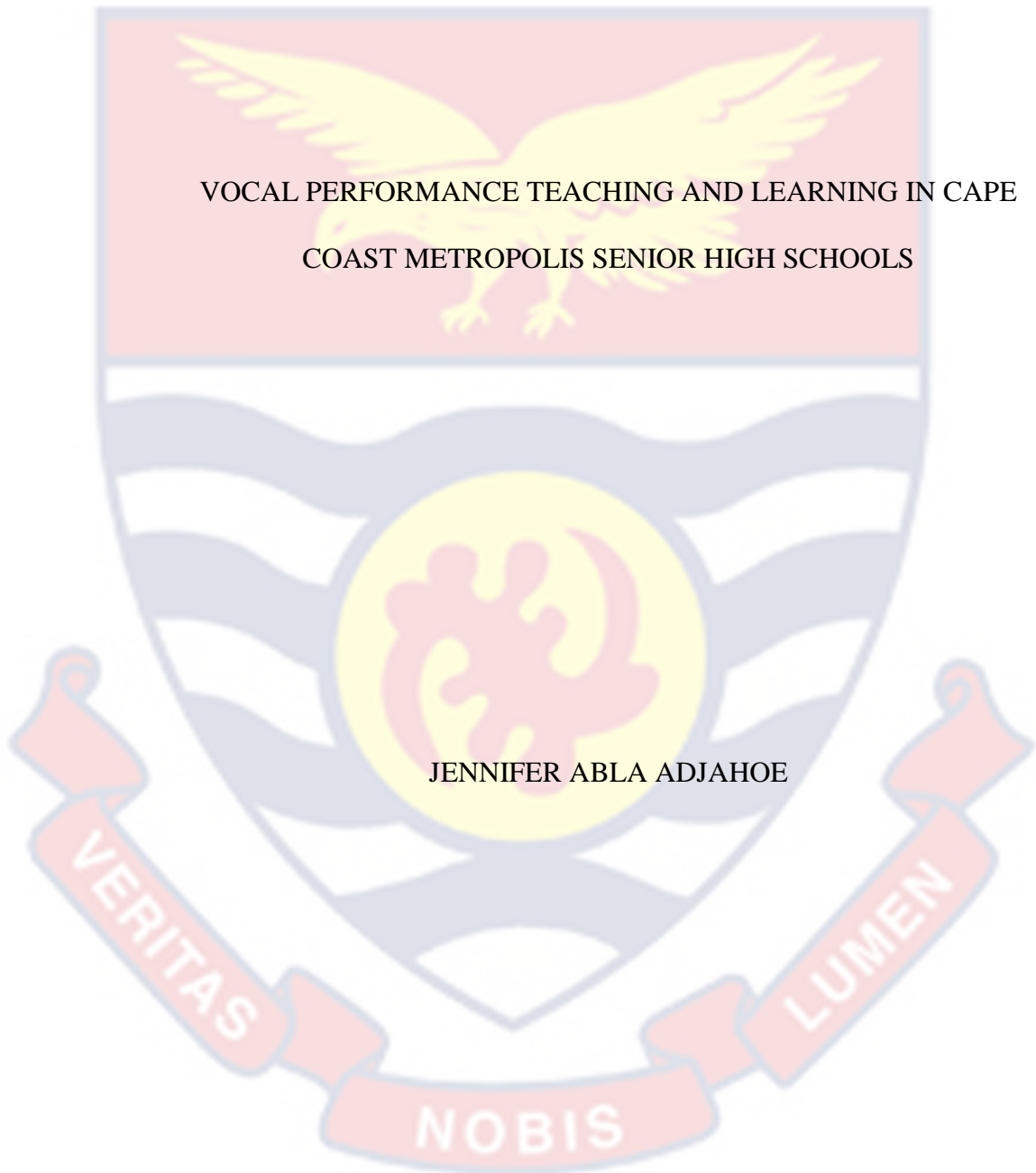


UNIVERSITY OF CAPE COAST

VOCAL PERFORMANCE TEACHING AND LEARNING IN CAPE  
COAST METROPOLIS SENIOR HIGH SCHOOLS

JENNIFER ABLA ADJAHOE



2022



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University of Cape Coast

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VOCAL PERFORMANCE TEACHING AND LEARNING IN CAPE  
COAST METROPOLIS SENIOR HIGH SCHOOLS

BY

JENNIFER ABLA ADJAHOE

Thesis submitted to the Department of Music and Dance, Faculty of Arts,  
College of Humanities and Legal Studies, University of Cape Coast, in partial  
fulfilment of the requirement for the award of Doctor of Philosophy degree of  
Music Education.

DECEMBER, 2022

## DECLARATION

### Candidate's Declaration

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

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Candidate's Signature: .....

Date: .....

### Supervisor's Declaration

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

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## ABSTRACT

It is a worldwide common knowledge that every ‘normal’ human being can sing. But singing has become an art that requires professional training, techniques, and skills. The primary concern of this study is to explore the impact of the teachers’ instructional methods in vocal performance studies on senior high school music voice students’ singing in order to create awareness of vocal music instructional procedures necessary for training the voice students in the Cape Coast Metropolis. The study employed stratified sampling, simple random sampling, and purposive techniques in choosing a school and participants (students and teachers) respectively. Four senior high schools were selected for the study. Convenience sampling is utilized in selecting WAEC examiners. Questionnaire, interview, observation and field notes were used to collect data from 144 voice students and five teachers, and three examiners in addition to The Chief Examiner. The findings revealed that rote approach/technique is main method music teachers used in teaching vocal performance studies. It was also discovered that attention is not paid to the necessary vocal practices such as integrating scientific concepts, the use of descriptive language, teacher demonstration, coordination of vocal register and many other essential concepts critical for developing the students’ singing voices. The teachers’ mode of directing the students on breathing suggested they had little knowledge in the breathing techniques. Additionally, enough vocal activities that would help develop the students creatively, artistically, and vocally were not employed in the vocal performance classroom. Inasmuch as vocal performance teaching and learning is concerned, “rote teaching” would not be enough for an effective vocal performance learning outcome.

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## DEDICATION

To all my children; Mawuyram Jnr., Mawukplorm, Mawuxornam,  
Mawuleabenam, and Mawulikplim.



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## CHAPTER ONE

### INTRODUCTION

#### Background of the Study

Vocal performance is an expressive art form in which performers utilize their voices to convey messages, emotions, and ideas through music. Hence, vocal music performance is a field of discipline and training of the mind and body as well as a field of cultural knowledge and artistic behaviour. This finds a justification for Nketia's (1999, p.11) assertion that music is not only a field of enjoyment but also an area that lends itself to discipline and training of the mind and body and also as a field of cultural knowledge and artistic behaviour. It is also evident that vocal performance is not only concerned with what is communicated via words but also deals with how the inner feeling of a song is communicated.

To teach vocal performance, Rosine (2018); Paton and Christy (2002); Walders (2005); Ware (1998) state emphatically that it requires high levels of knowledge, skills, strategies, and understanding of vocal elements. These include efficient vocal tone production, managing and coordination of breath, vocal register coordination, clear enunciation of the lyrics of songs, flexible dynamics and correct posture, and interpreting and expressing the songs for better communication of the message. Teaching and learning of vocal performance refines intelligence, enriches imagination, fortifies health, makes for happiness and endows for life added zest Hallam (2010). Affirming this assertion, Woody (2000) argues that the value of vocal performance as well as music serves to assist in the process of increasing communication and enabling people to function together more effectively. Knowing about the

points raised, music educationists thought it wise to include musical studies in Ghanaian second-cycle institutions. Vocal music performance study is a component of music as a subject.

### **The Teaching of Vocal Performance Studies elsewhere in Australia, America, and Europe**

Vocal performance studies a practical oriented facet of the subject music is an expressive art and its instruction at the conservatories in Western countries, as cited by Chapman (2017); Hughes (2007), involved the students with daily tuition; and the singers are not permitted to practice alone at the initial stages. All rehearsals or practices are done under the supervision of the teacher. Through this training, the students become familiar with good or best sounds for acceptable or standard vocal performance. The first step of every grounded teaching method is the examination of each student's vocal register, natural extension, and other health conditions Chapman (2017). Ensuring and being certain of individual voice students' specific vocal register is paramount in conservatories. The teachers employ highly structured vocal exercises to develop basic vocal techniques in training the students' voices. According to Ware (1998), the manner in which a person carries himself or herself reveals that personality through "body language". For singers or vocalists to move with an attractive, graceful physical appearance on stage, the teachers direct and guide students on body alignment during singing and instruct them on stage posture. Diction and pronunciation are considered elements of aesthetics and style in singing training. Hence, teachers take notice of that Carugno and Patturelli (2019).



As stated by Boardman and Alt (1992, p.45)) professional voice teachers in Miami high school in Florida, have time for the individual voice students, take them through warm-ups and vocalizing for them to be knowledgeable on how to sing. The learning of songs is based on rote and phrasal approaches. The teacher introduces the melody of the study song by rote; after which the phrasal approach is employed without notation or tonic solfage. The teacher sings each phrase expressively with a neutral syllable (that is using vowel sounds) and allows the students to echo the phrase back with those same vowels Robinson (1996). It is a known fact that teaching/learning singing with expression draws the students into musical conversation.

Presently in Australia, as found in Latukefu and Verenikina's (2010) report, vocal performance teaching and learning is focused on basic scientific knowledge of physiology and human anatomy to enhance students' knowledge, understanding and skill acquisition that affect their singing performance.

Traditionally, according to Lennon and Reed (2012), music teaching in schools, colleges, conservatories, and academies or private institutions previously, was more teacher-centered and primarily based on one-to-one tuition. Currently, the approach has shifted to learner-centered in most countries. Music teachers are instigating new strategies that are promoting new and more effective practical approaches to learning such as peer learning and peer assessment. Where appropriate, the teachers use constructive feedback strategies and demonstration/modelling in directing their students. In the report by Lennon and Reed (2012), in order to nurture and develop the

students' technical and interpretive skills, together with reading their pieces, performance skills, and creative imagination, the teachers employ various methods, resources, and materials appropriate to the needs and learning style of the students. Some of the pedagogical tools involved in the instruction are analogy, questions, imagery, and discussions.

In effort to help students learn with enthusiasm, the teachers frequently provide result to the students on every vocal performance activity he or she engages them in. when students are given feedback on their participation in a task, it motivates them to improve on their effort. Those who perform the activities well, make effort to repeat their performance or move a step further to perform satisfactorily on subsequent tasks.

### **The Teaching of Vocal Performance Studies in Ghanaian Schools**

The arrival of the missionaries in Gold Coast now Ghana, initiated the introduction of music into the Ghanaian school curriculum. Achimota College opened in 1927 was the first secondary school in Ghana to introduce music in second cycle institutions. This led to the formation of a famous school choir and orchestra which performed only European pieces in the school Flulo and Amuah (2003); Amuah (2014). There are no written records on the structure of the actual music lessons although the lessons were based on London external examinations. However, according to these scholars, evidence suggests that it encompassed the teaching of music in a style similar to the existing practice in Europe which includes performance studies (classical and traditional singing, and dance), composition, listening, and appreciation.

In 1987, the West African Examinations Council (WAEC) launched a syllabus for school certificate examinations to replace the London external

examination. The syllabus was classified into three major sections—: Rudiments and Theory of Western Classical Music and European Composers between 1650-1900; African Music: Contemporary West African Composers, Traditional West African Musicians, Black Music in Diaspora and Functions and General Characteristics of African music; and Performance Studies Flolu and Amuah (2003).

The instruments that are available in the Performance Studies are voice, violin, piano, atenteben, flute, trumpet, saxophone, trombone, and tuba. The West African Examinations Council has included in the syllabus a well-balanced and standard repertoire in the set work, which demands expressivity in its performance. Depending on the interest and ability of the individual music student, he or she is required to select a preferred musical instrument, study the set works, and perform for an examination.

In the case of vocal performance, the various songs are categorized into the “traditional” voice parts—Soprano, Alto, Tenor, and Bass ranges. Each voice range or part has not less than six musical pieces in the set work. These songs are into two groups of three songs per group. One of the groups has pieces written by African composers while the other group features pieces composed by non-African composers. These repertoires are also intended for performance practices at all levels in senior high schools and performed expressively in the final examination. It is imperative for each student to perform one Ghanaian or African piece and one Western song in addition to two vocal technical exercises in the West African Senior School Certificate Examination (WASSCE). An external examiner from the West African Examinations Council assesses the performance of the songs.

Through practice, singing can appear simple and effortless. Singing, according to the World Book Encyclopaedia, is a natural function that takes little training to do, especially when it comes to simple tunes. However, it is through hard work and commitment that one can attain the level of skilful singing. Just as people are trained to be able to speak a language properly, elocution, though they may have been speaking that language for years. Singers also need to undergo special training to be able to sing properly. Senior high school voice students are young singers therefore the music teachers are charged with task to inculcate healthy vocal performance habits in these adolescents. Utilization of suitable approach(es) will guide them discover their vocal potential.

The inclusion of the voice in the syllabus is to create an avenue for the students to acquire and develop expressive vocal performance skills that will enable them to perform reasonably well as soloists and as members of an ensemble Music syllabus (2010). Scholars confirm the potency of vocal performance studies that “it contributes to the total development of the student, which is reflected through inducing self-discipline, work habits, sense of responsibility, multi skills and successful integration in the society” Zelenkovska (2014); Thurman, & G. F. Welch (Eds.); Amuah et al (2017). More often than not, most music students in senior high schools in Ghana are interested in the voice with regard to performance studies. Despite the numerous instruments listed in the set work, from literature Adjahoe (2012); Flolu (1994) and observation, voice students constitute between 80-90% of the music students’ population in the Cape Coast Metropolis. The students learn Ghanaian or African pieces as well as Western pieces.

Music teachers in senior high schools in Ghana are general music teachers. They are responsible for teaching the various aspects of music including vocal performance studies in the school's syllabus. Scholarships have indicated many approaches or strategies that are effective for teaching and learning therefore, vocal performance instruction defers from school to school. Over a period of five years, I have noted through investigation and observation that voice students in most of the senior high schools in Cape Coast Metropolis were mostly engaged in serious vocal performance training for the West African Examination (WASSCE) in the later part of their final year in the school. Literature reveals that teachers do not evenly distribute the amount of resources on teaching history of music, rudiments and theory of music, and practical component of music. While much energy is expended on the rudiments and theory, and history of music, the practical is mostly relegated to the back, having very little time for practice and performance Amuah et al. (2017). According to the senior high school timetable, students attend music classes twice a week, and each meeting lasts for two hours. There is no written information on the approaches or methods that music teachers in the Metropolis could employ in the performance class.

The two standard vocal exercises included in the set work are for voice students' usage for warm-ups in order to prepare the voice for healthy singing and the mind for remarkable performances. Through warm-up exercises, the students learn about suitable methods for priming the singing mechanism for phonation. These technical exercises in the set work assist the teachers in directing students with healthy tone production, marching pitch accurately and with appropriate breath management and control. Innovative teachers even

create more exercises from the WAEC's technical exercises to improve the students' vocal ranges. Engaging students with these warm-up exercises, the teachers accompany them with the piano to keep their voices in tune.

Classification of vocal students into their various voice parts is very important in performance studies and this is done effectively using a piano/keyboard or tuning fork. In the absence of these musical instruments, the teachers determine students' voice ranges with their ears to categorize them into the various voice parts.

It is undeniable fact that while some of the teachers have piano and table top music synthesizers at their disposal, therefore making teaching and learning easy and interesting, other teachers too have no access to any musical instrument in their classroom, therefore, teach without it.

Teachers have diverse ways of implementing vocal performance curriculum. Notwithstanding the categorization of the set work or songs, some of the teachers teach the students two songs from the list of songs in category 'A' and one song from category 'B' of the set work including the technical exercises. Nevertheless, some teachers also teach the students one song from each of the categories. This implies that no matter the vocal range of a student he or she has no option but to learn to perform those two pieces.

### **Statement of the Problem**

Music education has great potential for job creation hence the ultimate music educator, according to Reimer (2003) is the value of the activities and quality of the instruction, which in the end will bring success to both the educator and the students. Although vocal performance students constitute up to 90% Adjahoe (2012); Flolu (2003) of the music students' population in the

senior high schools in Cape Coast Metropolis, teaching and learning of vocal performance studies suffer a number of setbacks. I realized that every year, the entry skills and competency of majority of the voice students in the university were majorly low. The structure of WASSCE vocal performance study pieces are solo voice and piano accompaniment, where the accompaniment dialogue with the soloist gives clues like key changes as well as informing the soloist of the appropriate entry points, and keeping the tempo of the music. Therefore, it is important for students to rehearse their study pieces with the accompaniment for an accurate entry point and pitch matching. However, that was not the case; some of the Senior High Schools lack accompanists Acquah and Kwofie (2021); Adjahoe (2012); hence, the students are not able to sing with the piano/keyboard accompaniment during the examination.

Performance studies is to take effect from the first term of the first year on the academic calendar. As directed in the syllabus, students are to study their selected instruments from that first term of admission into the school. Voice students at that level are supposed to learn the basics of art music performance, which enable them perform the songs in the set work as expected of them Ministry of Education (2010). However, the time for the introduction of this course in senior high schools in the Cape Coast Metropolis differs from school to school. Although some teachers introduced vocal performance studies in the first term of the first year, some also began in the second year of the second term, while others introduce the course to the students in the third year first term irrespective of the time stated in the syllabus. Meanwhile the early introduction of vocal performance is purposely for students to experience the joy in performing music, develop skills and

artistic confidence in the presentation of music, and display artistic skills and aesthetic awareness, and expressivity through solo and ensemble performances Ministry of Education (2010). By this process of beginning preparation of students for the vocal performance studies in the students' third year, one wonders whether the objectives stated could be effectively achieved.

Vocal performance is a practically oriented aspect of the subject music. The syllabus emphasises on the development of practical abilities and attitudes. Vocal performance studies incorporates sight-reading and it is thought to be beneficial to students because it enables them to apply their theoretical knowledge to reality. However, according to Dordzro (2017), music teachers mainly use phrasal approach (that is the teacher plays/sings each phrase of a musical piece a number of times and asks the student to play after him/her) in teaching practical performance. The usage of just one approach would not help students internalize rhythmic patterns and match the pitch accurately. This implies that the students cannot exhibit their practical performance skills acquisition to study or rehearse their study pieces on their own. Voice students need to be trained to acquire sight-reading skills to enable them study their assigned musical pieces and any other sheet music.

Again, though students experience teaching and learning of vocal performance in the school, until WASSCE examination, vocal performance students are not assessed in performance test during end of term examination Amuah et al. (2017).

In addition, the Chief examiner's reports from 2016 to 2019 show a continuous low performance in music practical examination. I then researched into the literature available on music teaching and learning in Ghana and



found that, scholars have researched into music practical performance test in general. Acquah and Kwofie (2021) for example conducted a case study and examined challenges of preparing students for music practical performance test. One major problem they identified was that most of the music students in senior high schools had no music background in junior high schools. Similarly, the students needed to prepare better. Again, Amuah et al. (2017) used a descriptive survey and sought teachers' opinion on improving music practical performance test in senior high schools in Ghana. They discovered that 67% of music teachers lacked performance abilities. Meanwhile learning to play an instrument involves systematic development of specific skills necessary for properly using the instrument.

While these prolific writers have contributed to the general knowledge in the teaching and learning of music in the Senior High Schools in Ghana, they however did not report on the teaching and learning of vocal performance studies thereby, creating a gap in the literature.

### **Purpose of the Study**

The purpose of my study is to examine the teaching and learning of vocal performance in senior high schools, in Cape Coast Metropolis.

### **Objectives**

The objectives underlining this study are to:

1. Investigate the instructional approach/strategies used by senior high school music teachers in training voice students.
2. Observe the difference between voice students' performance with piano accompaniment and without piano accompaniment.

3. Examine factors that impede music students' vocal and performance skills acquisition.
4. Evaluate the level of agency that vocal performance students have in the choice of their vocal pieces.
5. Analyze the content and structure of WAEC's criteria for assessing vocal performance tests in senior high schools.

### **Research Questions**

The following questions (among others) guided the study:

1. What instructional approaches/strategies do music teachers employ in training voice students?
2. What is the difference in the performance of voice students accompanied by piano, and voice students not accompanied by piano?
3. What factors impede the music students' vocal and performance skills acquisition?
4. How much agency do the students have in the choice of their vocal pieces?
5. What is the content and structure of WAEC criteria for assessing voice performance tests in senior high schools?

### **Research Hypothesis**

To help establish the significance of the difference in performance level between students who perform with piano accompaniment and those without accompaniment, I formulated a hypothesis and subjected it to statistical testing.

H<sub>0</sub>: There is no significant difference in performance level between voice, students who perform with piano accompaniment and those who perform without accompaniment.

H1: There is a significant difference in performance level between voice students who perform with piano accompaniment and those who perform without accompaniment.



### **Significance of the Study**

My study will contribute to literature by creating awareness of vocal music instructional procedures necessary for training senior high school voice students in Ghana. Secondly, the result of this study will enhance teachers' ability to select appropriate repertoire for voice students.

### **Delimitation**

The study is intentionally delimited to senior high schools within the Cape Coast Metropolis due to its historical relevance in music education in Ghana and the concentration of schools offering music as a subject. This focus enables a thorough analysis of vocal performance teaching and learning practices in a region known for its educational heritage. The study will focus on senior high schools in the Cape Coast Metropolis. I prefer conducting this study on Cape Coast because (a) Cape Coast is the hub of education and singing started in Cape Coast Castle School. Hence, it stands to reason that vocal performance could be initiated in Cape Coast. (b) Almost all the senior high schools in the metropolis are offering music and I was certain to sample a sizeable number of vocal performance students. The methodology was delimited to qualitative and quantitative data collection methods, including questionnaires, interviews, and observations, to gather rich, detailed insights into teaching practices and learning experiences. The choice of stratified sampling, simple random sampling, and purposive techniques for participant selection was deliberate to ensure a representative and comprehensive understanding of the instructional methods and their impacts on students' vocal performance abilities. I would be very much enthusiastic to include all the senior high schools in the Metropolis but due to time, funding, and labour,

I will sample four schools and concentrate on the first-year music voice students through to final year music, voice students.

### **Limitation**

Since this study employed mixed method convergent design, the researcher's choice of unequal sample sizes may pose challenges in merging the two data sets, for a clear and meaningful result. In addition, the study's geographical confinement to senior high schools within the Cape Coast Metropolis limits the generalizability of the findings to other regions with potentially different educational cultures and resources. Finally, it is anticipated that music teachers' responses to the questionnaire might also vary from what the researcher may observe during voice class.

### **Definition of Terms**

Cape Coast Metropolis: The capital town of the Central Region covers an area of 122 square kilometers with two (2) private and ten (10) public second cycle institutions which are made up of one technical school, one secondary technical school, three mixed senior high schools, two girls' schools, and three boys' senior high schools. This study involves senior high schools in the metropolis.

A three-year educational system in Ghana after junior high education

**Senior High School:**

but before tertiary education.

Artistic communication of the inner feeling of a song with significant

**Vocal performance:**

coordination of many components in the human body.

**Teaching approach:**

Series of steps, principles, ideas and activities taken by teachers in the classroom that cause students' desire to learn.

Mode or means by which students acquire knowledge.

**Learning strategy:****Organization of the Study**

This study is organized into five chapters. Chapter one involves the introduction which highlights the background to the study, statement of the problem, the purpose of the study, objectives of the study, research questions, significance of the study, and definition of terms. Chapter two encompasses the related literature; while chapter three concerns the research design, research instrument, population, sampling and sampling procedure, data collection procedure, and data analysis. Chapter four deals with the findings as well as the discussions of the study using analytical techniques and appropriate statistical modules. Chapter five, which is the last chapter focuses on the summary, conclusion and recommendations of the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter concentrates on vocal performance teaching and learning in senior high schools as it prepares, directs, energizes, and builds voice for students in their vocal music performances during and after schooling. The chapter, therefore, engages in reviewing existing relevant literature about the approaches and or strategies for vocal music performance education that are appropriate and congenial for senior high students' vocal performance skill acquisition. The review of the literature was done and categorized under the following sub-headings. As they have bearing on my study: introduction and development of vocal performance, instructional practice in vocal music education, vocal warm-up, repertoire selection, vocal music presentation, the effect of piano accompaniment on solo vocal performance, obstructing factors in vocal performance skills, and assessment influence on vocal music performance. Other pieces of literature discussed are, sight singing, time as instructional obligation, teacher motivation, and vocal performer's body alignment. Both primary and secondary sources of literature were reviewed.

The purpose of this study is to explore how music teachers prepare students for the West African Senior School Certificate Examination (WASSCE) vocal performance test, their instructional decisions on repertoire selection, and lesson methods and resources for developing student performance skills to enhance voice students' performances in Ghanaian senior high schools. Now, the review of literature on vocal performance education begins with the history and development of vocal singing.

## Introduction and Development of Vocal Performance (History)

The history and the development of vocal music performance in formal education provides insight into the prevalence of instructional approaches and methods employed by the pioneers of vocal music performance teaching. Vocal music performances throughout history have been used for practical purposes such as sacred, secular and outdoor entertainment. Vocal performance teachers have emphasized four essential vocal qualities: perfect intonation, good breathing technique, clear enunciation of words, and proper text expression of the lyrics Brown and Sadie (Eds. 1989). The vocal components that form the basis of good singing according to Brown and Sadie, are still present in contemporary vocal performance training despite the dynamism in the art of vocal music performance.

The training of the singing voice started as far back as the fourth century Bennett (2017). However, little information is provided on the techniques employed in training the singers. During this period, vocal performance was limited to church worship and singers were ordained to lead worship services. These clergymen were the only ones permitted to raise their voices to the Lord, therefore, were trained to sing professionally Bennett (2017); Hoch (2019). This early training paved the way for changes in the subsequent centuries.

From the 16th century through to the 19th century, vocal performance teachers or instructors such as Antonio Bernacchi, and Nicola Porpora believe that singing is erroneous when a performer frequently and untimely breathes within phrases or words Brown and Sadie (Eds. 1989). The implication of such an act or behaviour indicates immaturity and unprofessional on the part



of the performer as singing is an artistic representation of communication. Words in a piece of music are purposively meaningful messages. Therefore, the execution of the words must make sense. According to Bennett (2017), a well-executed phrase is the result of good and effective foundation or preparation.

In Brown and Sadie (Eds 1989, p.99), vocal instructors such as Caccini Guilio, Tosi P. F. Bovicello and Conforto consider florid singing equally as critical as the four essential elements of singing which involve perfect intonation, good breathing technique, clear diction, and proper textual expression. The teachers, therefore, performed exercises that handled proper pronunciation of the words. Italian singing style in the 16th century, known as *bel canto*, was a highly regarded vocal technique. Like Harper (1996); Stark (1999) states instructors and singers profoundly utilized this style throughout the 16th century to the early part of the 19th century. It is identified that correct placement of tones (where the tones are produced) and balancing of sound maximized resonance. Hence, the teachers emphasized proper tone production, resonance, and focus of tones (how the tones are produced). This way, they highlight the expression of the text, ‘impeccable legato’ production throughout the ranges, and the use of light tone in the higher register with flexible delivery. This singing technique has been the dominant vocal teaching style for opera singing. Many of the teachers or instructors of the *bel canto* singing style had their primary training from the church as junior choristers Harper (1996); Croskery (2005); Bennett (2017). Therefore, Harper (1996) asserts that voice instructors trained voice students or singers to sing with a clear tone, and encouraged them to develop their vocal range to meet such

expectations without any vocal restrictions but execute the pieces smooth and flawlessly.

Studio singing with instructors was encouraged. The students were not permitted to practice any piece(s) on their own but rather to build trust between the teachers and the students and maintain a solid singing technique based on the structured vocalization system of the period. The teachers engaged the students in daily tuition at the conservatoire Chapman (2017).

The teachers who were performers themselves did not know about the physiology and the anatomical conformation of voice production. Therefore, their instructional approach was from an empirical standpoint because the physiology of breathing was unknown to them. In view of the foregoing, bel canto singing teaching was through imitation and trial and error Manen (1990); Miller (2017). Bel canto voice instructors focused on producing a beautiful singing tone with register equalization and a flexible coloratura. To attain their intention, the mechanisms employed in the training were good tone production, musicianship, and character Hoch (2019); Bennett (2017); Coffman (1987); Husler (1976).

Producing a good vocal tone implies, that the singer is in control of singing each note accurately with a standard vocal sound, and clear enunciation of the lyrics regarding using consistent vowel sounds for the intended effect of the song. Musicianship involves the student's acquisition of performance skills, artistic sensitivity in performing music, and sight-singing skills. Performing a song, the musical piece plays an essential role in the character development of the performer by reflecting the mood and behaviour of the singer or performer.

Although bel canto performers focused on tonal preference and aesthetic of singing, vocal performance specialists in the 16th through 19th centuries realized that comprehending the lyrics of a song, helped the singers or vocal performers properly express the song's meaning(s). Thus, the teachers most often than not guided the students in understanding the message of the song. Therefore, the interpretation of the words of a song took precedence in sound production Bunch (1982). However, the invention of the laryngoscope in 1855, by Manuel Garcia, a voice teacher, and the introduction and the study of vocal science created an opportunity for people to research and understand the anatomy of the vocal folds and their physiological function of how singers should use their voice Velarde (2013); Bozeman (2007).

In current times, the contemporary ways of teaching demands instructors/teachers adapt strategies to radically change to meet the demands of their students in the way they teach singing. Despite this essential shift, conventional singing knowledge— florid singing, excellent and admirable intonation, appropriate breathing skill, clear pronunciation of song texts, and accurate textual expression— remains unchanged McCoy (2012); and Titze (2019). Teachers of vocal performance or singing are making enormous strides to improve their knowledge, the in-depth understanding and the diverse styles of music and the application of the knowledge of pedagogy so as to benefit their students. The knowledge of vocal pedagogy with its related physiology has increasingly evolved as the magnitude to research on the vocal mechanism has improved Harrison and O'Bryan (Eds, 2014).

The use of technology in singing has now taken over in this twenty-first century. Due to the advancement of technology, teachers no longer

assume that only one way is the best way to learn how to sing. Research has been made on the approaches to pedagogy, which is designed for the diverse music styles such as classical, musical theatre, and contemporary commercial music that are in existence and teachers now base their knowledge over centuries of scientific inquiry of vocal mechanism.

### **Instructional Practice in Vocal Music Education**

Teaching vocal performance calls for awareness of fundamental approaches that will help train the students to perform to the accepted standard of formal music education Davidova (2019). According to Jorgensen and Phenix (2002b); and Davidova (2019), music teacher needs to be knowledgeable of the various areas of music including instrument-specific. Conforming to Jorgensen and Phenix; and Davidova's viewpoint, Russell-bowie (1997); Bandura (1997) express that teachers' high level of knowledge in instructing their students would boost their (teachers) self-motivation and effectiveness in directing confidently and modeling to the students.

On the contrary, Ryan (1991) suggests that if the teacher's background in teaching music vocal practical performance is weak then the objective of handling the students with practical oriented skills would be devastated. As a vocal performance teacher, I deem it necessary for senior high school music teachers to possess a deep knowledge of the singing voice. In my view point teachers should comprehend the voice's development, and get to know each student's distinctive voice, its capability, limitation and unique qualities. This is in line with five significant points Gackle (1985) identifies that music teachers must put into practice in teaching vocal performance studies. Primarily, he emphasizes the teachers' understanding of the voice and its

growth. As a necessity, they must become accustomed to each student's individual distinctive voice. Also, they must be able to assess each student's capability and select appropriate musical pieces for each voice type. After all these, they must be masterful to identify if a voice is wrongly used and must be in a position to address it.

Similarly, having the ability to communicate significant information with demonstration and interpretive skills and as well be innovative with performance creative and expressive skills aid vocal performance teaching and learning. Additionally, employing a variety of methods/strategies with the right usage of language and terminology would promote students' understanding and for that matter, be creative and expressive in performing musical pieces. Scholars like Kar (2021), Bigler and Osborne (2021), Brenner and Strand (2013) pinpoint in their study that vocal and instrumental teachers in junior and senior high education and tertiary education employ different approaches (modelling by singing with the necessary and appropriate expressions and gestures, verbal instructions by directing learners, the use of metaphor such as "imagining of the sound before phonation", humour and other performance opportunities) for a vocal performer to be effective in his or her performance(s). Instructing students on a standard musical performance, Tait (1992) as found in McPhee (2011), indicates that important elements of teaching musical performance include "vocabulary choice and usage, several forms of modelling, and management and execution tactics" (p. 333).

Further, a study in "a curriculum in instructional pedagogy for music performers" Mace (2013) points out that the teaching of voice or vocal performance at the tertiary level, for example, should encompass voice

science, the analysis of specific vocal techniques, models, and methods or approaches, the assessment and synthesis of historical vocal pedagogies, and the advancement of vocal pedagogy research. These, coupled with performance dexterity and perceptual learning in my view heighten understanding of what to do, in which way it should be done, where and when should it be done and why should it be done as decided.

There are different levels of students' IQ (Intelligent Quotient) that are found in vocal performance class. In other words, every individual student has a different way of receiving and understanding the information given in class. Hence, the source of every successful teaching and learning is dependent on the appropriate choice of approaches and mode of instruction, and principles. As a bedrock of knowledge, the instructional approaches and strategies teachers employ, encourage students' learning and support them in developing new skills and working on challenging tasks. This is in support of theory of performance, which asserts that students' perfection in vocal performance depends on the application of the instructional knowledge journeying with the learners' mind-set by immersing them in enriching environment and engaging them in reflective practice Elger (2007)

Research shows that there are various modes of teaching vocal performance. Scholars such as McCloy and Gredler (2018); Ayua (2017) in their study, agree that teachers should be at liberty to use diverse ways or approaches that are appropriate and will help the students understand what is being taught. In support of this, the music syllabus (2010) encourages teachers not to limit themselves to the suggested approaches only. But try out other teaching and learning approaches. Ware (1998, p.252-253) investigating the

teaching and learning of vocal performance in music education, identified three approaches: holistic pedagogy, mechanistic pedagogy, and eclectic pedagogy. As made famous by Ware (1998), an intuitive and holistic approach concerns the usage of mental imagery to elicit a positive response from students indirectly. For example, to direct the students on the intake of breath, the analogy, 'pretend you are smelling peonies flower or rose flower' could be employed. This approach inherently is inspirational, empirical, psychological hence subjective because, the imagery may, on one hand, generate a smile from a participant and on another hand, a frown from another participant depending on their personal preferences.

Miller (1989, p.15) is of the view that employing imagery for beginning vocal students may mislead them into confusion than aiding them. Despite the fact that imagery is a subjective approach I disagree partially with Miller's assertion. I am of the view that a teacher with scientific and physiological knowledge of the singing voice has explicit picture of how the voice works in relation to singing. Hence, he can detect the imagery that would best be used for practical purposes to highlight scientific knowledge. In affirmation of my viewpoint, Callaghan (2014); and Welch (2004) indicate that teachers now understand that vocal folds have numerous layers, each one has unique mechanical characteristics and is responsive to various adjustment from the laryngeal muscles. Linklater, (2006); Georgii-Hemming and Westvall (2010) also postulates that if voice teachers are to depend solely on anatomical truth, then output of teaching and learning of vocal performance shall be monochromatic forced voice production.

An interesting study, in line with the use of imagery in teaching voice, is that of Dunbar-Wells' (1999) on the use of metaphors in teaching vocal performance which was necessitated by her personal inquiry into the best possible teaching mechanisms after seeing her voice, grow and deteriorate under different vocal teachers. Most educationalists and researchers generally accept that metaphors are central to language and understanding.

As a voice teacher, I believe in the use of both imagery and figure of speech in teaching singing. The idea is that combining imagery with an appropriate choice of a figure of speech will aid the student to connect himself or herself to the teacher's strategy to understand the concept better. For instance, directing my students on intake of breath, and how to control and manage the breath I requested everybody to bring a balloon to class for a memorable starting point.

The source of energy for voice is breath. Hence to help them have a mental picture on the whole action especially, in directing or pushing the air as far back to their ribs. I asked them to blow air into the balloon filling it halfway. The first task is to observe how the air filled the balloon all around. The action was repeated after which I directed them to hold the 'neck' of the balloon with the thumb and the pointing finger a bit firm and slowly release the air. This is done with number of counts to let them understand how they should sustain breath by managing and controlling it during singing. We practice breath management and control with other exercises alongside the balloon activity. It aided them in managing their breathing to fit musical phrase lengths and rhythmic structure of any given musical piece. This activity demands a lot of mechanism coordination and activity in the muscles of the rib



cage wall, and the deformation of the rib cage and abdominal walls alter considerably. Hence, I describe breath management and control for singing as a battle field. Henrich, D. N. (2006); Gabrielsson (1999) attest that the most essential aspect of breath control during singing is to keep a proper or suitable balance of subglottal pressure for desired sound quality, targeted pitch range and dynamic level.

In connecting or linking vocal sound to a ‘battlefield’ it is suggestive that when performing a song with lengthy phrases, the singer has to arm himself or herself by taking in enough air and managing that air or breath by releasing it in small quantity. To take in a deep breath, I ask them to pretend smelling ‘queen of the night flower. In this act, they must extend the air into the rib cage to allow the diaphragm to fully descend for downward expansion of the lungs. The first day with these activities was quite challenging for most of the students. But since I gave them assignments, from our third meeting I noticed many were showing improvement. In effect then, the approach has been effective in my vocal performance classes. Meanwhile, it is important that any such figure of speech the teacher might use is well understood by the students for its easy application.

The process of exploring the use of metaphors enables a much deeper understanding of the sort-to-be-explained phenomenon. For example, I use an inflated balloon to describe inflation in the lungs. Other teachers also use metaphors to aid interpretation and clarify literal language Petrie (1979); Lakoff and Johnson (1980); and Dunbar-Wells (1999). These researchers indicate that metaphors and their resultant imagery are vital facets in the

changes that occur between the teacher's instruction and the student's understanding outcome.

Mechanistic pedagogy relies on scientific references whereby direct control is utilized for actual exertion to change voice production, which means that having efficient knowledge in voice science (physiology and anatomy of the voice) may determine the value of the training procedure. As a voice instructor, I consider the voice as a complex and delicate instrument that needs care and basic knowledge in its operation.

The capacity of the vocal folds to vibrate depends on the amount of air the singer inhaled; and needs to have dominion over all the mechanisms (vocal folds, larynx, thorax, lungs, pharyngeal, buccal and nasal cavity) in all pieces to present. Hence, students need to be taught about the physical development of the larynx, the vertical and horizontal growth of the vocal folds, and how these and other changes affect singing and speaking during the growing process Milo (2014); Siplely (1993). The vocal teacher with his/her knowledge in the voice science as demand in the realms of instructional model, would have to explain these mechanisms in a language understood by the students. The fundamentals of successful vocal production must be thoroughly addressed so that the students will come to understand how the voice works in the production of tonal sounds Siplely (1993).

Bennett (2017); Bigler and Osborne (2021) believe that successful teaching and learning of vocal performance demands the teacher's knowledge of the physiological functioning of the voice. Hence, the teacher's physiological knowledge enlightens the students' awareness of healthy vocal production. At a National Association of Teachers of Singing Summit (NATS)

2013, it was addressed that, the vocal performance teacher's knowledge of voice science (in anatomy and physiology) should be associated to phonation, respiration, resonance, articulation and vocal registration; and must be well understood in support of voice mechanism and voice production in connection to various vocal styles (Bigler and Osborne, 2021).

Per Phenix and Jorgensen (2002b) instructional knowledge model, the teacher of vocal performance needs to be aware of the differences in tone qualities, produce the different tone qualities physiologically themselves, know how to connect voice levels, and understand the respiratory mechanism and its function. The views of these scholars imply that the teacher may employ an incorrect approach/technique in the training procedures without physiological knowledge which will affect the end result. In my opinion as a teacher of vocal performance, the views of these scholars regarding the fact that the teachers' theoretical/scientific knowledge or ideas of the singing voice, will empower and guide them in directing the voice students in practical application of the vocal mechanism. For, effective and healthy vocal production is noteworthy.

Despite the teachers' anatomical and physiological knowledge of teaching vocal performance, another school of thought are also of the opinion that voice teacher's efficiency is based on the knowledge he/she acquired through the number of months or years of teaching experience as well as his or her involvement with singing performance. These scholars have confirmed my thought on teachers' cognizance in all aspects of music with the fact that music students (student teachers) in all tertiary music institutions must be

required to study practically all the various aspects of music at the earlier levels till the final year before they specialized in their mastered areas.

The mechanistic approach is objective and therefore requires a demonstration-imitation exercise. It also uses explicit activities for explicit results. In my view, it is permissible for senior high school voice teachers to enhance their knowledge about vocal tone production by familiarizing themselves with appropriate literature to acquire scientific knowledge on the singing voice. Further studies also discovered eclectic pedagogy. This third approach incorporates both holistic and mechanistic approaches Ware (1998).

It is appropriate for teachers to adopt instructional approaches that best assist students' understanding of the course being taught. Callaghan, (1998) asserts in his study that sixty-six (66) percent of teachers are of the view that it is very essential for vocal music teachers to acquire scientific information about the voice. Whereas, thirty-two (32) percent of the respondents suggest that every vocal teacher must have qualifications in vocal physiology and acoustics. Eighty-two (82) percent also ascertain that the basic qualification for teaching singing must be interpersonal skills.

The significance of the teachers' acquisition of the scientific concepts helps them change the students' thinking and problem-solving and as well guides the students to restructure their vocal production without abusing their voice Latukefu and Verenikina (2010). This is supported by Shewell (2009) who describes excellent teaching of singing as "being able to communicate relevant knowledge and practice of techniques that develop and protect the voice". This research results support Phenix and Jorgensen's instructional knowledge model which emphasizes that the teacher must be well-informed in

all the areas of music and in particular, the vocal performance so that the students will experience the reality of the performance of music vocal sounds.

The third approach—eclectic pedagogy—is embraced by most “vocal coaches”. In music education, most vocal performance teachers employ eclectic pedagogy in their teaching while not concerned only about the sound production but also about the elements of singing, how the manipulated organs create the appropriate sounds Ware (1998, p.253). While Ware’s assertion may stand true, it can only, be considered in a sense of regional truth. In that, in my observations in vocal teaching classes, teachers appeared not to have any foreknowledge of eclectic pedagogy neither did they, employ the concept intentionally nor unintentionally.

Additionally, through creative imagery, both learning and performance are enhanced, expressing the desired emotion(s) provoked in performance. In the instance illustrated by Ware, teachers consider the physiologic as well as acoustic makeup of the trainee and learning and performative space. Thus, there is the need for the creation of an enabling environment ranging from the physical body to the metaphysics to the physical space, which in turn lays the foundation for a wholesome performance.

Similar to these three instructional approaches of Ware (1998) are also strategies Woody (2000) suggests for improving students’ expressiveness in music performance; only the names or terms differ. Whereas Ware suggests “holistic”, Woody says “verbal teaching using metaphor”; Ware’s “mechanistic” approach becomes Woody’s “verbal teaching explaining concrete musical properties”; the only difference is Woody’s third approach, which is “aural modelling”. Whereas Ware’s third approach “eclectic

pedagogy” is a combination of “holistic and mechanistic pedagogy”, Woody’s “aural modelling” is directed to the teacher’s demonstration of the song(s) or playing professional performances in class for students to observe for a better understanding of the art of singing and thereby develop a positive response.

In addition to the above approaches, other scholars such as Latta (2012) also suggest three types of teaching methods—drill method, song method, and drill and song method—which can help the students on how to use their vocal elements efficiently and artistically in singing. The ability to produce the correct pitch levels used in a song and control breath is paramount in singing.

In using the drill method, students are subjected to a variety of vocal exercises based on vowel forms that are used in singing scales over a long period, of time. In the course of this exercise, no song is learnt but consistently, keeping to the drills until students acquire the mechanical difficulties presented in the exercises. It is believed that this exercise helps students sing florid sentences or sing chromatic scale passages and other embellishments. Naturally, adolescents easily feel bored and lose interest in a continuously repeated activity such as pitch drill for several days. Despite the fact that the drill method helps with singing florid sentences and chromatic passages, I suggest that each specific drill exercise should be held for two weeks after which a specific song involving such drill must be studied.

Besides the drill approach, is a song method which is dependent upon the utilization of difficult sections such as wide leaps, ornament, chromatics, and challenging rhythms in an assigned piece as vocal exercises for the students before learning the actual piece(s). This means any challenging

musical or compositional element that is not part of the specific study song/piece is not included in the song method drill exercise.

It is not enough to prepare the students for solving only today's challenges. Rather, the teacher needs to prepare the students for solving future challenges as well because there is an Ewe adage that literarily translates as “a man who prepares for war is not defeated”. Thus, the teacher could create further challenging elements in addition to those identified in the study piece(s).

In the case of vocal coordination processes, the song method exercises must be crafted to create room for breath control and management, vocal onsets, and register coordination. Moreover, Latta (2012) believes that tone quality and rhythm in any song rely on the interpretation of the meaning of the song. Hence, interpretation is practiced with the song method.

### **Student's Vocal Tone Development**

Every individual has a unique vocal tone. However, an individual singer can be guided by the various elements or concepts that will help him or her acquire a better attractive or desired tone quality. One school of thought is of the view that “educating a singer on phonation is just a means of developing concepts, not muscles. Meanwhile, the second school of thought also thinks that the study of (singing) skills is not primarily referring to tone, but rather how the various elements—body alignment, respiration, phonation, resonance, and articulation—help affect tone because these concepts are situated in the human body Quam (1971). This means in directing students on vocal tone development, teachers and instructors' in-depth understanding of

these elements and their knowledge of broad developmental strategies or techniques is very essential to help attain their goal.

Gackle (2011) attests that a standard singing tone ought to be easy and freely produced, warm, be in tune, resonate, and be capable of having diverse timbres, varying durations, frequencies, and intensities. McKinney (1994) addressed that voice students in senior high school are challenged by vocal change with undesirable vocal quality. Therefore, teachers/instructors' knowledge in the mechanism for nurturing these students to develop and produce healthy vocal tone is very important. Additionally, the teacher/instructor needs to play vocal performance audio or video for the students to have a mental picture of the desired vocal tone. Educating and directing senior high vocal students on tone development alongside vocal performance audio-visual motivate and increase their understanding and skills acquisition.

Research has proved that phonation involves the converting of air pressure from the lungs into audible vocal sounds. Scholars identify that aspirate or soft onset, glottal onset, and coordinated onset are the different means to form and release vocal tone Ware (1998); Miller (1997). Other pedagogues have a different label for these onsets. David (2008) explains that phonation that involves glottal/hard onset shows that the vocal folds are in a closed position and breath pressure initiated beneath the vocal fold forcefully opens the folds. The tone of a bass singer with the application of a glottal release will sound dramatic. Nevertheless, when beginning students and or untrained singer employed this process of tone release, the perceived production is a stressed or tight voice. This glottal release, is most often



employed by professional opera singers. Ware (1998) discloses that light usage of glottal onset is useful for clear articulation of many initial vowels in English and German words.

Miller (1997) reported that the German school of singing is in favour of glottal onset usage. Nevertheless, the Italian singing school encourages their students on a soft but noticeably audible beginning. In vocal performance culture, glottal usage is out of place when singing soft-to-moderately loud dynamic levels and in low-to-medium pitch ranges Ware (1998).

To achieve the teaching and learning of glottal onset release, Heizmann, (2003) and Ware (1998) suggest panting exercises with the consonant 'h' and three-letter words or short words that start with 'h'. For example, hop, hip, (but not in a breathy sighing manner). But I think the use of 'wh' in addition to "h" words such as who, where, hope, how, and many others can be vocalized with different rhythmic patterns for efficiency.

Application of aspirate onset makes a singer's tone sounds breathy because, during each glottal cycle, the vocal folds are not completely closed. This weakens the breathing mechanisms and leads to 'hook up' failure as identified by Ware (1998). Some music educationist instructs students to sing with the intake of air as they term it sing on the breath with no additional clarification. Miller, and Ware explain that achieving balanced or coordinated onset/release, depends on the dynamic modifications of inspiratory-expiratory muscles, vocal folds, and resonators to accomplish correct balanced airflow and vocal fold adduction. This indicates that with balanced/coordinated release, the tone quality of the singing voice needs be consistent from the start to the end of all the phrases in a musical piece. It would be appropriate for the

teaching and learning to begin with knowledge of the mechanisms that aid in vocal sound production for example lungs, bronchi, larynx, pharynx, vocal folds, oral cavity, nasal cavity, just to mention.

David (2008) claims that as untutored singer produces high musical pitches, he or she builds tension that makes the larynx, longer in the throat and therefore, shortened the vocal tract. Hence, he suggests that teachers should instruct students to position their larynx low for achieving appropriate space in the vocal tract for singing.

### **Singer's Breath**

Generally, vocal sound production is generated by the larynx, (that is the vibrating source of sound) and vocal tract (which is the resonance system). However, during singing, the oral cavity, nasal cavity, sinus cavity, and chest cavity Chapman (2017); Mason (2000); Welch (2006) come to play and function as amplifiers to the vocal tract and the larynx Mathew (2011). She purports that effective usage of all the resonance cavities helps develop and improve all sound production. Studies have remarkably demonstrated the relationship between science and the art of singing and the necessary measures required from both teachers and learners to practice “outstanding” vocal technique.

The lungs and the respiratory muscles in the chest and abdomen are the sources of energy for both speech and singing. Myoelastic-aerodynamic theory expresses that breathing which involves the exchange of internal and external gases is the foundation or fuel for singing. Cowgill (2009) defines breathing as a complex multi-step physiological process that comprises two phases: the

inspiratory phase, also known as inhalation, and the expiratory phase, referred to as exhalation.

Although we humans have an inherent ability to breathe, the efficient singing task requires modification of the breathing arrangement Mabry (2002); Solomoni, Hoorn, and Hodges (2016). This means that despite the fact that breathing is an automatic function, the respiratory system's efficiency is influenced by the active management of breathing patterns through exercises. According to Miller (1996), effective breath control is the fundamental basis for all skilled vocal performances. This means when a singer's breathing is improved definitely his or her singing is as well improved. Creating perfect tones demands appropriate intake of air. Some singers inhale too much air quickly while singing low notes in an attempt to make the notes louder.

Scholars have espoused that setting the foundation for singing demands simple exercises on correct breathing which must be well understood by the teachers and learners Solomoni, Hoorn, and Hodges (2016). These exercises which are tailored towards free articulation, and careful study of the vowels and consonants must be introduced in the first term of the student's first year. These scholars are of the view that the flexibility of the articulating muscles depends on the free activity of the breathing muscles and correct pronunciation, clear enunciation and distinct articulation in singing constitute good diction. These factors are suggested for frequent and systematic drilling.

Pedagogues have done studies on ways of breathing and strategies necessary for breathing in singing Cowgill (2009). According to recent studies, different body types and sexes share some degree of diversity in breathing method Cowgill (2009); McCoy (2005); Callaghan (2014).

Regardless of this minor difference in people, scholars have identified four ways of breathing—high torso breathing, middle torso breathing, low torso breathing, and the combination of the middle torso and low torso which is also known as appoggio. Ware (1998) defines high torso breathing as a breath of “exhaustion” he explains that applying this technique during singing makes singers shoulders and chest vigorously pump air into and out of the respiratory system swiftly. As a result, the muscles in the neck and throat become stressed therefore this type of breathing is not good for effective singing. Vennard as cited in Cowgill (2009) describes middle torso or pancostal breathing as inhalation that involves expansion of the ribs without involving lower abdominal breath-related actions. Therefore, when one is singing in a high-range with pancostal breath management, creates an overly pressurized breathing system that restricts airflow and strained the voice. Low torso breathing as described by Miller (2000); Ware (1998) involves more usage of the low abdominal muscles. Thus, pulling in the lower abdominal to cause the diaphragm to descend fully and relax. Some pedagogues and teachers are of the view that a combination of diaphragmatic and middle torso breathing is the most efficient and effective breathing technique for singing Paton and Christy (2002); Ware (1998); and Cowgill (2009). On the contrary, Alderson postulates that humans have individual differences. He, therefore, believes that there are several ways or approaches for teaching a student to sing; and the best method is the one that works for the student. Hence, suggests the combination of all the methods of breathing for effective singing. Secondly, it is illogical to disengage middle torso or rib breathing from diaphragmatic or

low torso breathing since these two mechanisms are close and work together with each other in the process of breathing.

As a vocal performance teacher, I disagree with Alderson's view that vocal students should be allowed on the usage of any breathing technique that works for the individual student. Learners are in school to be trained and acquire the most effective and efficient techniques and skills to develop their vocal performance stance for the singing industry or further studies. Despite the fact that there are many approaches or methods, one of them could be better off than the rest. On the other hand, it could be that the approaches are just supporting each other. However, studies have been carried out on breathing for singing and pedagogues are convinced that the best breathing technique for singing is the combination of middle torso breathing and low torso breathing (*appoggio*). Students' understanding of the approach and its application depends on their mind-set. Elger (2007) postulates that a performer's mind-set, immersion in an enriching environment, and engagement in reflective practice are the cornerstone for performance improvement. Therefore, teachers have to explain all approaches to the students. Train and encourage them on the usage of the best approach. Immerse them in an enriched environment of suitable breathing and other effective exercises and as well, engage them to reflect on the exercises. I encouraged my students on the "yawn-sigh" technique and the imagery "pretend to smell queen of the night flower" for achieving balanced or *appoggio* breathing. These techniques contract the abdominal muscles and make the diaphragm descend at a relaxed position and make use of the controlled external intercostal and abdominal muscles respiration during

singing. I allow my students to share their experiences on any technique I engaged them with. "Cowgill (2009) indicates in the result of his study on body type and breathing tendencies of beginning vocal performance students that understanding and facilitating a healthy breathing method is a learned experience and requires training.

### **Instructional Model**

Modelling and or teacher demonstration and listening are effective instructional strategies in music performance pedagogy. Meissner (2017) conducted an action research study involving nine teachers of different instruments including voice on the strategies the teachers employ for facilitating expressive music performance learning. Various instructional strategies such as teacher's inquiry, discussions, explanation of expressive devices, gestures and movements, singing, imagery, modelling, 'projected performance' and listening to one's recorded performances are recognized to help teach expressive music performance. Every student attends classes with a fair knowledge of what the teacher is teaching. As a vocal teacher, it is best to inquire about learners' knowledge in what to be taught and this would lead into discussions and further explanations. Application of various strategies in guiding vocal performance students is essential as learners have different levels of understanding and process of acquiring vocal performance skills. Additionally, application of imagery, modelling, and listening to ones' recorded performances, in vocal teaching would encourage and heighten the students' knowledge of the techniques and skills they have acquired and thereby utilize them appropriately in their performances. This I think, calls for

high school students' understanding of the structure of the music, the lyrics, and the mood which will help in interpreting the piece expressively.

Closely linked to studies in performance theory is modelling. The process of knowledge acquisition and its enhancement in performance theory is by immersing the student in an enriched classroom environment. This is attained through observation. Bandura, (1971) defined observed learning as modelling and believed that student motivation depended on whether or not students could see knowledge in action. Student attitudes towards the learning process possibly determined the amount of information learned and retained Bandura (1986).

Today, modelling is the basis for classroom instruction; and, guiding students toward a desired vocal production, teachers purposefully utilize modelling. Mann (2008) attests to the fact that the use of modelling provides learners with the visual, verbal and or musical clue that helps them progress in their performance. Mann believes that students could express and interpret their assigned pieces by watching their teacher or resource person physically demonstrate the songs in class. Mostly, modelling gives explicit understanding to students which grants them confidence and inspiration in performing their assigned musical pieces.

Seventeenth-century scholar, Comenius values educators' classroom demonstration as a means to progress students' knowledge. He stated, "Do in front of their eyes what you would like them to do". This implies students' understanding of the lesson taught in class is dependent upon the teacher's explanations, examples, and interpretations. Hence, Comenius suggests that teachers must teach every subject matter with examples for learners to imitate

and develop understanding effectively. Without imitation precepts and examples students cannot fully comprehend the concept being taught and apply it appropriately. Gordon, (1980) a music educationalist, Crane (1988), and many others have affirmed the use of modelling and imitation as a core rote learning, placing them in the first step of a learning sequence. Crane, for instance, developed a curriculum that highlighted the use of the teacher, as a model and propose that students' use of imitation was the first in music learning. To date, vocal modelling has been explored primarily concerning pitch matching ability in the elementary music classroom Green (1990); Hendley and Persellin (1994); Mang (1997). After modelling or demonstrating a musical piece for class observation, it would be appropriate to engage the students in a discussion of the interpretive measures employed. This will include reflective exercises for knowledge and skill acquisition.

Although, some research has demonstrated the benefits of modelling in the instrumental classroom, it could be a problem for some senior high school music teachers who, did not offer voice as an instrument during training in college or first degree in the university might not be able to coordinate appropriately the vocal mechanisms or processes for the students to understand him. A teacher with a bass vocal category, for example, may have challenges in demonstrating the coordination of the registers to a soprano voice student. Yet some male teachers might capably demonstrate falsetto voice sound in vowel differentiation and aspect of phrase shaping. Some female teachers with soprano or alto voice ranges might be in the same situation with their bass students.



Likewise, a teacher unaware of his challenge with pitch and aesthetics of singing may model wrongly but with confidence for the students to imitate. In these cases, then, teachers who are experts/remarkable in singing or vocal performance can model in class for students' imitation and motivation. In other words, music educators are responsible for establishing high-performance standards by providing models and leading children in appropriate performances within the typical classroom setting Baker (1980).

Miller (1996) advocates for audio-visual recordings of the students' class performances for their "self-perception and performance reality". This is to say that vocal performance students do not always exhibit the emotional expressions of their assigned pieces as they internally intended. In his narrative, a student was excited by the lyrics of a love song assigned to him for a public performance. He tries to express the meaning of the texts of the song through facial and body expressions.

Unfortunately, the audience does not realize his internal image as external displays. The problem was he had never seen himself perform via video. He therefore misleadingly assumes that he looks like what he feels. It is very essential for vocal performance teachers to make use of audio-visual recorders or full-length mirror for their class for the students to view themselves in the spare of the moment for the necessary corrections.

### **Vocal Performer's Body Alignment**

An essential possible basic concept for a vocalist to incorporate into his or her technique is proper body alignment and this is the first step for every vocal performance student to be directed upon. How a singer poses

himself/herself in the act of singing has an effect on the production of the sounds.

Pedagogues are more concerned about singers, especially beginners' ability to create healthy body alignment without the muscles causing any tension. It is noted that alignment affects every part of a vocal performer's technique Griffin (2015). Bennett (2017) indicates that a singer's body without any muscles causing tension enables them to connect to their diaphragmatic energy. This implies that with an appropriate alignment of the body, producing high notes, vowel depth, and tone would not be difficult.

A voice student's awareness of a singer's body alignment depends on the tuition received from the vocal performance teacher. Explaining correct or healthy body alignment Griffin (2015) Paton and Christy (2002) indicate that it comprises a long spine, relaxed shoulders, and knees, a balanced head, free and open chest. In support of this Titze (2019) emphasizes an upright spine that will freely put the ribs and sternum into a suitable position with the head straight and the muscles around the neck free of tension.

Miller (2004) is of the view that Titze's description of body alignment will prove beneficial for many, but his usage of the word "upright" has the tendency of baffling others due to the anatomical nature of the human spine. Hence, Miller uses the "Garcia position" in describing body alignment. He explains that the "Garcia position or noble posture" makes the sternum comparably elevated, the shoulders are restfully back and down, while the too aggressive military stance is avoided. Whereas throughout each stage of the respiratory cycle, the rib cage is practically motionless. As a vocal performance teacher and a performer myself, I believe that Miller's

description of the concept will cause the body to become rigid and tense. If the singer's muscles are stiffened, it would affect every single element of the voice. Therefore, the body has to be well-balanced in order to fulfil its fundamental functions, and the respiratory muscles would work easily and efficiently without interference. Despite the fact that the shoulders should be relaxed, I think they also should not be slouched forward as this would hinder the lungs from expanding adequately.

Singer's body alignment is not concerned only with the upper part of the body. Scholars such as Paton & Christy (2002); and Mckinney (2005) include the alignment of the feet, legs, hips, abdomen, chest, back, shoulders, head, and arms. Their description of the alignment of these body parts gives a total picture of a classical vocal performer's body alignment. The recurring theme in all the descriptions of alignment by scholars is that every physiological structure must be free and flexible. Senior high school music teachers' understanding and knowledge of singers' body alignment is very essential so that they would be explicit in directing the voice students.

### **Singers' Physical and Vocal Warm-Up**

Vocal performance studies a practical-oriented subject, demands students' engagement and practicing various essential skill sets. Vocal pedagogues recommend that singers, like athletes, require warming up before any vocal performance Amir, Michael, and Amir (2005); Paton and Christy (2002); Miller (1996); Ware (1998). The warm-up should be purposefully designed to prepare the learners body and instrument (voice) by stretching out the vocal muscles and relieving the body of unnecessary tension before

singing Millbrath, and Solomon (2003); Amir, Amir and Michaeli (2005). Research has proven that students learn in different ways and respond to different stimuli.

Warm-up exercises usually consist of various activities that introduce the body and brain to healthy and effective desirable vocal performance practice Rayfield (2007). Part of the exercises involves physical exercises or activities that improve body-mind coordination and as well strengthen the appropriate muscles needed for singing. Routine warm-up activities convince singers that their voices are capable of the tasks ahead.

Science has demonstrated that when our body is at rest or asleep, the neurological system sends signals to the muscles, occasionally checking to make sure the routes for nerve impulses are open. The muscles twitch slightly in response to these messages. This according to Paton and Christy (2002) causes our lengthy muscles to shorten while we sleep, and stretching them when we wake up allows the system feels good. Pedagogues have also indicated that in the course of daily activities parts of our bodies incur tension that does not help efficient singing. Therefore, for a singer to achieve optimal performance, he or she needs to routinely engage the body in a variety of moderate physical activities before resuming singing Heizmann (2003); Paton and Christy (2002); and Ware (1998). These scholars suggest stretching the body is a fantastic approach to releasing unneeded tension from a muscle. When the stress is released, the muscles return to a neutral, relaxed position. This implies stretching with care and patience gives the muscle 'fibers' time to achieve their full length. Another way of releasing muscle tension is gentle tapping with the tip of our fingers using the two hands all-round the faces.

Massaging from the back of the ears through to the shoulders aid release negative interfering muscular tension.

In my view, a warm-up should be part of each vocal class's initial activity for consistent vocal development. Sometimes, students come to voice class lacking the confidence to sing due to muscular antagonism. Miller (1996) and Fradkin et al. (2010) confirm that regular warm-up assures the student psychological and physical security with the fact that the student more often than not, practices the necessary techniques pertaining to singing. Vocal warm-up according to Freer (2009) is a strategic tool for the teacher in leading adolescents' toward singing and developing a quality singing voice. He, therefore, suggests that Vocal performance class warm-ups should focus on certain melodic intervals and vowel-consonant pairings included in the repertoire. The purpose of warming up the singing voice is to help students balance their high and low tones with smooth and easy adjustments of the voice.

Eloranta (2016) observes and concurs that singing registers and head tones should be explored and accessed during warm-up. He advises the student to examine every area of vocal instruction and development in order to identify the sounds he hears, identify the causes of those sounds, and be aware of how to correct the sounds. Freer (2009) also indicates that vocalizes that lead to pitch matching rather than those that start on fixed pitches should be employed in some circumstances for students who have phonation challenges. This shows that the student is assured of his/her voice's capability of functioning well in the task ahead of him/her. Though there are no laid down orders for vocal warm-up exercises, from experience, it is appropriate to

always begin with various relaxation exercises including gentle physical exercises in order to loosen up and relax the entire body for singing.

Having a good posture ensures the breathing muscles the freedom to operate without any interference from the sound the singer wants to produce.

Meanwhile, it is beneficial to precede the vocal exercise with breathing exercises since vocal performers depend on their respiratory capacity for executing long musical phrases. Miller (1996) suggests that every individual student should be able to develop his or her own reliable routine for warming up the voice. Most often teachers do not mention the effect or what learners will attain from a particular activity. Ideally, understanding of the impact of a vocal activity encourages students' participation and also pay more attention to the task. Hence, teachers are encouraged to inform their students on the benefit of any warm-up activity.

In conclusion, there are numerous modes or approaches to the teaching of vocal performance. The teachers' knowledge of these modes/approaches and their ability to employ them efficiently during instruction, would positively impact individual voice student's learning. Therefore, every music teacher or educationist in senior high school needs to have the right knowledge regarding vocal performance studies and what the singing voice as an instrument requires from the performers. Accordingly, the teaching of vocal performance and its learning depends on the approaches and strategies being used. Hence, the teacher is at liberty to employ the approaches/techniques deemed important or necessary for teaching and directing the students for standard vocal performance.

## Teacher Motivation and Feedback

The success of learning and the ability to perform an activity to a standard is dependent on teacher motivation. For, motivation is an influential drive for inspiring, guiding, reinforcing and persistently intensifying students' time for learning activities toward achieving academic success. Vocal performance study like any other subject requires students' motivation in diverse scenarios—types and the nature of the repertoire assigned to a student (secular music, sacred music, traditional folk music, and contemporary music) as well as feedback and motivation.

In every vocal performance teaching and learning situation, students' performance ability improves through the teacher's frequent motivation by interacting and demonstrating the piece(s). No doubt, Stramer (2009) postulates that students' interest in learning is actuated if they realized that the learning task is significant and exciting. As a matter of fact, students develop trust for their teacher through motivation and that leads to appreciating the teacher. When students are successful with a learning task, it elevates their confidence.

The singer's voice is variable in character. The psychological and or emotional state of the singer can have an effect on his or her voice at any point in time. Teachers' or instructors' ability to inspire and motivate their students is paramount Mason (2000, p. 204). Costa-Gioni (2004) and Haltvick attest that students who lack motivation may find it difficult to rehearse their assigned pieces. To achieve teaching and learning goals, teachers need to understand how to motivate their students and give them feedback to facilitate their development and boost their performance. Generally, feedback is a

powerful tool for offering a reflection on students' performance which could assist the learner in attaining a positive result and self-awareness. Minnoni, et al (2017) have confirmed in their study that feedback from their teacher offers them priceless suggestions that are crucial for their development and skill improvement. They now have the chance to understand their potential strengths as well as the weaknesses they still need to improve on. Other scholars have conducted studies and noticed significant improvement on the effect of modeling and feedback on students' singing behaviour Miller (2004).

### **Time as Instructional Obligation**

Allocation of time in an institution goes a long way to aid the teaching and learning of the subject. For instance, time given for a subject like English Language or Mathematics may be advantageous to students. Similarly, time for vocal performance studies would be advantageous. Instructional time concerns the amount of time or durational period utilized for teaching and learning activities in which students are really engaged in the classrooms.

Vocal performance studies demand enough time for effective teaching and learning just like other fields or disciplines of the music subject. In senior high schools in Ghana, for instance, instructional time for vocal performance studies varies considerably. Most teachers do not expose music students to vocal performance studies at the stipulated time as mandated in the syllabus. Benavot and Gad (2004); Gunu and Issifu (2019) confirm this observation in their study that carrying out the official curriculum in Ghana is obligatory but a large number of teachers are not following the prescribed weekly timetable. He identifies that time allocated for some of the subjects is reduced by sixteen per cent (16%) and this can cause the quality of students' academic



performance. In my view, making use of the instructional time for the subject music demands three fundamental awareness of the teacher: awareness of the various facets that are involved in the subject music, awareness of the time that fills these various fields, and positive teaching and learning habit.

Many responsibilities are involved in the teaching of the subject of music; the time allotted for this subject on the senior high school timetable is to cater for all the various fields. Therefore, evenly distribution of instructional time among the various fields (performance studies, theory of music, history of music, and music aural) is very essential for achieving a positive result. A study by the presentation of academic tasks, instructional comment, music performance, and teacher reinforcement. This suggests that every facet of music is essential and must be given equal attention.

In conclusion, the introduction of students to the various areas or aspects of a subject at a stipulated time as well as even the distribution of instructional time among the various aspects involved in the subject is important for quality academic achievement.

### **Vowels and Consonants Production**

‘Sung’ words in a piece of music are messages or information, and listeners discern messages from the singer in the acoustical blend of clear vowels and consonants. This suggests that for a singer to accomplish the purpose of a vocal piece of music, he/she needs to produce the words explicitly with the rhythmic submission to the vowels and consonants to make the lyrics comprehensible. Scholars are in support that this practice preserves the continuity of sung words’ production and the legato phrasing (smooth

production of the musical notes) that are very essential to effective vocal art music performance Hallam (2010); Ware (1998); Hoffer (1983).

In vocal performance, the production of a particular vocal sound is dependent on how the articulators—jaw, lips, tongue—shape the resonators and the appropriate position or place a vowel is formed. For instance, I have experienced that producing the vowel “a” with the mouth opened, allowing the tongue to lie flat with the tip of the tongue touching the back of the lower teeth results in a natural bright quality sound. When this same “a” is produced with the mouth opened but the back of the tongue is raised the resultant is a dark “ɔ” sound. Vowels provide quality blended consistent sound required for intonation and artistic expression of sounds. Every vowel sound has specific sound pattern. When a singer alters the space or shape in the mouth it changes the sound pattern therefore, makes the vowel sound becomes distinct and resonant Miller (1996) Titze (1993). Scholars have identified five primary vowels—ah, ay, ee, oh, oo, as pure vowels McCoy (2004); Miller (1996). [i] and [e] are considered front vowel whereas [a, o, & u] deemed to be back vowels McCoy(2004). Although [a] is considered a back vowel, I explored the two sections with [a] and it works well for both front and back units hence, in my view, it can be considered front or back vowel. Directing students on the pronunciation of the words in their individual assigned pieces for appropriate vowels and desired quality tones may take a lot of time. Latta (2012) argues in his study that guiding singers on diction practice probably takes up more rehearsal time than any other part of vocal performance. However, spending time to explain to the students how the vowels are formed and how they are produced, grants them understanding and enriches their knowledge. It would

be of good help if teachers would adopt phonetic vowel system in guiding them with production of the vowels. More so, correct shaping of the tongue and lips permit the mouth to produce better resonant space for excellent vowel production. Cooke, (2017) purport that incorrect placement of the tongue impedes the quality of sound production.

In performing a musical piece, as the singer ascends in high pitch, each vowel needs more resonating space and to accomplish that activity he/she needs to free the lower jaw by dropping it to the required space of the vowel with enough airflow for the ascending pitches.

#### **‘Resonance Change’**

Scholarship has shown that the singing voice has levels or sections known to be vocal registers. Each has different qualities in tone production when the vocal folds adjust themselves skilfully by changing shape, length, thickness, and amount of surface contact along their edges depending on the pitch level of a musical sound Paton and Christy (2002). However, some scholars theorized that throughout the vocal range there is no interruption hence, the voice has one register. For this reason, these proponents of one register theory strictly do not introduce voice register to their students Ware (1998). As a vocal performer, I disagree to the views of these scholars in that when singing low pitches one can feel the thickening of the vocal folds and as well experience some buzzing sensation. But as the voice transits into higher pitches there is a feeling of thinning and stretched of the folds making the sounds light.

All voices, according to Cooke (2017), have two registration regions. Discussing the vocal registers, he identifies two transitional areas in female

voices. The initial transition between C4 and A4 on the staff is known as the primo passaggio. While the secondo passaggio also occur in a range between E5 and A5 among less skilled singers. Other scholars also recognize three registers as—the chest voice (lower register), which employs the thyroarytenoid muscles, the middle register, which uses a mixture of the thyroarytenoid and cricoarytenoid muscles, and the upper register, also utilizes the cricoarytenoid muscles Gackle (2011); Smith and Sataloff (2006). Relating to the realms of instructional knowledge model, teachers' knowledge and skill in directing the students in making smooth transition is very essential. Involving the students with series of register transition exercises will help them acquire the skill in no time. Gackle therefore advises teachers to simply employ exercises that will assist vocalists make seamless transitions between these registers rather than overly emphasizing the concept of three different voices.

### **Students' Music Performance**

The art of solo vocal performance is more than just reciting what is written on a music score. Fabian (2014); Palmer (1997) and Clarke (1987) are of the view that musical expression is exclusively subject to a few interpretive properties which involve deviating or changing from the principles of tempo, tone quality, articulation, and dynamic level. Considerably, solo vocal performance goes beyond the imitation or deviation from the structure of a musical piece as composed.

Since vocal music involves words, apart from the singer's concern with beautiful musical tone production and technical issues, he/she also deals with lyrics as expressive matters Burwell (2006); Simones, Rodger and

Schroeder (2015). As indicated in performance theory, it is necessary for the learner to reflect on both the performance activities including the elements of singing he or she experienced in voice class and the musical piece(s) at hand. Be able to immerse himself/herself in the grip of any emotional condition that the words and the music express; analyze areas for improvement and as well develop his identity Elger (2007). In my opinion, composers indirectly communicate their sentiments and ideas through music and these are to be realized, understood and interpreted by the performer using communicational and expressive parameters—dynamics, connecting with the audience in terms of eye contact, facial and body “projection” with appropriate emotion, and other expressive gestures. Using performance clues in directing the students would help their skill acquisition.

Sloboda (1996) expresses that students store expressive musical signals in an abstract template which is in the form of extra-musical analogies or metaphors. This reminds them of the generation of such expressive changes in music. Hence, he suggests that the teachers assist students in building a template repertoire from a range of sources conceivably with those of bodily and physical actions, expression of emotion, vocal inflexion and other gestures.

Assisting students to build such template, Emmons and Alma (1998, p.182); Brenner and Strand (2013) pinpoint in their study on the usage of different approaches. For instance, (i) modelling by singing with the necessary and appropriate expressions and gestures, (ii) verbal instructions by directing learners, (iii) the use of metaphor such as “imagining of the sound before phonation”, (iv) humour and other performance opportunities vocal and

instrumental teachers employ in junior and senior high education and tertiary education for a vocal performer to be effective in his or her performance.

The appropriate directive approach in teaching performance studies assists the student's interpretive and expressive understanding. Lisboa (2008), in her longitudinal case study noticed from one of the three various performance teaching and learning strategies—self-guidance learning, teacher-directed learning, and multimodal learning with singing and contextual discussion – that students who were not given unequivocal instruction did not understand performance directives of their pieces; hence, could not express their pieces during rehearsals. This justifies theory of performance that studying vocal performance is a trip in which the degree of performance determines the student's knowledge and skills acquired Elger (2007).

Music is an art associated with the communication of sentiment and meaning Woody, (2000, 2003), interpretation, and expression of a musical composition. To perform a musical piece, the theory of performance (ToP) explains that it demands a series of complex tasks combined with a level of knowledge and skills in order to produce an acceptable result. Similarly, Hargreaves et al. (2017) indicate that the basis of a performer's familiarity and level of knowledge of the structure of the musical piece depends on a long time of practice or frequent rehearsal and the learner's ability to memorize the musical piece(s). This has been confirmed by musicians such as Mozart, Beethoven, and Hindemith that they were capable of hearing their own compositions in a single glimpse cited by Clarke (1988). This indicates that if a performer is not conversant with a piece of particular music he has to perform, he will not know the expressive profiles that are involved in the

music. Clarke (1988) and Bernac (2001) assert that mastery over a musical piece(s) does not only grant the performer room for expressing the music; but also prevents him from continuous modification of the timber of notes, articulation, timing, dynamics, and vibrato from one performance to another.

Having enough knowledge of the piece(s) can cause dramatic changes in these expressive parameters during successive performances of that same musical piece(s). The uniqueness of the teacher's understanding of a musical composition or concept affects his/her process of teaching. Therefore, his/her choice of interpreting a particular composition/artwork facilitates a deeper understanding of clarification of the chosen work Xin (2021). He continued that the student's ability to process, evaluate and create new musical information, critically analyze and understand what is on the music score, mentally imagine and operate elements of different musical languages and the quality of vocal sound helps to achieve a good result in interpretation Xin (2021, p. 69).

Vocal performance artistically, communicates with meaning, the message in a piece of music with emotions. Silverman (2008) postulates that the art of singing aims to make the human voice a powerful agent of musical emotion. As a vocal performer and a voice teacher, I infer that students can achieve this attraction through character mechanism which includes consistency of the clear enunciation of lyrics, good vocal tone production, suitable volume, phrasing, application of dynamics, body posture, as well as being in performance control. Boardman and Alt (1992); Henley (2001); Juslin and Persson (2002); Lindstrom et al (2003) consider a song's emotional presentation by the performer's ability to identify himself/herself with the text

of the song. They suggest that songs that concern profound aspects of death, and complex metaphysical and spiritual concepts call for emotions that will inconvenience adolescents hence, will not be able to interpret such songs well despite the beauty of the voice tone. This implies that senior high students may find it difficult to project with emotional energy a song with difficult dramatic concepts or a song with emotions that could be felt by just a mature person.

It is an indisputable fact that the amount of effort one puts into a task, determines the end result. Students' regular practice of their pieces, inevitably helps them memorize their pieces; and through that their ability to generate knowledge about the structure of the pieces is high as indicated by the theory of music performance. Thus, the performer's level of ability to own the piece is high as well. Moreover, the enjoyable stage of a musical presentation is, the performer's personal interpretation of the music which demonstrates his understanding of the composition in relation to the message that the composer might have intended to portray in the piece. In this way, what the audience or assessors would expect or enjoy hearing is emphasized in the presentation. This is confirmed in a study that the central concern of the examiners is based on students' ability to embrace the emotional circumstance of their performance pieces and as well personalize the music Coimbra and Davidson (2004).

### **Sight Singing**

Sight singing is an aspect of vocal performance studies that demands students' knowledge and ability to sing melodic compositions they have not seen before at first sight. Developing voice students' full vocal potential, and becoming more meaningful and richer, the learners need a solid foundation in



sight singing in order to perform simple melodic patterns fluently at first sight. To sight sing any musical compositions demands the singer's knowledge and understanding of music notational symbols (note values), key signatures, time signatures, rhythmic patterns, pitch, and intervals of musical notes. All these elements are tools for every musical composition. Students' acquisition of knowledge and skills in all these elements have effects on their sight-singing ability.

In vocal performance classrooms, sight singing is an important strategy for developing students' musicianship. Demorest, (2001) analyzing Gordon's study, indicates that teaching students to sight read/sing help develop the students' musicianship and also assists in producing independent intellectuals.

The educational academic year in which learners are introduced to sight-reading has an impact on their ability and fluency level. Chapman (2017) therefore believes that introducing students at an early stage of the academic year to the concept of sight-reading encourages and promotes independent musicianship. The fact is that the recognition of musical elements, internalizing or imagining the pitches and intervals of the musical notes and matching pitches accurately, interpreting rhythmic patterns correctly, and presenting the task appropriately demand time and the student's knowledge, skills/technique, and deep understanding. According to Burwell (2006), developing a deep understanding entail using one's prior knowledge and skills in new circumstances. This implies that the students would be able to interpret every element accurately in the music. Clark (1988) reveals that good sight-readers have mastered a variety of sight-reading tasks and have a big library of rules and patterns at their disposal. This highlights the idea that teaching and

learning of sight-singing should begin at an early level or stage of the student. It also suggests that the learning should be consistent with a series of exercises that will help improve the learner's skills and ability and thereby affect the output.

While most teachers have a positive attitude toward teaching sight reading/singing, as studies by some scholars have revealed on the practice of sight-reading during music class, on the contrary, other studies have also uncovered that few teachers really devote the necessary time to teaching the skills Hoffer (1983); Sloboda (1996).

Sight singing skills and ability have a strong influence on the duration of the period a student spends on a study piece. Burwell (2006) proposes that sight reading/singing instruction and practices must be exposed to the students at the beginning level of their studies to complement their performance skills. Successful teaching and learning of sight singing depends on the instructor's approaches and strategies. A study on best practices for developing fluent sight singers indicates that the application of the Curwen hand signs approach was beneficial for students' sight-reading ability. On the other hand, Gromko (2004) and Amuah (2014) also noticed from their study that students' sight-reading skills depend on their understanding and ability to interpret rhythmic patterns. Although Curwen approach is good, in my view point, that method best aid students to internalize the pitches and encourages them in matching the pitches accurately. I agree with Gromko and Henry that knowledge and understanding of all the elements concerned and the competency to translate them precisely is the key to sight singing skill.

Vocal performance students are usually members of the school choral groups. Some of them also belong to other choral groups outside school. Several scholars Winnie (2014); Stramer (2009); Robinson, M. (1996) indicate that choral groups receive sight singing instructions to enable the members to learn musical pieces on their own with ease. This facilitates students' sight-singing potential. Lehmann; Sloboda; and Woody (2002) conduct a study to find out if students' choral group's success of sight singing has an influence on individual student's sight singing. They notice that even though the choral group consistently receives excellent awards in sight singing contests the group's ability in sight singing has no accurate impart on individual student's sight singing capabilities on pitch accuracy and rhythmic tasks. It is clear that students have their strengths and weaknesses in studying a concept. But their understanding and knowledge of the various elements involved in sight singing depend on the teacher's choice of approaches/strategies. The theory of performance emphasized that performance is a journey, and sight singing is part of vocal performance, teachers need to journey with the students in an enriched environment and engage the students in reflective and frequent practices that involve varieties of exercises on the various elements.

### **Obstructing Factors in Vocal Performance Skills**

Adolescence as a period in compliance to singing tones poses challenges to adolescents' singing voices. It is the responsibility of the voice teachers to guide and direct vocal performance students with effective and efficient vocal techniques. The Myoelastic-aerodynamic theory has demonstrated that the performing voice requires the development and coordination of numerous intricate abilities for the creation of a standard

singing tone. Every human has certain successive development designs that the person follows at various rates.

At any age, the development may be supported or hindered by a number of factors such as the appropriateness of a given singing task set by an adult in relation to current singing capabilities, the expectations of peers and/or the value placed on singing (and certain types of singing behaviour) within the immediate culture Welch (2006 p.22).

From what Welch (2006) propounds, it is suggestive that the teachers' knowledge concerning adolescents' singing voice at this critical stage is very important. The teachers need to acquaint themselves with the students' vocal limitations or comfort zones in order not to involve them in vocal tasks and drills that are beyond their limits which could negatively affect their vocal production and expression as well. This is because Gackle (1985) cited by Simpson (2013) identifies that adolescents' inter-arytenoid muscles are not resilient enough to stretch and adduct their vocal folds to close glottis completely. Therefore, pitch during pubescence is insecure; and since their registers are in the development stage, they experience breaks between registers and a feeling of discomfort when singing. Gebhardt (2016) advocates that voice teacher must be of good help to their students to know their voice limits and thereby use the voices in moderation.

An investigation directed by Abithol; Abithol and Abithol (1999); Zahner (2000) recommends that the period between 11 – 18 years can be significant for the improvement of the voice. He clarified that adjustments in the body and passionate improvement affect the tone and employment of the voice, and propensity might be created which can hamper clear vocal creation

and hinder articulation and expression. He deliberates, however, that nothing is irreversible – it will save the students a great deal of difficult work if the teacher can affect their strategy directly from the earliest point. The essential challenge at this age is to overcome the potential abyss between emotional and aural development and vocal advancement.

It is understood that the status of the voice in pre-adolescent singing "reflects their vocal advancement as well as, their melodic enculturation" Addo (1998). This advancement is comparable to the central changes that occur in the singing voices of females and males during pubescence. Both adolescent girls and boys experience changes in their voices. But the experience of the change in boys is more intense. It is uncovered in an investigation by Titze (1994) and Welch (2006) that while the genuine measurement and development of the vocal instrument are comparative across genders during childhood, during adolescence the male vocal fold turns out to be significantly longer and builds up a more prominent boundary. Titze (1994) notices that during the pubertal development spray, the heaviness of the vocal lot increases by around half and after pubescence into adulthood, it increases again by half. This has been affirmed by Cooksey and Welch (1998) who referred to Kahane (1982) on the phases of changing voice advancement that males' vocal folds' length increases by 63% from pre-pubescence through adolescence (from 17.35mm to 28.21mm) whereas that of females increase by 4mm or 34% long.

Gackle (2000) as cited in Welch (2006) specifies in his study that early sign of voice change involves an inability to sing high tones, and additionally having the sensations of weighty harsh or unpleasant tone creation. Gackle

refers to Hoffer (1983) that the harsh and slight nature of an adolescent girl's voice is a result of numerous variables like solid youthfulness, absence of control and coordination of the breathing muscles and deficient voice advancement. In the examination, he uncovers that there are four particular stages in female young adult voice change. In the principal stage which Gackle named 'pre-pubertal', the voice has a light woodwind like quality with no obvious register changes; and inside a more extensive singing scope of Bb3 to F5, the open to singing reach is D4 and D5. The following stage 'pre-menarchial' stage IIA is a quality of the beginnings of female voice change around the periods of 11 to 12 years old. As per Gackle (1991), the comfortable range at this stage is "approximately the same as the first stage within a slight expanded overall range of A3 to G5" In any case, at this stage, there is frequently a rasp in the tone because of the deficient conclusion of the vocal folds due to development happening in the laryngeal region. He further clarifies that a singing register progresses ordinarily shows up between G4, B4 and a few young ladies may experience issues in singing lower pitches. Singing gets awkward and raspy voice quality is created across the reach. The third stage is the pinnacle of the female voice transformation named 'post menarchial' stage IIB. Singing is portrayed by a restricted solace range from B3 to C5. it is an inconvenience, especially past C5. Particular voice characteristics for each sung register, and with the turndown of the volume, frequently takes on a more alto and the lumber is regularly imposing. The last stage named 'youthful grown-up female' stage III has a much-extended comfortable singing range from A3 to G5. This stage has less hoarseness. There is more noteworthy consistency in tone quality and more prominent

singing nimbleness. Vibrato frequently shows up at this stage, and the voice has a more grown-up, womanly quality. The high purpose of pubertal voice change will in general be around 12 to 14 years old Cooksey (1986, 1998); Cooksey and Welch (1998); Gackle (2000).

Youths have constraints in their voices. Before the young adult male voice can encounter achievement in singing exercises, at that point, their changing vocal constraints should be contemplated. Cooksey (1992) tended to the length of vocal folds in the two males and two females Gackle (1991) and inferred that the males' vocal folds are longer than the females. Cooksey (1986) likewise Gackle (2000) and Gackle (1991) report that in their investigation of voice development and as per proposal research, "voice development appears to happen in stages and was firmly connected with the advancement of the essential and auxiliary qualities and corresponding improvement in the larynx, body stature and weight". They further contend that in the greater part of the cases, the 'essential' male voice development starts at age 13 and goes on for a very long time. The development gets to its high purpose of progress at age 14 and tightened drastically by age 15.

Drawing on additional examinations, Cooksey (1992) introduced five formative plans of adolescent male performing voice which are described by bringing down the singing pitch range. In the first male adolescent stage before the changes start, the mean range of A3 to F5 with tessitura boundaries of C#4 to A#4. The voice quality at this stage is "clear" with relative evidence of breathiness in the tone.

The beginning of voice change, stage I "mid-voice" I is when according to Cooksey (1992), higher pitches are more difficult to produce; and

there is an overall richness in the tone. The singing range decreases thus Ab<sub>3</sub> to C<sub>5</sub> and breathiness is increased.

The second stage is termed by Cooksey as “mid-voice II” stage II. It is characterized by a reduced mean range. Higher notes are not stable at this stage.

The possibility of reducing sound in the falsetto register is reduced by the increase in the length of the vocal folds. The vocal range for “mid-voice” II is F<sub>3</sub> to A<sub>4</sub>. Cooksey explains that voice quality at this stage is distinct, thicker, darker in colour, and less resonant. The vocal range for this stage III termed “mid-voice” IIa, is D<sub>3</sub> to F#<sub>4</sub>, and voice change is at its high point. The quality of the tone is often husky and quite breathy. Stage IV is termed “new voice”. Voice production at this point is stable and the quality becomes clearer.

The last stage “emerging adult voice” is when the vocal range opens up again and the voice timber begins to adopt a clearer and less breathy quality as shown below Adjahoe (2012; p.39).

These studies on adolescent voices imply that regardless of the stages of change the voice is experiencing, any vocal training that is beyond the comfortable range of the young adults, during such period of voice change may demotivate their vocal performance ability. It is therefore essential to research vocal performance teaching and learning in senior high schools.

Lack of deeper knowledge of a subject and or absence of the use of the syllabus in teaching affect students’ performance. An investigation of music student teachers reveal that most teachers were not using the curriculum efficiently consequently, most music instructors and their students appeared to



altercate for no apparent reason Georgii-Hemming and Westvall (2010). Meanwhile, the Ghanaian senior high school music syllabus underscores a deeper knowledge of areas of music such as the study of the historical, theoretical, creative, and practical aspects of music Min. Edu., (2010). Hence, a scholar such as Davidova (2019) heightens the all-around qualities and capabilities of a “good” music teacher/instructor.

### **Repertoire selection**

Selection of repertoire is an essential component of the instructional process in vocal performance studies education. Before choosing a solo vocal piece for a student, the teacher must first be aware of the student’s ability. Consider his or her age, maturity level, and skill level to ensure effective teaching and learning. This indicates that every vocal music has its own level of challenge when it comes to singing. In other words, all songs are not composed with the same level of difficulty. Omaggio (1993) proposes that variety of musical pieces or compositions must be made available for students to select their preferred songs for performance. In support of this, Howe, (1990); Forbes (2001) also believe that if students chose repertoire they enjoy, practical music lessons could be more effective for them.

The appropriate selection of repertoire to match the individual student’s voice change depends on the range of the musical piece(s) and the student’s vocal tessitura (comfortable singing range of a vocal performer). Mainly, in most senior high schools, the music teachers select pieces for their students. Aware of this situation, Stephenson (2013) suggests that teachers must be competent in selecting musical pieces for the students. It is a fact that

not every piece of music assigned to students encourages them in preparing for performance.

A repertoire is a powerful tool that motivates students' regular practice and passion for the subject. Repertoire helps develop efficient vocal techniques and also instils expressive communication skills in music performers. Choosing musical piece(s) that meet the standard of the student, challenge and motivate its' learning. From experience, I have noticed that challenging music motivates some voice students while the rhythmic structure of the piece also inspires others. Despite these motivational elements, teachers must use the right approach to selecting music for their students.

Bronner (2003) realizes in his study that prospective teachers face challenges in selecting appropriate pieces that will motivate students in terms of age and skill level of students. For the benefit of the students, he cautions and suggests a remedy for such a challenge.

In the process of choosing literature for students to study, many new voice teachers first turn to musical pieces they were taught as novice singers. However, these teachers inescapably run into limitations with such an approach when they face students for whom their personal repertoire does not work well. As a result, it is critical for new teachers to become familiar with the materials accessible for each voice category's beginning students Bronner (2003).

There are some important facts teachers need to consider before selecting a vocal piece(s) for a student. Boardman and Alt (1992) recommend six characteristics for consideration when selecting repertoire mostly for adolescent students experiencing mutation and other vocal challenges even

though, irrespective of age, teachers can still consider these measures. These characteristics are ‘control of breath, range, energy, subject matter, language, and advanced vocal techniques’. Other aspects that must well be considered are the form of the musical piece, ‘the flow or flexibility of the solo part, and the accompaniment section’ Simpson (2013). Some composers do not make provision for the singer’s intake of breath. To satisfy the artistic requirement of vocal music, the performer needs to take a deep breath at the beginning of a piece of music and be able to control the breath to accommodate the duration of sounds in a phrase. A quick intake of breath may be needed at the end of each phrase depending on the artistic nature of the music. A musical phrase can be four or eight measures long depending on the meter of the composition. Vocal music performers are expected to sing each phrase within one breath. Most often than not, beginner voice student has a challenge in singing along to phrase within one breath. Therefore, Simpson (2013, p.24) recommended that pieces with short phrase lengths that do not demand full sustained breath should be assigned to beginner voice students to perform such phrases reasonably with their limited breath support. Simpson stresses that as breath support and energy level drop at the end of a phrase, the student must be made aware during instruction that the energy for the start of a piece must be strong.

A singer’s vocal range concerns high and low pitches that he can comfortably produce without straining the voice. The students’ vocal performance range must be taken into consideration when assigning pieces to them. According to McCoy (2012), the vocal folds are supposed to draw closely together (a process known as adduction) during phonation to close the glottis. The vocal folds pull apart, allowing the glottis to open (abduction) to

stop phonation for inhalation. Myoelastic—aerodynamic theory indicates that during pubescence which is a developmental stage for adolescents, the interarytenoid muscles are not so strong to stretch the vocal folds enough to close the glottis completely. As a result of this, their tonal productions especially at the beginning stages of the development, sound husky, with hoarseness, cracking, and breaks between registers. Hence, singing beyond their limited ranges may worsen their discomfort and as well damage their folds. Boardman and Alt (1992) argue that since individual voice students have their comfortable pitch level, pieces that maintain their tessitura in the middle range are appropriate. However, if a student can sing a high note, it is often best to assign him or her with the piece(s) that involves occasional high notes approached with scale. Considering the vocal piece compatibility to the student's vocal tessitura, Apfelstadt (2000) also believes that if a student could sing impressive high or low notes, then pieces assigned to such student should be of reasonable difficulty. Forbes (2001) cites Default's study which discovers some controversy among voice teachers on the selection of repertoire. Interacting with the participated teachers, one of them pointed out that the repertoire selected for the students should just be a little above their ability level to further challenge them. Whilst another teacher objected to the idea of assigning advanced repertoire to students at their developmental level. Among the participants students interviewed was Kelly, who respected her teacher (Adams) for giving her some increasingly challenging repertoire. She noted, "I think he has taught me that I can push myself a lot farther than I thought I could. I don't know if he has been really conscious of that". Ben, another student said Adams taught him how to select repertoire Simpson

(2013, p.19). I am of the view that considering the vocal ability and maturation of a student, once in a while, a moderately challenging piece can be assigned to that student to boost his or her singing skills and performance ability. This means the challenging or tricky sections in that piece must be captured in the warm-up to aid in handling the challenges with ease.

Skadsem (2007) recommends that teachers should incorporate ascending and descending scales in the warm ups-for the boys to develop their two extreme parts. He also believes that involving the male students occasionally to sing along to popular songs in which a male singer exploits high range, will encourage the boys to develop a higher and broader range of pitches. Depending on the vocal training, a singer's maturation can affect the tessitura level to change. Ware (1998) suggests that the student with a developed voice should receive challenging enough music to motivate the student without causing constant frustration and feelings of inadequacy.

Human activities involve energy and, so does singing. Energy for vocal performance can be obstructed because of inappropriate use of breath. Kayes (2015) notices that energy for vocal performance is "created by intricately coordinated neuromuscular and acoustic responses of the entire vocal process that involves respiration, phonation, resonance and articulation". Ware (1998) termed the singer's effective control of energy as charisma or personal magnetism in performance. Since air serves as the fuel for propelling the vocal tone, the volume of breath taken before commencing a musical phrase and the ability to release the air slowly and steadily help the vocal performer in facilitating varying dynamic levels in the performance of the piece. Boardman and Alt (1992) raised concern about the student's efficient use of breath. They

urged teachers to assist the students to use the abdominal muscles correctly in regulating the air and concentrating their attention on pure intonation and resonant sound. If there are long sustained notes, a subdivided beats accompaniment such as an Alberti bass will keep the students energized even while sustaining long notes Simpson (2013, p.24).

Every musical composition is based on a particular subject such as love, unity, nature, and many others. Performing a piece of music to affect listeners depends on the performer's ability to own the song through the understanding of the texts in the song, discovering the story hidden in the words (no matter the structure of the words), and connecting oneself to both words and the tune. Another point Boardman and Alt (1992) noticed is that students' ability to understand the words of a song and attach themselves to the meaning of the texts motivates them to learn the piece. When presenting a vocal piece, the student needs to bring the character to life. This has been supported by scholars such as Kimball (2013); Bernac (2001); Emmons and Alma (1998) who suggest that for a performance to be recognized as an artistically satisfying, the performer needs to understand the text and the music. Bernac further explains that it is important to analyze and synthesize both the voice and the accompaniment part that make a complete song. This suggests that students cannot do it alone. Teachers guide and encourage the students to develop a character in the assigned pieces. To accomplish this, singers must first understand the words in the song. The students often, appreciate songs about young love, sadness, and folksongs where the text tells a story. These authors suggest that teachers avoid assigning songs that have

mature emotional content. Their reason is that the emotional intentions captured in some of the love songs far surpass the simplicity of young love.

Language is a barrier to understanding the text in a song which may result in an inexpressive vocal performance. Ransom (2015) indicates that singer's understanding of the texts of his/her performance piece influence his emotion; hence grants him a better interpretive opportunity. It is essential for voice students to understand every word in the song they are assigned to study and perform. As senior high school vocal performance students begin training in classical solo performance, English songs and other songs in a language they can easily read and understand are recommended.

### **The effect of piano accompaniment on solo vocal performance**

Classical solo vocal music for schools is more often than not, written with piano accompaniment. In art music, the piano accompaniment is in collaboration with the soloist in bringing out the artistic creation through the execution and fulfilment of the musical performance. Every piece of music is written in a particular key with a particular meter. In solo vocal performance, the accompaniment plays numerous roles such as dialoguing with the soloist, giving clues like key changes as well as informing the soloist of the appropriate entry point and keeping the tempo of the music.

Performing with instrumental accompaniment, create confidence in the soloist with the fact that before the soloist produces the first pitch, the accompanist set the tonal center and the pace. Mostly, the accompaniment set up the changes-where there is a key change, and directs the soloist clearly to the pitch in the new key. Usually, the piano accompaniment sets the tempo and the tonal center. No doubt, Katz (2009) identifies accompanists as “Four-

folds custodians charged with the mission of guarding and maintaining (a) the composer's wishes (b) the poet's requirement as the composer saw them, (c) the soloist's emotional and physical needs and (d) the personal needs of the pianist". This indicates that performing art music without an accompaniment creates a missing link in action. In relation to vocal performance accompaniment, the theory of performance exhibits that engaging learners in inspiring settings with reflective practices encourage and grant them sense of creative ability Elger (2007).

The result of a study conducted by Hamann and Banister (1991) on factors related to performance rating at solo and ensemble festivals for band students indicates that participating students with accompaniment scored high marks. Sheldon, Grashel and Reese (1999) researched "the effects of different accompaniment conditions on instrumental musicians' performance quality". The participants—music students—were given three conditions (live accompaniment, intelligent digital accompaniment, or without accompaniment) of which to choose one and rehearse under that condition. The participants were allowed to practice period for 6 weeks after which they were asked to perform a selection twice. Once without accompaniment, and once in accordance with their assigned accompaniment condition. The performances were evaluated on several musical aspects. While the performance scores were similar across the three groups, the average marks of the initial performances were higher for both accompaniment groups than the group that practiced without accompaniment, even though the differences were not significant. it was speculated that learning a piece of music with any



form of accompaniment may help the learner gain an understanding of the piece Sasanfar (2012).

Researchers such as Madsen & Geringer (1998) also conducted a similar study with art songs performance. Adjudicators employed Traditional performance evaluation rating scales for phrasing/expression, rhythm and dynamics. The result favoured those who performed with accompanists significantly more than those who performed without accompaniment.

Music is a creative work and therefore can be designed in various forms depending on the creative ability of the composer. If a piece of music is created in the form of a dialogue for voice and other accompanying instruments, there is no way that piece of music can be performed satisfactorily by only the soloist without the instrumental accompaniment. This is because the accompaniment section serves as a reference point for the soloist on the appropriate time to set in with the singing. Hence, the accompaniment complement improves and as well supports the soloist's confidence level in the performance. In summary, practicing musical pieces with any form of accompaniment may benefit students in the music learning process by helping in gaining a better understanding of the piece as a whole, thus enhancing all aspects of the performance.

#### **Assessment influence on vocal performance**

Assessing voice students' performance skills acquisition and development are very essential in music education. Some schools have earned a reputation as first-class schools due to the students' high-performance level. Philip Melancthon, a German Protestant teacher observed that "No academic exercise can be more useful than that of examination. It whets the desire for

learning, it enhances the solicitude of study while it animates the attention to whatever is taught” cited in Agbeti (2011, p.10). Thus, students become more involved in the learning process and from this gain confidence in what they are expected to learn and exhibit. This revelation influences teaching and learning in some schools to the extent that some teachers tilt their instruction towards external assessment for students’ success. Agbeti (2011) confirmed that teachers concentrated their teaching on related items of the external assessment content and ignored those that were not in the assessment content be it in the curriculum.

The influence of assessment on teaching also affects how the items in the content are being taught. Meanwhile, teaching and learning the content from the syllabus would give the students a better understanding, and perform better rather than concentrating on assessment content. Despite this statement, Flórez & Sammons (2010) and Pellegrino (2014) state in their study that whether good or bad, assessment has the power to manipulate instruction in ways that emulate the content and format of the assessment. Teachers who follow the assessment content and instruct their students accordingly, exhibit excellent performances.

External assessment evaluates what students have studied in the course of their academic pursuits. As a matter of fact, students demonstrate the knowledge in the performance skills, and mastery they have acquired at the end of their studies. Shepard (2000) stated that traditionally, assessment evaluates what students have learnt and gives a report on it. Sadler (2010) explained that the content of the assessment provides the teachers and students with a better understanding of the requirements for the academic task.

Assessment content “is used to elicit the learning outcomes students demonstrate in their performance; it serves as a guide to marking; as well for clear and distinct feedback to students” (Educational and Evaluation). This suggests that a well-defined assessment content can be used in support of classroom-based assessment to inform the students on their learning and mode of answering questions. Meanwhile, not every assessment content is well-defined. Despite the existence of external assessment content, teachers who are aware of the fact that students’ musical behaviour can be changed (through the teaching of vocal performance studies by implying aims and objectives of the syllabus assiduously), instruct their students according to the expected standard.

One of the aims of the syllabus is, to help students perform well as soloists and as members of an ensemble; in the condition that the student’s involvement in the classroom performance tasks as demanded by the syllabus will enable the students to develop skills and artistic confidence in the presentation of music and as well, display artistic and aesthetics awareness through solo and ensemble performance Music Syllabus (2010). This means that going strictly by the performance tasks in the content of the syllabus, students’ performance ability would meet the assessment standard.

Usually, in Ghana, the national assessment considers technical exercises, sight-reading, and the set works for the students (WASSCE Music Performance, 2020). A student’s performance is assessed basically on pitch accuracy, phrasing, tone quality and expressivity. Although expressivity in performance is a subjective concept, the criteria used for national assessment are dependent on the syllabus. Sasanfar (2012) cites Supreme Court Justice

Potter Stewart on the subjective nature of expressivity in music performance writing “I know it when I hear it”. Therefore, depending on listeners’ preferences, perceptions about expressive performance might not be the same.

It is imperative for teachers to understand the national assessment of a subject and not to use it solely as a criterion for teaching and learning. In vocal performance studies, teachers equip the students with the knowledge and practical skills that will empower them to perform reasonably well as soloists and ensemble members and enable them to pursue further studies in music for the job market. Training students to meet such goals need deep concentration on the syllabus content and as much as possible, research on how to teach/instruct the items in the content of the syllabus. I suggest vocal pedagogues must spend ninety per cent of teaching and learning periods on the syllabus content and ten per cent (10%) on the national assessment content. The fact is that the assessment content is captured from the school’s syllabus but is not as detailed as the syllabus. Therefore, the teachers’ commitment to the content of the syllabus will help the students meet the standard of the national assessment requirement. Based on scholars’ claims that teachers’ reliance on the assessment content makes teaching and learning more understandable thereby grants students’ performance excellency, calls for research into vocal performance teaching and learning in senior high schools.

### **Theoretical Framework**

Several theories ground music research practice. Some of these theories directing my study involve the theory of performance, Myoelastic-aerodynamic theory and the realms of instructional knowledge model.

The realms of instructional knowledge model based on Philip Phenix and Estelle Jorgensen's philosophical ideas emphasize that the music teacher must be skilful in musical foundations, musical history and development, musical repertoire, instructional pedagogy, and instrument specific pedagogy.

A critical study of the Ghanaian syllabus clearly states where necessary, the skillset that teachers of music must have in advance to deliver the teaching of the vocal performance. Just as studied in the realms of instructional knowledge theory, these skillsets include musical repertoire, and instructional pedagogy just to mention but a few are checklists for the teacher before he/she attempts teaching vocal performance.

Myoelastic-aerodynamic theory concerns the production of muscular musical sounds. As a result of mechanical phenomenon directed by the complex connection of the muscular forces and elastic properties of the vocal folds (which is the Myoelastic), working together with airflow (aerodynamic) to produce a vocal tone (Hirano, 1981). Scholars in voice science indicated that the larynx comprises a series of muscles grouped as abductors, adductors, tensors, and relaxers. These muscles are attached to the cartilage they assist in phonation. Hirano, (1981); Markova (1991); Simpson, (2013) indicate that phonation occurs as air passes over the vocal folds and the inner thyroarytenoid muscles cause the folds to vibrate. Vocal music performance is a physical act that demands significant coordination of many components in the human body in order to convert the air stream into sound Welch (2020). Hirano indicates that the vocal folds have length, depth, and width. The speed of the vibration combined with the thickness as well as the length and depth of the vocal folds determines the pitch level of a vocal performer (Titze, 1993a).

The quality of the voice is related to the extent to which the vocal folds adduct as well as the shape of the vocal tract, coordination and balancing of breath as well as the coordination of the vocal register (Welch, 2020). The singing voice develops with vocal activities or exercises and time.

This theory embraces the recognition of six basic voice types in human beings – three types for males: bass, baritone and tenor while the other three are for females: alto, mezzo-soprano and soprano. Each voice type has its vocal range. This means that not all the voice types can produce all the pitches or sounds from low to high levels on the musical hierarchy. Even though the voices overlap each other, every voice type has its low limit and high limit, especially among senior high school music voice students. As the voice students perform the songs from their respective voice classification, the teacher must identify each of the students' voice types and employ the necessary technics to coordinate the vocal processes. Since the set work for the senior high schools' music voice students is classified according to the voice types, the voice students are expected to perform songs from their respective classifications. Myoelastic—aerodynamic theory, equally has a bearing on my work and will therefore direct the study.

Elger (2007) develops the theory of performance (ToP). According to him, to perform is to take a complex series of actions that mix with skills and knowledge to produce a valuable result. This affirms what goes on in vocal performance studies class in senior high schools for an impressive result. Elger believes that a theory of performance (ToP) is beneficial in a variety of educational circumstances. In conventional settings, it guides instruction in the classroom, training sessions, and other settings that are typically connected to

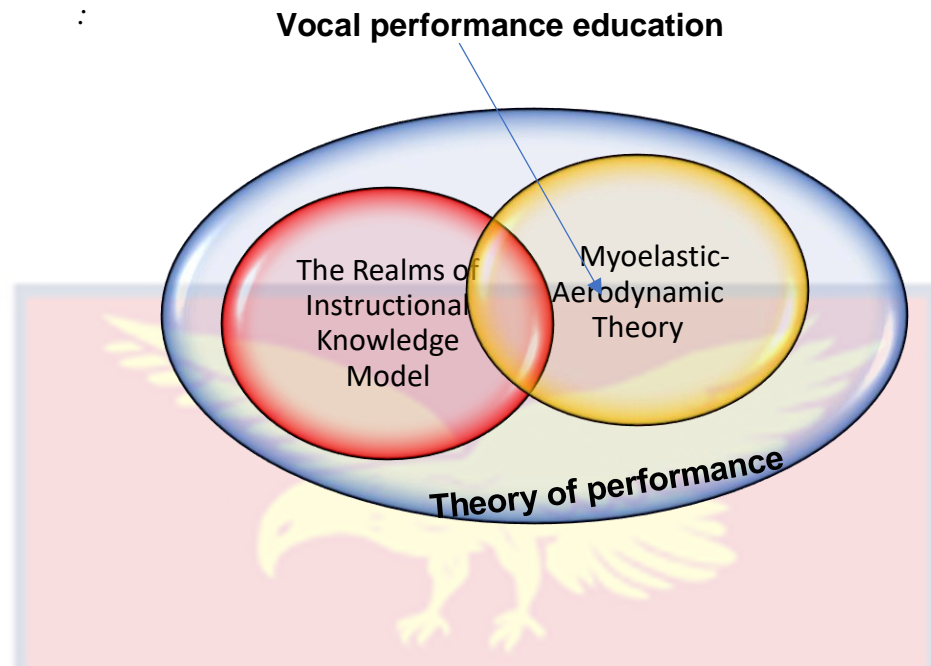
learning. This theory also influences education in settings that are not often thought of as classrooms. It includes academic advice, self-development, departments, academic committees, professional research groups, and colleges. Hence, it is essential that educational institutions that provide music as a subject are evaluated based on the student's performance.

In the framework below, the theory of performance encompasses the realms of instructional knowledge model and the Myoelastic aerodynamic theory; because Elger (2007) indicates that developing performance is a journey and the level of performance describes the location of the journey. Meaning that studying vocal performance is a journey and the level of performance describes the location of the journey. Implying that studying vocal performance (which requires the knowledge and the use of instructional knowledge model and the application knowledge of the operation of the human organs) is a journey learners embark on and their perfection or quality in performing musical pieces is based on the in-depth of their knowledge and skills they have acquired. This theory is composed of axioms and foundational ideas; which include—context of performance, level of knowledge, levels of skills, performer's mind-set, and immersion in an enriching environment and engagement in reflective practice. These are important facets of vocal performance teaching and learning in senior high schools. The teacher needs to direct and engage voice students' mind-sets in a positive emotional state of the study pieces and as well engage them with performance activities and exercises. Thus, either by demonstrating the usage of vocal mechanisms of quality tone production. Modelling or playing solo vocal audio-visuals for the students and also asking and encouraging them to perform their study piece(s).

Through this, the students would be able to reflect on every performance or activities during a performance to improve themselves and develop their personal performance uniqueness. For the students to have a high level of performance, they need to be immersed in physical, social and intellectual environments that can elevate their performance and enhance personal and professional development.

Reflective practice according to Elger, entails behaviours that encourage people to reflect on or pay attention to and absorb lessons from their experiences. He postulates that the axioms and the foundational ideas are the cornerstone for performance improvement. Theory of performance, Myoelastic-aerodynamic theory and the instructional knowledge model therefore, have bearing on my study with the fact that theory of performance integrates series of activities which incorporate vocal mechanisms with airflow (aerodynamic) and the knowledge (music teacher's acquaintance in the various aspects music and the skillset) to produce an excellent result. This is all that vocal performance teaching and learning in senior high school must attain. Therefore, directing vocal performance with the axioms and the foundational ideas needs the teacher's knowledge, skills and approaches/strategies for the best result.





*Figure 1: Vocal performance education*

Source: Designed by Jennifer A. Adjahoe

### Summary

In summary, this review centralizes on senior high school teaching and learning of vocal performance studies of the students as it equips, directs, and boosts the vocal production of the students in their various musical performances both during and after senior high school.

The characterization of the review was made under the following; development of vocal performance, instructional practice in vocal music education, vocal warm-up, repertoire selection, vocal music presentation, the effect of piano accompaniment on solo vocal performance, obstructing factors in vocal performance skills, and assessment influence on vocal performance.

Performance studies in the music syllabus was directed to be studied taken effect from the first year precisely the first term of their academic calendar during which students are obligated to select their various instrument of study and it is at this stage that voice students learn the basics of singing

which enables them to perform simple tunes and pieces. However, this direction does not happen as each senior high school introduces performance studies at different levels in the course of the duration of the studies in senior high school. For the purpose of examination in performance studies, students are categorized under various kinds of voice ranges (soprano, alto, tenor and bass). Despite this categorization, the teachers without any consideration of the student's voice range selects normally two pieces of the voice categories which might not necessarily suit the voice of the student. Thus, this study seeks to explore the in-depth of teacher preparation of students for the purpose of the West African Senior School Certificate Examination.

In the history of vocal music performance, the prior has served various functions such as sacred, secular and outdoor entertainment. There are four essential vocal qualities which have been emphasized by vocal performance teachers; perfect intonation, good breathing technique, clear enunciation of words and proper text expression of the lyrics (Brown & Sadie, Eds 1989). The history of singing voice training goes as far back as the 4th century when minimal information is provided as to the techniques which were used in training the singers. Vocal performances were also limited to church worship and singers were only ordained to lead worship services. From the 16th century to the 19th century, vocal performance instructors such as Antonio Bernacchi and Nicola Porpora believed that singing is erroneous when a performer frequently and untimely breathes within phrases or words. Students of performance studies were not allowed to practice any piece on their own, rather they were encouraged to do so with the instructions of the teachers in

order to build trust and maintain a solid singing technique based on the structured vocalization system.

In recent times, there has been a shift in the way teachers teach singing as they have changed to meet the demands of their students which conventional singing knowledge, florid singing, excellent intonation, appropriate breathing technique, clear diction and accurate textual expression remain unchanged. In the 21st century, the use of technology has taken over, thus teachers no longer assume that only one way is the best way to learn how to sing but teachers now base their knowledge of vocal mechanisms over centuries of scientific inquiry.

For the purpose of training the students to perform to the accepted standard of formal music education, there has to be awareness of the fundamental approaches of teaching vocal performance. Jorgensen and Davidova expressed that the high level of knowledge of the teacher in instructing the student would boost the teacher's self-motivation and effectiveness in directing and modelling the students confidently but Ryan contrary suggested that if the teachers background in teaching vocal performance is weak then the objective of handling the students with practical oriented skills would be devastated.

Research shows that there are various modes of teaching vocal performance; mechanistic pedagogy- which relies on scientific references whereby direct control is utilized for the actual exertion to change voice production. The mechanistic pedagogy is objective and thus requires demonstration-imitation exercise. The holistic pedagogy deals with the usage of mental imagery to elicit a positive response from students indirectly. The third approach which is eclectic pedagogy, concerns with not only the sound

production but also, about the elements of singing and how the manipulated organs create the appropriate sounds and this approach is used by most vocal performance teachers. Similar to these approaches, Woody suggests other strategies in the expressiveness of music performance only the terms differ.

The strategies include verbal teaching (holistic pedagogy), verbal teaching explaining concrete musical properties (mechanistic pedagogy) and aural modelling which is directed to the teacher's demonstration of the song(s) or playing professional performances in class for students to observe for a better understanding of the art of singing and thereby develop a positive response.

In vocal performance, the basic important concept for a vocalist to incorporate into their technique is proper body alignment that is the effect of the production of sounds based on how the singer, poses themselves in the act of singing. Brisbane expressed that dependent on the body alignment of the performer, causes tension which enables them to connect to their diaphragmatic energy. For the fulfilment of the fundamental functions and the respiratory muscles to work efficiently without interference, the body has to be well balanced and this does not only concern with only the upper part of the body but also the lower part of the body.

In vocal performance studies, vocal pedagogues recommend singers just like athletes warm up before any vocal performance. Research has proven that students learn in different ways and respond to different stimuli. During the warm up activities, the body introduces the brain to a healthy and effective desirable vocal performance practice. Having a good posture ensures the breathing muscles the freedom to operate without any interference from the sound the singer wants to produce. There are therefore various modes to the

teaching of vocal performance. The ability of the teachers' knowledge of these approaches and how to employ them efficiently during instructions would positively impact individual voice student's learning.

Time allocation in an institution goes a long way to aid the teaching and learning of the subject. Instructional concerns with the amount of time period which is utilized for teaching and learning activities where students are engaged in the classrooms. In senior high schools in Ghana, instructional time for vocal performance studies varies in each school. It is obligatory for teachers to have instructional time for vocal performance but a large number of teachers do not follow the prescribed weekly timetable. The introduction of students to the various areas or aspects of a subject at a stipulated time as well as even distribution of instructional time among the various aspects involved in the subject is important for quality academic achievement.

The art of solo vocal performance is more than just reciting what is written on a music score. It is essential for the learner to reflect on both the activities he or she experienced in voice class and musical pieces at hand, and be able to immerse themselves in the grip of any emotional condition that the words and the music expresses. Lisboa in her case study realized from one of the three various performance teaching and learning strategies-self-guidance learning, teacher-directed learning, multimodal learning with singing and contextual discussion- that students who were not given unequivocal instruction did not understand performance directives of their pieces. The enjoyable stage of a musical presentation is the performer's personal interpretation of the music, which demonstrates their understanding of the composition in relation to the message that the composer might have intended

to portray in the piece Baker (1980). Thus, the presentation is what determines what the audience would expect or enjoy hearing.

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Selection of repertoire is an important component of instructional process in vocal performance studies music education. Every vocal music has its own level of challenge when it comes to singing. The appropriate rate selection of repertoire to match the individual student's voice change depends on the range of the musical piece(s) and the student's vocal tessitura. Repertoire helps develop efficient vocal techniques and also instils expressive communication skills in music performers.

Performing a piece of music to affect listeners depends on the performer's ability to own the song through the understanding of the texts in

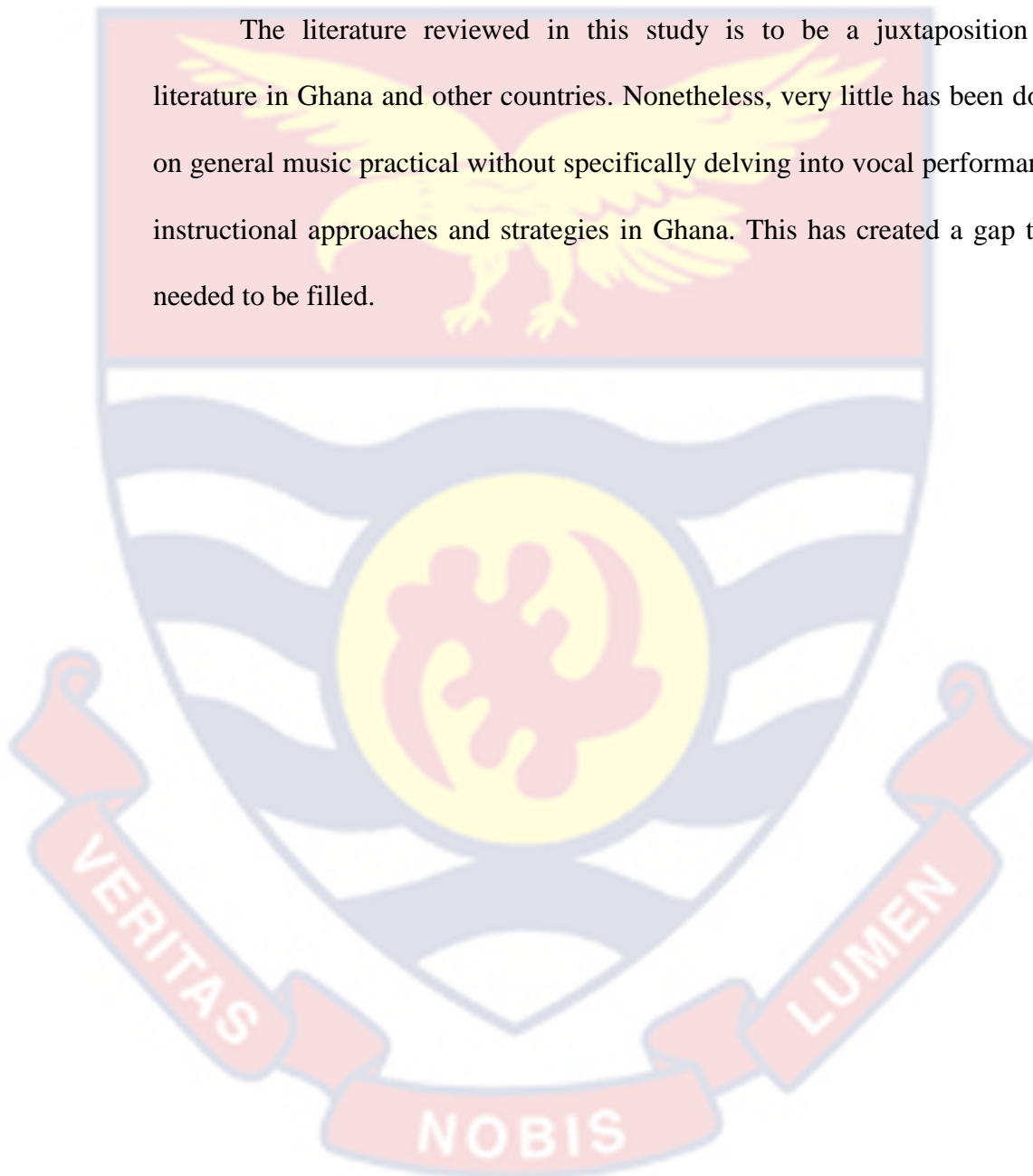
the song, discovering the hidden in the words and connecting oneself to both words and tune. It is essential for voice students to understand every word in the song they are assigned to study and perform.

In art music, the piano accompaniment is in collaboration with the soloist in bringing out the artistic creation through the execution and fulfilment of the musical performance. Performing with instrumental accompaniment creates confidence in the soloist with the fact that before the soloist produces the first pitch, the accompaniment set the tonal center and pace. In the instances where there is a key change, the accompaniment set up the changes and directs the soloist clearly to the pitch in the new key. Accompaniment section serves as a reference point for the soloist on the appropriate time to set in with the singing. Practicing musical pieces with any form of accompaniment may benefit students in the music learning process by helping in gaining a better understanding of the piece as a whole, thus enhancing all aspects of the performance.

Students voice assessment of their performance skills acquisition and development are important in music education. External assessment evaluates what students have studied in the course of their academic pursuits. A well-defined assessment content can be used in support of classroom-based assessment to inform the students on their learning and mode of answering questions. Despite the existence of external assessment content, teachers who are aware of the fact that students' musical behaviour can be changed by implying aims and objectives of the syllabus, and instruct their students according to the expected standard. One of the aims of the syllabus is to aid the students to perform well as a soloist and as members of the ensemble.

Based on scholars' claims that teachers' reliance on the assessment content makes teaching and learning more understandable thereby grants students' performance excellency, calls for research into vocal performance teaching and learning in senior high schools.

The literature reviewed in this study is to be a juxtaposition of literature in Ghana and other countries. Nonetheless, very little has been done on general music practical without specifically delving into vocal performance instructional approaches and strategies in Ghana. This has created a gap that needed to be filled.





## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction

The intent of my study is to investigate vocal performance teaching and learning in senior high schools in Cape Coast Metropolis in order to evaluate the music teachers' instructional decisions influencing the selection of musical pieces, and students' learning and acquisition of performance skills. First, I observed Additionally, I will analyze the criteria for WASSE's vocal performance examination.

In this chapter, the various methods and procedures I followed in carrying out the study have been systematically discussed. Hence, I have organized the chapter under the following sections or sub-headings: research design, population description, sample size estimation, sampling techniques, data sources, research instrumentation, validity and reliability of instruments, procedure for data collection, ethical considerations, and data analysis plan.

#### Research Design

Research design denotes the techniques underlying the use of various methods for undertaking research that ensures that high-level reliability and validity are attained Levy and Lemeshow (2013). A study design is a detailed master plan of the research project to be carried out, including a general description of the techniques to employ. The task of the research design is to ensure reliable and cost-effective collection of the required data on the basis, of the problem at hand. In simple terms, it is a structure, a blueprint, for a research study, that directs data collection and analysis. The design may be a very thorough description, depending on the researcher's needs, or may

include only the basic information needed for the research planning Punch, Creed, and Hyde (2006). In his contribution, Trochim (2006) opined that research design serves as a framework that binds the research together. The study design defines how subjects are chosen, what variable is used, how extraneous variation is managed to solve research questions and how data is collected and analysed.

The research design suitable for my study is a mixed-methods design. Precisely, convergent design. This design according to Saunders, Lewis, Thornhill (2007) and Creswell, (2003; 2018) focuses on collecting both quantitative and qualitative data rigorously within a single research study. Creswell and Clark (2018, p.5) and Jupp (2006) relying on the core characteristics of mixed methods convergent design within the social and behavioural sciences, describe it as a design in which the investigator, in a single study, collects both quantitative and qualitative data in response to research questions, hypotheses, and analyzes both data thereby enabling an in-depth understanding of a problem. These two types of data collection are concurrent but typically, separate. This implies, one does not depend on the results of the other. There is substantial evidence that mixed-methods research helps overcome the shortcomings of a study that relies solely on quantitative or qualitative methods Creswell and Plano Clark (2011; 2018). Besides, Jogulu and Pansiri (2011) suggest that with this method, researchers can minimize their over-dependence on a single statistical method for gathering and analyzing data to explain a social phenomenon that is largely subjective. I am analyzing and mixing both data concurrently for better responses to research questions and hypotheses.

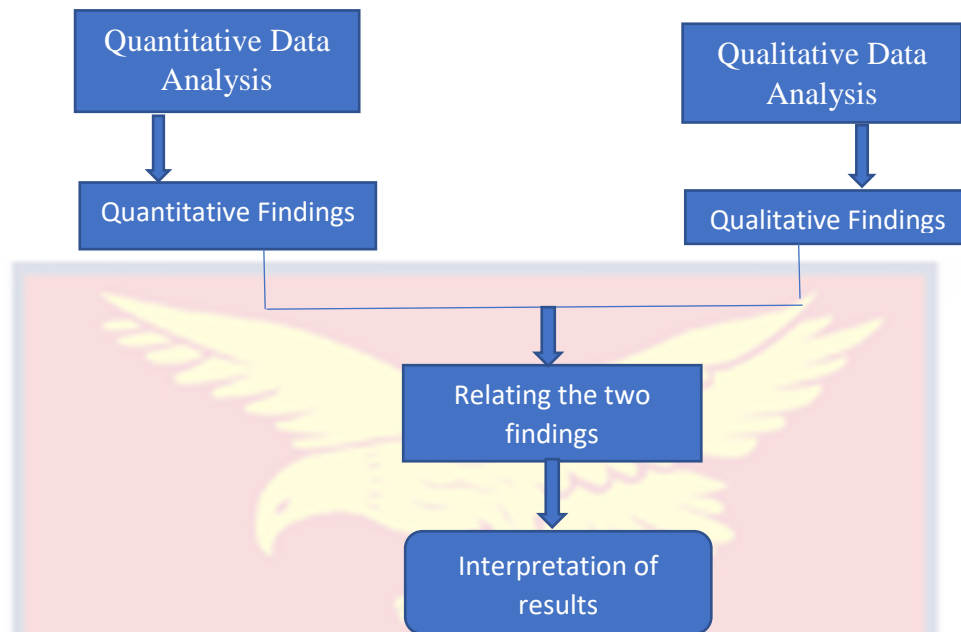
According to Creswell, (2002; 2009; 2012), a quantitative study provides the researcher with numerical data. I need numerical data on the instructional approaches the teachers used in training the students, and also, the process of selecting voice pieces for the students. The success of teaching and learning depends on the appropriate choice of approaches and mode of instruction. I employed post-positivist ideas and make claims for knowledge based on a cause-and-effect thinking. Hence, I am looking for cause-and-effect thinking on the specific period in which the students were introduced to vocal music performance learning; when vocal pieces for final year examination are assigned to the students; and how often they rehearse their musical pieces for the examinations.

Moreover, it is established that in quantitative research validity and the reliability of the collected data can be measured. Johnson and Christensen (2000). Alternatively, qualitative research is a study in which the inquirer explores to gain a deeper understanding of the complexity of a phenomenon. He or she develops “protocols” for recording data as the proceeds, and enquires generate broad questions for the participants to open up on their experiences to him/her. The data consists of words. Qualitative researcher relies on constructivist approaches and conducts a study in a natural setting. He/she analyzes the words, describes the information and develops themes Creswell (2002, p. 54-55). The analysis includes the teacher’s instructional approach, factors hindering students’ acquisition of vocal performance skills, the process of selecting vocal pieces, and contribution of WASSCE criteria on teaching and learning of vocal performance and the personal reflections of the researcher and past research on students’ attitude towards singing and choral

participation. There is evidence that qualitative research methods provide interesting and extremely detailed insights based on subjective interpretations of contextual events experienced in the phenomenon. I integrate the two data—qualitative and quantitative—at the analysis and report stage for in-depth understanding of the study problem.

Mixed methods convergent design though complex, allows for the limitations of both approaches to be neutralized while strengths are built upon thereby providing stronger and more accurate inferences Bryman (2008); Creswell (2003); Johnson and Onwuegbuzie (2004); Creswell, et al. (2003). Mixed methods researcher employing convergent design, engages in a pragmatic worldview to make claims for knowledge. She believes that reality is found in the environment and can only beget through human experience Tashakkori and Teddlie (2008). Pragmatism embraces both deductive and inductive reasoning and uses research design and methodology that is most appropriate to address the research question Morgan (2007).

Designing a convergent mixed-methods project is a difficult task. As a result, I used the main concept to identify whether the design is "fixed" or "emergent" in order to traverse the process of selecting, visualizing and performing a mixed methods study Creswell and Plano Clark (2018, p.52). This study used a 'Fixed mixed-approaches design,' which means that the employment of quantitative and qualitative design methods was decided and planned from the start, and the processes were carried out as I planned.



*Figure 2: Flow Chart for the Research Process of this Project Using the Convergent Mixed Methods Design*

Source: Designed by Jennifer A. Adjahoe

### **Study Area**

Cape Coast Metropolis is my study area. It covers an area of approximately 122 square kilometers and it is an urban area. It was raised to the status of municipality in 1987, and upgraded to metropolitan status in 2007. This Metropolis is one of the twenty-two districts in Central Region, Ghana. The communities surrounded by Cape Coast Metropolis are to the west by Komenda Edina Eguafo Abrem Municipality; to the east by Abura Asebu Kwamankese District; to the North by the Twifu Heman Lower Denkyira District and to the south by Gulf of Guinea Population and Housing Census (2010). There are nine (9) senior high schools in the Metropolis and are made up of three (3) boys' schools, two (2) girls' schools and four (4) mixed schools.

### **Study Population**

The population under this study comprise of all private and public senior high schools offering music in Cape Coast Metropolis. There are nine (9) public senior high schools (SHS). This is made up of four mixed senior high, three boys' senior high, and two girls' high schools. Out of the nine schools, two are not offering music. The number of private senior high schools in the Metropolis is three but all are not studying music. I therefore, concentrate solely on public senior high schools in the Metropolis. The accessible population however, includes music students in forms one to three as well as the teachers.

### **Sample Size**

A sample as defined by Johnson and Christensen (2014) is a subset of measures drawn from the population to serve as the medium of inference for the entire population. Baltes and Ralph (2020) posit that examining the entire population to arrive at a generalization is usually impractical. On the other hand, Creswell (2002, p.168) states that the larger the sample size, the smaller and insignificant the difference of the result. Using a large sample implies the use of powerful statistics in which the results from the sample can be generalized to the population Creswell (2002 p.168). It becomes more convenient for a researcher to select and study a subset of the population by attempting to estimate a population parameter by statistically analyzing the sample for inference and generalization. Accordingly, I employed a maximum variation sample size of one hundred and forty-four (144) students, five (5) teachers across the four (4) senior high schools selected for the study and three WAEC examiners and a Chief Examiner. The fifth teacher whom I named

‘teacher E’ teachers in the same school as ‘Teacher A’ and therefore assists in teaching vocal performance study. The number of music students offering vocal performance studies in the selected schools differs. I involved all the voice students from the four selected schools in the study. The ages of the students are 13-23years.

### **Sampling Procedure**

Sampling according to Blair and Blair (2015) is the act of choosing a predetermined number of individuals from a target population to characterize that entire population. In other words, sampling as per Salkind (2010) is when a researcher selects a subset of respondents from a larger collection of targeted respondents for a research study and then utilizes results obtained from the selected respondents to generalize inferences to the entire larger population.

Consequently, this study employed both random and non-random sampling technique, precisely stratified and simple random sampling, and purposive techniques in choosing a school and participants (students and teachers) for the study respectively. Also, convenience sampling is utilized in selecting WAEC examiners. Johnson & Christensen (2000) refer to convenience sampling as a sampling technique where the researcher chooses participants who are readily available, easily recruited, or willing to take part in the study. Stratified sampling is a sample selection method in which the elements of the population are first divided into a non-overlapping group, called strata, and then simple random sample from each stratum is selected McMillan (2000). Simple random sampling according to Baltes and Ralph (2020) refers to the selection of items entirely by chance, such that each item has an equal chance of inclusion. I wrote numbers ranging from 1 to 7 on

pieces of paper, folded and placed them into a dark container. I invited six people including myself making seven to represent the seven senior high schools offering music in the Metropolis. I utilized schools that selected odd numbers for this study. On the other hand, purposive sampling is a method whereby the researcher intentionally chooses a participant because of their qualities in relation to the aim of the study Lavrakas (2008). I employed purposive sampling in selecting all voice students and music teachers from the selected schools because this study focused on vocal performance teaching and learning hence, necessitating the purposive choice of the teachers and all voice students for the study.

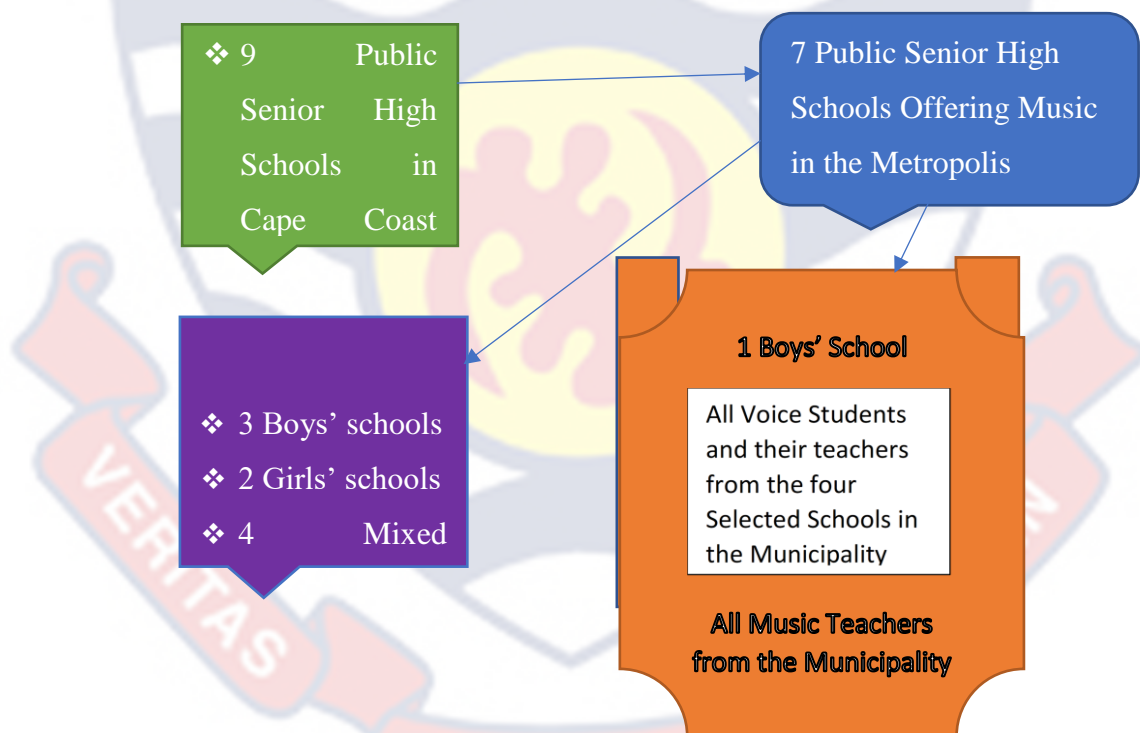


Figure 3: Flow Chart of the Sampling Procedures

Sources: Constructed by Jennifer A. Adjahoe



### **Sources of Data**

Data for the study was sourced directly from a primary source. In specific, the primary data was sourced from voice students and their teachers, and West African Examination Council (WAEC) examiners using questionnaire and interviews. The primary data source according to Salkind (2010) is an original data source, that is, one in which the data are collected first-hand by the researcher for a specific research purpose or project.

### **Data Collection Instruments**

A data collection instrument as per Mosweu and Mosweu (2020) is tools employed by researchers in collecting data to compute the objectives of a research. The commonly used instruments for data collection are questionnaire, interview, field notes, and observations.

Consequently, my study relied on the use of questionnaire, interview, and observation and field notes as its main data collection instruments to collect its information on vocal performance studies teaching and learning. These instruments are briefly explained below on how they were structured. Final year students' vocal performance examination was video recorded and scored by four "WAEC" Examiners to fulfil the teacher-student approach/techniques to teaching and learning.

### **Questionnaire**

According to Jupp (2006), a questionnaire is a set of meticulously prepared questions presented to a group of research participants in basically the same way in order to gather data about some subject(s) in that are of interest to a researcher. Lavrakas (2008); Cheung (2014) on his part defines a questionnaire as a set of well-defined questions, known as items, that follow a

predetermined pattern to collect independent data from respondents on one or more subjects.

The questionnaire has six sections: section one examines the demographic profiles of respondents whilst section two explores the instructional methods used by senior high school music teachers in training voice-students. Besides, the section three sought for the factors that impede the acquisition of vocal and performance skills by senior high school voice students, whereas section four investigates senior high school music teachers' process of selecting songs for their students. Furthermore, section 5 evaluate WASSCE's criteria for assessing vocal performance. Yet still, the sixth section of the questionnaire sought the difference in the performance of students who have prepared to perform with piano accompaniment compare to those who have not prepared to sing and with accompaniment.

### **Interview**

Interview is the oral conversation between two people with the objective of collecting relevant information for the purpose of research. Monday (2019) defines interview as a well-regulated process seeking and listening to individual people for information. Interview as recommended by scholars, is one of the appropriate sources for qualitative study. Johnson and Christensen (2000); Jupp (2006). A researcher has a list of issues/objectives and questions of a study to achieve. Therefore, attaining the objectives of a study David and Sutton, (2004) recommended open-ended interview with a guide or plan that would help cover all relevant areas of the study topic and keeping the interview within the parameters of the study. Hence, I employed open-ended interview for the qualitative data.

Open-ended interview involves conducting intensive “tête-à-tête” interrogations with research respondents to learn more about their viewpoint on a certain concept, plan, or circumstances. Additionally, Alshenqeeti, (2014); Johnson and Christensen (2000) assert that this interview type permits a researcher to cross the threshold and enter into the inner world of a research participant to gain understanding of the respondent’s perspectives. In addition, open-ended interview allows the participant to provide personal experiences that may be beyond those identified for example in close-ended options Johnson and Christensen (2000). Again, an open-ended interview demands the interviewer’s close attention since he/she serves as the repository of detailed information during the interview. Since I conducted the interview alone, I paid extra attention to every response. As David and Sutton, (2004) expressed, when interviewee needs to provide more detail or clarification on an issue, the researcher must utilize probes/prompts. Hence, any follow-up questions that emerged I addressed them immediately. For example, the response to the question “How do you teach your voice students their musical pieces?” naturally emerged a follow-up question. Inquiries that would naturally arise during qualitative interviews should be followed up with an appropriate question. I consulted related literature to prepare an interview guide that focused on vocal performance studies teaching and learning. The interview questions were directed at securing answers pertaining to the research questions and the objectives of the study.

An in-depth interview was conducted on five teachers from the four selected schools. One of the selected schools has two music teachers. Upon their acceptance to participate in this study, I involved them in the interview.

Securing enough in-depth data in answering research questions three, four and five, I contacted three WAEC music examiners and the Chief examiner. I discussed and explained the purpose and significance of my study with them. I pleaded with their indulgence and engaged them in one-on-one open-ended interviews.

An interview needs to follow a plan or a guide to enable the researcher to collect data covering the needed topics. Bird, (2016) defines an interview guide as a list of essential topics an interviewer plans on covering, based on high-level questions that he/she wants to be answered under each topic. These questions are provided on an interview protocol written by the researcher before the interview session. To ensure that I have sufficient and important questions covering all the research questions I designed an interview guide for participants' responses and clarification. Johnson and Christensen, (2000) indicate that the interviewer does not have to follow the topics or questions during the interview in any particular order. He or she is at liberty to change the wording of any questions listed in the interview protocol. Nevertheless, must cover the same general topics and questions with all of the interviewees. The interviewer must try to keep the interview on track bringing the respondent back on course when he or she goes off on a topic that is unrelated to the subject. I used a Sony IC recorder for the interviews. I recorded and documented responses from participants to complement information from other data-collecting instruments.

The interview is focused on six sections for the teacher respondents. While the examiners' interview is centred on five sections. Section one

concerns the demographic information of the teacher participants and examiners. The

second part is directed to the teachers only and it examines the teaching strategies employed by senior high school music teachers while instructing voice students. In addition, the section three is tailored toward the teachers and examiners with the view to investigating the factors hindering the development of senior high school students' vocal and performance abilities. However, the section four addresses the process of choosing examination songs for the students by the examiners and the teachers. In addition, drawing attention to assessment criteria, the section 5 analyzes WASSCE's criteria for assessing vocal performance. The last section sought the difference in the performance of students who have prepared to perform with piano accompaniment compare to those who have not prepared to sing and with accompaniment.

### **Observational Guide**

Observation is a subjective data collection method that requires collecting information on research participants without asking questions (McMillan (2000); Walshe et al (2012); Cowie (2009)). To obtain "first-hand" information about vocal performance teaching and learning in senior high school, I carried out qualitative observation. Scholars indicate that qualitative researcher pays attention to everything that is relevant to his or her research questions; also, the most useful styles of observation involves observer-as-participant and participant as observer. These allow the voluntary consent by research participants and permit the research to take on a blend of the insider and outsider's role. In terms of observer-as-participants, the researcher

interacts with participants less frequently and for shorter periods of time, assuming the position of observer rather than participant which makes it easier for the researcher to maintain neutrality and objectivity. In addition to attending one or two classes and negotiating to faculty meetings, he or she may also conduct one-on-one interview with participants. Regarding participant-as-observer, the researcher spends extended time on the field participating and observing and collecting data as needed. Hence, I participated in the schools' choir rehearsals/mix choruses.

To obtain vital information about this study, I observed vocal performance classes in the selected school for one month on the phenomenon of interest for the fact that people do not always practice what they say they do. According to Johnson and Christensen (2000), the researcher's ability to record actual proceedings instead of obtaining reports of preferences or intended behaviour is the advantage of observation. Secondly, that I can address pertinent research issues, I used Samsung Cam Coder (audio-visual) supported with Sony IC Recorder for the observation class.

Three out of the four selected schools meet for vocal performance studies class once a week while the fourth school, meet twice a week for performance studies class. I was always punctual for vocal performance classes in the schools so as not to miss any activity in the performance classes. It is important to edit any notes written during observation as early as possible so that essential details are not forgotten Shaffir and Stebbins (1991). Hence, after each observation, I played back the video recordings several times and compared the recordings to the notes taken on the field to incorporate pieces of information that were not captured in the notes. As a result, the

observational notes informed the items to include on the questionnaire and the interview guide. Field pictures are located at appendix.

### **Pilot Study**

The term pilot study refers to a “mini-scale or trial test” usually done in order to “try out” a research instrument towards a major study Levy and Lemeshow (2013); Johnson and Christensen (2000). One of the reasons for pilot testing ones’ research instrument, is that it informs whether the proposed instrument or method is complicated or inappropriate, and where the main research study could fail Levy and Lemeshow (2013). The pilot test is also to help reveal ambiguities and poorly constructed questions. To ensure the simplicity and explicitness of the content of my instrument to draw meaningful and justifiable inferences about this study, I conducted a pilot study. Johnson and Christensen (2000) ascertain that participants for the pilot test must be similar to those for the main study and the number of participants should not be less than five (5). This pre-test was undertaken on senior high school voice students in one of the senior high schools in Cape Coast metropolis. The number of participants for the pilot test was twelve.

A combination of closed and open-ended questions was involved in the questionnaire. Open-ended questions permit individual participants’ responses. The pilot study also offered the researcher an opportunity to identify and restructure some few items on the questionnaire. Whereas closed-ended questions make room for the participants to select their responses or answers from a number of options. Consequently, a number of responses were stated. Problems that could have been encountered in the main study such as ambiguity in the structuring and wording of the test items. The pilot test

helped me to determine the questions that the initial individual respondents did not understand. Hence, the necessary corrections to the questions before the main study were done. Besides, the suggestion from respondents and my supervisor prompted alterations in the structure and content of the instrument. This confirmed Kumekpor's (2002) assertion that the pilot test's result may lead to a restructuring of the questionnaire for the main study of which the pilot study was carried out.

### **Validity and Reliability of Instruments**

According to Kimberlin and Winterstein (2008), the evidence of validity and reliability in research are prerequisites to assure the integrity and quality of a measurement instrument. Validity as defined by Bryman (2008); and Johnson and Christensen (2000) refer to the extent to which a measure adequately represents the underlying construct that it is supposed to measure. Therefore, to ensure validity and make the instruments relevant to the study, the instruments were subjected to colleagues at the Department of Music and Dance of the University of Cape Coast, Cape Coast for scrutiny and expert views for necessary inputs and corrections from my supervisor. Indeed, their comments were considered for the review of the questions. They pointed out some ambiguity in the wording of the questions; this helped in fine-tuning the items in the questionnaire.

Reliability on the other hand sought to address the issue of whether the instrument used in the data collection would produce the same results each time it is administered. Creswell (2012) defined the reliability of a measuring instrument as the extent to which the results are nearly the same when researchers administer the instrument multiple times at different times. The



use of a pilot study, according to Fraenkel and Wallen (2000), is one way of ensuring that the items on a questionnaire measure what it is meant to measure and also that the wordings in the questions are explicit and that vague questions are avoided. Consequently, the reliability of the questionnaire was ensured by carrying out a pilot test of the instrument.

The result from the pre-test was used to determine the reliability of my instruments with Cronbach's alpha measure of internal consistency. The obtained over all reliability coefficient was 0.771, indicating that the instrument was reliable (see Appendix).

#### **Data Collection Procedure**

I delivered an official letter written and signed by the Head of the Department of Music and Dance, University of Cape Coast to the Metropolitan Educational Director, Cape Coast, to seek permission to conduct the study in the metropolis. After the permission was granted, I visited the four selected senior high schools in the metropolis and gave out copies of the introductory letter concerning the study to the headmasters/headmistresses.

I explained the purpose of the study to the headmasters/headmistresses. Each headmaster/headmistress in turn invited the music teacher(s) to the office and introduced me and also inform him/her about my study. After the introduction, we all decided on the date for the commencement of the vocal performance class observation as well as the administration of the study questionnaire. It was agreed by the headmasters and headmistress of the four schools that I administer the questionnaire after the last lesson period on my last day of vocal performance studies observational class. After permission was granted, I met with the participants and explained the purpose and nature

of the study to them. I took the participants through the Institutional Review Board (IRB) informed consent form and had their signatures. I sent copies of the consent form to the parents of the participants for approval of their child/ward's participation in the study.

The number of days vocal performance study is organized within a week differs from school to school. Three of the selected schools organize their vocal performance studies class once a week while in the fourth school, it is organized twice a week. The first school I visited— “School C”—had a mixed chorus rehearsal the previous day before the vocal performance studies class. I took part in this rehearsal to associate myself with the students. I sang the tenor part and the teacher and his students were so happy about my performance.

Performance studies classes were not organized at the same period in all the four schools. Two schools had it on the same day but at different periods; while the remaining two schools had it on different days and at different periods. Although the teacher in the fourth school declares he organizes performance studies twice a week, I have realized that he alternates vocal performance with other instruments' studies.

On my first day in vocal performance studies class in each of the schools, I established rapport by briefly introducing myself and informing them about the importance of singing and the purpose of my study. My last observation class with school 'D' was disrupted by an emergency meeting the school held with Ghana Education Service persons. Therefore, I rescheduled a date for administering of the questionnaire and interview with the teacher.

At the proposed time on the last day of performance observation class in school A, B, and C, before the distribution of the questionnaire to the participants, I established my usual rapport by introducing myself and also describing the need for the study to the participants. After the distribution of the questionnaire, I read through the questions and explained the terms that the participants were not familiar with before allowing them to answer the questionnaire. While the students were responding to the questionnaire, I conducted an interview with their teacher. This activity lasted for 30 minutes. Table 1 below indicates the various dates and days I observed vocal performance studies in the schools. My last day in school D was wasted.

**Table 1: Observation Days and Dates**

Week	School A	School B	School C	School D
<b>Week One</b>	February 5 <sup>th</sup> 2021 Observation: 16min	February 9 <sup>th</sup> 2021 Observation: 20min	February 5 <sup>th</sup> 2021 Observation: 15min	February 10 <sup>th</sup> 2021 Observation: 10min
<b>Week Two</b>	February 12 <sup>th</sup> Observation: 20min	February 16 <sup>th</sup> 2021 Observation: 16min	February 12 <sup>th</sup> 2021 Observation: 20min	February 17 <sup>th</sup> 2021 Observation: 8min
<b>Week Three</b>	February 19 <sup>th</sup> 2021 Observation: 30min	February 23 <sup>rd</sup> 2021 Observation: 20min	February 19 <sup>th</sup> 2021 Observation:20min	February 4 <sup>th</sup> 2021
<b>Week Four</b>	February 26 <sup>th</sup> 2021 Observation: 52min	March 2 <sup>nd</sup> 2021 Observation: 20min	February 26 <sup>th</sup> 2021 Observation: 30min	March 11 <sup>th</sup> 2021

### Data on Performance Test

To answer my research question two—what is the difference in the performance of voice students accompanied by piano and voice students not accompanied by piano—on June 5 2022, I delivered an introduction letter to the Chief Examiner in Accra and discussed the study with him. I then sought permission to take a video on vocal students' Performance Test examination in August 2021. On the 15<sup>th</sup> of August 2021, which was a day before the examination, the Chief Examiner informed the examiners in charge of Cape Coast Metropolis examination centres about my studies. After the performance examination, I contacted four examiners from WAEC to assess the performance of the students' videos. Upon their acceptance, I sent the videos of the vocal performance students including copies of the assessment criteria based on the West African Examination Council (WAEC) to them through their email. Each student in the performance video is assessed by the four examiners.

Using the Statistical Package for Social Sciences (SPSS) version 22, the data obtained from the questionnaires were analyzed. Creswell (2018) asserts that quantitative raw data be converted into a form useful for data analysis by scoring and assigning numerical values to each response, creating special variables thus, recoding items from the instrument. I fed the quantitative data into the SPSS software following the structure of the questionnaire. The demographic section was fed into the software using D1, D2, D3, and D4 as labels to represent the name of the school, gender, age, and level. The data analysis was conducted following the research objectives set for this study. The items under the first research objective were keyed into the

software using the labels IM1, IM2... (n + 1) to represent the items. The items under the second research objective were keyed into the SPSS software using the labels F1, F2, F3.... F (n+1). The items under the third research objective were keyed using the labels PSV1, PSV2, PSV (n+1). Items under the fourth objective were keyed using the label CVP and the items under the fifth research objective were keyed using the label PD. Apart from one variable being measured with a scale, the rest of the variables are all measured with a nominal scale. The data are rated in numerical form. The characters' width is 8 and the decimals are zero (0). I used descriptive statistics (frequencies and percentages) to explain the responses of the questionnaire items as shown by the respondents.

Having read through the observation and field notes carefully and repeatedly, and develop themes. I analyzed the data to have first-hand knowledge of the approaches the teachers used in directing vocal performance students and to see whether my observation confirmed the teachers' self-report in the interview. I believed these themes guaranteed more in-depth discussions.

The Interview data I collected from both music teachers and the examiners were transcribed word-for-word. For the purpose of accuracy, I made sure to read through each sentence I transcribed. During the transcription of the interview data, I created a margin for the emerging keywords. I read through the transcriptions for the first time like a novel. Whilst reading through for the second time, I immersed myself into the transcriptions, by reading every word at a moderate pace and with care and accuracy. The reading gave me a general sense of information to reflect on the general

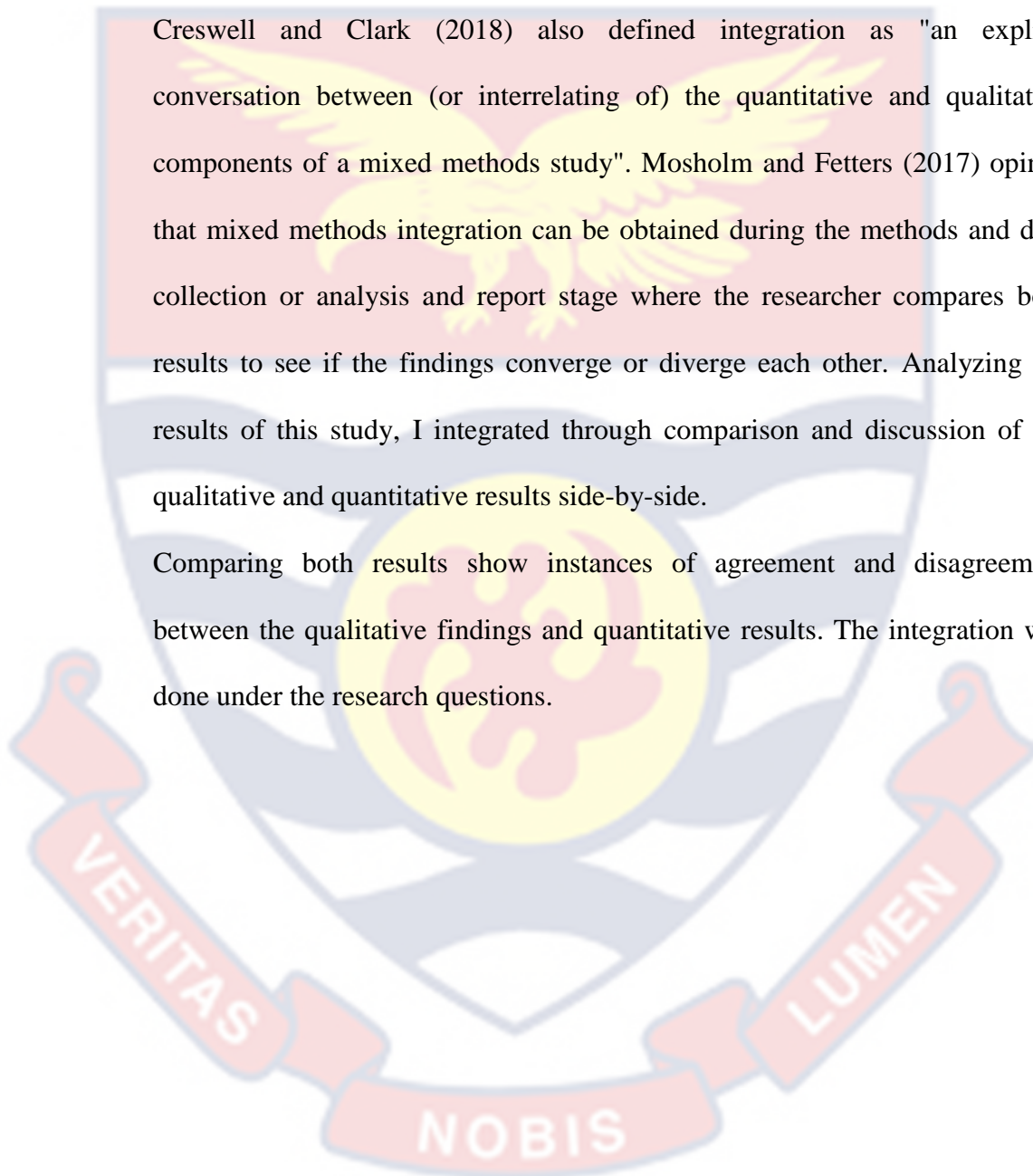
meaning. The interview and observation transcriptions are included in the Appendix.

I employed content analysis for the interview data. According to Schreier (2012), one of the many qualitative techniques currently accessible for studying data and deciphering its meaning is qualitative content analysis. Kleinheksel et al. (2020) also posit that content analysis uses little pieces of data that reflect key concepts to detect and analyze meaning in recorded forms of communication. Kleinheksel et al. define a code as a word or short phrase that symbolically assigns salient, essence-capturing and or evocative attributes for a portion of language-based or visual data. The pieces are then applied to describe or explain a phenomenon. During the readings, I generated codes and themes. The following, are the codes that emerged from the interview transcriptions: (a) skill and talent development, (b) recordings and technical exercises, (c) demonstration, (d) vocal warm-ups, (e) appropriate pitch and voice production, (f) scale singing, (g) analyze and sight-read, (h) voice ranges, (i) singing ability, (j) once a week, (k) one hour, (l) accompanied, (m) perform unaccompanied, (n) encouraged, (o) preparation toward the examination, (p) appropriate pieces.

According to O’Cathain et al (2007), researchers can gain knowledge or insights, which are not available to qualitative or quantitative projects undertaken independently by intentionally integrating the data. In support of O’Cathain et al, assertion, Creswell and Clark (2018) emphasized that the goal of integrating both quantitative and qualitative data analysis in a convergent design is to produce findings and interpretations that deepen comprehension and yield a comprehensive outcome. He further highlighted that to accomplish

this intent, a researcher may merge the results by comparing the two data sets or by transforming one of the data sets and conducting further analyzes. Integration, therefore, is defined as a means by which researchers combine qualitative and quantitative data Creswell (2015). In their contribution, Creswell and Clark (2018) also defined integration as "an explicit conversation between (or interrelating of) the quantitative and qualitative components of a mixed methods study". Mosholm and Fetters (2017) opined that mixed methods integration can be obtained during the methods and data collection or analysis and report stage where the researcher compares both results to see if the findings converge or diverge each other. Analyzing the results of this study, I integrated through comparison and discussion of the qualitative and quantitative results side-by-side.

Comparing both results show instances of agreement and disagreement between the qualitative findings and quantitative results. The integration was done under the research questions.



## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

In this chapter, I present the analysis and discussion of results from the questionnaire, interview and observation of vocal performance studies from the selected schools. This is done in line with the purpose of this study which was to investigate vocal performance teaching and learning in Senior High Schools in Cape Coast Metropolis. Corresponding to my research design, four major research instruments were used: a questionnaire, and WAEC Performance Test (for the quantitative part), as well as an interview and observation (for the qualitative part). Descriptive and inferential statistical procedures were utilized for the results from the quantitative data. Both qualitative and quantitative data were analyzed, compared and discussed side-by-side.

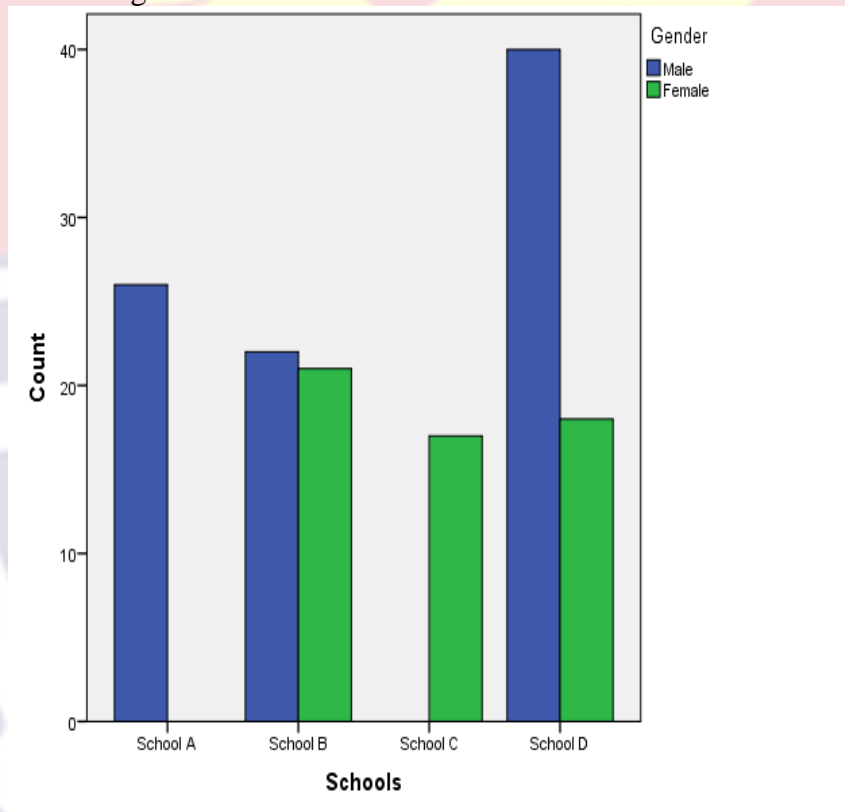
Results from the pre-test were used to determine the reliability of the quantitative instrument with Cronbach's alpha measure of internal consistency. The obtained overall reliability coefficient was 0.771. This indicated that the instrument was reliable.

There are nine public senior high schools in Cape Coast Metropolis out of which two were not offering music. This reduced the total number of public senior high schools representing my target population to seven. From this number, a randomizer was utilized for sampling four schools for this study. Both voice students and teachers from the four selected schools responded to demographic questions. The number of voice student participants was one hundred and forty-four which is made up of eighty-eight males and fifty-six



females; five teachers—four males and one female—three examiners and a chief examiner who are all males. About the five teachers, two are from the same school and the remaining three are from different schools. The majority of the voice students in senior high schools in Cape Coast Metropolis are between the ages of fourteen (14) and twenty-three (23).

Figure 4



*Figure 4: The Number of Student Participants from Each School*

Source: Generated from SPSS by Jennifer A. Adjahoe

The number of years the teachers have been teaching in the schools, ranges from two years to eight years. Teacher ‘A’ has been teaching for eight (8) years; Teacher ‘B’ has also been teaching for five (5) years; Teacher ‘C’ has four (4) years; Teacher ‘D’ has two and a half (2½) years and Teacher ‘E’ two (2) years. Out of the five teachers, only one of them studied voice. Two

majored in brass instruments—trumpet and saxophone—while the fourth teacher is an “atentebenist” and the fifth is a pianist but he audited voice in the university.

The number of years the participated WAEC examiners for this study have been assessing WASSCE vocal performance ranges from five years to one year. The Chief Examiner is in his third year in this leadership position.

These are his words:

**Chief Examiner:**

I have been an examiner for WASSCE Music performance practical examination for two years. I am currently in my third year as a Chief Examiner for Music Performance Test examination. So in all, I have been assessing Performance Test for five years now.

The first examiner is just one year old in assessing vocal performance test examination while the second examiner has been assessing for three years.

The third assessor has been assessing the performance examination for five years These are their statements:

**First Examiner:**

I am new in this field. I am only one year old as an external examiner for WASSCE Music Practical Exam.

**Second Examiner:**

I am three years old as an examiner for WASSCE Music Practical Performance Test.

**Third Examiner:**

I have been examiner for Music Practical Test Examination for five years now.

### **Research Question 1**

**What instructional approach/strategy do teachers employ in training voice students?**

Some instructional approaches/strategies music teachers employed in training voice students were identified for participants' responses—teaching the fundamentals of voice or the basics of voice as an instrument, the use of audio-visual, and teacher demonstration or modelling. Besides these modes, vocal performance class involves various vocal exercise activities that help singers develop tone production and coordination of the voice registers: physical exercise, vocal warm-ups, directing students on effective use of breath, directing students on performing with expression, breathing exercises, directing students on vocal register coordination, improving word pronunciation and body alignment (posture) (See Appendix B).

To be certain on the items involved in vocal performance studies in senior high school, enquiry from the teachers specified that final year voice students were required to perform one Western musical piece and an African/Ghanaian piece. Aside these two pieces, each of the student will be given unknown melody or a melody, which the students have never seen before to sight sing. The Chief examiner and the three examiners approve this information.

Most of the Tables on the results are located in Appendix.

#### **Teaching the basics of voice as an instrument**

Voice students' knowledge and experience of the physiological functioning of the voice enable them to utilize the instrument (voice) effectively. It is deduced from Table 2 below, majority of the student

respondents, 105 that represent 72.9% indicated that they studied the basics of voice as an instrument. Nevertheless, 39 participants representing 27.1% stated that they have not been taught the basics of voice.

**Table 2: Instructional methods/approaches (students' responses)**

		Frequency	Percent
Taught the basics of voice as an instrument	Yes	105	72.9
	No	39	27.1
Watched solo performances (Audio visual)	Yes	57	39.6
	No	87	60.4

Source: Generated from SPSS by Jennifer A. Adjahoe

Notwithstanding the response from quantitative data of which the majority of student participants said that they were taught the basics of vocal science, the qualitative data for further insight on the approach teachers employ in training voice students revealed that only one teacher “Teacher A” partially employed “verbal teaching explaining concrete musical properties” in training his vocal students. The remaining four teachers did not even mention any part of the singing voice to the students. This shows that the student respondents possibly did not understand the question or they were possibly trying to cover up for their teachers. Despite this conflicting issue, the teachers’ knowledge of the basics of voice science would have reflected in their choice of words for instruction or direction of the students’ voices for efficient vocal tone production. It was evident from the teachers’ responses that majority of them have little idea on how students’ knowledge of the fundamentals of voice science or the makeup of their instrument (voice) as indicated by literature, help them in the utilization of vocal tone production;

and as well permit them to take caution against damaging their voice. These were their statements during interview:

**Teacher B:** We have not been told to use voice science to teach vocal performance studies. It is not stated in the syllabus. So, I have no idea about.

**Teacher C:** Since I came to this school, I have not seen the syllabus and no one asked me to use the voice science in teaching vocal studies.

**Teacher D...**in fact, I did not study science. So, I have no knowledge about what you are saying.

**Teacher E:** Nobody informs me on the use of voice science. I have been teaching voice for some years now. I have not come across anything on voice science in the syllabus.

However, the result of a study on the integration of scientific concepts in the teaching of singing proved that the scientific principles and their incorporation with the creative practice of singing enabled students to critically evaluate every step of singing studies, solve problems, and self-regulate their behaviour in order to better their singing abilities. This has actually transformed the vocal performance level of the students Latukefu and Verinikina (2010). Pedagogists' concern about vocal instructors/teachers without physiological knowledge is that they may employ incorrect approaches/techniques in the training procedures which will affect the end result Skadsem (2007). Since successful teaching and learning of vocal performance demands the teacher's knowledge of the physiological functioning of the voice. It will be of great benefit to learners if teachers should abreast themselves with literature on how

the various parts involved in vocal tone production function in order to train students to sing properly and healthfully.

### **The use of Audio and Audio-visual**

As specified in the literature, the process of practical knowledge acquisition is through observation Simones, Rodger and Schroeder (2015). Playing or showing videos of solo vocal performances in class is an approach for teaching vocal performance studies. Voice teachers are at liberty to employ videos on solo vocal performances in their instructions. Also from Table 2 above (p. 115), 57 participants representing 39.6% stated that they had ever watched a solo vocal performance video in class. But 87 which represents 60.4% of the respondents said they had never watched any performance videos in class. To enquire further on the consistency of solo performance video usage in voice class, the Likert scale was generated using the following words to determine the consistency: once a month, twice a month, once a year, never. It could be observed from Table 3 below that 10.4% of the respondents replied that they watched such video once a year and 12.5% indicated they watched solo vocal performance twice a year. However, 59.7% of student respondents declared that they have never experienced such activity in class. Meanwhile, playing such videos in class throw more light on the teacher's instruction and as well, have an effect on students' tone production, pronunciation of the lyrics, expressions and interpretation of their assigned pieces.

**Table 3: Frequency of watching solo vocal performance during class**

	Frequency	Percent
Once a month	25	17.4
Twice a year	18	12.5
Once a year	15	10.4
Never	86	59.7

Source: Generated form SPSS by Jennifer A. Adjahoe

Reference to the qualitative data (observation class) disclosed that out of the five teacher participants, one teacher (Teacher D) utilized an audio recording of the set work for instruction. However, he actually replaced the teaching of vocal performance with audio recording. These were his words during interview:

**Teacher D:**

I mostly depend on the recordings of the examination pieces and technical exercises for teaching my students vocal performance studies..... I know that the more they listen to the pieces, the more conversant they will become with the pitches.

This teacher—an atentebenist—demonstrated inexperience in teaching vocal performance study. Although literature recommended the use of music audio and video recordings as a teaching aid for vocal performance classes, it is for the purpose of motivating learners. But not as a replacement for the teacher, as demonstrated by Teacher D who replaced himself with audio recording materials. Throughout the observation period with this teacher, he only played the recording for the students to sing along without an attempt to correct the students in terms of wrong pitch production, incorrect entry points or guiding them to employ dynamics where necessary. This possibly suggests that he has no idea about how the singing voice works, also, he does not have

the musical ears to detect wrong pitches and probably does not have a singing voice hence cannot demonstrate to his students. During unofficial discussions with him, he affirmed that he has no knowledge of voice science; hence he does not introduce that concept to his students. Meanwhile, his aim in teaching vocal performance studies was to equip students with the needed performance skills. Without utilizing the necessary approach/techniques for directing vocal performance studies, I cannot just imagine how this teacher will achieve his aim. I think students' acquisition of the needed performance skills as specified by the teacher, would probably, not be attained.

Finding out from teachers on the teaching materials or items they use in class for students' understanding and performance skill acquisition, these are their responses during interview:

**Teacher A:** The materials I include in teaching vocal performance study are audio-visuals and the piano for playing the study songs.

**Teacher B:** The items I use for teaching and guiding my students are warm-ups, the technical exercises and the examination pieces.

**Teacher C:** The materials I have are the two modes of technical exercise (major and minor), the actual pieces, and sight-reading materials. I start my class with the two technical exercises then the actual piece or song the last is the sight-reading.

**Teacher E:** Sometimes, I use the piano to teach the pieces. If there is light out, I use the trumpet to give tune to the students. I also engage them by clapping patterns.

The responses from the teachers indicate that apart from Teacher D who uses audio, Teacher A is the only one who plays audio-visuals of vocal



performances in class. Although during observation class, he did not employ audio-visual in his teaching, or say anything about such videos to remind his students of for example appropriate tonal release or anything on vocal performance, it is possible he occasionally plays audio-visuals in class.

The observation data and field notes testified that most teachers are possibly ignorant of the importance of engaging students in watching vocal performance videos in class. Moreover, literature affirms that it enables skill development and performance stylistic awareness which grants an individual's musical interpretation and performance and self-confidence Lestari, et al. (2018); Monkhouse and Forbes (2015); Mann (2008). Voice students, therefore need to watch videos of solo vocal performances to help them develop their performance style.

#### **Teacher demonstration**

The Voice instructor's illustration and utilization of vocal mechanisms, in the production of some specific tone, and specific performance behaviours, assist in motivating and developing learners' interests in active participation in vocal performance. Despite the teachers' ignorance on the use of vocal performance audio-visuals in class, it is also disclosed in Table 4 that 66 participants representing 45.8% stated positively that their teachers demonstrate in class how they should perform their pieces. But 76 respondents representing 52.8% said their teacher had never demonstrated how they should perform their pieces.

**Table: 4 Teacher demonstration in class (students' responses)**

		Frequency	Percent
Teacher demonstrates in class how to perform pieces expressively	Yes	66	45.8
	No	76	52.8
Taken video recordings of performance rehearsals	Yes	--	00
	No	142	99.0

Source: Generated from SPSS by Jennifer A. Adjahoe

The qualitative data disclosed that in the absence of a vocal performance video, Teacher 'A' exhibited awareness of teacher demonstration/modelling by demonstrating the study piece in class. It is obvious from the observation that he was the only teacher who demonstrated to his students how he wanted them to execute the study piece. Considering students' responses and vocal performance class observation on demonstration, it could be possible that the rest of the teachers sometimes felt uncomfortable modelling or demonstrating to their students in my presence since they did not study vocal performance to perform satisfactorily. Perchance, due to time constraints they decided not to include a demonstration in their teaching-learning activities though they are aware that demonstration/modelling help students develop and achieve performance skills.

But it is not common for teachers to decline an approach/technique that has a positive impact on learning. So long as they are familiar with it, it becomes part and parcel of their instruction. Otherwise, the teachers themselves have not studied the pieces to perfection and hence could not demonstrate them artistically to the students.

In spite of the fact that Teacher 'A' could not model artistically for self-expression, it served as encouragement to the students. This is related to what literature divulges that students develop a better understanding of a technique, a lesson, or a phenomenon that has been demonstrated with examples and interpretation. Mann (2008) affirmed that teachers, who demonstrate to their students the intended outcome, result successfully at the end of the class. Though modelling is a good approach/technique for teaching

vocal performance, playing videos of professional performances in addition to modelling will help expand the student's knowledge of performance.

The performer's self-perception about his/her body-conduct in performance is significant. It is advisable that in preparation for a vocal performance, either for examination or public performance, the student/singer should view himself or herself in a video for reasonable assurance of what his or her face and body are registering or look like.

Finding out from the students if their teacher has ever taken video recordings (using his or her personal phone) of any of their rehearsal performances for them to view their facial and body gestures. Almost all the participants—142 representing 99% of respondents—answered they have never video recorded their performance rehearsals in class (see Table 4 p.121 above). This implies the teachers are possibly not aware of the benefit of such recordings to the students. They might perchance be conversant with the value of the video recording but it did not occur to them to take video recordings of their rehearsal performances.

Finding out from the teachers if during rehearsals they have video recorded the students' for discussion of their performance attitude for example postures, facial and body-gestures. It is evident from their responses that even though such recordings would be of help for the students, it did not befall on them at that time. These are their words during interview:

**Teacher A:** ...this is a very good point. I have not thought about recording the students' performances to guide them on performance attitude. This is a good idea. I will take note of that.

**Teacher B:** No, I have never taken any recording of the students' performances. But I think such activity will be of good help.

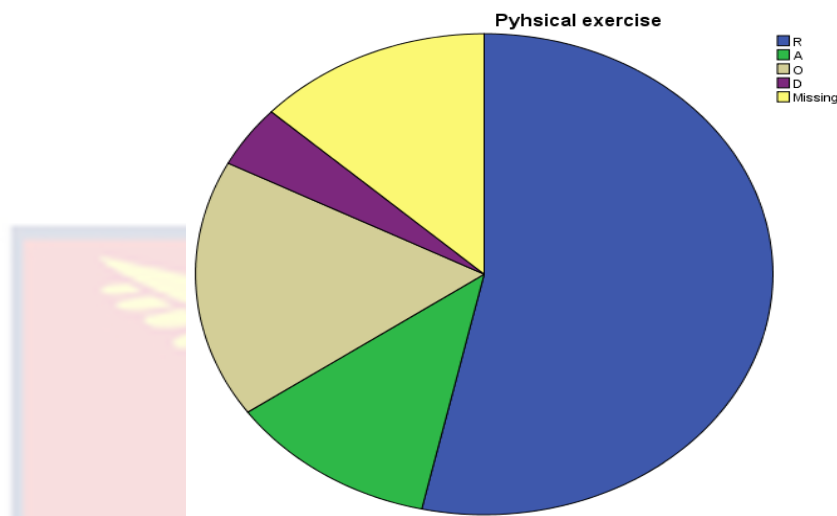
**Teacher C:** Recording the students' rehearsal performances may be of good help but it did not occur to me. ... I think you have given me a new idea. I will try it.

**Teacher D:** Well, that sounds good but, who will provide the garget for that activity? ...anyway, I will think about it.

**Teacher E:** ...This is laudable idea... See, sometimes it is not our fault. Our schools lack so many things. Ghana education service (GES) has not provide us with teaching and learning materials...

These responses clearly showed that taken recordings of the students' rehearsal performance is not part of the teachers' instructional strategies or approaches. Meanwhile, Miller (1996) study disclosed that performing in front of a full-length mirror or watching oneself perform via video helps the performer to make the necessary adjustment of facial and body expressions to project the emotional expressions of the musical pieces.

Physical exercises



*Figure 5: Physical Exercise*

Source: Generated from SPSS by Jennifer A. Adjahoe

In vocal performance classes or rehearsals, the students need regular physical exercises to release body tension in order to develop ultimate performance Amir et al. (2005). Finding out from the participants if they have been taken through physical exercises and other vocal exercises during performance study class, the following scales have been developed for participants to state the frequent occurrence of such activities in vocal class.

— ‘R’ being rarely; ‘A’ being any time we meet for practice; ‘O’ being occasionally that is 3 or 4 times a term, and ‘D’ being when students are not active in class. The result from figure 6 below shows that majority of the student respondents 79 rarely engaged in physical exercise during voice class. 34 of them engaged in physical exercise any time they met for practice; 25 of the participants occasionally engaged in it; and finally, 6 of them indicated that they only engaged in physical exercise during voice class whenever students are not active in class.

It was obvious from class observation videos and field notes that Teacher ‘A’ was the only teacher who exhibited little knowledge of muscle tension as opposed to singing; hence occasionally engaged his students in physical exercise during vocal warm-up sessions. In view of students’ responses, the majority of them said they rarely experience physical exercises during vocal performance rehearsals. Could it be that the other teachers have not been engaging them in such activity? Because it did not reflect in their approach throughout the study. Meanwhile, singers are challenged with tension and relaxation issues. Literature reveals that vocal performers mostly experience muscle tension, which often blocks mental, physical and emotional energies during vocal performances Ware (1998); Amir; Amir; and Michaeli (2005). Engaging in gentle physical exercises help release such tension. Vocal performance students are thus supposed to be taken through such physical exercises for muscle relaxation for better singing activities.

#### Students’ involvement in warm-ups

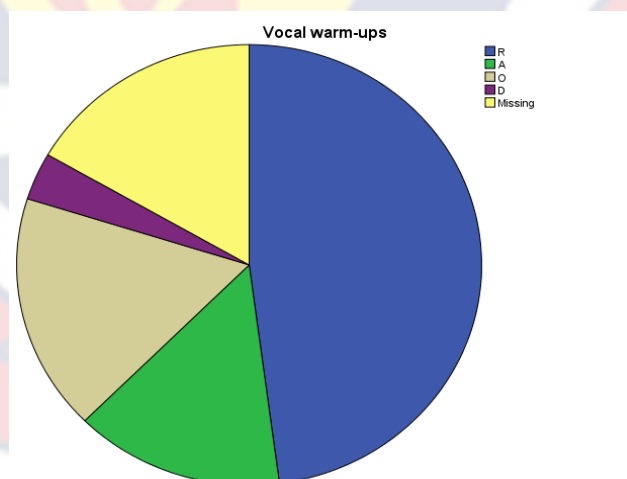


Figure 6: Vocal warm-ups

Source: Generated from SPSS by Jennifer A. Adjahoe

Vocal pedagogues confirm that warm-ups are outstanding opportunities for directing vocal techniques, which prepare a performer ahead for any challenge he/she might encounter in any music. The Myoelastic-aerodynamic theory states explicitly that the vocal system is composed of muscles and layers of tissues which are elastic in nature and can be stretched upward, downward or sideways. Therefore, the more the human voice is engaged in warm-up exercises, the more flexible the elements and the mechanisms operate. To stretch the vocal system upward or downward enough for a required tonal range, demands ample exercises. For this reason, some vocal instructors are very consistent with warm-ups. Figure 7 above, indicated that any time students met for the vocal class, 64 participants experienced vocal warm-ups. However, 47 respondents pointed out that they rarely engaged in vocal warm-ups during voice class. Occasionally, 25 respondents also experienced warm-up; while 8 of the respondents declared that they were only taken through warm-up when they were not active in class.

Although four teacher respondents used the technical exercises for the examination and normal scale singing for the warm-up exercise, one teacher (“Teacher D”) did not involve his students in any kind of warm-up exercises. Due to the fact that he replaced himself with the audio recordings of the examination pieces. Though literature recommended the use of music audio recordings as a teaching aid for vocal performance class, it is not to be used as a replacement of the teacher, but for motivational purposes.

Despite students’ claims about warm-up exercises, it is evident from the qualitative data that four teachers utilized WASSCE technical exercises

and scale singing for engaging students in vocal warm-up exercises. These were their own words during interview:

**Teacher A:** I first use voice training by employing the technical exercises, which are part of the final year examination requirement.

**Teacher B:** I start with the technical exercises before the actual piece or song.

**Teacher C:** I start with warm-ups, followed by breath control. I also take them through the scale singing.

**Teacher D:** Using a particular key, I asked them to sing the scale.

**Teacher E:** The first thing we do in voice class is warm-up since the voice is their instrument. I always take them through scale singing and the technical exercises by WAEC before the main song.

The fact on students' claim could possibly be that before this research study, students had not been experiencing warm-up frequently. Alternatively, it could also be that because the technical exercises are part of the content for the WASSCE examination, and moreover, teachers did not utilize the exercises to drill their voices as they might have expected it, therefore, failed to recognize such exercises as a warm-up. For, some of the students belong to choirs outside school therefore have noticed the thorough warm-up exercises they experienced at choir rehearsals. As a result, do not consider the simple singing through the technical exercises as warm-up. Meanwhile, the Ghana Education Service (GES) syllabus for Senior High Schools made room for the



teachers to include exercises that will help train and prepare the students to pursue further studies in music. A moderate drill could be of good help for the students to explore other registers because the aim of drill is to assist the students with smooth transition from high tone to low tones and vice versa through simple and effortless vocal modifications.

It is likely that some teachers would think performance studies are all about teaching the students the required pieces for the examination and therefore, providing them with the recordings of the pieces. Actually, the intent of vocal exercises or warm-ups is to train and develop healthy and beautiful singing tone production. Scholars such as Amir, O. Amir, N. & Michaeli (2005) assessed the effect of vocal warm-up on voice production and found out that through warm-up singers' formant amplitude is heightened. Nevertheless, they noticed that warm-up did not work upon tone matching accuracy. According to the findings of the Gish et al (2012) online survey, 87% of the singers who took part said they always warm up with a variety of exercises before the real singing. They agreed that warm-up is so helpful. They have noticed that their voices are more cooperative and very flexible.

Naturally, students mostly use their voice for speaking and most often, they make musical use of their voice during vocal performance class. Performance theory reveals that, for vocal students to improve their performance level, they need to be immersed in an enriching environment. An enriching environment involves the various vocal and physical productive activities necessary for the vocal class. So that the students would be able to reflect upon these practices to improve themselves. Hence, no matter the time-frame of the studies, it is very essential that the teachers begin vocal

performance studies with appropriate warm-ups for the students to develop efficient and healthy singing tone production. Literature encourages vocal instructors to make warm-ups each day for initial vocal work Ware (1998); Walders (2005).

### Directing students' singing breath



Figure 7: Breathing exercises

Breathing serves as fuel or a source of energy on which singing is based. Though one may think breathing is an innate activity therefore, it functions automatically, it is through an exercise that a singer to some degree voluntarily controls his or her breath and manage it in performing long musical phrases McCoy (2005). Performing long musical phrases that demands slow release of breath, the singer needs effective training on conscious breath control and management for impressive execution of such musical activity without breath 'interjections' within musical phrases. As shown in figure 8, the majority of the respondents about 73 representing 50.7% always experience breath exercises in singing class. While 56 respondents depicting 38.9% declared that, their teacher rarely takes them

through breathing exercises. Occasionally 14 participants, which represent 9.7%, were taken through breathing exercises.

Although 73 student respondents declared they undergo frequent breathing exercises, class observation videos and field notes exhumed the teachers' inconsistent practice in breathing exercises. Three teachers who endeavoured to employ breathing exercises in their instruction did not engage students frequently in such activities. This shows that the teachers are Perhaps, not conscious of the intensity of vocal activities that go into developing talented and skilful vocal performers. Therefore, denying learners acquiring breathing skills.

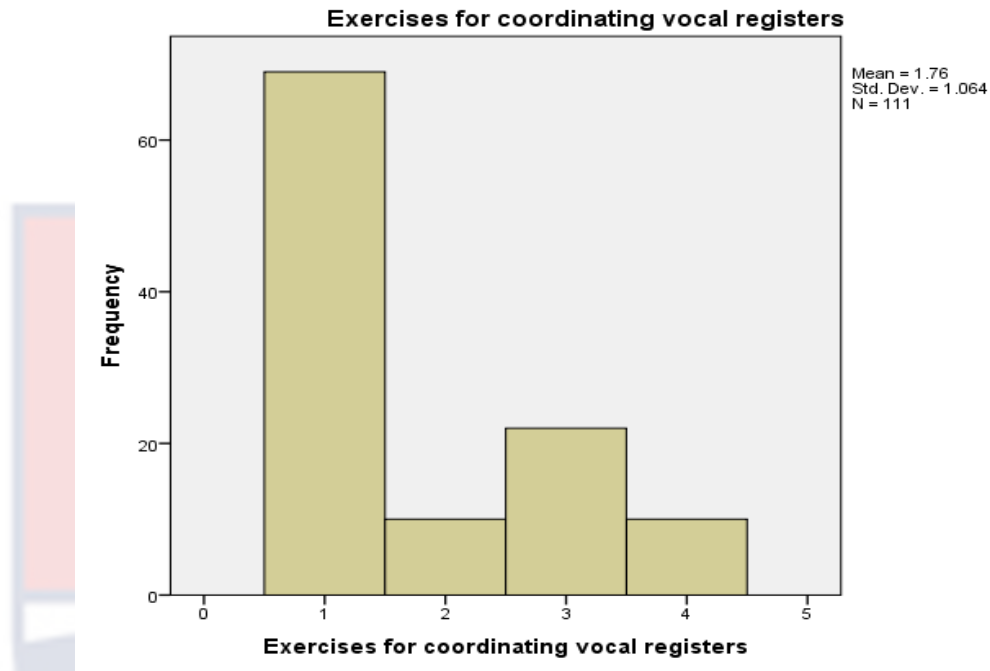
Meanwhile exercising breath for singing is not just taking in breath and releasing the breath. Nevertheless, breath exercise for singing involves inhalation and synchronizing the breath pressure with the vocal vibration in producing vocal tones. This breath practice would even, inform the teacher on the type of vocal release a student makes and must be applauded or corrected. However, if a music teacher is perhaps not cognizant with the usage of a vocal phenomenon, he or she might not be aware of the end result.

Additionally, the teachers' mode of directing the students suggested they have little knowledge of the efficient breathing techniques for singing. Meanwhile, they could have utilized breathing activities to assist students to understand the best breathing technique and be able to coordinate and manage the singing breath. Since breathing in vocal performance, concerns the singer's ability to control and manage the singing breath.

During the breathing exercises, I was expecting the teachers to direct the students on producing tone for example with a vowel while exhaling the

air slowly to see how long a dash of intake of breath can take them. This could have informed the teachers if the student were actually following the breathing process by managing breath well. The findings of Millbrath and Solomon (2003) on music teachers' usage of breathing and vocal exercises in song teaching reveal that music teachers in public schools make little use of breathing and vocal exercises. However, the result of another study on "The effect of group breath-control training on the singing ability of students" indicates a significant improvement in their vocal range, vocal intensity, and pitch accuracy by declining from clavicular breathing to abdominal diaphragmatic-costal breathing Phillips (1985). According to Pedagogists Ware (1998); Walders (2005), singing breath is achieved through a combination of middle and low torso expansion; and this demands constant and conscious effort in performing moderately long musical phrases. Ideally, training singers in controlling and managing their breath for musical performance, go a long way to prompt them in having a mental concept about the phrases of a song they are learning and thereby plan appropriately toward measured breaths to complete each phrase. Actually, a performer's breathing and preparation affect the end result of the singing. Hence, more attention is needed for breathing exercises for vocal performance.

### Directing students on vocal register coordination



*Figure 8: Coordinating vocal registers*

Source; Generated from SPSS by Jennifer A. Adjahoe

The goal and beauty of art music performance is the blending of the registers whereby the tone quality of producing vowels match and the dynamics merge so that the differences obfuscate into each other without any line of distinction. To find out if the voice students have been taken through exercises for coordinating vocal registers, it could be observed from figure 4 that 72 of the student respondents stated that they rarely engaged in exercises for coordinating vocal registers during vocal performance class. Whereas 37 of the student respondents indicated that any time they met for voice class, they were taken through exercises for coordinating registers. 25 occasionally engaged in exercises for coordinating vocal registers; while 10 of the respondents were involved in vocal register coordination exercises only when they are dull in class.

However, the qualitative data did not indicate teachers' usage of exercises for coordinating students' voice registers. Neither did the teachers mention or discuss register coordination with the students. Since the majority of the students indicated that they rarely experience exercises for coordinating their vocal registers, it is possible that the teachers could not detect the change in vocal quality due to students' improper connection of the vocal mechanisms as they sing from the lowest to the highest range of their voices. Or, perhaps, they are not familiar with the techniques for vocal register coordination and therefore tried to ignore the change in the students' voice quality. Meanwhile equal vocal quality is key to classical art solo music performance. Sometimes, during singing, the lower voice tone of a beginner vocal student may appear rich and robust, but the upper voice tone will be 'crackly' and thin; especially with the female students. Meanwhile, these students declared that they love singing; and when learners have a love for a study course they want to be well versed in that subject. But the indication of this result shows that students are not receiving consistent training that will guide and mould their instrument (voice) so that they will not exhibit audible breaks or any register problems when performing. Literature even suggests that it is helpful when instructors/teachers explain to learners how the mechanisms concerning register coordination work Ware (1998); Maribeth and Voughn (2004); Harrison and O'Bryan (2014). This problem is treated/corrected with consistent register coordination exercises for a balanced voice production of the singer's lower range to his/her upper range.

**Educate students to perform with expressions.**

The result from Table 8 (see Appendix C), also shows that teachers educate the students on performing their pieces with expressions. The question on educating the students to perform their musical piece with expression called for a full written response, but participants responded with only “yes” and “no” answers. 106 respondents representing 73.6% confirmed the statement. This is an indication that the students are not just being taught to sing their assigned pieces, but they are taken to another level, which is to sing with meaning.

From the qualitative data, it is brought to light that two teachers (Teachers A and C) informed students on the use of musical expressions. Teacher A and E actually educated his students on the use of dynamics in singing; while Teacher C schooled the students on hand gestures whereas, it is common knowledge among scholars that the application of hand gestures in art vocal music performance is out of context. These teachers discussed and explained some of the words of the study piece with the students and asked them to apply the appropriate dynamics. Expressive vocal performance does not only involve the application of vocal dynamics but the inclusion of the performer’s entire being (which involves body and facial expressions) and emotional expression which the teachers could not inform learners about it. Dynamic concerns just the degree of loudness and softness of the singing voice. It is not enough for the teachers to just notify learners about the use of musical dynamics. Rather, consistent prompting of students on expressive vocal performance is crucial. But it is evident from the observation data that after the education, teachers’ attention on expression got diminished. Perhaps,

the teacher's mind was not on what he discussed with them, or possibly, he thought it is not necessary to waste time on dynamics. However, every element of vocal performance or singing is essential. As said by Silverman (2008), the art of singing is to make the human voice a powerful agent of musical emotion.

Moreover, vocal music performance is artistic creativity which is associated with communication with passion and meaning, the message crafted in a piece of music. Therefore, the performer needs to paint or interpret the message by engaging in vocal, facial, and body expressions.

### **Frequency of Vocal Performance Class Organization and Duration of Meeting Time**

Achieving a successful vocal performance result depends on the frequency of rehearsal time. It is revealed (see Appendix C, Table 15) that 66 student-participants point to the fact that vocal performance studies are organized once a week in their schools. While 39 participants indicated that they meet for vocal performance studies twice a week. This shows that the allocation of time for vocal performance studies varies from school to school.

Teachers' interview transcripts, observation videos, and field notes support students' claim that almost all-vocal performance classes were organized once a week. Only Teacher D claimed he organized vocal class twice a week. The interview transcript and observation class disclosed that he used the last 15 minutes of music theory class for performance teaching, and the theory class was given two meeting days. Not all the students were offering vocal performance studies, there were other students in the class



studying atenteben; so, he alternated the teaching of these two instruments. Hence, he organized a voice class once a week.

Vocal performance studies entail other activities including the learning of assigned pieces. Each activity demands time so that the students achieve quality end results. Though the vocal performance class is handled as a group, it is meant for solo rendition as required by WAEC. The teacher, therefore, has to listen to each individual student for the appropriate direction of the voice. Four teachers declared that they organized a vocal performance class for 1 hour. These are their own responses during interview.

**Teacher A:** The duration for this class is 1 hour

**Teacher B:** I used to spend 45 minutes for vocal performance class but now it has been changed to 1 hour.

**Teacher C:** Vocal performance class is just one period class. So, it lasts for 1 hour.

**Teacher E:** It lasts for 1 hour

Nevertheless, the observation videos and field notes revealed that the time duration of the voice class period was between 20-30 minutes. Due to limited meeting time, teachers could not actually pay attention to every individual student. Meanwhile, it is through one-on-one instruction or grouping the students into a small number of two or at most three that could help teachers detect the vocal need of each student; and thereby provide them with appropriate guidelines. Literature disclosed that achieving consistent positive performance results demands balanced distribution of time among the various items involved. It is therefore a possible fact that meeting once a week

for vocal performance studies might not be sufficient for a required and expected result.

### **Determination of students' voice range**

Per my research problem, I have noticed from a pre-test I conducted in some senior high schools in Cape Coast that teachers have not been following the specification of WAEC's categorization of the set work. The result in Table 9 (see Appendix D) shows that, 54 of the student respondents, which represents 37.5% indicated that their teacher informed them about the voice part they sing by testing their voice range and tessitura with an organ. While 47 of the participants, which represent 32.6%, indicated that they chose the voice part on their own and finally, the rest 43 of them representing 29.9% indicated that they sing in a choir, therefore, they are aware of their voice range.

The interview transcript established teachers' awareness of the fact that not all the students would be able to sing from one voice part. Hence, relied on students' vocal range in selecting voice parts for them. They specified that they made use of the keyboard/piano to check the vocal range of learners before allocating them to the appropriate voice part. These are their words during interview:

**Teacher A:** I have been using a keyboard to select voice parts for them.

**Teacher B:** I select their voice part for them with the piano

**Teacher C:** I use the piano to select their part for them. Based on their voice range...I realized that some have high vocal range.

When I gave the soprano piece, they were able to sing it....

**Teacher D:** I use the piano to select voice part for my students

**Teacher E:** I check their voice range and as well assess the individual with the piano to know their abilities and how best each student can produce some pitches...

Meanwhile some of the teachers have no keyboard/piano for their voice class. Probably, on the day of selecting voice part for the students they brought their personal keyboard to school for such assignment.

On the contrary, some students indicated that they decided on the voice part to sing. This means that even though the teachers exhibited knowledge in the classification of students' singing voice into the appropriate vocal part, they probably do not understand the essence of singing voice classification and therefore were not stringent with the students' vocal classification approach. The vocal range is not the only aspect to consider in determining a singer's vocal part and therefore, selecting a musical piece(s) for performance. The singer's tessitura—where the singer feels comfortable producing the notes clearly and without forcing the voice—as Boardman and Alt (1992) indicated is essential. This action might cause damage to innocent students' singing voices thereby causing them to lose interest in vocal performance. Thus, if the voice part they have chosen does not favour their vocal range they may be switching ranges on and off to favour their performance. The musical pieces or the set work for the WASSCE examination has been categorized according to the traditional voice parts—soprano, alto, tenor, and bass voice ranges. This implies that teachers have to determine the students' voice ranges and classify them into the appropriate voice types so that selection of the examination pieces would be done as such.

Meanwhile, class observation videos revealed that despite teachers' awareness of vocal range, they teach one piece from one voice part to all the students. Owing to the range of the musical piece against the range of the student, he or she may find it difficult to efficiently perform. On the other hand, it is a good thing on the part of a voice student to join a singing group; and this informs some of the respondents about their voice parts. Despite this assertion from some of the students, it would have been good on the part of the teachers to examine all the students' vocal ranges for confirmation.

### **Improving word pronunciation**

Vocal pieces are composed of words. To get a general idea and meaning of the message of the piece, the learner/performer needs to carefully read the words. By doing this, the student acquires the appropriate pronunciation of the words. The result from Table 17 (see Appendix E) shows that 50% of the student respondents indicated that they rarely engage in exercises for improving pronunciation of words during voice class. While 27.8% of the participants engage in exercises for improving pronunciation of words any time they met for practice. 14.6% of the respondents also occasionally engage in exercises for improving pronunciation of words and finally, about 7.6% of them indicated that they only engage in exercises for improving pronunciation of words during voice class whenever students are not active in class.

Evidence from the qualitative data shows that two teachers involved their students with rote method in the pronunciation of the lyrics of the study piece before learning the piece. This is the views of one of the teachers' who

involved his students in the pronunciation and studying of the words in their study piece.

**Teacher B:** We first of all, learn to pronounce the words of the piece and also, study the words..... I let them do this first because the words of the music play part especially when it comes to expression. Therefore, they need to understand the words of the music so that in performing music without guidance, emotionally they know how to express the song.

This is in line with the objectives of reading out the lyrics of a study song—for accurate articulation, inflexion, phrasing and meaning of the song’s message. In spite of the fact that the African/Ghanaian pieces included in the set work are our native dialect of which almost all the students can speak, not all of them can read. Those who can read might not understand every word for precise expression of the song. However, understanding the words of a song, being familiar with the phrasing, and securing the meaning of the message in the song, help the performer appreciate the piece and present or perform it accordingly. Unfortunately, both the quantitative and qualitative data revealed that some of the teachers scarcely take learners through the diction of their study pieces. Humanly possible, the teachers might consider the students’ level of education and their ability to speak the language in which the piece(s) is written, to determine their capabilities in pronunciation of the words. Therefore, felt reluctant in that aspect. Meanwhile, most singers exhibit some minor difficulties articulating consonants and some vowels correctly and clearly irrespective of where they occur. These students might have diction

challenges and without training them on the pronunciation of the texts of the study piece(s), may affect their performance.

The aims and objectives of all the teacher participants in this study are geared toward equipping the students with vocal performance skills and also helping develop their singing talent for the music industry. But it seems the teachers are not consistent with the strategies and basic performance skills which will provide learners with great potential for self-improvement in their studies and as well help build the singing voice. I have found out from the interview that only one teacher is a voice major. This could be a contributing factor toward the teaching and directing the vocal performance students. The teachers could not actually guide the students on the use of the singing voice.

#### **Frequency of Sight-Singing Lessons**

Sight singing compliments the content of vocal performance studies. The voice students are obliged in the WASSCE vocal examination to perform or sight sing some melodies they have not seen before. Such activity demands a strong foundation in all the elements of sight singing to develop the full vocal potential of the voice student's practical musicianship. Since the students have begun studying the basics of music at senior high school, it is good to know the academic year sight singing was introduced to the vocal performance students. Because the early introduction of the concept and its frequent and efficient practice have an impact on the student's knowledge, understanding, and skill acquisition. Again, from table 17 (Appendix E), 23 participants which signify 16.0% stated that sight-singing was introduced to them in the first term of their second academic year. While 81 respondents which is 56.3% were introduced to sight singing in the second term of their

second academic year. But 18 participants representing 12.5% also indicated that sight-singing was introduced to them in their third term of the second academic year. This means sight-singing is introduced to vocal performance students in their second academic year but at different stages.

To find out if a specific period is created for sight singing lessons, I generated some statements for them to choose. 121 participants, which represent 84.0% indicated that sight-singing lesson is organized for them during the theory and composition period. But 14 respondents which is 9.7% also stated that they experienced sight-singing lessons in both theory and composition and vocal performance classes.

For the students to be efficient and perform sight singing meaningfully, they need consistent sight singing lessons. Inquiring of the consistency of that lesson, 79 participants representing 54.9 specified that any time they meet for theory and composition class, they were taken through sight-singing lesson. This means if they have theory and composition twice a week, the teachers surely take the students through sight singing.

On the contrary, 61 respondents, which is 42.3%, stated they study sight-singing occasionally. This suggests that even though sight singing lesson period is included in theory and composition period, the previous concept is not always studied during theory and composition class. This possibly suggests that not all the teachers have the same positive attitude toward sight singing. Meanwhile, sight singing involves many activities that come to play at the same time. Therefore, the duration of time and frequency of practice sessions for this concept has a significant impact on the student's acquisition

of knowledge, understanding, ability, and skills for fluent sight-singing performance.

The interview data has confirmed that teachers actually introduced sight singing to the students in their second academic year. The observation data revealed that out of the five teachers, only Teacher C engages his students in sight reading during performance class. This possibly suggests that students' ability to sing a musical piece is not acquired through their ability to sight read the piece. It would have been more beneficial if the teachers have included sight singing in vocal performance class.

The data indicated that the teachers employed different strategies in introducing the concept. These are some of the strategies.

**Teacher A:** I first teach them key signatures. After this, I move to simple rhythms and note values. After all these, we then move to sight-reading melodies.

**Teacher B:** I first take them through the clapping of rhythmic patterns of a song. After that, we move to the pitches. We then combine the two elements by singing the song.....

**Teacher C:** .....I want them to be familiar with the pitches first, so I write the scale on the board and guide them to sing.....this strategy makes the students understand the phenomenon very easily.

But in the end, they all arrived at using the rote approach for teaching sight singing. The students' skill acquisition and knowledge will be more improved if the sight singing lessons would be organised frequently.



Based on the vocal class observation and field notes, the general routine of vocal performance class in the four participated schools was to learn the WASSCE voice pieces. Throughout the observed classes, teachers engaged their students in rote learning of the examination songs without intrinsically immersing them in reflective vocal performance activities. The aims of vocal performance teaching and learning is to train and equip the students with the necessary vocal performance skills that will develop their talent for further studies and or join the singing industry. Nonetheless, as the adage goes, 'informants do not always say what they do', the paramount intent of the teacher participants I deduced during the observed voice classes seemed to be teaching the students the selected examination pieces. There was no actual warm-up or voice and performance training to equip and develop vocal performance skills.

Vocal performance class and rehearsals would begin with moderate vocal warm-up drill to help students coordinate breath, phonation and resonance, and explore the singing registers through vocal modification to aid voice transition from high tone to low tones and vice versa. Students' exposure to standard performance of related musical pieces attract instructive comments and immediate feedbacks, which enhance and hasten learning. In solo vocal performance, the singer assumes acting role with the responsibility to present the song's intended or special meaning with body and facial interpretations.

## Research Question 2

### **What is the difference in the performance of voice students accompanied by piano and voice students not accompanied by piano?**

The musical pieces for the WASSCE examination are composed for solo voice and piano accompaniment. Therefore, the students have to rehearse their pieces with the accompaniment for an accurate entry point and pitch accuracy. Finding out if the students do rehearse with piano accompaniment, from Table 15 (Appendix H) it is observed that 91 participants representing 63.2 per cent affirmed that they always rehearse with the accompaniment while 53 respondents representing 36.8% indicated that they rehearse their pieces without accompaniment. This suggests that the majority of the students have been trained to gain an understanding of the pieces which in turn would grant them confidence in performing their pieces. This is in relation to literature, which states that learning a piece of music with instrumental accompaniment grants the learner an understanding of the musical piece (Sasanfar, 2012). Despite the fact that the majority of the students rehearse with piano accompaniment, quite a number of them rehearse without the accompaniment.

Analyzing teachers' interviews, it was discovered that three teachers more often than not accompanied the students' singing. They believe that accompanying the students builds their listening skills in pitching, for, the structure of the musical pieces demands accompaniment. Therefore, they do what is expected of them; but some students prefer to sing without accompaniment. It could be possible that those students have challenges with singing on time to match the accompaniment: or, when singing with the

accompaniment they do not stay in key and it makes them feel uncomfortable. However, other two teachers do not frequently accompany their students. One indicated that she cannot play the accompaniment. She asked a resource person to come and play the piano for the students. Meanwhile, the resource person is not a teacher from the school hence does not often meet the students. This could contribute to the students' inability to sing with the accompaniment. The fifth teacher is of the view that when students sing without accompaniment, he can easily detect their mistakes and correct them. Despite the structure of a musical piece, a music teacher is expected to attain good musical ears to discover errors. The structure of the WASSCE pieces or set work is in a form of dialogue for the voice and piano. As a result, the accompaniment section serves as a support for the voice part and as well regulates the time for the performer to set in. If such complex creativity has not been rehearsed with the accompaniment regularly, it can demotivate the students' interest in vocal art music performance and hence have an effect on their examination. I have noticed from the observation classes that two of the schools have no piano or table top synthesizer for the vocal performance class. In spite of the fact that some of the teachers cannot play the keyboard, they are familiar with the musical keys; hence, could have used it for guiding and training the students' voices in order for them to learn and rehearse the examination musical pieces with their right 'key'.

According to examiners and the chief examiner, all pieces involved piano accompaniment must be studied as such. This means, if a teacher is not in position to play the accompaniment, he/she needs to get a resource person or other alternative. Since the chief examiner is very much aware of some

teachers' inability to play the accompaniment, he suggested an alternative for teachers. These are his words:

“It is mandatory for the students to perform their pieces with accompaniment. We are cognizant that not all the schools have accompanists so what we advise the teachers to do is to score the accompaniment section into a Finale or Sibelius file to accompany the students. Even though the electronic accompaniment is mechanical, as the student frequently rehearses with that, he or she becomes used to it”.

This means the teacher's problem with the accompaniment has been solved. Such teachers can contact their colleague teachers from other schools or other resource people who are knowledgeable in piano playing and record the accompaniment section for class use and for the examination as well. This approach will benefit every student and will understand and enjoy solo vocal art performance.

As indicated by some students that they did not practice their pieces with accompaniment, the possibility for them to perform in the examination without accompaniment is high. Finding out examiners' reaction toward candidates who may not perform their pieces with the accompaniment, they pointed to the fact that it could be no fault of the student and also examiners must not be seen as intimidating students so irrespective of whatever happens, they allowed the candidate to perform. They further explained that:

The accompaniment adds some beauty to the entire performance. Even sometimes, it guides the student in terms of modulation. Without the accompaniment, the student may not be

able to execute those sections well and that will go against the student. Except that sometimes the examiners have to use their discretion knowing that it is no fault of the student and award him or her the right grade.

One of the examiners gave an additional explanation:

..... some of the accompaniments are just duplicating the voice part. So, with such a piece, if the student performs creditably well, he or she deserves the right grade.

This implies that if a student happens to perform such a musical style without the accompaniment but does well to apply the necessary dynamics, expressions, good tone quality and interprets the piece well, he/she requires the right grade.

To determine the performance level of students who perform with accompaniment and those who perform without accompaniment, I was able to take video recordings of vocal performance examinations of three schools, which, I sent to four examiners to assess.

Finding out the performance level, hypothesis was developed as:

Ho: There is no significant difference in voice performance between students who rehearse and perform with piano accompaniment and those who do not toward achievement in the WASSCE.

H1: There is a significant difference in voice performance between students who rehearse and perform with piano accompaniment and those who do not toward achievement in the WASSCE. I computed an independent t-test and explored the two groups using their respective means. Empirically, the result from Table 16 below shows that on average, the score of a student who

performed with accompaniment is about 0.8418 more than the score of a student who perform without accompaniment. For further investigation of this claim, a test statistic is also computed to establish the statistical relationship between the test results.

**Table 5: Independent t-test indicating the level of performing with accompaniment and without accompaniment**

Group Statistics				
	n	Mean	Std. Deviation	Std. Error Mean
ACCOMPANIMENT WITH ACCOMPANIMENT	23	11.1043	1.06461	.22199
WITHOUT ACCOMPANIMENT	8	10.2625	.69269	.24490

Source: Generated from SPSS by Jennifer A. Adjahoe

The output from Table 6 below, presented a statistically significant value. Levene's test for equality of variances showed a significant value of 0.041 which is less than an alpha value of 0.05. This shows that statistically, the variances for the two independent populations are not equal. It can also be seen from the Table that the t-test for equality of means presented a significant value of 0.020. Since this value is less than the alpha value of 0.05, we reject the null hypothesis that the means of the two populations are equal and conclude that indeed there is a statistical difference between the scores of students who, perform with accompaniment, and those who perform without accompaniment.

**Table 6: Independent Samples Test**

<b>Independent Samples Test</b>										
Levene's Test for Equality of Variances		t-test for Equality of Means								
								95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed		4.560	0.041	2.076	29	0.047	.84185	0.40543	0.01265	1.67104
Equal variances not assumed				2.547	19.121	0.020	.84185	0.33054	0.15032	1.53338

Source: Generated from SPSS by Jennifer A. Adjahoe

The statistical result on these two performance levels justified the fact that in solo vocal art music performance, the piano accompaniment collaborates with the soloist in terms of dialoguing and or supporting the singing; and as well informing the soloist of the appropriate entry points. This brings life to the artistic creation of the song. The results of studies on the effect of accompaniment on solo art music performance indicated high performance levels over solo performance without accompaniment. Sheldon et al. (1999); Geringer and Madsen (1998); Katz (2009) study confirm and elaborate on the importance of performing solo art music with the accompaniment that the accompanist is charged with the mission of guarding and maintaining the composer's wishes, the poet's requirement as the composer saw them, and the soloist's emotional and physical needs. Although the examiners indicated that if a student performs creditably well without the accompaniment that student is awarded the required marks, such performance

would sound incomplete. In other word the quality of such performance would be affected.

### **Research Question 3**

#### **What Factors Impede Students' Acquisition of Vocal and Performance Skills?**

Various factors impede senior high school voice students' vocal performance skills acquisition. Finding out some of the factors—reasons for choosing voice as an instrument, students' comfortability in producing musical pitches, absenteeism, and reasons for students' absenteeism, some statements were made for participants to strongly agree or disagree with the declaration.

#### **Reasons for choosing voice as an instrument**

The table below (Table 7) reveals reasons for choosing the voice as an instrument. To understand the students' reasons for choosing the instrument 'voice' some statements were constructed for them to agree or disagree with. Group 1 are students who strongly agree with such statements as being their reasons for choosing voice as an instrument. While group 2 are students who disagree strongly with the statements as reasons for choosing voice as an instrument. The result of the t-test shows that all three reasons recorded p-values less than 0.05, indicating that respondents in group 1 unanimously approved most of the statements. In specific, it could be observed that about 97% and 71% of the respondents in group 1, unanimously either strongly agreed or agreed that they chose the voice as an instrument for the fact that "they like singing" and secondly "they cannot play other instruments".

However, in group 2 about 69% of respondents unanimously disagreed with the statement "My teacher chose it for me" as the reason for choosing the



voice as an instrument. This simply means the choice for vocal performance studies was a personal decision taken by the students themselves due to their passion for singing. Though there are other instruments that they could opt for and study, perhaps, they think learning to play those instruments is difficult. Hence, they may not be successful so they decided to study vocal performance. But having a passion for singing does not necessarily mean they all have the ability for singing. However, 31% agreed that the teacher chose the instrument 'voice' for them. This means if the teacher had probably not told them to study vocal performance, they would not have developed an interest in singing.

**Table 7: Reasons for choosing voice as instrument**

	Category	n	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
I like singing	Group 1	= 2	140	0.97	0.50 0.000
	Group 2	= 2	4	0.03	
	Total		144	1.00	
My teacher chose it for me	Group 1	= 2	44	0.31	0.50 0.000
	Group 2	= 2	100	0.69	
	Total		144	1.00	
I cannot play other instruments	Group 1	= 2	102	0.71	0.50 0.000
	Group 2	= 2	42	0.29	
	Total		144	1.00	

Source: Generated from SPSS by Jennifer A. Adjahoe

### Students' comfortability in producing pitches

Assigning a vocal piece with tonal range beyond the singer's tessitura may cause discomfort or a hindrance to the learner's interest. A vocal

performer's voice range depends on the high and low pitches he/she can comfortably produce without hurting the voice Ware (1998); Harrison and O'Bryan (2014). It is discovered from Table 8 that about 74.3% of the student respondents feel comfortable when producing the pitches in their assigned songs. However, 25.7% of them do not feel comfortable producing some of the pitches in the assigned pieces. It is possible that when selecting the study pieces for the class, teachers did not consider the compatibility of the pieces to the individual student's vocal tessitura. This can affect their interest and thereby delay their vocal skill acquisition.

Finding out from the teachers what they consider before selecting vocal pieces for their students, Teachers 'B' and 'D' stated that they consider the student's ability in performing the songs. While Teachers A, C and E also indicated that they take into account the student's voice range and ability to perform the musical pieces.

Meanwhile, evidence from the observation data and field notes show that individual student vocal range and performance ability are not considered in the selection of the WASSCE examination pieces for the students. Rather, the teachers look at the class's ability for the selection of the songs. So, everybody in the voice class learns the same musical piece(s). The students are all not having the same voice range, it is imperative that the teachers group them according to the vocal classifications and select the musical pieces accordingly. For instance, soprano and tenor voices are compatible therefore are allowed to perform the same piece. Similarly, alto and bass voices can as well sing the same pieces. But it is possible that teachers consider this as time-consuming hence, allow every student in the class to learn the same song.

Perhaps, so long as the majority of the students are able to sing the piece(s) it satisfies them.

The selection of the musical pieces for the set work of WASSCE examination is done by the WAEC. Therefore, is it appropriate finding out from the Chief Examiner the principles that guided their selection of the pieces. This is his response during interview.

**Chief Examiner:**

“.....the pieces are selected by the subject officer at WAEC in connection with Ghana Education Service. What I do know is that they consider the level of performance of these students in senior high schools so that the difficult level of the pieces selected are not above the students. Hence, the basic things they consider for example are the virtuosity, voice range, and not too much chromatic notes.

This implies that if the teachers should possibly take time, and check the vocal ranges and tessitura of each individual voice student and select appropriate song to suit their ability the students would feel comfortable and sing with ease.

**Absenteeism**

Vocal performance class involves various participatory activities that need regular attendance for the acquisition of vocal skills. Students who repeatedly absent themselves from class are bound to miss out one acquisition of these skills, which can affect their performance. To find out the participants on their punctuality in vocal performance class, also from Table 11 (Appendix F), the analysis revealed that the majority about 84% of students indicated that

they are punctual in class. This shows that due to their love for singing, they did not absent themselves from vocal performance class. But, 16% of the respondents indicated that they were not punctual.

Besides, it could be observed that 9.7% of them usually absent themselves from vocal performance class once a week; 2.8% absent themselves once a month; and 3.5% of them usually absent themselves twice a month. It is understandable that respondents who missed vocal class once a week are actually on the verge of losing the objectives of the vocal performance class. Hence, should the class meet once a week these absentees are totally missing everything concerning vocal performance studies. It is likely that they are those that the teachers are required to study vocal performance; therefore, are possibly not interested in singing.

#### **Reasons for student absenteeism**

Every action taken by students concerning class attendance has a reason. While students may have reasons for being absent from school, their absence does impart their performance. Finding out from the respondents' reasons for absenting themselves from vocal performance class, I constructed a number of reasons for them to select the best that match their response(s). Forty-three (43) participants responded to the question on reasons for absenteeism. The result in Table 14 (Appendix G), thus shows that respectively approximately 27.9% of all respondents and 52.2% of all response cases indicated that they usually absent themselves from vocal performance class because "performance class was sometimes boring". It is likely these students have some expectations for the class that are not met. Therefore, decided to stay away from the class. Perhaps, they are students in

the school where the teacher uses audio recordings of the examination pieces to replace his teaching of the musical pieces; which, they probably think they could listen to in their houses. Could it be that they are the ones the teachers required to study vocal performance but they have little interest in singing; hence, refer to the class as boring and absent themselves.

Engaging voice students with the necessary vocal activities to help develop their singing and performance skills also assists in building their interest. Again, it is observed from Table 14 that about 4.7% of respondents and 8.7% of all response cases specified that the statement “my colleagues laugh at me when I sing” was the reason for their absenteeism from vocal performance class. The fact about this response could be that these respondents have some vocal challenge(s) but because they think they cannot play other instruments, they, therefore, resolved to vocal performance studies; so, the best is to absent themselves from the class. Interviews with the examiners also revealed that some of the students are not supposed to be voice students. This means if teachers had assessed every student’s voice, they would have detected that not all the students have a singing voice. Hence, advise such students on other instruments. However, sometimes due to the fact that a teacher’s ability in handling other instruments perhaps is minimal, he/she then imposes vocal performance studies on the students. Examiners’ interview transcript revealed what a student disclosed to one of the examiners “.....I am not good at singing. I had wanted to do atenteben but I was forced to do singing”.

When the examiner enquired from the teacher this is what he said

“.....I can't teach atenteben.....”

This affirms that in connection to music performance studies, teachers actually do impose the musical instrument they can teach on students no matter the student's ability. Asking the opinions of the teachers on possible factors they think are hindrance to a student's vocal performance, these are some of the issues they have identified:

**Teacher A:**

What I have noticed is, the student's ability to listen to the piece and pitch accordingly is impeding their singing

**Teacher C:**

..... most of the students' interest is in popular music.... So, art music is a challenge to them

**Teacher D:**

The interest of the students is in contemporary music like RMB, Jazz, Reggae etc. So, their expectation in vocal performance class was on those staff. When I introduced them to art music, they find it difficult. It is taken the time to adjust. Very few of them are into art music.

**Teacher E:**

The problem is time. The students need time to rehearse their pieces.

Source: Interview

Furthermore, about 9.3% of all respondents which resulted in 17.4% of the total response cases, indicated that they usually absent themselves from vocal performance class because songs assigned to them are difficult.

Meanwhile, Elger (2007) identifies a performer's mind-set as a drive that has an effect on performance improvement. This implies, any positive or negative thought a student would make can affect his or her performance ability or skill. It is possible that the study pieces are selected for students as a group hence individual students' abilities were not considered before selecting the piece(s). If attention is given to individual students or they are grouped into small number of three (3) and attended to, the teachers could have identified individual student's vocal challenge(s) for appropriate selection of the pieces.

On the contrary, class observation videos revealed that the teachers do not take the vocal ranges and the classification of the students' voice into consideration before selecting the pieces for learning and performance. For example, students who are pursuing music are from two subject groupings—arts related subjects and visual art related—some teachers, therefore, selected two pieces for each grouping, regardless of the classification of the musical pieces and the learner's voice part. This could possibly affect the student's interest in performing the piece(s) due to the fact that they have no other option apart from the two pieces they have studied.

In addition, the result showed that 34.9% of the total respondents respectively and about 65.2% of the respondents indicated that they usually absent themselves from vocal performance class because "they have a challenge in singing on time". Some people actually have challenges with rhythmic interpretation. Hence, teaching them demands extra techniques and constant rehearsals for positive performance outcomes.

Finally, it can be seen from that same table that about 23.3% of all respondents and about 43.5% of the total response cases respectively indicated

that they usually absent themselves from vocal performance class because “they are not able to sing with piano accompaniment”. It is likely that the teachers could not play the accompaniment and hence did not teach them with the accompaniment. Some people also have challenges singing in tune and if the teachers had taken these students through an audition, they could have identified this problem and suggested other alternative instruments to the students.

### **The academic level at which students are introduced to vocal performance learning**

Vocal performance study is expected to be introduced to music students in their first academic year in the school. Enquiring from the learners on the academic year at which they have been introduced to the study of vocal performance, 66 student respondents representing 45.8% reveal that performance studies course was introduced to them in their second year. However, 19 respondents which signifies 13.2%, expressed that the course was introduced to them in their first year. 59 respondents representing 41.0% also indicated that vocal performance studies was introduced to them in their third academic year. This means that, the teachers do not consider the stated ‘time’ in the syllabus for introducing learners to the course—vocal performance study—Perhaps the teachers are not proficient in voice and are possibly not acquainted with the content of vocal performance study. Therefore, are not aware of how demanding it is. Hence, delay time for commencement. This has confirmed Gunu and Issifu (2019) finding that majority of teachers do not go by the prescribed time allocated for teaching of courses.



During a discussion with Teacher 'C' after the interview, he disclosed to me that performance studies is actually taught in the third academic year of the students. The reasons being that music is not taught at the basic school level. So, they have to take time for the students to understand the fundamentals of music. Secondly, the syllabus is overloaded and if they are to follow the syllabus strictly, the students will not understand anything; and that will affect the general music performance of the students. In the first academic year of the students, they (the teachers) inform them of the various aspects of music that they will study. So, at the appropriate time they introduce the students to the expected aspects as demanded. This possibly implies that time allocated for the study of music on the schools' time table is not enough. However, if the students and teachers are overburdened with many aspects in a course of study, it affects the output of some areas of the course. The information gathered from this teacher implies that the students try to cover-up their teachers by given me wrong time they were introduced to vocal performance study.

#### **Research Question 4**

#### **What is the Process of Selecting Vocal Pieces for Senior High School Voice Students?**

This section sought to determine the various processes senior high school music teachers and voice students utilised in selecting the study pieces. While one of the most important responsibilities of a vocal performance teacher is selecting musical pieces that facilitate healthy vocalism and communicative artistry, based on personal taste, learners would like to select pieces for themselves and are at liberty to do so through the help of their

teacher. To ascertain information on vocal pieces' selection for the students, some possible alternative procedures were listed for students to choose the one appropriate to the procedure in their class. Table 9 below shows the response of students with regards to the means by which they select study pieces/songs.

Group 1 represents students who strongly agree or agree, while group 2 are students who disagree strongly or disagree on some ways in which students select study pieces/songs. The result thus shows that all three reasons recorded p-values less than 0.05, indicating that respondents unanimously rated them highly in one group. In specific, it could be observed that about 84% of the respondents unanimously either strongly agreed or agreed with the statement, "Teacher selects my pieces for me" as ways by which they select study pieces/songs. However, 74% of the respondents unanimously strongly disagreed with the statement "My friend(s) encouraged me to also study the pieces assigned to them" and 63% disagreed with "I select the pieces on my own" respectively as ways by which they select study pieces/songs. This implies the teachers have the upper hand in selecting pieces for the students.

Upon analysis of the class observation videos and field notes, it was disclosed that some of the schools had two streams of music classes — general arts and visual arts. The teachers in school 'A' (boys' school) taught their students, three musical pieces—one soprano/tenor piece and two alto/bass pieces (O for the wings of a dove, To music, 'Gyae nsem keka yi', and Wo ho te sen). On the other hand, the teacher in school 'D' gave two different sets of music recordings (Borne ben, I love you dear, 'To music' and 'Gyae nsem keka yi') to these two classes which must be learnt and presented. School 'C' learnt two alto pieces (To music, and 'Gyae nsem keka yi'), whereas School

‘B’ studied four-piece—two soprano/tenor pieces and two alto/bass pieces (How beautiful are the feet, Mawue na ‘me, To music, and ‘Gyae nsem keka yi’). This implies that a teacher who selected and taught songs from only one voice category imposed those pieces on the students irrespective of the student’s vocal range and tessitura. More so, a teacher who taught his/her students two musical pieces from the list of group A, and one piece from group B, will definitely enforce that single piece selected from group B on all the students despite their individual vocal abilities.

The examiners’ interview transcriptions unveiled that “there are six different vocal pieces grouped into two for each voice part—group A three pieces and group B also three pieces of which students have to select one piece from each group. Pieces for sopranos can be sung by the tenors and pieces for the altos can as well be sung by the basses”. However, the data is clear on the fact that teachers do not actually follow the classification order, implying that students whose vocal ranges are not within the range of teacher-selected pieces may have challenges in comfortably rendering the pieces. In other words, irrespective of the student’s vocal range/tessitura if a teacher limits the selection of the pieces to three—one piece from group A under soprano/tenor category, and two pieces from group B under alto/bass category, then alto and bass singers would be forced to perform the soprano piece.

The repertoire is an influential performance propensity dependent on the performer and the instructor/teacher. At this level, students stand in the right position for choosing their performance pieces under the guidance of their teachers instead of the teachers selecting the pieces for them. The fact is that some of the teachers who did not pursue voice in college or university,

including some prospective teachers are challenged in selecting vocal pieces for the students (Bronner, 2003). From experience as a voice teacher, students are motivated and passionately involved in regular practice when they are given the chance to select a performance piece through the supervision of the teacher. But it seems the selection is influenced by the teachers' preferences. Meanwhile, Stephenson (2013) cautioned teachers to be efficient in selecting voice pieces for learners. It is therefore very important for the teachers to be familiar with the available repertoire.

**Table 8: Process of song selection**

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Teacher selects my pieces for me	Group 1	= 2	121	0.84	0.50 0.000
	Group 2	= 2	23	0.16	
	Total		144	1.00	
My friend(s) encouraged me to also study the pieces assigned to them	Group 1	= 2	38	0.26	0.50 0.000
	Group 2	= 2	106	0.74	
	Total		144	1.00	
I select the pieces on my own	Group 1	= 2	53	0.37	0.50 0.002
	Group 2	= 2	91	0.63	
	Total		144	1.00	

Source: Generated from SPSS by Jennifer A. Adjahoe

### **Time for selecting WASSCE vocal performance pieces**

Vocal performance pieces for the West African Secondary School Certificate Examination, are renewed after every five years and sent to the various schools. This means the collection of the set work remained in the system for five years. This set of work is expected to be studied and performed

in the students' third-year final examination conducted by WAEC. The time that students select and begin learning their performance pieces for the West African Secondary School Certificate Examination (WASSCE) is a factor in their performance level. To find out from the final year students (form three students only) when the examination pieces were assigned to them, Table 10 below shows that majority of the student respondents 47.1% indicated that they selected and started learning the examination pieces in the second term of their third year. 35.3% of the participants also declared that they selected the pieces in the third term of their third year. While 17.6% of the respondent also stated that selection and learning of the examination pieces began in the first term of their third year.

On the contrary, all four teachers indicated during the interview that the students have learnt the examination pieces in their second year. Hence, in the third year, students just select the pieces that they can perform comfortably and satisfactorily. If the students have actually studied the pieces in their second academic year, then I think the teachers just have to guide them rehearse the songs by applying the needed performance techniques. Upon the teachers' information, I enquired further from the second-year students if they had begun learning WASSCE examination pieces. On the contrary, they informed me that they would begin the learning of the performance examination pieces in their third year. It is clear from the response that teachers delay in selecting and teaching students the WASSCE pieces. Meanwhile, literature recognizes that voice students' acquaintance with their performance pieces depends on the number of days they rehearse the music and their ability to memorize the musical pieces Clarke (1988); Mordhorst

(2020). However, due to delays in the selection and teaching of the examination pieces, and limited rehearsal days and time, students' performance levels could possibly be affected. In other words, as a result of the students' late preparation for vocal performance pieces, they are ill-prepared for their final vocal performance examination and find it difficult to perform since they are unsure of what is expected of them. Nevertheless, the fact that the students have not mastered the musical pieces to the level where they can own the songs and perform them with meaning could satisfy the examiners. All along, WAEC examiners have some level of expectation from voice students. These are their word during interview:

**First Examiner:**

My ideal expectation of every voice student is to sing the song as it is written. All the expressions, dynamics, the tone quality must be well exhibited.

**Second Examiner:**

“..... I expect good voice production, good pronunciation of the words, singing in tune, no deviation, but well-expressed performance.”

**Chief Examiner**

“.....the pieces have been with them in the school for three (3) years..... my expectation from the students is: singing on time, remaining in key, performing with dynamics, expressing the piece, pronouncing the words accurately, and being able to communicate with the accompanist. These are some of the things we consider in the examination.

This suggests that teachers need to introduce the students to the examination pieces not later than the second term of the students' second year so that the students would become conversant with the pieces and the expressive parameters.

**Table 9: Time for selecting WASSCE vocal performance pieces**

	Frequency	Per cent
1 <sup>st</sup> Term of Third Year	9	17.6
2 <sup>nd</sup> Term of Third Year	24	47.1
Third Term of Third Year	18	35.3
Total	51	100.0

Source: Generated from SPSS by Jennifer A. Adjahoe

### **Research Question 5**

#### **How do the WASSCE Criteria for Assessing Vocal Performance Tests Contribute to the Teaching and Learning of Vocal Performance in senior high schools?**

In Table 11 below, it could be observed that the majority of the student respondents, about 79.2%, indicated that their teachers have informed them of the criteria of WAEC that the examiners use for assessing performance tests. However, 20.8% of them specified that their teachers have not informed them of the criteria WAEC uses for assessing performance tests. This means the majority of the students are aware of what the examiners will be expected of them; therefore, the students prepare for that. Besides, the result reveals that 18.8% of the student respondents showed that they have access to vocal performance studies past questions while the rest 81.3% of

them indicated they don't have access to vocal performance studies past questions.

Analysis of the interview transcription made it known that teachers have knowledge of the component/content of vocal performance studies but are probably unaware of what the examiners expect of the students. Therefore, their teaching/direction of the students were only directed toward the component—technical exercises, sight-reading, and the set work—of the examination. This indicate that the students are rather enlightened on the vocal performance component but have no information on the criteria for assessing vocal performance examination. Finding out the views of the examiners on teachers having access to the content of vocal performance examination criteria, the Chief Examiner explicitly stated that Ghana Education Service (GES) develop a curriculum which included music performance component/content and the set works for every five years for the schools. So, when the curriculum is changed, the set work also changes. If the curriculum is not changed, the set work remains in the system. Music teachers are therefore aware of what goes into vocal performance studies and prepare students accordingly. Two examiners confirmed the chief examiner's statement of teachers' knowledge about the content of vocal performance studies. But one of them doubted teachers' having access to the examination criteria saying:

“..... if they have it, they would have prepared the students well to pass their examination more than what we observed. I think teachers' access to the syllabus would help them. Every department of the school has a syllabus”.



**Table 10: Response to performance assessment**

		Frequency	Percent
Does your teacher inform you of the criteria WAEC uses for Performance Test	Yes	114	79.2
	No	30	20.8
Did you have access to vocal performance studies' past questions?	Yes	27	18.8
	No	117	81.3

Source: Generated from SPSS by Jennifer A. Adjahoe

Reading through the marking scheme for the WASSCE vocal performance examination, I have noticed that 10 marks were allotted for the technical exercises. 15 marks each for a piece from list A, and a piece from list B; and 10 marks for singing at sight. It is explicitly stated to address the students to take note of the following items or points that would be considered in the examination “diction, purity of vowels and tone production, flexibility, intonation, articulation and breath control. The marks to be given to each of these points are not stated. Secondly, all these items listed are not stated in the syllabus. This has approved what one of the examiners said: “if the teachers have access to the examination criteria, they would have prepared the students well to pass their examination more than what we observed”. This means for the teachers to appropriately train and prepare the students to excel in this examination, the examiners have to draw the teachers’ attention or inform them of the various vocal performance elements or points that would be taken into consideration in the examination. The reason is that not every music teacher studied vocal performance at college or university and has become conversant with the various procedures.

Finding out the criteria for selecting the examiners, it was specified by

**The Chief Examiner:**

“We recruit the same senior high school music teachers. These teachers are university degree holders; and in addition, some lecturers are included in assessing them. The selection of these senior high school teachers is based on the number of music teachers in a school. For example, if a school has two music teachers, we select one leaving the other in the school to cater for the students during the assessment period. If there are three teachers, we sometimes pick two or one.”

Unfortunately, these teachers WAEC selected have not been scrutinized whether they have done voice as a principal or minor instrument when they were in the university. Possibly WAEC regards this activity of application and screening of the applicants (music teachers who have knowledge in voice) too long a procedure. Therefore, so long as the person is a music teacher, he/she is capable of assessing vocal performance. As a voice teacher, I am of the view that vocal performance assessor must demonstrate knowledge of the elements and processes of vocal performance activities perceptual validity and evaluator reliability is very important and needed attention. It shows that any school with only one music teacher will not be given the opportunity to experience the national assessment of the WASSCE vocal performance examination to help him/her improve his teaching. The possibility that the teachers who have the opportunity to assess the WASSCE vocal performance examination have the upper hand in their teaching and learning activities through the application of the knowledge and understanding those elements. But, the examiners declined my accusation and stated that

there are teachers who take part in the assessment but yet their students do not perform well in the examination.

The Chief Examiner expressed with astonishment that:

“I have some of the teachers in my group whose schools I expect to be at a particular level, but they are even the worst. Teachers who do not take part in this programme are rendering better training to their students”.

Source:

These statements suggest that not every music teacher is competent and reliable of teaching and directing vocal performance study. If this is the issue, then such a teacher might not be competent enough to be an examiner. It is possible that such an examiner had not been paying attention to the assessment criteria. Hence, might not be awarding marks appropriately despite the subjective nature of such an assessment. Certainly, not every music teacher studied vocal performance at a college or university and such teachers might possibly not be ready or interested to engage themselves in self-education in vocal performance. But because music teachers are obliged in teaching all aspects of music, such teachers would just do their best in teaching the students the required number of musical pieces for the examination. Nevertheless, they cannot guide and direct learners to appropriate vocal performance skills acquisition. Otherwise, it would be very advantageous to organize workshops for the teachers to enhance vocal performance teaching in the schools.

## **Discussion Point of Agreement and disagreement in comparing the Quantitative and Qualitative Result**

### **Research Question 1**

While majority of the teachers expressed ignorance of voice science thus their inability to train the students accordingly, the students however, responded that they were taught voice science. Both the quantitative and qualitative data diverge explicitly but to a certain degree convey a certain level of convergence. On the level of convergence, it is deduced from the students' response that they do not know about voice science although they answered in the affirmative, which is indirect to the teachers' responses. When a teacher has little to no knowledge on a certain topic, he is incapacitated to teach his/her students. It is reading between the lines of students responses that a degree of convergence with the teachers' responses is drawn.

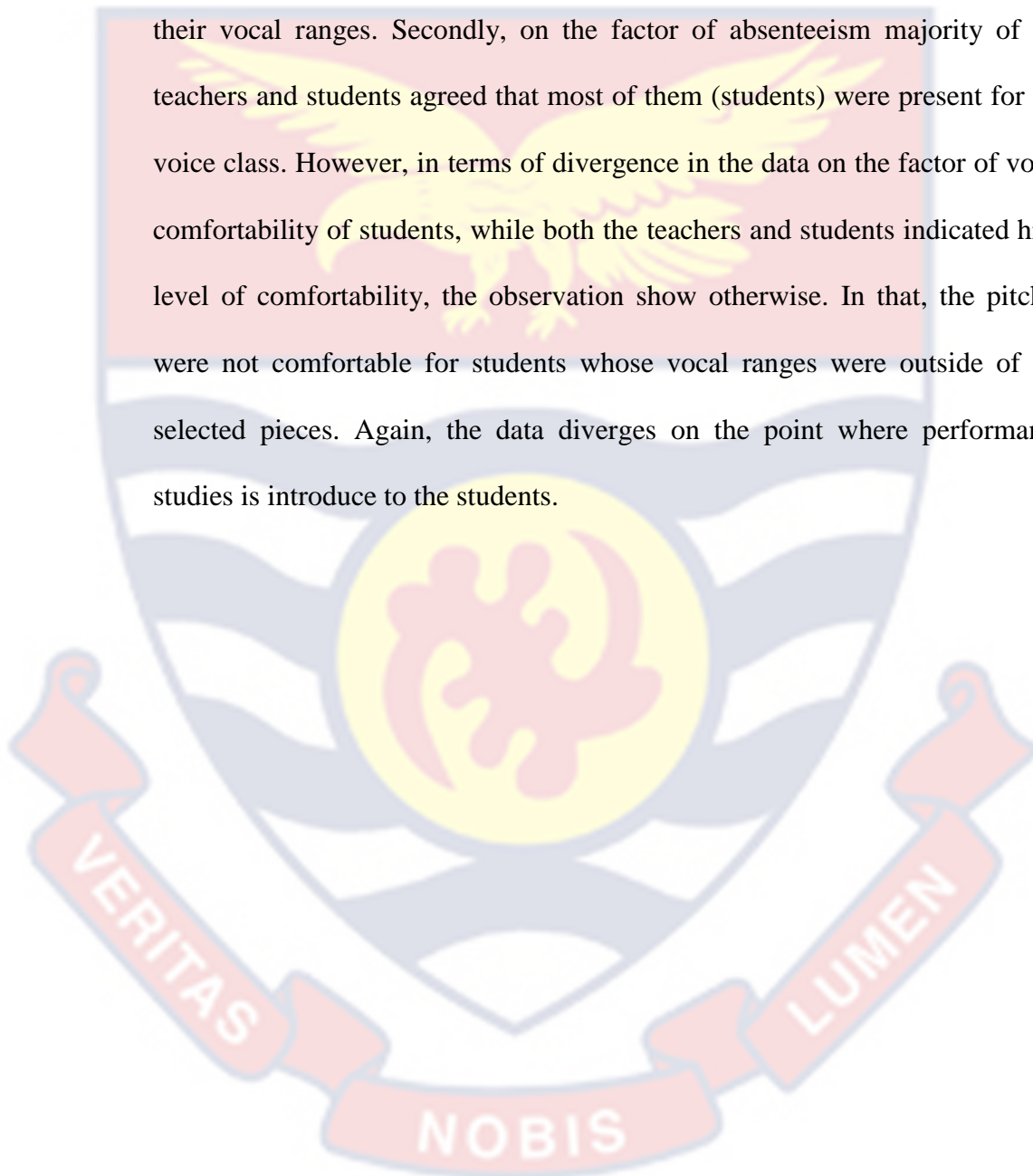
### **Research Question 2**

Both qualitative and quantitative data on this question agrees on rehearsing and performing study pieces with piano accompaniment. Majority of the students indicate that they rehearse and perform their study piece with accompaniment.

### **Research Question 3**

According to the quantitative and qualitative data on this research question majority of the teachers stated that the students chose their instrument due to their passion. While some chose voice for the fact that they could not afford or play other instrument. This agrees with the quantitative data where the student said they chose voice because of their interest in singing and the fact that they cannot play other instrument.

The quantitative and qualitative data on this research question converges on such factors as selection of instrument, voice comfortability, and absenteeism from class. On the factor of voice comfortability, majority of the teachers and students agreed that selection of the study pieces was based on their vocal ranges. Secondly, on the factor of absenteeism majority of the teachers and students agreed that most of them (students) were present for the voice class. However, in terms of divergence in the data on the factor of voice comfortability of students, while both the teachers and students indicated high level of comfortability, the observation show otherwise. In that, the pitches were not comfortable for students whose vocal ranges were outside of the selected pieces. Again, the data diverges on the point where performance studies is introduce to the students.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### Introduction

In this chapter, I summarized the entire thesis on the instructional approach/strategy music teachers at senior high schools in Cape Coast Metropolis use while directing or teaching vocal performance studies. In summary, I synthesize significant ideas from the various chapters. Based on the data results, conclusions and recommendations follow the overview. The chapter closes with suggestions for further studies

#### Summary

I investigated music teachers' directing or teaching approaches/strategies for vocal performance in senior high schools in the Cape Coast Metropolis. Ghanaian senior high school music instructors are general music teachers. They teach various aspects in the schools' curriculum, including vocal performance studies. Rote teaching is the approach the teachers use in teaching vocal performance study. In accordance to the Ghanaian senior high schools' calendar (2010) music syllabus, vocal performance study commences from the first term of the first year of the students; to enable them develop creative confidence abilities in music performance and also be able to demonstrate artistic skills and aesthetic awareness through solo performances. However, teaching and learning vocal performance study in most schools begin in the students' third year.

The West African Examination Council (WAEC) specifically classified vocal study pieces for external examination into various voice parts for appropriate selection. Nevertheless, most of the students whose vocal

ranges do not conform to the soprano pieces assigned to them by their teachers find those pieces challenging to them. Meanwhile, the vocal study pieces are comfortably categorized for appropriate vocal ranges.

Voice students' achievement or failure in vocal performance is dependent on the choice of pieces and the approaches/strategies teachers employed in moulding the students. In addition to investigating how the teachers' instructional decisions influence the selection of musical pieces for students' learning and acquisition of vocal performance skills I analyze the criteria for WASSCE's vocal examination to enhance student performance.

The specific objectives steering the study are to:

1. Investigate the instructional methods/approaches senior high school music teachers use in training voice students.
2. Examine factors that impede the acquisition of vocal and performance skills by senior high school voice students.
3. Investigate senior high school music teachers' process of selecting songs for their students.
4. Examine WASSCE's criteria for assessing vocal performance examination in senior high schools.
5. Observe voice students who have prepared to performed with piano accompaniment compare to those who have not been prepared to sing with piano accompaniment.

Achieving my objectives, here are my five research questions and a hypothesis (which relates to research question five) are instituted to regulate the study and help gain insight into vocal performance teaching at senior high school.

1. What instructional methods/approaches do teachers employ in training voice students?
2. What factors impede music students' vocal and performance skills acquisition?
3. What is the process of selecting voice pieces for senior high school music students?
4. How do the WASSCE criteria for assessing voice performance tests contribute to the teaching and learning of vocal performance?
5. How do voice students who have prepared to perform with piano accompaniment compared to those who have not been prepared to sing with piano accompaniment?

On senior high students' vocal performance skill acquisition, I reviewed appropriate literature in chapter two on various sub-headings including instructional practices in vocal music education. My review encompasses multiple approaches/techniques for directing vocal performance, including teacher engagement of learners in physical exercises, vocal warm-ups, breath management, determination of students' singing voice range, word pronunciation, vocal register coordination, and the use of audio/audio-visuals and teacher demonstration or modelling. Scholars such as Davidova (2019), Jorgensen and Phenix (2002b), and Ware (1998), are of the view that music teachers must be well-versed in all aspects of music including instruments specific. For such versatility, Ware specified three approaches: holistic, mechanistic, and eclectic pedagogy for music teachers to employ in teaching vocal performance. Woody (2003) also spells out aural modelling, verbally



describing concrete musical properties, and verbally presenting mental imagery as approaches for conducting vocal performance studies.

Additionally, helping learners in producing pitches accurately and singing florid sentences and chromatic passages with ease, David (2008) also indicate the application of the drill methods for directing voice students. Vocal educators recommend that singers, like athletes, are obliged to warm up before any vocal performance (Amir, Michael, and Amir 2005; Christy and Paton, 2002; Miller, 1996). Various activities introducing the body and brain to healthy and effective desirable vocal performance practice are involved in vocal warm-ups. Other sub-headings discussed in this study include:

Repertoire selection.

Vocal music presentation.

The effect of piano accompaniment on solo vocal performance.

Obstructing factors in vocal performance skills.

Assessment of influence on vocal music performance.

Scholars such as Mann (2008); Mang (1997); Hendley and Persellin (1994); Crane (1988); Gordon (1980) recommend teacher demonstration and modelling for enhancing vocal performance teaching.

A convergent mixed-method paradigm (Creswell and Clark, 2018) was employed to understand better the teachers' instructional procedures for training the voice students. Scholars such as Creswell and Clark (2018); Saunders, Lewis and Thornhill (2007) reveal the validity of this design in that it allows for emerging of qualitative and quantitative data for elaboration, enhancement, illustration, and clarification of the result of one method with the results from the other method.

Purposive sampling was applied in selecting only voice students for this study since "purposeful sampling" entails asking people with certain qualities to participate in a research study. Additionally, stratified sampling method was also used in dividing first my population into non-overlapping groups, called strata; after which I employed simple random sample in selecting from each stratum. Hence, I selected one girls' school, one boys' school, and two mixed schools for the research study. The total number of participants sampled was 144 students, four teachers, and four examiners. It is a common axiom in the social and behavioural sciences that attitudes and behaviour are not always consistent Johnson and Christensen (2014). For this reason, four main instruments—observation and field notes (of vocal performance class lessons), questionnaire (for student participants), and interview (for the teachers and examiners)—were utilized in gathering data in addition to video recordings of the WASSCE vocal performance examination.

Prior to data collection, I solicited permission for approval from the University of Cape Coast's (UCC) Institutional Reviewed Board (IRB) Secretariat for the headmasters/headmistresses of the selected schools and the Chief Examiner of WAEC before I was able to gather relevant data. The second part of the data focused on students' WASSCE vocal performance examinations. Therefore, I presented video recordings of the students' WASSCE vocal performance examination to four examiners selected to evaluate the students' performances. The examiners used The West African Examination Council's (WAEC) marking scheme for evaluating the recorded vocal examination performance. The intention for this evaluation is to compare the performance of voice students who have prepared to perform

with piano accompaniment and those who have not prepared to sing with piano accompaniment.

### Major Findings

The result of this study disclosed differences and similarities in teaching vocal performance studies. It is clear from the findings that the majority of the students study vocal performance due to their love for singing.

Secondly, the findings unveiled that only one teacher used teacher demonstration or modelling, engaged students in physical exercises (for releasing muscle tension), and in-exhaustively integrated scientific concept of the voice in his approach to teaching vocal performance.

Further, a teacher tried utilizing audio recordings of the study pieces in his instruction but ended up replacing himself with the audio recordings all the time without a single correction and or directing the students with important tips on their vocal production and performance.

The blending of vocal registers is crucial in art solo vocal performances. Singing from one register to the next needs smooth transition. However, the findings indicated that teachers did not apply exercises for coordinating students' voice registers. It is possible that teachers could not detect the change in vocal quality when students moved from one register to the next. Therefore, teachers' attention was not directed toward the students' vocal register coordination.

Besides, all the teachers resorted to the technical examination exercises and scale singing as vocal warm-ups. A few students said that teachers need to use something new for warm ups rather than technical exercises. But the students, however, do not recognize the examination technical exercises as

warm-ups. They did not recognize the value of the technical exercises for vocal development.

Singing depends on the volume of air a singer takes in and how well he or she manages or controls the breathing. Some teachers employed breathing activities in their instruction but were inconsistent with the exercise. Additionally, it was obvious that the teachers' mode of directing the students suggested they had little knowledge of breathing techniques.

The result of the findings display that there were not enough vocal activities that would help develop the students creatively, artistically, and vocally. For example, teachers did not employ dynamics such as singing with a crescendo to decrescendo, tempo to 'retallendo,' to a tempo, and or fermata and as well apply various rhythmic patterns which give richness and colour to music and performance.

It was discovered that voice students in senior high schools in Cape Coast Metropolis are not being introduced to the study of vocal performance in their first academic year of school as indicated in the curriculum/syllabus.

Incoming students to senior high schools had not been taught the fundamentals of music in the basic schools because music is no longer studied at the basic education level. Hence, voice teachers in secondary schools had to teach basics of music before addressing the vocal performance repertoire in the curriculum. The students' limited musical knowledge created the delay in introducing them to vocal performance study.

The findings specified that WASSCE vocal performance examination pieces or songs selection for the students were based on teachers' preference. Apart from one teacher who strictly followed the selection by the

classification of the lists of songs, the rest of the teachers did not follow the categorization of the song lists for selection. In addition, the teachers did not consider the pieces' compatibility with the individual student's vocal range and tessitura for the selection of the musical pieces.

Student's poor vocal performance is as a result of delay in the teaching and selection of the examination musical pieces, and incompatibility of the pieces to the individual student's vocal tessitura and vocal range. Similarly, imposing vocal performance learning on the students, and limited rehearsal time and days are possible determinants of poor performance in the examination.

Training voice students to be independent musicians, their ability to sight read musical notation is a very essential component of musical independence which would be attained through consistent routine and varied activities.

It is identified from the findings that the teachers are not aware of the criteria for assessing vocal performance examination. However, The Chief Examiner maintained that WASSCE examiners for vocal performance study, comprised both senior high school music teachers and some university music lecturers. But some of the teachers who have the chance to assess the examination are not making positive use of the assessment criteria to enhance their vocal performance instructions.

Students must rehearse their pieces for an accurate entry point and pitch accuracy. Some teachers believe that accompanying the students builds their listening skills in pitching the first note, for, the structure of the musical pieces, demands accompaniment. If such complex creativity has not been rehearsed with accompaniment regularly, it can demotivate the students'

interest in vocal art music performance. The majority of students rehearse with piano accompaniment but quite a number rehearse without.

### **Conclusion**

Training voice students to develop and enhance their performance skills and techniques without utilizing the necessary approaches/strategies limit quality performance attainments. This study's findings proved that music teachers' in Cape Coast Metropolis involve voice students in rote learning of the study pieces with scale singing, and the two technical exercises of the set-work, and breathing exercises to achieve their objectives of equipping students with the needed performance skills and techniques. However, maximum knowledge and understanding of breath exercises, the two technical exercises, scale singing and systematic and consistent application of these approaches to develop the students vocal tone production are lacking. As far as vocal performance teaching and learning are concerned, those few strategies would not be enough for an effective vocal performance-learning outcome. The teachers' awareness of voice science (how the 'singing voice' works) and their ability to integrate this concept or theory with the vocal performance teaching would have granted the students a better understanding of their instrument. In addition, students would be able to evaluate every step of their vocal production critically.

Appropriate intake and management of breath, free, and flexible posture, vocal register coordination, explicit pronunciation of words and expressive use of body and voice, application of analogies, metaphors, and imagery for describing tone-building concepts, teacher modelling and or vocal performance audio-visuals are paramount in vocal performance instruction and

learning. Surprisingly, teachers gave little or no attention to all these elements and strategies that would help develop the full vocal potential of the singing voice.

The study highlighted the significance of piano accompaniment in enhancing students' vocal performance. However, it also noted challenges such as the availability of accompanists and students' comfort and skill in performing with accompaniment

The driving force for instrument learning is dependent on the student's interest and love for the instrument. It is demonstrated in this study that students' choice of voice as an instrument is influenced by their interest. It is also proven that the selection of the WASSCE study pieces are on teachers' preferences. However, the introduction of the teaching and learning of vocal performance studies delayed.

### **Recommendations**

To this end, findings of this study maintain that there should be continuous professional development for music teachers, focusing on the physiological aspects of voice, to enhance their understanding and teaching strategies in vocal performance. Teachers should be encouraged to incorporate scientific principles into vocal performance teaching to enable students to critically evaluate and improve their singing abilities. Objectively, the scientific knowledge would grant them an intrinsic understanding of the musical tone production by making meaning of what they experience during the singing and better their singing ability.

Secondly, Vocal warm-up exercises are believed to help boost singing voice quality while supporting the elimination of vocal fold injury. Warm-up

must always begin with gentle physical exercises to the vocal exercises to let go of all related habitual muscle tensions. Paradoxical opposite issues that challenged singers include tension and relaxation. In this study, I consider tension as a condition of excessive muscle activity and relaxation as a state of releasing negative, interfering muscular activity. Regular physical exercises (a) by stretching their hands and arms forward while they tighten and release as if lifting a heavy weight. After this, they should stretch their arms and hands on both sides with the same activities. (b) Raise shoulders to ears, hold, and drop. Rotate forward and backward for two full turns (c) Using the lobes of the fingers massage gently from the back of the ears through the sides and back of the neck to the shoulders. (d) Tuck one's face all-round with the tips of the fingers and vocal warm-ups should be incorporated into vocal performance classes to help students develop better vocal tone production and performance skills. The teachers' reliance solely on the two technical exercises of WAEC is not adequate. Other appropriate vocal exercises such as connecting 'sliding sigh' with various modifications of descending musical patterns with vowels and dynamic levels. In addition to the two technical exercises, teachers should explore the students' voices with different pitches.

Furthermore, breathing and breath management are absolutely essential for vocal performance. Normal breathing for speech is not commensurate for 'intense' vocal performance demands; it is the breath that fuels the voice. Engaging the students with consistent breath exercises or training which involves the middle and low torso combination, will help them develop breath management skills and techniques.



Additionally, students' ability to produce the pitches of their study pieces is not enough. Equal vocal quality or balancing of the vocal registers is correspondingly vital. The teachers also need to draw their attention to the coordination of vocal registers so that the students become familiar with the appropriate skill for coordinating their vocal registers. In addition, teachers must not overlook the individual student's vocal range, tessitura, expressive abilities and practical readiness in selecting the examination musical pieces for them.

Using performance audio-visuals in class and teacher demonstration employing applicable performance techniques and expressions helps to excite learners' interest in participating in vocal performance. Schools should provide adequate resources, including audio-visual aids, to support vocal performance teaching. Teachers should as well be trained on how to effectively use these aid to enhance students' learning experiences.

Sight-reading/singing is part of the vocal performance study examination, therefore, must not be studied only during music theory class. Frequent sight-singing practice prepares and grants learners the right musical pitches/tone production, rhythmic interpretation, and fluency in the singing of an unseen musical piece for the first time. The teachers must also, involve the students with sight-singing during vocal performance classes.

Schools should ensure the availability of pianos or keyboards and skilled accompanists. Teachers who are unable to play the piano should seek alternatives, such as using digital accompaniment or collaborating with capable individuals, to support students' rehearsals and performance with accompaniment.

Teachers should consider each student's vocal range and preferences when selecting pieces for study and performance to enhance engagement and performance outcomes.

Vocal performance examination pieces must be introduced to the students not later than the first term of their second academic year. The reason is that early introduction of the set work may grant them the opportunity to study quite a number of the pieces which will enable the students to select the ones they are comfortable with for the WASSCE examination. In addition, the longer period vocal performers practice their musical pieces, the more perfect and confidence they gain and also develop performance skills.

For appropriate pronunciation and easy remembrance of the lyrics of musical pieces, acquiring a general idea and meaning of the message of the piece, teachers must involve the students in reading through the words poetically. Assist them to understand every word. After which they must read and communicate with expressions. Through this, the students must be encouraged to memorize the words.

Above all, voice students' performances would be augmented if the teachers were aware of the WASSCE criteria for the vocal performance study examination. Teachers should also make students aware of the criteria used in vocal performance assessments, including the importance of diction, tone

In conclusion, addressing these recommendations could significantly improve the teaching and learning of vocal performance in Senior High Schools, leading to enhanced student performance and interest in vocal studies.

### Areas for Further Research

This study should be envisaged as an exploratory study on vocal performance instructional approaches/strategies senior high school music teachers in Cape Coast Metropolis' engage in directing the voice students. Even though the study delved into numerous vital points, there are still additional areas that could be investigated. It is prudent to find specific factors that inform a vocal performance teacher's preference of a particular teaching strategy over other strategies.

The expansion of the sample to include voice students and their teachers in all senior high schools in central region to provide a more comprehensive understanding of the methods and techniques used by experienced versus inexperienced teachers when teaching vocal performance studies.

The teaching and learning of the vocal performance examination set work is done as a group even though the students perform the musical pieces individually. It would be good to the effect of studying factors influencing individual student's singing development and the realization of performance potential.

Finally, healthy vocal production is frequently a problem for many singing students and instructors. Stereotypes and gender biases may also restrict or control study piece selections. A study can be carried out to further prop into gender biases in repertoire selection for voice students.

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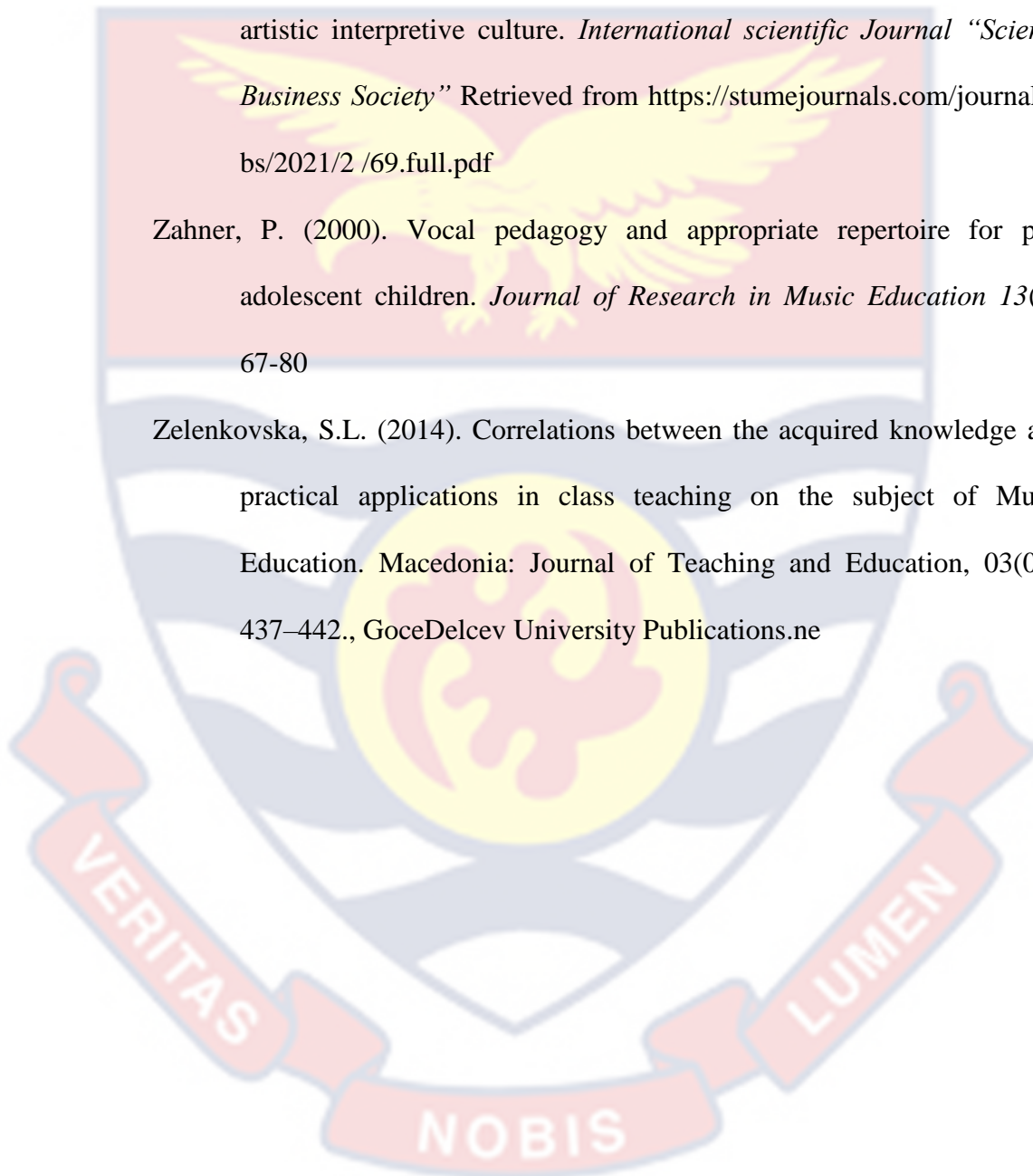
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## APPENDICES

## Appendix A

The pictures under “Appendix A” were the participated schools sampled for this study. All the schools were preparing toward WASSCE Music Performance Test (examination). The researcher took the pictures during the vocal performance observation classes. In figure 1 below, the teacher was writing the technical exercise on the whiteboard for the students to learn to sing in the WASSCE examination.



*Figure 9: Field Pictures*

Source: Picture taken by Jennifer A. Adjahoe during class observation

This is the first the participated school. The teacher was writing the tonic solfege of the scale on the board for the students to sing.





*Figure 10:* The students were singing through the WASSCE technical exercise

Source: Picture by Jennifer A. Adjahoe during class observation.

This is the second participated student. The teacher was leading the students in singing through the WASSCE technical exercise without informing them on their body alignment.



*Figure 11:* The students were engaged in singing one of the selected WASSCE vocal performance pieces.

Source: Picture taken by Jennifer A. Adjahoe during class observation

This is the third participated school. The students are engaged in singing one of the selected WASSCE vocal performance pieces. The teacher was playing the accompaniment and singing the song phrase by phrase for the students to imitate.



*Figure 12:* The students were engaged in singing one of the selected WASSCE pieces

Source: Picture by Jennifer A. Adjahoe during class observation

This is the fourth participated schools. The students were engaged in singing one of the selected WASSCE pieces without the piano accompaniment.

## Appendix B

**Table 11: Gender**

Gender	Frequency	Per cent	Valid Percent	Cumulative Percent
male	88	61.1	61.1	61.1
female	56	38.9	38.9	100.0
Total	144	100.0	100.0	

Source: Generated from SPSS by Jennifer A. Adjahoe

**Table 12: Age**

	Frequency	Per cent	Valid Percent	Cumulative Percent
14	1	.7	.7	.7
15	4	2.8	2.8	3.5
16	14	9.7	9.7	13.2
17	28	19.4	19.4	32.6
18	40	27.8	27.8	60.4
19	21	14.6	14.6	75.0
20	15	10.4	10.4	85.4
21	8	5.6	5.6	91.0
22	12	8.3	8.3	99.3
23	1	.7	.7	100.0
Total	144	100.0	100.0	

Source: Generated from SPSS by Jennifer A. Adjahoe

**Table 13: Number of Student Participants from Each School**

Schools	Category	Number of Voice Students
School A	Single School	26
School B	Mixed School	44
School C	Single School	17
School D	Mixed School	57

Source: Generated from SPSS by Jennifer A. Adjahoe

## Appendix C

Table 14: Instructional methods/approach (students' responses)

		Frequency	Percent
Taught to use breath effectively when singing	Yes	102	70.8
	No	42	29.2
Voice part sing by students	Soprano	33	22.9
	Alto	34	23.6
	Tenor	36	25.0
	Bass	41	28.5
Frequency of organizing vocal performance	Once a week	66	45.8
	Twice a week	39	27.1
	Once fortnight	11	7.6
	Once a month	28	19.4
Teacher educates students to perform expressively	Yes	106	73.6
	No	38	26.4
Involvement in other activities	Yes	63	43.8
	No	81	56.3
Refusal to study a particular piece or song	Yes	23	16.0
	No	121	84.0
Guidance on producing a particular tone quality	Yes	96	66.7
	No	48	33.3

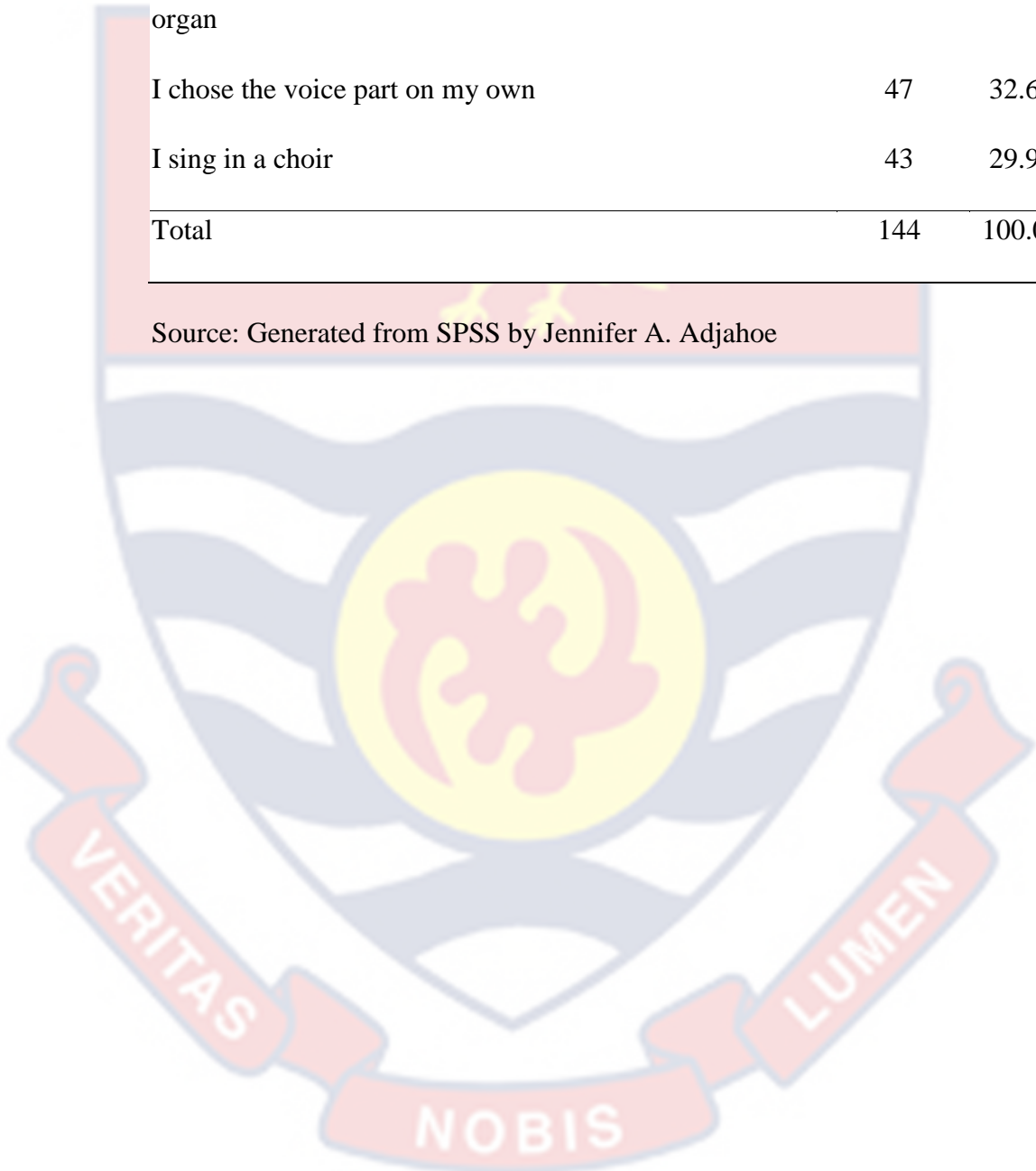
Source: Generated from SPSS by Jennifer A. Adjahoe

## Appendix D

Table 15: determination of students' voice range

	Frequency	Percent
My teacher informed me by testing my voice range with organ	54	37.5
I chose the voice part on my own	47	32.6
I sing in a choir	43	29.9
Total	144	100.0

Source: Generated from SPSS by Jennifer A. Adjahoe



## Appendix E

Table 16: Students' response to voice exercise activities

		Frequency	Percent
Physical exercise	Rarely	79	54.9
	Always	34	23.6
	Occasionally	25	17.4
	When Dull	6	4.1
Vocal warm-ups	Rarely	64	44.4
	Always	47	32.6
	Occasionally	25	17.4
	When Dull	8	5.6
Breathing exercises	R	56	38.9
	A	73	50.7
	O	14	9.7
	D	1	0.7
Exercises for coordinating vocal registers	R	72	50.0
	A	37	25.7
	O	25	17.4
	D	10	6.9
Exercises for improving pronunciation of words	R	72	50.0
	A	40	27.8
	O	21	14.6
	D	11	7.6
Sight reading with sol-fa (do re me)	R	33	22.9
	A	79	54.9
	O	28	19.4
	D	4	2.8

Source: Generated from SPSS by Jennifer A. Adjahoe

## Appendix F

**Table 17: Responses to students' comfortability in producing the pitches in their study piece and punctuality in class**

		Frequency	Percent
Do you feel comfortable when producing the pitches in the songs assigned to you?	Yes	107	74.3
	No	37	25.7
Are you punctual in class?	Yes	121	84.0
	No	23	16.0
How often do you absent yourself from vocal performance class?	Once a week	14	9.7
	Once a month	4	2.8
	Twice a month	5	3.5
	Never	121	84.0

Source: Generated from SPSS by Jennifer A. Adjahoe



**Table 18: When does your teacher organize sight-singing lessons for you?**

		Frequency	percent
During theory and composition classes only	Yes	121	84.0
	No	11	7.6
During vocal performance classes only	Yes	--	00
	No	--	00
Both theory and composition and vocal performance classes	Yes	14	9.7

Source: Generated from SPSS by Jennifer A. Adjahoe

**Table 19: Students' Response to the Learning of Sight-Singing**

		Frequency	Percent
When were you introduced to sight-singing?	First Year	00	00
	Second Year First Term	23	16.0
	Second Term	81	56.3
	Third Term	18	12.5
	Third Year		25.7
	First Term	21	14.6
	Second Term	--	00
	Third Term	--	00
	How often does your teacher engage you in sight singing exercises?	Once a week	
Twice a week.			
Once a while.			
Once a month			
Twice a month			
Any time they meet for a composition class			

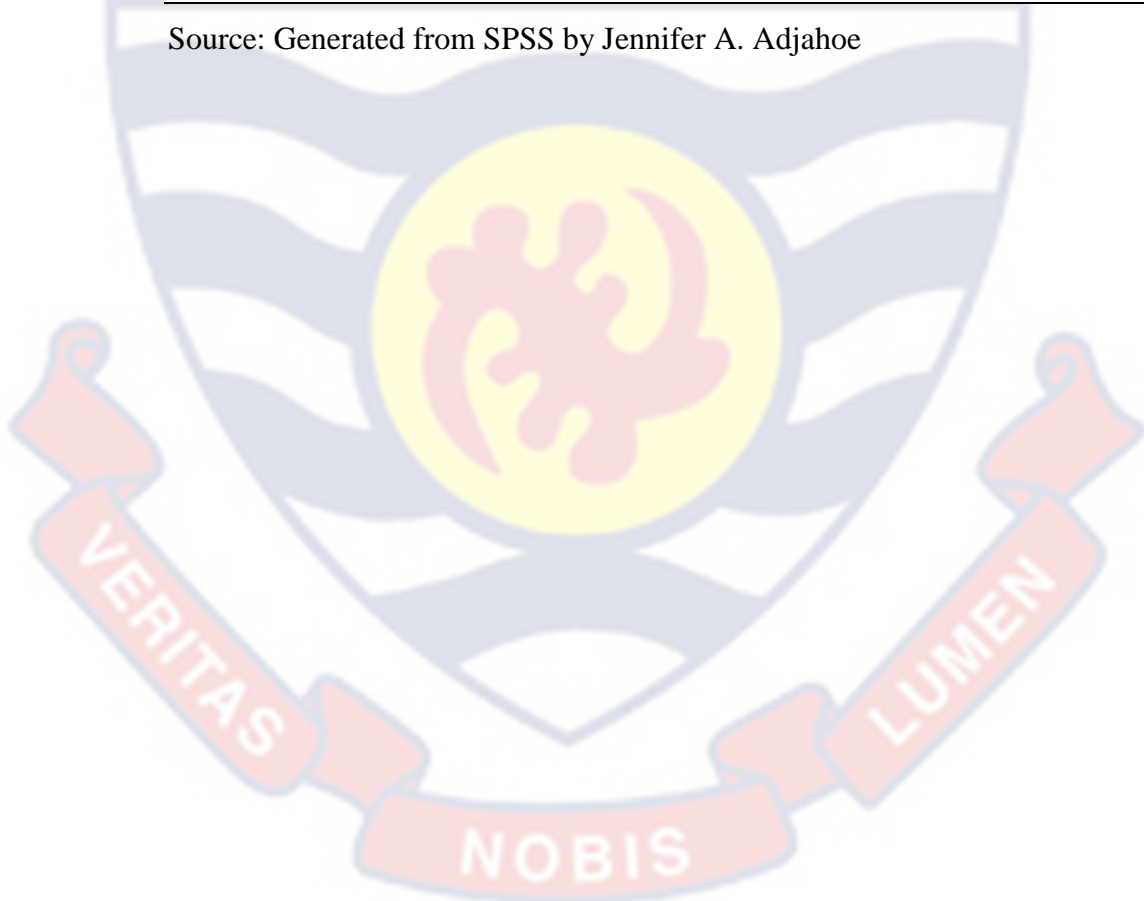
Source: Generated from SPSS by Jennifer A. Adjahoe

## Appendix G

Table 20: Reasons for student's absenteeism

	Responses		
	N	Percent	Percent of Cases
Performance class is sometimes boring	12	27.9%	52.2%
My colleagues laugh at me when I sing	2	4.7%	8.7%
The songs assigned to me are difficult	4	9.3%	17.4%
I have challenge in singing on time	15	34.9%	65.2%
I am not able to sing with piano accompaniment	10	23.3%	43.5%
Total	43	100.0%	187.0%

Source: Generated from SPSS by Jennifer A. Adjahoe



## Appendix H

Table 21: Response to performance with/without accompaniment

		Frequency	Percent
Did you learn the pieces with piano/organ accompaniment?	Yes	92	63.9
	No	52	36.1
Do you rehearse your pieces with piano accompaniment?	Yes	91	63.2
	No	53	36.8
Do you also perform or sing any of your pieces without piano accompaniment before?	Yes	124	86.1
	No	20	13.9
Have you observed any difference between singing with piano accompaniment and without piano accompaniment	Yes	114	79.2
	N	30	20.8

Source: Generated from SPSS by Jennifer A. Adjahoe

## Reliability of Research Instrument

N	Alpha	No of items
15	.771	36

Source: Generated from SPSS by Jennifer A. Adjahoe